

Information and communications technology

Information and communications technology (ICT) is changing the way in which we work and play. It is also changing the way in which we learn, with ICT rapidly becoming integral to classroom practice. Traditionally seen as an individual subject to be studied, ICT is now recognised as a tool to facilitate teaching and learning across the curriculum.

Many independent schools have developed initiatives to enhance student outcomes through use of ICT in the classroom. These include laptop/notebook programmes, music technology courses, construction and programming of computers by students, and extra-curricular activities such as robotics clubs. Communication within school communities has been enhanced through online school newsletters and advice, access to information and class programmes through the school website, and use of online programmes that students can access from home.

Teachers are changing the way they operate in response to ICT developments. In addition to using ICT for research, they are increasingly using digital material in the classroom, and using ICT to collaborate with teachers and students within and beyond the school, and for professional development (PD) activities.

Some more technologically savvy teachers are developing their own web pages, tracking the travels of students and adventurers, developing audio and video material, and using ICT for a host of other activities. Such is the expertise within some independent schools that teachers from around the world are contacting our teachers for advice and exchange of ideas.

Primary and secondary schools tend to adopt different approaches to teaching ICT. The 2004 Annual National Report on Schooling showed that half of the schools with primary students based their ICT curriculum on the relevant state or territory syllabus, or on commercially available programmes. Few of these schools used material from their jurisdiction authority. Seventy-five per cent of schools with secondary students, however, offered an identifiable course in ICT. Word processing was the most frequently provided course, followed closely by internet usage, multimedia, spreadsheets, and design and publishing. Databases and web design were also common courses offered by schools.

Assessment of ICT occurs through a variety of strategies, the more common of which include teacher observation, student productions, participation, and folios and assignments. Tests and examinations are used in approximately 50 per cent of schools.

High cost of ICT for independent schools

The extent to which schools can engage with online learning depends on their ICT capabilities and their access to the internet. ICT is greatly increasing the cost of schooling and this is a particular challenge for the independent schools sector, which must meet these costs from private sources. While some schools are able to support leading edge programmes, others are relying on second-hand computers sourced through the Australian Government's Computer Technologies for Schools Programme.

Research by the Independent Schools Council of Australia (ISCA) in 2005 showed that just under half of independent schools represented had internet connections of 1 Mbps or faster, however about one third of schools did not have broadband, and many still used dial-up connections. The research also showed that primary schools were about three times more likely to be without broadband than secondary or combined schools.





School-wide online capabilities are becoming increasingly important as initiatives such as EdNA and The Le@rning Federation gain momentum, and online testing and reporting become a reality. Access to broadband and associated technology, and curriculum and professional development are particular issues for independent schools.

The Associations of Independent Schools (AISs) are supporting schools in their capability assessments and planning. Some large projects have been undertaken by the Association of Independent Schools of Western Australia (AISWA) and The Association of Independent Schools of New South Wales Ltd (AISNSW).

AISWA has developed AISWAlerningnet, an online environment for schools where teachers and students work collaboratively and contribute to the development and sharing of online teaching and learning resources. AISNSW offers StudentNet, an online learning community, access to a content management portal and ISONet, a managed network offering access to high quality broadband data services and essential internet resources, as well as the benefits of aggregated demand.

Managed networks could form the basis of a collaborative network across the sector and indeed, may eventually link to the Australian Education Digital Network (AEDN) which is currently being developed. AEDN should provide education networks with access to resources from public institutions such as art galleries, museums and libraries, and allow online collaboration on a global scale.

ISCA believes that a strategic approach to the provision of this essential infrastructure is essential so that schools within the sector are able to take full advantage of ICT at reasonable cost.

For further information:

The following website provides information and advice on the Computer Technologies for Schools (CTFS) project: www.ctfs.edna.edu.au

EdNA Online aims to support and promote the benefits of the internet for learning, education and training in Australia: www.edna.edu.au

The Le@rning Federation is a project that employs emerging technologies to produce online curriculum content: www.thelearningfederation.edu.au

AISWAlerningnet is a gateway that allows access to and sharing of online learning and teaching resources: www.aiswlearningnet.wa.edu.au

StudentNet is an online learning community providing access to a range of quality online resources: www.portals.studentnet.edu.au/studentnet/

ISONet is a Wide Area Network which provides independent schools with access to high quality broadband data services and essential Internet resources: www.isonet.edu.au

The following webpage provides some background information on the Australian Research and Education Network (AREN). AREN will provide the infrastructure for the Australian Education Digital Network: www.dest.gov.au/sectors/research_sector/programmes_funding/programme_categories/key_research_priorities/australian_research_and_education_network/