Connecting teachers, learners, tools and content: A systems perspective

Andrew Dalgliesh - The Learning Place, Education Queensland
• Schooling in the 21st century
  • more diverse student populations
  • higher demands for standards
  • change and complexity
  • community values & expectations
  • competition for student attention
  • emerging roles and relationships
digital natives Vs digital immigrants

“Today’s students think and process information fundamentally differently from their predecessors. They are used to receiving information fast: parallel processing and multi-tasking are at work in their minds and they function best when networked. Today’s students are no longer the people our educational system was designed to teach.”

Marc Prensky
### 21st century teachers and learners...

<table>
<thead>
<tr>
<th>people</th>
<th>primary resources</th>
<th>secondary resources</th>
<th>tools &amp; models</th>
</tr>
</thead>
<tbody>
<tr>
<td>experts</td>
<td>artefacts</td>
<td>learning objects</td>
<td>face to face</td>
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<tr>
<td>guests</td>
<td>source documents</td>
<td>wikipedia</td>
<td>chat and forums</td>
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<tr>
<td>communities</td>
<td>world events</td>
<td>digital resources</td>
<td>online courses</td>
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<tr>
<td>shared knowledge</td>
<td>original artwork</td>
<td>websites</td>
<td>conferencing, podcasting, RSS, streaming</td>
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<tr>
<td>parents</td>
<td>original performance</td>
<td>units and lessons</td>
<td>wikis &amp; blogs</td>
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<tr>
<td>local peers</td>
<td>datasets</td>
<td>news feeds</td>
<td>Webquests, sampler, raps, buddies...</td>
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<td>statewide and national peers</td>
<td>field trips</td>
<td>school library</td>
<td>inquiry learning</td>
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<tr>
<td>global peers</td>
<td>media assets and digital resources</td>
<td>performance</td>
<td>collaborative online projects</td>
</tr>
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</table>
20th century teachers and learners...

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people

primary resources

secondary resources

tools & models

artifacts

face to face

world events

shared knowledge

parents

original performance

local peers

units and lessons

field trips

school library

inquiry learning

performance
Contemporary learning

- continuous & lifelong
- relevant and purposeful – real world
- situational, learner-constructed knowledge
- multi-disciplinary
- individual & collaborative – learning communities
- rigorous & challenging

In a connected world, with connected learners, what do we mean by e-learning?
20th century

Where can ICTs fit into my classroom?

- Integrate into teaching & learning
- Face-face vs online
- Focus on learning technology
- e = electronic

21st century

How can ICTs change my classroom?

- Transform teaching & learning
- Multimodal, blended
- Focus on learning
- e = effective
Even with Jamie Oliver's kitchen I wouldn’t be a great chef...

Classroom teachers do not want to become experts in the use of ICT: instead they want to be expert teachers of physics, French, maths or music and if ICTs will help them to teach these subjects better, they will use them for this overriding purpose, which is at the heart of transformation.

David Hargreaves 2003

…so what does it take to make great teachers of connected learners?
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<table>
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<tr>
<th></th>
<th><strong>The Chef</strong></th>
<th><strong>The Educator</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Infrastructure</strong></td>
<td>Implements and appliances</td>
<td>Online tools</td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>High quality fresh ingredients</td>
<td>Content</td>
</tr>
<tr>
<td><strong>Research, policy &amp; reporting</strong></td>
<td>Recipes, procedures, standards, reviews, menus</td>
<td>Models of practice, syllabus and strategic frameworks, planning</td>
</tr>
<tr>
<td><strong>People</strong></td>
<td>Experience, professional learning, repertoire, mentors, professional communities</td>
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<tr>
<td></td>
<td><em>Customer, critic, market</em></td>
<td><em>Learner, parent, community</em></td>
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</table>
• EQ participates in The Le@rning Federation (TLF) as
  • end users (school, region, system)
  • shareholders
  • public servants working to the Smart State agenda
  • participants in the national LOW agenda

• Implementation of TLF requires
  • Whole of enterprise vision
  • E-learning as a transformational vehicle
  • Online content as a pillar of the e-learning vision
  • Focus on supporting quality teaching practice for connected learning

• TLF content integral to
  • Systemic public education, ICTs and e-learning strategies
  • Empowered regional and district action
  • Effective teaching practice and enhanced student learning
In the beginning digital content was...

