

The Digital Education Revolution

IDEA 2008

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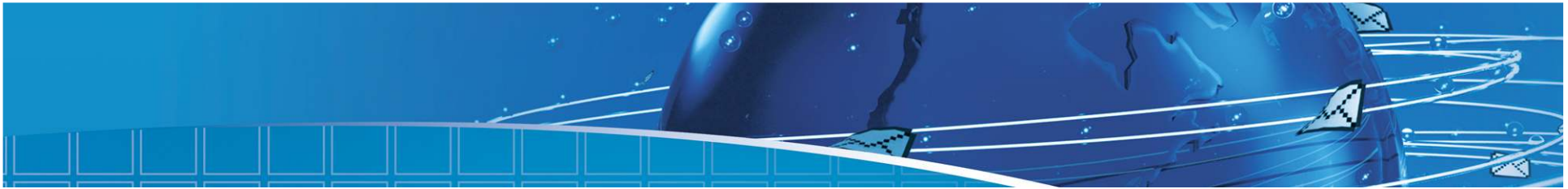




Digital Education Revolution

- Investment of \$1.2 billion – for all secondary schools over five years (2008-2012) to improve student access to world class ICT.
- Five key funding elements:
 - National Secondary School Computer Fund - \$1.1 billion over 5 years;
 - \$10 million over three years to develop support mechanisms for schools.
 - Broadband Fibre Connections to Schools - \$100 million;
 - \$32.6 million over 2 years for online curriculum tools, resources and supporting technical frameworks; and
 - Professional Development for teachers on ICT.





Core elements of the policy

- The core premise is that getting the right implementation of ICT in education is genuinely important for Australia
- And that making effective use of ICT in Australian education requires:
 - o ubiquitous computing capacity
 - o high speed ubiquitous telecommunications
 - o high quality nationally accessible content (and collaboration tools) and;
 - o well trained teachers





National Secondary School Computer Fund

- The Commonwealth is providing funding, not provisioning computers
- Objective of Round 1: to improve the provision of computers in schools where the computer to student ratio is 1:8 or worse to a target ratio of 1:2.
- \$116 million for 116,820 computers to 896 of the neediest schools.
- Applications for Round 2 opened on 14 July and close 9 October 2008 for up to 1900 schools.
- ICT requirements for students with disability identified.
- On-going consultation with key stakeholders.





Support for Effective Deployment of Computers

- Australia is unusual in having a combination of very large centralised school systems and large numbers of Government funded schools which have no systemic support at all
- It is very difficult to deploy ICT well without embedding it into an overall network and support structures
- Significant funding will be going to schools with little experience in deploying ICT
- The Better Practice Guide is a first step to addressing this issue (<http://www.digitaleducationrevolution.gov.au/resources/guide/about/default.htm>)
- The Government has allocated \$10 million for technical support structures
- We are going to consult on the best way to use these funds
 - o and would welcome industry input





Fibre Connections to Schools Initiative (FCS)

- The Government has committed \$100 million to the FCS initiative.
- The FCS will contribute to the provision of fibre-to-the-premise broadband connections to Australian schools to deliver speeds of up to 100 megabits per second.
- It is aligned with the overall approach to implementing the Digital Education Revolution.
- The FCS is focussed on full engagement with State and Territory governments and non-government schools authorities.

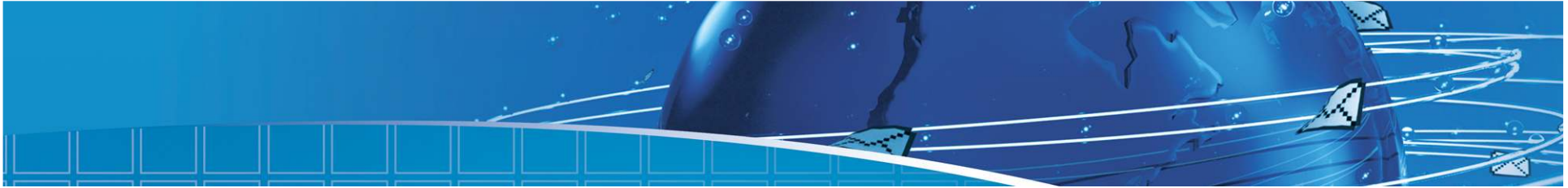




FCS Implementation Plan

- The FCS Implementation Plan will be provided to the Council of Australian Governments' Productivity Agenda Working Group in December 2008.
- Elements:
 - A baseline survey of school connectivity;
 - National Vision of Connectivity for Australian Schools;
 - High level strategies and investment principles; and
 - An evaluation plan.

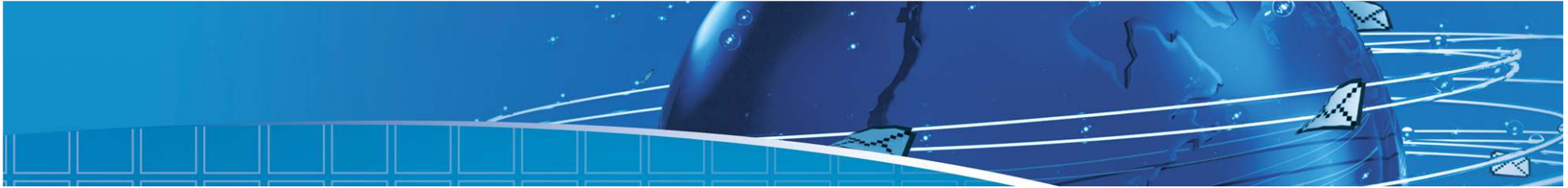




Teaching challenges

- Teacher pre-service education coverage of ICT issues is patchy
- A significant proportion of the teaching workforce is not engaged
- One solution is to actually make the technology more useful
- Also to use the technology itself as a mechanism for engagement
- Teachers are used to sharing and collaborating
 - better tools to do that on line will be important
 - particularly Web 2.0 tools
- Australian Government is committing \$11.25 million to ICT related school-based teacher professional development in 2009
- And has started a process to deliver strategic advice for the 'Teaching for the Digital Age' initiative





