Global trends of ICT in education

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www.ictconnect.typepad.com
Outline

- Global drivers
- ICT, pedagogy and transformation
- Emerging Technologies
Global drivers in changing the educational landscape
“The best way to predict the future is to build it”

A new report visualises learning in a world where technology is embedded in everything we do, and raises some important questions for educators.
Engagement
School 1.0

Teacher Delivers Content & Skills based on government standards

Content and skills delivered by the teacher and reflected back by the students.

Students act as mirrors, reflecting content and skills back to the teacher and government assessors.

Taken from David Warlick
Students act as amplifiers, mining, processing, mixing and remixing content, and sharing.

Teacher models learning and sharing and monitors student work channeling and crafting learning experiences.

Content and skills are mined by students who build from the information raw materials and then share within the class and outside.

Taken from David Warlick
The connected teacher
"I think there is a world market for maybe five computers."
- Thomas Watson, chairman of IBM, 1943
Wi-Fi Signal Status for You and the World!

Here at ThinkGeek we're pretty lazy when it comes to technology. We expect our laptops to do all the busywork while we focus on the high level important tasks like reading. That's why we hate to have to crack open our laptops just to see if there is any internet access about... and keychain wi-fi detectors, we would have to actually take them from our pockets to look at them. But now thanks to the ingenious ThinkGeek monkeys you can display the current wi-fi signal strength to yourself and everyone around you with this stylish Wi-Fi Detector Shirt. The glowing bars on the front of the shirt dynamically change as the surrounding wi-fi signal strength fluctuates. Finally you get the attention you deserve as others bow to you as their reverential wi-fi god, wi-chicks swoon at your presence. You can thank us later.

Product Features

- Glowing animated shirt dynamically displays the current wi-fi signal strength
- Shows signal strength for 802.11b or 802.11g
- Black 100% Cotton T-Shirt
- Animated Decal is Removable (with hook and loop fasteners) for Easy Wash
- Battery Pack is Concealed in a Small Pocket Sewn Inside the Shirt
- Runs for hours off three AAA Batteries (not included)
Wi-Fi Signal Status for You and the World!

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Global drivers in changing the educational landscape

- Creativity
- Innovation
- Risk taking
- Collaboration (community)
- Presentation skills
- Performance skills
Will the Next Silicon Valley Change the Rules?

From: The Next Silicon Valley Leadership Group – Innovation & Competition

Copyright Optara
Set up a free TV station
Free access to learning content
Open Yale Courses provides free and open access to seven introductory courses taught by distinguished teachers and scholars at Yale University. The aim of the project is to expand access to educational materials for all who wish to learn.

Open Yale Courses reflects the values of a liberal arts education. Yale's philosophy of teaching and learning begins with the aim of training a broadly based, highly disciplined intellect without specifying in advance how that intellect will be put to use.

**Featured Course**

**Death**

with Professor Shelly Kagan

There is one thing I can be sure of: I am going to die. But what am I to make of that fact? This course will examine a number of issues that arise once we begin to reflect on our mortality. The possibility that death

Free access to learning content
Digital divide and digital opportunities

- 60% of the world's classrooms/schools....
Leapfrogging......
Changing face of technology

- **Learning tool** (student centric, relevant and rigorous learning)

- **Data tool** (inform educational and instructional decision making)

- **Enabling force** (knowledge work, entrepreneurship, political, social, cultural, networking)
Map of Future Forces Affecting Education (2006-2016)

Driver of Change:
- Grassroots Economics
- Family & Community
- Markets
- Institutions
- Educators & Learning
- Tools & Practices

Institute for the future
Sustainable systemic innovation and change

- Knowledge transfer/sharing
- Practice based CPD
- Knowledge creation, capture and transfer
  - Research supported
  - Balance between practising teachers and researchers
  - Methods of knowledge capture
  - Impact on teaching and learning
  - Knowledge transfer network

2020 Vision
Report of the Teaching and Learning in 2020 Review Group
Sustained innovation

Teacher input

Student output/impact

Low

High

Low

High
Intrigue, creativity, motivation

Transformational use of technology
Engagement
Not powerpoint again!
Why are we doing this?
Can we just draw?
Reflections…

- A personalized flat world has important implications for pedagogy
- Learning is becoming a global activity
- A 21st century students will define “school” as a place where they can learn more than they could on their own.
- Time and place shifting devices are making an impact on learning

