

Computing Policy

Our children live in a technological society. Using and controlling a wide range of sophisticated equipment has become part of their lives from an early age. When children enter school we feel it is important to build upon these previous experiences as well as provide new ones. We have made various changes to how we teach Computing. These changes have had significant impact on the teaching and learning of Computing in our school. We enable children to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way. We have found that Computing skills are a major factor in enabling children to be confident and independent learners.

Aims and objectives

At the end of Early Years Foundation Stage, our aim is for all children:

• To recognise that a range of technology is used in places such as homes and schools and those children can select and use technology for particular purposes.

At the end of Key Stage 1 our aim is for all children:

- To understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- To create and debug simple programs.
- To use logical reasoning to predict the behaviour of simple programs.
- To use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- To recognise common uses of information technology beyond school.
- To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Teaching and learning style

At Purston Infant School, we use a range of teaching and learning styles in computing lessons. The main aims being to develop children's Computing skills and capability in the subject and to develop further knowledge and understanding of other curriculum areas by using Computing. While working within the framework of both Early Years Foundation Stage and Key Stage 1 National Curriculum there is a laptop and tablet trolley. The laptops have programming and debugging activities suitable to early years and KS1. We teach Computing through a mixture of whole class/ group and individual activities. We give children the opportunity to work on their own, to collaborate and to listen to the ideas of others.

We recognise that all classes have children with widely differing Computing abilities. This is especially true when some children have access to technological 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.

Curriculum Planning

Key Stage 1

Computing is a compulsory subject in the National Curriculum. ICT skills are taught in the classroom with the class teacher. Tablets and laptops are booked out to ensure fair usage. Planning for Computing across the curriculum is the responsibility of each teacher and subject co-ordinator. This includes plans for classroom/independent based work.

Planning involves three phases long-term, medium term and short term. Our long-term plan shows the distribution of teaching units across the year groups and how these fit together to ensure progression. They also include the use of Computing in different curriculum areas.

Medium term plans identify key objectives, progression of skills, assessment opportunities and time allocations for each unit. The subject co-ordinator is responsible for reviewing these plans. The topics studied in Computing are planned to build upon prior learning. While we offer opportunities for children of all abilities to develop their skills and knowledge in each unit, we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move up through the school.

Foundation Stage

At Purston Infant School, we encourage the development of skills; knowledge and understanding that aid our foundation stage children to make sense of the world around them. Planning for ICT in the foundation stage is taken from Development Matters – Understanding the World - Technology. This underpins the curriculum planning for children aged between three and five. All children have the opportunity to use laptops or tablets in the classroom and the interactive white board using appropriate hardware and software.

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 history or geography. ICT enables children to present their information and conclusions in the most appropriate way.

SEND

At Purston Infant School, we teach computing to all children, whatever their ability. Computing forms part of our school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the needs of children with learning difficulties. In some instances, the use of Computing has a considerable impact on the quality of work that children produce; it increases their confidence and motivation. When planning work in Computing, we take into account the individual targets in children's One Page Profiles.

Assessment and Recording

It is each teacher's responsibility to monitor their own class's access to the laptops in the classroom. The class teacher will measure children's computing capability against the Level Descriptions for Key Stage 1 and Development Matters stages for EYFS. There is an opportunity to report progress in Computing to parents during parent interviews and at the end of the year in a summative report. Information about a child's computing capability is also transferred from one-year group to the next.

Resources

At Purston Infant School we have a tablet trolley containing 16 tablets. We also have a laptop trolley for children to access. All computers have Internet access and all classrooms are fitted with an interactive white board. Each member of teaching staff has their own laptop, which is used to run the interactive whiteboard in their classroom. In addition, there are BeeBots in school for children to access.

Hardware & Software

The school is equipped with a range of hardware and software to facilitate the delivery of computing skills and to deliver the National Curriculum. Each computer has its own bank of software suitable for the year group.

Monitoring and review

The monitoring of children's work and the quality of teaching in Computing is the responsibility of the subject co-ordinator. It is their job to:

- Maintain and update the policy document and to help to produce any schemes of work.
- Support colleagues in planning, training days, implementation, record keeping and assessment of Computing.
- Monitor progress throughout school by reviewing the portfolio of agreed standards.
- Organise audit days with the Computing school governor to observe Computing lessons in each class and feedback any relevant information to colleagues.
- Keep up to date with current developments in Computing by attending courses or conferences and disseminate this information to colleagues.
- Take responsibility for reviewing resources during co-ordinator release days and inform management of any purchasing requirements.

Health and Safety

The member of staff working with the laptops or tablets in the classroom is responsible for the correct usage and safety of the equipment. Computers can be damaged by water, dust and chalk. Direct sunlight makes interactive whiteboard screens difficult to see and blinds have been fitted in each classroom to help with this.

It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be PAT tested before being used in school. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the senior site technician or head teacher who will arrange for repair or disposal.

Any faults are reported to the Computing co-ordinator or administration staff. A member of our support team, Alamo, carries out repairs, updates and maintenance every week.

The school is aware of the health and safety issues involved in children's use of ICT and computing.

- Children should not put plugs into sockets or switch the sockets on.
- Socket covers should be on all sockets that are not being used.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Magnets must be kept away from all equipment
- Safety guidelines in relation to IWBs will be displayed in the classrooms

- E-safety guidelines to follow when using the laptops and tablet
- The ICT Technician will be responsible for regularly updating anti-virus software

Children are supervised closely when accessing tablets and laptops by the class teacher, and teaching assistants. Alamo technicians ensure that laptops and tablets are safe to use, with the correct safety software so that children cannot access inappropriate context.

E-Safety

Accessing the internet can be a great way for young children to explore and find out new information to aid their education. However, it is essential that children are protected from seeing inappropriate media online. To prevent children from viewing inappropriate content, software has been installed to block inappropriate sites. 'Jessie and friends' is a program used in school to teach children about the importance of e-safety. This allows children to understand the importance of staying safe online, and to help them become more aware about online dangers.