Braywood CE First School

Computer Science
"From tiny acorns, mighty oak trees grow, watered and nurtured by God"

Vision and aims

" I.C.T prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology" National Curriculum

ICT is changing the lives of everyone. Through teaching ICT we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. We enable them 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. ICT skills are a major factor in enabling children to be confident, creative and independent learners. Our vision is: ☐to equip all learners with the experiences and skills of ICT that they will use in a rapidly changing technological world, ☐learners in our environment will be confident and independent in their use of ICT to solve problems across the curriculum.

Learners understand how technology works
ICT is a tool for teachers to make teaching and learning relevant, immediate and fun.
It is a vehicle through which each curriculum area is delivered, a means of communication and a support mechanism for teachers.

The aims of ICT are to enable children:
*   to develop ICT capability in finding, selecting and using information;
*   to use ICT for effective and appropriate communication;
*   to monitor and control events both real and imaginary;
*   to apply hardware and software to creative and appropriate uses of information;
*   to apply their ICT skills and knowledge to their learning in other areas;
*   to use their ICT skills to develop their language and communication skills;
*   to explore their attitudes towards ICT and its value to them and society in general.

Teaching and learning style
As the aims of ICT 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. Children are formally given instruction on how to use hardware or software in 'skills' lessons. These skills are then put into practice through lessons throughout the curriculum where subject matter dictates the tasks. We encourage the children to explore ways in which the use of ICT can improve their work. Both the children and staff use ICT to support teaching across the curriculum.

We recognise that all classes have children with widely differing ICT abilities. This is especially true when some children have access to ICT 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 carry out the curriculum planning in ICT in three phases (long-term, medium-term and short-term). The long-term plan maps the

ICT topics that the children study in each term during each key stage. Our long-term ICT plan shows how teaching units distributed across the year groups, and how these fit together to ensure progression within the curriculum plan.

Our medium-term plans, which we have adapted from the national scheme of work, give details of each unit of work for each term. They identify the key learning objectives for each unit of work and stipulate the curriculum time that we devote to it. The class teacher is responsible for implementing the short-term plans with the ICT component of each lesson. These plans take account of the learning objectives and skills required at the end of a half termly session

Foundation Stage
We teach ICT in reception classes as an integral part of the topics covered during the year. The reception class follow the EYFS Development Matters framework. This encompasses studying and visiting everyday technology in the world around us. The children have the opportunity to use the interactive whiteboard, computers, programmable toys and a digital camera. Then during the year they gain confidence and start using the computer to find information and use it to communicate in a variety of ways.

Teaching ICT to children with special needs
At our school, we teach ICT to all children, whatever their ability. ICT 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 ICT has a considerable impact on the quality of work that children produce; it increases their confidence and motivation.

Health and Safety
All stakeholders are taught about the risks of using ICT equipment irresponsibly and due care is taken at all times. Age appropriate class and safety rules are displayed and lessons specific to Internet, email and text safety are given annually. Parents and children sign an Internet Agreement Policy and all children undertake ICT safety lessons often alongside parents. Equipment is maintained and used according to safety standards.

Assessment and recording
Teachers assess children's work in ICT all the time by making informal judgements as they observe them during lessons. Pupils' progress is formally monitored at the end of each term; each pupil will be levelled for the strand of ICT, which has been studied through an electronic assessment program. This software will monitor the child's progress throughout their time in school and present a NC level together with a detailed skills report. This form of self-assessment is designed to give children more ownership of their learning.

When appropriate, pupils print out or save work and this is kept in their workbooks, although children can also save their work onto their own files The ICT subject leader keeps samples of the children's work in a portfolio. This demonstrates the expected level of achievement in ICT for each age group in the school and helps teachers assess children's work.

Monitoring and review
The monitoring of the standards of the children's work and of the quality of teaching in ICT is the responsibility of the ICT subject leader and the Leadership Team. The ICT subject leader is also responsible for supporting colleagues in the teaching of ICT, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.