Small

Simple

Reusable

One part of a teacher-defined curriculum
…then came software with the Worx

Large

Complex

Predefined learning contexts

Limited reuse
...and of course the WWW

Wealth of information
Discoverable
Static or dynamic?
Australian or not?
Reliable?
Appropriate?
Current?
Teachers are like magpies…

Gather best, brightest bits & pieces

Combine into unique environments

A new nest each season
• Curriculum Exchange resources
  • Redevelopment of flat CX site – migration to CX resource centre
  • Integration into Learning Place
  • Searches, browses
  • Curriculum Gateways & Hot Topics
  • TIPS: teaching ideas, units
  • EduSites: website evaluations
  • Learning Objects
  • Digital resources
  • Image bank and other EQ digital resources
• Curriculum Exchange (coming in 2006-2007)
  • Integration with Blackboard
  • Federated searches to Merlot, Museums, State Library, EdNA and other quality online databases
  • Overnight caching to schools
  • Media collections and streaming
  • More learning objects, digital resources and other content from the Le@rning Federation (TLF)
  • Existing CX resources migrated to the new system – web site and discovery solutions by Sep 2006
• Online learning
  • Blackboard 6.3 (elearn.eq.edu.au)
  • Participate in a professional learning online course
  • Choose and use a Ready-to-go course for student learning
  • Develop their own online activities in Virtual Classrooms
  • Virtual Schooling Service; Schools of Distance Education
  • LP course development services
  • Content management (incl time and adaptive release, IMS)
  • Assessment activities (incl Respondus and StudyMate)

38,500 members
200+ quality assured courses
3500 staff made courses
• Communication
  • Participate in an online event
  • Create a student or staff project room
  • Invite experts and online guests
  • Facilitate meetings
  • Discuss, share and collaborate

Chat
Comic chat
Forums
Project rooms
MOOs
Blogs
Video, data and teleconferencing

80,000+ participants
6386 project rooms
26 Mentors and 20 OLCs
• Communication (coming in 2006-2007)
  • Web conferencing solution including podcasting, enhanced video/audio/data conferencing, media streaming
  • Wiki
  • RSS – in conjunction with CX resource centre
  • Debating and other collaboration tools

80,000+ participants
6386 project rooms
26 Mentors and 20 OLCs
The Online Literature Festival 2005

- **94 authors and illustrators worldwide**
- **5535 students participated in...**
  - book launches
  - online debates
  - writing workshops
  - characters online
  - critical discussions

*with*
- Districts sponsoring authors
- National Literacy Week support
- State Library of Qld support
- Online registration tool being developed
- New Professional Learning Community
- Public Libraries involved.
• Communities
  • Closed communities (Blackboard)
    * eg C4T community
  • Open Professional Learning Communities (PLCs)
    * eg Learning objects and TLF in Queensland
  • Collaborative Online Projects (COPs)
    * eg Townsville Learning Object Rap
      • Virtual field trips
      • Travel buddies
      • Raps

405 PLCs
3800 staff PLC members
93 Blackboard communities
Putting it all together

*Antarctica*

‘To me, information and communication technology brings the world to the classroom. It just takes the walls away.

When students can access real, totally up-to-date information from real experts – like chatting online to scientists in Antarctica through a project room on The Learning Place – well, you just can't get much better than that.’

*Greg Cooper, Kawungan SS*
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A matter of granularity…

Ready to use

Assets (digital resources)

Learning objects, Edusites

TIPs, activities, courses, unit & project plans

Ready to go

Customising teaching and learning for individuals within communities of learning

Ready to go courses, spotlight projects

Sara Lee

Solutions & skills for transformative teaching practice

Jamie Oliver
• Not all learners are sitting in a classroom
  *(Some things we’ve learned or are learning)*

  • Powerful agents of change can live locally
    (LP Mentors)

  • Be part of the solution and help define the problem
    (Professional Development framework, Middle Phase of Learning, Maths)

  • When you have them by the heart…
    (LP Mentors and OLCs)

  • United we stand…be worth standing for
    (One classroom Vs Schooling 2001)
• The journey of 1000 miles still has some steps
  (*Some things we’ve yet to overcome, or are working on*)

  • New Learning Place (individualised, dynamic, integrated) as part of whole of enterprise solution

  • ICTs Support for Schools - Network maximisation, One ID, MOE, Help

  • Continue and develop delivery of systemic priorities

  • Developing relationships within and beyond EQ
Start with the low hanging fruit

- CX: Learning objects, EduSites, Digital resources
- Ready to go courses
- Spotlight communication event
  (eg Literature Festival, Australia Day chats)
- Participate in an existing COP
  o Travel buddy
  o Book rap
  o Virtual Field trip

The ripest fruit for good learning, the ones that hang in easiest reach and yield the most, are the passions and interests we find and spark in our students