Beyond the Infrastructure

- Ubiquitous computing capacity and a fully effective national network will not be enough to achieve the objectives of the Digital Education Revolution
- We need easy to use systems to connect learners with resources, tools and each other
- Currently it is easier for teachers to provide information to students, set tasks and assess performance off line
- ICT applications do not connect with each other
- Teachers and administrators are faced with unpredictable costs if they use technology to the maximum





Key things we want to do

- Connect learners with resources, tools and each other
- Make it easier for teachers to provide information, set tasks and assess performance
- Make it easy for students to own information about themselves and take it with them
- Improve parents' ability to know how their child is performing
- Improve the community's ability to know how schools (and education systems) are performing





Federation Issues

- There are examples of jurisdictions which are well on the way to getting an integrated solution to the use of ICT in education
 - eg Scotland, Local Education Authorities in England
- Australia cannot use their methodology of mandating a solution and selecting single suppliers to deliver it
- Australia does need a true education network where everything connects with everything
- But we must get there with devolved decision making by education authorities





This is where you come in

- What all of this means is that the Australian Government recognises the central importance of the issues addressed by the IDEA conferences
 - and needs the contributions of the organisations represented here
- We need tools and services developed within international standards and specifications frameworks
- We need help in working out how those tools and services can be integrated into a seamless national education network





Online Curriculum Resources and Tools

- **Investing \$32.6 million over the next two years**
 - Access to digital content by teachers and students
 - ICT infrastructure integrated effectively in our schools
 - Aligned with national curriculum
- **National Curriculum**
 - National Curriculum Board
 - National curriculum will be developed by 2010 for implementation in all jurisdictions from 2011
 - Further information on the Board and its work go to:
http://www.ncb.org.au/home_page.html





Formal structures

- The key approving bodies are the Council of Australian Governments (COAG) Productivity Agenda Working Group (PAWG) and its Schooling Sub-Group
- And the Ministerial Council for Education, Employment, Training and Youth Affairs (MCEETYA)
- The key officials level expert body is the Australian ICT in Education Committee (AICTEC)





Australian Information and Communications Technology in Education Committee (AICTEC)

- A national advisory body to education and training Ministers
 - on efficient and effective use of ICT in education and training across schools, VET and university sectors
 - on the enablers of technology rich learning environments
 - to COAG's Sub-groups on implementation of the DER
- AICTEC is focused on achieving practical outcomes in areas where national, cross-sectoral collaboration and coordination are needed.





Key documents

- COAG will be considering a Strategic Plan for the Implementation of the Digital Education Revolution
- We are working on an implementation roadmap to be completed by the end of this year
- Both documents will form the basis for a dialogue with a wide range of players, including industry
- We want to build as wide a consensus as possible about the vision we are trying to achieve
- And the best way to deliver the vision





Consultation on curriculum and services

- AICTEC has established two working group to provide advice on key elements of building a National Digital Architecture
- They will be the principal bodies advising the Australian Government, through AICTEC, on how to expend the \$32.6m available to:
 - o deliver national access to digital content by teachers and students
 - o ensure ICT infrastructure is integrated effectively in our schools





National Interoperability & Digital Architecture Advisory Group (NIDAAG)

- The Australian ICT in Education Committee (AICTEC) has established a cross sectoral advisory group to progress schools' interoperability issues. It includes members from
 - The Government, Catholic and Independent schools sectors;
 - Higher Education sector;
 - Vocational Education & Training sector and;
 - The Australian Government.
- The Chair of the Advisory Group, also representing Australian Government schools, is Mr Adam Todhunter, Chief Information Officer, Victorian Department of Education and Early Childhood Development





NIDAAG - it's focus will be to

- Provide expert advice on a technical framework to support online learning and the implementation of the Digital Education Revolution
- Key priorities areas include:
 - Common infrastructure including essential standards and specifications;
 - Trust Federation for identity and access management;
 - An interoperability framework for school information systems; and
 - A national infrastructure for persistent identifiers.
- Other areas for examination will include e-Portfolios & integrated learning environments.





The importance of copyright

- Copyright can be a major impediment
- On line you want to copy/communicate all the time
- Every student and every teacher is a 'publisher'
- Copyright law is complicated and slow to change
- Trying to solve copyright issues at the point of use is inherently problematic
- One option is to create large bodies of material which are copyright cleared in advance so teachers and students can use and manipulate them without facing uncertain costs and liabilities





Intellectual Property & Privacy in Technology Advisory Group (IPPTAG)

- In June 2008 AICTEC agreed to the establishment of IPPTAG, a cross jurisdictional and cross sectoral group.

Again members are from

- The Government, Catholic and Independent schools sectors;
- Higher Education sector;
- Vocational Education & Training sector and;
- The Australian Government.





IPPTAG will report to AICTEC and will provide advice on :

- A nationally agreed open or free copyright licensing regime that all education sectors can access;
- Minimising copyright obstacles to implementing the Digital Education Revolution;
- the range of new and emerging technologies being used in schools and identify and raise any legislative issues that may arise in their use; and
- enhancing and developing copyright knowledge in the education sectors through technological solutions.





FOR MORE INFORMATION VISIT

www.digitaleducationrevolution.gov.au

Thank you

