

learning and teaching

7

ICT: essential guides for school governors



This guide is intended to enable school governors to:

- contribute to developing and reviewing a vision for learning and teaching with ICT
- consider how their schools could develop the use of ICT to enhance learning and teaching
- monitor the use of ICT in the curriculum more effectively.

ICT provides a wealth of opportunities to extend and support learning and teaching, but it is also a major expenditure for schools. As a governor, if you are to fully support the development of ICT in your school, you need to be aware of the reasons why schools should prioritise committing funds to ICT to support learning and teaching.

If you are a governor with curriculum responsibilities, you are probably familiar with the different roles that ICT plays in learning and teaching. Teachers may use ICT in a lesson where the main purpose is to develop new ICT skills, knowledge and understanding. Alternatively, they may be using ICT as a tool to enhance the learning and teaching of another curriculum subject by making a concept easier to understand or presenting content that it is not possible to present in any other way. Increasingly, the subject content itself will be in electronic form.



Why are we using ICT?

ICT contributes to raising standards across the curriculum by **enhancing the learning experience** of pupils and improving the effectiveness of teaching. Teaching support materials that use ICT allow pupils to engage with the content of the lesson in a variety of ways – visually, with sound, with movement – and with the ability to revisit and repeat learning as required. Pupils can be actively involved in their learning, exploiting the interactivity and communication potential of ICT.

ICT provides opportunities to **extend learning**, removing some of the more burdensome tasks like drafting and redrafting work and enabling pupils to focus on higher-order thinking such as analysis and interpretation of cause and effect. Pupils are able to ask questions such as 'What if...?' and test their hypotheses. ICT-based activities offer wide opportunities for differentiation and personalised learning, so pupils can learn at their own pace and often in their preferred style. Learning with ICT can

also be extended beyond the boundaries of the school so that learning need not be limited to the school day and school premises. Pupils can continue their learning by remotely accessing resources which can, in turn, increase parental involvement in supporting their children's learning. ICT can also facilitate opportunities for adult and family learning in the community.

ICT **enriches the curriculum** by enabling access to information,

images, animation and video and encouraging collaborative working and communication with a range of audiences, for example, using video conferencing. The world is effectively brought into the classroom and pupils become more engaged in their learning. Teachers using technology such as data projectors and interactive whiteboards can provide clear models for the children to transfer into their own work. Difficult concepts or potentially dangerous scenarios can now be experienced virtually as pupils can see animated, sequential images, virtual reality tours and movies at the click of the mouse; they can interview experts and record and refine their work more easily, again releasing time for them to question, interpret and explain what they have experienced.

ICT enables teachers to **assess** some areas of the curriculum more quickly and easily, for example through the use of automated marking or pupil voting systems, which can provide teachers with a quick and accurate assessment of pupils' learning. Assessment data can also be recorded and analysed more efficiently, allowing teachers to see where particular children or areas of learning need to be further supported (see the Governors' guide to Assessment).

Change management

A school that is using ICT to extend and enhance its ICT provision will be going through a process of change. A strategic management plan needs to be in place to assist delivery of the change and ensure the support and involvement of all relevant staff. It is important that governing bodies support a strategy that involves staff in decision making and provide professional development opportunities to enable change to take place.

Case study

Darlington has a dedicated e-Learning Support Team who have been involved in an innovative project using the ICT syllabus as a tool to ease the transition of pupils from Key Stage 2 to Key Stage 3. As a result, the teachers involved agreed that the project made learning more effective for their pupils.

[<http://www.dfes.gov.uk/elearningstrategy/uploads/Darlington%20LEA.pdf>]

ICT policies and initiatives

There are a number of policies and initiatives affecting the use of ICT for learning and teaching. As a governor, you should be aware of the initiatives listed below:

Primary Strategy

In May 2003, the Secretary of State launched *Excellence and Enjoyment - A Strategy for Primary Schools* which set out the vision for the future of primary education, a copy of which was distributed to all primary schools. This set out to empower primary schools to take control of their curriculum, to be more innovative and to develop their own character. The strategy aims to strengthen leadership, particularly leadership of teaching, and professional development to help teachers embed the principles of effective learning and teaching.

