

Website contacts

New South Wales

NSW Department of Education & Communities:
www.dec.nsw.gov.au

School A to Z:
www.schoolatoz.nsw.edu.au

NSW Institute of Teachers:
www.nswteachers.nsw.edu.au

Board of Studies NSW:
www.boardofstudies.nsw.edu.au

Nihongo Tanken Centre:
www.curriculumsupport.education.nsw.gov.au/tanken

The Japan Foundation Sydney:
www.jpff.org.au

National

Department of Education, Employment and Workplace Relations:
www.deewr.gov.au

Australian Curriculum, Assessment and Reporting Authority:
www.acara.edu.au

Australian Institute for Teaching and School Leadership:
www.aitsl.edu.au

PLANE (teacher online professional learning):
www.plane.edu.au

International

Assessment & Teaching of 21st Century Skills project:
www.atc21s.org

Center for Curriculum Redesign:
www.curriculumredesign.org

21st century skills for Australian students

21st Century Skills Forum
Tokyo, Japan 14 November 2012



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Education in the 21st century is a high stakes enterprise.

Our students compete on a global stage and they need new skills to prepare them for further study and jobs – many of which have not yet been created. They need skills we call the 4Cs: creativity, communication, collaboration and critical thinking.

The rate of change in technology and in society is so rapid that to prepare young people to live, work and be successful in the 21st century, they will need the ability to think both creatively and critically, problem-solve and work collaboratively.

Students are always at the centre of every decision we make about their education.

Our challenge, as educators, will be to constantly adapt teaching and learning to new technologies and the demands of a global environment where knowledge and skills are the new global currency.

Quality teaching matters

Technology on its own will not deliver an improved learning experience for students.

Across the world it is well recognised that quality teaching is the single most influential factor on student learning.

As technology advances further in the future let's not forget that it is the teacher who makes the greatest difference.

Digital education in Australia

In December 2008 Australia's education ministers signed "The Melbourne Declaration" that set the educational goals for young Australians.

It said in part: "Rapid and continuing advances in information and communication technologies (ICT) are changing the way people share, use and process information and technology. In this digital age, young people need to be highly skilled in the use of ICT. While schools already



employ these technologies in learning, there is a need to increase their effectiveness significantly over the next decade."

The Digital Education Revolution is a national partnership between the Commonwealth Government and the states and territories to support the effective integration of ICT in Australian schools.

In NSW we have provided a laptop computer for every student in Years 9 to 12 (upper secondary school), wireless networks, school technology support officers and professional learning and curriculum support for teachers under this program.

The Connected Classrooms Program

Our NSW Connected Classrooms Program has funded interactive classrooms and upgraded network infrastructure in all public schools. Each school has interactive whiteboards, data projector, control computer, network device and video-conferencing tools to support teaching and learning.



Benefits for students

Technology has opened up new forms of learning and creative expression for students. It has allowed them to take greater control of their learning.

Students can have a real-time lesson with NASA astronauts, take a virtual tour of the world's great museums and galleries, contact students in other countries and other parts of Australia and rehearse for performances via video-conference.

Technology is breaking down barriers of geography and time zones. Students in regional and remote parts of New South Wales can access curriculum experts online or by video-conference.

There are student groups that may be better served in their learning styles through technology in the classroom, such as students with disabilities.

Research suggests that one-to-one computing programs like the Digital Education Revolution increase students' motivation and engagement in learning and support students to see connections to what they are learning and the wider world.

Pedagogy and curriculum

There are many innovations that combine ICT, curriculum and pedagogy in NSW to ensure that our teachers are well equipped now and into the future.

The Australian Curriculum is Australia's first national curriculum and one of the world's first online curricula. In NSW the Board of Studies has integrated the Australian Curriculum into new online curriculum documents, allowing teachers to find, search and manipulate content to suit their own teaching purposes.

Australia participates in The Assessment and Teaching of 21st Century Skills project in collaboration with Cisco, Intel and Microsoft and a number of other member countries. This

"To cope with the demands of the 21st century, people need to know more than core subjects. They need to know how to use their knowledge and skills by thinking critically, applying knowledge to new situations, analyzing information, comprehending new ideas, communicating, collaborating, solving problems, making decisions."

– Partnership for 21st Century Skills

project has developed and tested innovative assessment tasks on collaborative problem-solving and using ICT. NSW has recently joined the International Centre for Curriculum Redesign to look at how we can create a curriculum for the 21st Century.

NSW is working with the Australian Government and other states to build national digital repositories of curriculum and professional learning resources that all teachers can access, and online assessment tools and diagnostic information to enable teachers to personalise learning options for students.

Effective integration of technology into learning requires strong school leadership, stimulating learning resources and reliable infrastructure.

Teachers need to adapt to new technology, but quality teaching is still the key.

Dr Michele Bruniges AM

Michele Bruniges is Director-General of the NSW Department of Education and Communities. The Department educates 1.5 million students in early childhood centres, schools and vocational education and training colleges.