

## Information and Communication Technology (ICT) Policy

Rosslyn School is to have a new ICT suite in September 2005 where children will be taught discrete lessons and benefit from the full coverage of the curriculum. The policy set out incorporates the vision for the use of ICT from September 2005 (these areas are highlighted). At present each classroom benefits from its own computer and much of the curriculum is in place.

### 1 Aims

1.1 ICT has become part of the way we all work and entertain ourselves. Almost everything we do at school now involves the use of ICT:

- **online lesson research, teaching plans and resource materials;**
- **lesson delivery via either overhead projector or interactive whiteboard;**
- **communication by e-mail and fax;**
- **document distribution and storage;**
- **assessment information analysis;**
- **production and editing of reports.**

1.2 Through teaching ICT we equip children to participate in a world of rapidly-changing technology. We enable them to find, explore, analyse, exchange and present information. We also help them develop the necessary skills for using information in a discriminating and effective way. This is a major part of enabling children to be confident, creative and independent learners.

1.3 The objectives of teaching 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 their ICT skills and knowledge to their learning in other areas;
- to explore their attitudes towards ICT and its value to them and society in general. For example, to learn about issues of security and personal safety, confidentiality and accuracy.

### 2 Teaching and learning style

2.1 As an objective of teaching of ICT is to equip children with the technological skill to become independent learners, the teaching style that we adopt is as active and practical as possible. While at times we do give children direct instruction on how to use hardware or software, the main emphasis of our teaching in ICT is for individuals or groups of children to use computers to help them progress in whatever they are studying. So, for example, children might research a history topic by using role-play software that engages them in a highly visual way, or they might place themselves in a historical setting by manipulating a digital photograph, **or they might investigate a particular issue on the Internet.**

**2.2** We recognise that all classes have children with a wide range of 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 achieve this in a variety of ways:

- setting 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.

### 3 ICT curriculum planning

**3.1** The school uses the national scheme of work for ICT as the basis for its curriculum planning. We have adapted the national scheme to the local circumstances of the school.

**3.2** 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. **The ICT subject leader** (when appointed) will devise this in conjunction with teaching colleagues in each year group, and the children often study ICT as part of their work in other subject areas.

**3.3** Our medium-term plans, which we have adopted 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 ICT subject leader will be responsible for keeping and reviewing these plans.

**3.4** The class teacher is responsible for writing the medium and short-term plans with the ICT component of each lesson. The class teacher keeps these individual plans in their planning folders.

**3.5** The topics studied in ICT are planned to build on prior learning. While we offer opportunities for children of all abilities to develop their skills and knowledge in each unit, we also plan progression into the scheme of work, so that the children are increasingly challenged as they move up through the school.

**3.6** Parents are required to give signed authorisation before their child can use the Internet, either in guided or in independent school work. The parents are however assured that their child's use of the Internet at school is always supervised. A record of those children who do not have permission to use the Internet at school is held by each class teacher and by the school office.

### 4 The Foundation Stage

**4.1** We teach ICT in our Kindergarten and Reception classes as an integral part of the topic work covered during the year. As the Kindergarten and Reception class is part of the Foundation Stage of the National Curriculum, we relate the ICT aspects of the children's work to the objectives set out in the Early Learning

Goals (ELGs) which underpin the curriculum planning for children aged three to five. The children have the opportunity to use the computers, a digital camera, remote control car and a floor robot (roamer) Then, during the year, they gain confidence and start using the computer to find out information and to communicate in a variety of ways.

## 5 The contribution of ICT to teaching in other curriculum areas

**5.1** The teaching of ICT contributes to teaching and learning in all curriculum areas. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers use software to present information visually, dynamically and **interactively**, so that children understand concepts more quickly. **For example, graphics work links in closely with work in art, and work using databases supports work in mathematics, while role-play simulations and the Internet prove very useful for research in humanities subjects. ICT enables children to present their information and conclusions in the most appropriate way. Quite a lot of software is generic, and can therefore be used in several curriculum areas.**

### **5.2 English**

ICT is a major contributor to the teaching of English. Children's reading development is supported through talking stories. As the children develop mouse and keyboard skills, they learn how to edit and revise text on a computer. **They have the opportunity to develop their writing skills by communicating with people via e-mail, and they are able to join in discussions with other children throughout the world through the medium of video conferencing. They also learn how to improve the presentation of their work by using desktop publishing software. There is in addition a variety of software which targets specific reading, grammar and spelling skills.**

### **5.3 Mathematics**

Children use ICT in mathematics to collect data, make predictions, analyse results, and present information graphically. Screen robots allow pupils to give exact instructions for a particular route, or to use their knowledge of angles to draw a range of polygons.