**In a world of infinite content, the only way to cope with this is to focus on context (put information to use)**
The Technology Paradigm

- Content is important
- Connectivity is king
- Context is the emperor
Create
Blooms Taxonomy

Knowledge
Understanding
Application
Analysis
Synthesis
Evaluation
Blooms Taxonomy revisited

Higher-Order Skills
6. CREATE
5. EVALUATE
4. ANALYZE
3. APPLY
2. UNDERSTAND
1. REMEMBER

Lower-Order Skills

Changing Technologies

Blog aggregators
Podcasts
RSS
Wiki
Blogs

E-Learning
C-Learning
Web 2.0, Community and Personalisation

1. Information is a conversation
2. Information finds me
3. Add value to a topic
4. People power! (social networking)
OPENING EDUCATION

Social software and learning
http://www.flickr.com/explore/
Educational Podcasts

Podcast.net
The Podcast Directory

SEARCH:
Title & Description  SEARCH

Browse Tags: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6 7 8 9 0 - TOP

Entertainment (4049)
Music, Celebrities, Comedy...

Business & Money (513)
Career, Investment, Marketing...

Arts (1137)
Poetry, Storytelling...

Computers & Internet (1221)
Hardware, Software, Podcasting...

Science & Nature (542)
Technology, Animals, Environment...

Home & Lifestyle (667)
Relationships, Health, Pets...

Hobbies & Recreation (612)
Games, Autos, Travel...

Learning & Instruction (765)
Biographies, How To, Education...

News & Media (1025)
World News, Newspapers...

Politics & Government (678)
Crime & Law, World Politics...

RSS=Really Simple Syndication
The Next Time You Find a Great Website...

We make sure you can visit it again, from any computer, anytime!

In One Click -

- Share it with others! Or keep it private.
- File it for reference, or research, or for fun!
- Read it later! When you have the time.
- See it appear in your links on your blog instantly!

http://www.blinklist.com/
The changing face of information

Mash-ups
### Route Finder

**From:** bs16 3lz  
**To:** bs15 8bd

<table>
<thead>
<tr>
<th>Print map only</th>
<th>Print written directions only</th>
<th>View written directions</th>
<th>Email route to a friend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance: 1.5 miles 2.5 km</td>
<td>Walking time: 23 mins fast 31 mins medium 46 mins slow</td>
<td>Calorie burn: 124 fast 93 medium 65 slow</td>
<td>CO₂ avoided: 0.54 kg car 0.77 kg taxi 0.15 kg bus</td>
</tr>
</tbody>
</table>

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[Map Image]

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[Help...]
Buzztracker: World News, Mapped

Today's Top Locations

Gaza (19%)
New York (38%)
Washington (36%)
Baghdad (14%)
Beijing (04%)
Hong Kong (02%)
Shanghai (02%)
London (02%)
Vienna (02%)
Boston (02%)

View Archive (2006)
Buzztracker: World News, Mapped

Today's Top Locations
- Gaza (15%)
- Baghdad (11%)
- Lhasa (06%)
- Beijing (05%)
- Washington (05%)
- Hong Kong (05%)
- New York (04%)
- Mexico City (03%)
- London (02%)
- Los Angeles (02%)

View Archive (2006)
ICT

- Information **Communication** Technology

- Information **Collaboration** Technology

- Information **Connecting** Technology

- Information **Culture Change** Technology
Useful list of websites

- [www.edublogs.org](http://www.edublogs.org) (blogging site for educators)
- [www.mogulus.com](http://www.mogulus.com) (free TV station)
- [www.blinklist.com](http://www.blinklist.com) (social bookmarking)
- [www.voicethread.com](http://www.voicethread.com) (tool for formative assessment)
- [www.google.com/accounts](http://www.google.com/accounts) (sign up for a free google account and explore some of the collaborative tools)
- [www.wikispaces.com](http://www.wikispaces.com) (set up a free wiki)
- [www.pbwiki.com](http://www.pbwiki.com) (set up a free wiki)
- [www.walkit.com](http://www.walkit.com) (example of a mashup)
- [www.zentation.com](http://www.zentation.com) (share video and slides)
- [www.slideshare.com](http://www.slideshare.com) (share slides on-line)

Photostory 3 (google this word to download a free digital story telling software)
Future lab (google to access the website of this education technology forecasting site)
Thank you

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