The strategy encourages schools to network together and learn from others as they share and develop good practice. Schools are encouraged to further develop partnerships with parents, which is vital in helping children to achieve their potential as well as making wider links with the community.

Embedding ICT in Primary Schools

Although it is now generally recognised that ICT has the potential to transform learning and teaching, in 2002 Ofsted reported that only 25 per cent of primary schools in England used ICT effectively in their learning and teaching across the curriculum. Thus a series of pilots concentrating on interactive whiteboards,

Embedding ICT in Primary Schools

Objectives include:

- improving the quality of learning and teaching and raising standards through the use of ICT
- providing support to teachers and schools in the task of embedding effective use of ICT across the curriculum. This includes providing example materials covering all subjects, with a range of video clips of good practice from Foundation Stage to Year 6, lesson notes and resources to support teachers applying the ideas in their own practice. In addition, the Leadership Team Toolkit supports School Leadership teams in reviewing the use of ICT within their school and implementing a strategic plan to develop it further.
- integrating ICT into the Primary Strategy and its fieldforce (these are central government funded consultants who are based in every English LEA) and building a professional learning community to develop, collate, share, improve and disseminate best practice more widely.



laptops and computer suites was established by the National Primary Strategy.

The use of ICT across the primary curriculum is intended to help to improve pupils' attainment, not just in mathematics and literacy (where the Government has set specific targets for achievement by 2006), but across all subjects. The strategy is targeted across the whole primary phase from Foundation Stage to Year 6 across all schools, from those where access to ICT equipment is widespread to those where such technologies may be limited to a cluster of PCs or a dedicated ICT suite.

KS3 Strategy

The challenges at Key Stage 3 are demanding. These are important years for laying the foundations for life-long learning and influencing some of the crucial decisions pupils will make at age 14.

The Key Stage 3 National Strategy is designed to support schools to address the learning needs of 11–14-year-old pupils. It now operates across all subjects as a whole-school improvement strategy and provides a platform for professional development across the school through its emphasis on learning and teaching.

The strategy supports personalised learning by promoting an approach in which:

- careful attention is paid to pupils' individual learning styles, motivations and needs
- there is rigorous target setting linked to high-quality assessment
 - lessons are enjoyable
 - pupils are supported by others well beyond the classroom.

The *KS3 ICT Across the Curriculum* (ICTAC) pack is a set of materials designed to promote the use of ICT across all subjects in schools. It builds on the work of the Key Stage 3 National Strategy ICT strand and the ICT capability that pupils are bringing to their subject lessons from their ICT lessons.

Personalised learning

Personalised learning is about tailoring education to individual need, interest and aptitude so as to ensure that every pupil achieves and reaches the highest standards possible. Many schools and teachers have tailored curriculum and teaching methods to meet the needs of children and young people with great success for many years. The DfES is engaged in a drive to make these best practices universal.

Five main components of personalised learning have been identified:

- Assessment for learning
- Effective learning and teaching
- Curriculum entitlement and choice
- Organising the school
- Beyond the classroom.

Details of what your school might consider to develop personalised learning can be found on the Standards website [<http://www.standards.dfes.gov.uk/personalisedlearning>].

14–19 ICT Strategy

The final report of the Working Group on 14–19 reform, led by Mike Tomlinson, was published in October 2004. A White Paper will be published in early 2005 laying out the final proposals for the reform agenda drawn from consideration of the report. This is a radical reform, and secondary governors need to be aware of the key issues.

The report and its summary can be found on the 14–19 Reform site [<http://www.14-19reform.gov.uk>].

Collaborative provision for this age group across institutions will have an impact on the development of ICT strategies. ICT can support pupils who may be spreading their learning across the school, the local FE college and potentially the workplace, by:

- transferring pupil data between institutions for pupils and teachers to access
- enabling electronic, on-demand pupil assessment and tracking
- providing online high-quality interactive content, simulations and video learning for vocational training
- enabling content creation, sharing and access across providers
- supporting the management of collaboration. Online forums and shared online systems for staff and learner communication can support and strengthen partnership at all levels.

SLICT

Developed in partnership by the National College for School Leadership (NCSL) and Becta, the Strategic Leadership of ICT (SLICT) is the first national programme to focus on the strategic role of headteachers in leading and developing ICT. See the NCSL site [<http://www.ncsl.org.uk/slict>].