### **5.4 Science**

Software is used to animate and model scientific concepts, and to allow children to investigate processes which it would be impracticable to do directly in the classroom. Data loggers are used to assist in the collection of data and in producing tables and graphs.

### **5.5 Personal, social and health education (PSHE) and citizenship**

ICT makes a contribution to the teaching of PSHE and citizenship in that children in ICT classes learn to work together in a collaborative manner. They also develop a sense of global citizenship by using the Internet and e-mail. There is consequently an Internet Proficiency Scheme for Key Stage 2 pupils. The scheme aims to develop a set of safe and discriminating behaviours for pupils to adopt when using the Internet and other technologies. Through discussion of safety and other issues related to electronic communication, the children develop their own view about the use and misuse of ICT, and they also gain an insight into the interdependence of ICT users around the world.

## 6 ICT and inclusion

**6.1** At our school we teach ICT to all children, whatever their ability and individual needs. ICT forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our ICT teaching we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details see separate policies: Special Educational Needs; Disability Non-Discrimination and Access; Gifted and Talented.

**6.2** When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively (for example, a lot of software can be differently configured for different ability ranges). **Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels. This ensures that our teaching is matched to the child's needs.**

Intervention through School Action and School Action Plus will lead to the creation of an Individual Education Plan (IEP) for children with special educational needs. The IEP may include, as appropriate, specific targets relating to ICT. In some instances the use of ICT has a considerable impact on the quality of work that children produce, by increasing their confidence and motivation.

**6.4** **We enable pupils to have access to the full range of activities involved in learning ICT. We have a range of software which is designed to include all learners, for example grid clicking. Our hardware can accept a range of input devices catering to pupils with specific difficulties.** Where children are to participate in activities outside the classroom, for example, a visit to an ICT exhibition, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

## 7 Assessment for learning

**7.1** Teachers will assess children's work in ICT by making informal judgements during lessons. On completion of a piece of work, the teacher assesses the work, and uses this assessment to plan for future learning. Written or verbal feedback is given to the child to help guide his/her progress. Older children are encouraged to make judgements about how they can improve their own work.

**7.2** The subject leader will keep 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.

## 8 Resources

- 8.1** Our school will have the appropriate computer-to-pupil ratio, and Internet access. Most software will be already installed on PCs. Some software is installed only on the class PC.
- 8.2** We employ a technician to keep our equipment in good working order. **Members of staff will report faults in the book provided for that purpose in the ICT suite.** The technician will also set up new equipment, and install software and peripherals.
- 8.3** Each classroom has its own computer with age related software installed. There is also a laptop for use by teachers which is also used for children with Special Educational Needs.
- 8.4** In order to keep our school computers virus-free, no software from home will be installed on school computers. Pupils bringing in work on portable storage disks must first have it scanned, **but it is easier if the work is e-mailed to the teacher concerned.** Where teachers are transferring files between their home and school, they must have up-to-date virus protection software on their home computers.
- 8.5** Along with desktop and a laptop computer, the school is developing its resources to include the following:

#### Hardware

- **network, including switch, router and server PC;**
- **network shared resources, including printers;**
- **interactive whiteboard and screen projection equipment;**
- scanners;
- digital microscope;
- **DVD and video recorders;**
- lower case letters on keyboards for younger children;
- tape-based listening centre and **digital sound recorder;**
- calculators;
- floor robot (roamer); remote control car, **set of mini roamers**
- **control interface with buzzers etc.;**
- headphones and **microphones;**
- overhead projector;

#### Software

- word-processing and desktop-publishing programs;
- painting and drawing software;
- **music composition package;**
- **multimedia presentation program;**
- spreadsheet and database programs;
- **control program and models;**
- **simulations;**
- **encyclopaedia reference material;**
- virus protection.
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#### Online material

- **online content subscriptions;**
- school website and internet;
- **school e-mail accounts.**

9 Monitoring and review

**9.1** The monitoring of the standards of the children's work and of the quality of teaching in ICT is the responsibility of the subject leader. The ICT subject leader will also be responsible for supporting colleagues in their teaching of ICT, for keeping informed about current developments in the subject, and for providing a strategic lead and direction for ICT in the school. The subject leader will have specially-allocated time for carrying out the vital tasks of reviewing samples of the children's work, and of visiting classes to observe the teaching of ICT.

**9.2** This policy will be reviewed every 2 years

**Signed:**

**Date:**