Naacemark

The Naacemark is a quality assurance scheme for ICT in schools. Developed by Naace, in association with Becta, the Naacemark focuses directly on learning and teaching with ICT in schools. The award stands for quality and is intended to promote the use of ICT to enhance learning and teaching. Since its launch in January 2003, around 300 schools have been awarded the Naacemark, with at least 1500 schools currently using the framework as a tool for improvement, see the Naace website [<http://www.naace.org/resource.asp?menuItemId=18>].

Sherwell Valley Primary School is an example of one school that has been awarded the Naacemark [<http://www.sherwell-valley-primary.torbay.sch.uk>].

Becta has created an online Naacemark matrix to support school leaders who wish to develop their strategic approach to ICT. The matrix can be found on the Becta website [<http://matrix.becta.org.uk>].

Case study

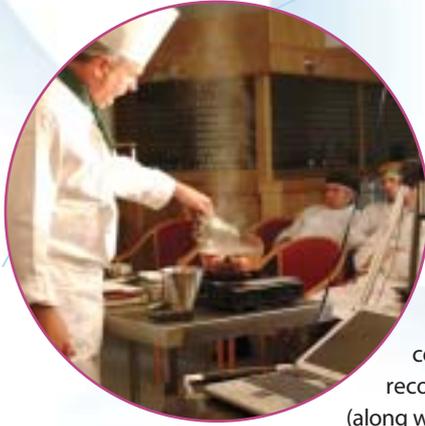
St Ninian's Primary School in Stirling uses ICT extensively to enrich learning and teaching. They have a teddy bear that travels between their school and a school in the USA. The bear's antics are regularly emailed to the link school. They maintain a dictionary of Scots words and produce a website on Space.

[<http://www.becta.org.uk/corporate/display.cfm?section=21&id=3216>]

Case study

Oakthorpe Primary School in Derbyshire first opened its 'Help is at Hand' centre in November 2001. The centre is based in the village and houses 15 PCs, 4 scanners, 2 printers, webcams and a digital camera as well as an interactive whiteboard. Learners can sign up to a range of courses including Learndirect, Computers for Beginners, Computer Literacy and Information Technology (CLAIT) and European Computer Driving Licence (ECDL).

[<http://www.helpisathand.gov.uk/info/about/archive/regions/oakthorpe/>]



Extending your school's ICT to the community

ICT is a valuable tool in establishing or enhancing the school's position at the heart of your community. With ICT capability now recognised as an essential life skill (along with literacy and numeracy),

there are significant benefits to school staff and pupils, as well as families and the local community, in school managers widening the scope and scale of their ICT facilities and provision.

Your school may want simply to offer pupils more time to use the school's ICT facilities, or bring in groups from the community for special events and courses. Creating a flexible pool of loan equipment which pupils and others can use from home is increasingly popular, and some schools are even providing internet access to homes and businesses in their area.

The importance of parental/carer involvement in children's education has been acknowledged in recent research, and ICT provides ways to improve these home-school links. This can range from developing the school's website with information on homework, the curriculum and social activities, to providing an interactive online service to reinforce pupils' learning and improve communication between teachers and parents, or organising workshops for parents and carers on topics such as internet safety

What the Research Says

Becta's research has provided firm evidence of the benefits of using ICT for learning and teaching.

ImpaCT2 was a major study into the effects of using ICT on attainment, which provided clear evidence of a positive relationship between the use of ICT and educational attainment. Following this, two major literature reviews were carried out, on ICT and attainment and ICT pedagogy. This research considered the range of environmental, contextual and institutional factors and the effects that these have on educational attainment.

[<http://www.becta.org.uk/impact2>]

Becta's What the Research Says series includes reports which summarise the research into the use of ICT in specific subjects, including English, maths, science, history, geography and modern foreign languages.

[<http://www.becta.org.uk/research/research.cfm?section=1&id=546>]

For more information, visit the Becta Research website [www.becta.org.uk/research].

Inclusion

Inclusion is often perceived as being about special needs provision but in fact is about ensuring that all pupils are able to participate fully in the learning and life of the school. ICT can provide a valuable support to achieve inclusive practice through helping teachers overcome potential barriers to learning, respond to pupils' diverse needs and setting suitable learning challenges. Teachers need to plan their management of ICT in the classroom together with the availability of particular technologies.

The Communication Aids Project (CAP) has provided assessment, technology and training for pupils with significant communication difficulties, so they can access learning at school and at home. The challenge for teachers, particularly in mainstream schools, is to include these pupils in a meaningful way.

[<http://cap.becta.org.uk>]

(see the Governors' guide to Safety and Security with ICT). ICT can also have a role to play in supporting pupils who might be absent from school, for example when they are ill or travelling with their family.

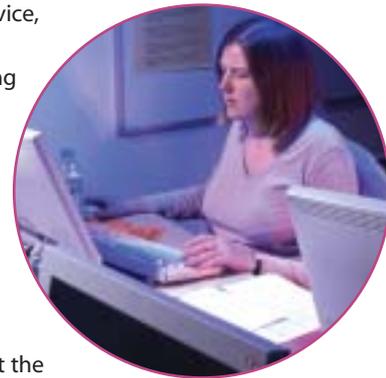
Working with Becta and other agencies, the DfES has produced advice, guidance and useful case studies for schools wanting to explore how they might use ICT

to reach out into their community.

There are many considerations to be taken into account, from

identifying what the community actually needs

and wants, to the legal, technical, financial and administrative factors. Information and tools to help governing bodies discuss these issues are available from Teachernet [<http://www.teachernet.gov.uk/wholeschool/extendedschools/ICT>].



Useful information

Where can you go for further help regarding ICT?

Your own LEA team, particularly the ICT adviser, should be your first contact for advice on LEA policy decisions regarding learning and teaching with ICT. Your LEA's Governor Training section may be able to direct you to support.

Becta

Guidance on all aspects of leadership of ICT in school, including learning and teaching issues.

http://www.becta.org.uk/leaders/school_leaders.cfm

ICT Advice website. Information and inspiration on all aspects of ICT in learning and teaching.

<http://www.ictadvice.org.uk>

ICT Advice newsletter subscription services. Newsletters for Primary and Secondary teachers including the new email service Direct2U for primary teachers.

<http://www.ictadvice.org.uk/index.php?section=ab&catcode=registration>

Using web based resources: primary series catalogue

http://www.becta.org.uk/corporate/publications/publications_detail.cfm?currentbrand=1&pubid=180&cart=

Using web based resources: secondary series catalogue

http://www.becta.org.uk/corporate/publications/publications_detail.cfm?currentbrand=1&pubid=181&cart=

DfES publications

Available from Prolog, the DfES's distribution services on 0845 602 2260 or via dfes@prolog.uk.com.

- *Embedding ICT in Primary Schools* An introduction to the materials (DfES 0473–2004), and the materials themselves (DfES CD-Rom 0315–2004G)
- *Leadership Team Toolkit* (pack DfES 0368-2004) (CD-Rom DfES 0369-2004)
- *Key Stage 3 ICT across the Curriculum pack* (ICTAC) (DfES 0171-2004 G)
- *The big pICTure: The Impact of ICT on Attainment, Motivation and Learning* (DfES 0796 2003)

<http://www.dfes.gov.uk/research/programmeofresearch/projectinformation.cfm?projectid=14185&resultspage=1>

National Curriculum

Provides examples of pupils work against curriculum subjects.

<http://www.ncaction.org.uk/>

Qualifications and Curriculum Authority (QCA)

Leads developments in curriculum, assessments, examinations and qualifications.

<http://www.qca.org.uk/>

Teacher Resource Exchange (TRE)

TRE is a moderated database of resources and activities designed to help teachers develop and share ideas for good practice.

<http://www.tre.ngfl.gov.uk/>

Virtual Teacher Centre (VTC)

The VTC offers free education information, with updated news and events areas.

<http://vtc.ngfl.gov.uk/>

This document is one of a series, developed during Autumn 2004, by Becta to support school governors. Each guide, together with supporting material, will be made available for downloading in the Governor Support area of Becta's website [<http://www.becta.org.uk/leaders/display.cfm?section=13>].

department for
education and skills



Becta is the Government's key partner in the strategic development and delivery of its information and communications technology (ICT) and e-learning strategy for the schools and the learning and skills sectors.

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