

INFORMATION FUTURES FORUM  
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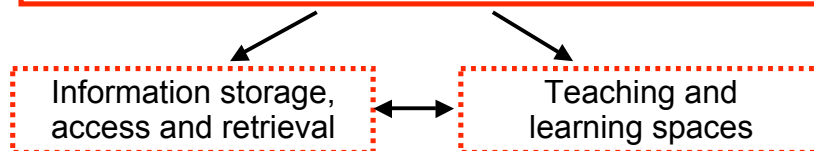


How will scholarly information  
and technologies be used in  
teaching and learning in 10  
years' time?

A panel discussion to inform the  
Information Futures Commission

Richard James  
Dianne Chambers  
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**Disciplinary teaching and learning practices**



*... faster access to more information is only an advantage if students have the skills and time to examine, sort and assimilate it. While the Internet will come to offer exceptional opportunities for information transfer, information on its own is of little value unless it is well integrated in a teaching and learning program ...*

Richard James and Kate Beattie **1995 (!)**



## In what directions will we take T&L?

### **ESTABLISHING A STRATEGIC POSITION**

How distinctive do we wish to be in our approaches to teaching and learning?

Will this be a point of institutional differentiation, strategy and marketing?

How do we wish to position the Melbourne Experience into the future?

### **... BUT BEING AWARE OF THE LIMITS TO OUR INFLUENCE**

What trends in the environment for teaching and learning in higher education are simply beyond our control, and over what can we reasonably expect to exert influence?



## What we can predict with confidence:

- Mass higher education, globalisation and internationalisation are here to stay.
- Students' patterns of (dis)engagement with study and campus life will grow more diverse.
- Students' expectations for easy, fast access to information will be high.
- Global information repositories will be ubiquitous.
- Paper is here to stay.
- The lecture is here to stay.
- The way in which a human brain learns won't change at all.



### **What seems likely, or may happen if we have the will:**

- Assessment practices will change to guide student learning and the acquisition of graduate attributes.
- Knowledge transfer will find a secure location in the undergraduate curriculum.
- The way in which we use lectures and small-group learning will continue to evolve and become more sophisticated.
- Students will be carefully educated in the wise use of information.



### **An information-rich environment is wonderful for educators, but there are traps to be avoided**

- Excessive amounts of undifferentiated information can cause bewilderment.
- The shuffling and storing of e-files can mistakenly be being thought of as studying.
- 'Information skimming' can replace sustained engagement with theories and ideas.
- The memorising of fragments of information can be mistaken for knowledge acquisition.
- Collaborative online activities can become the e-pooling of ignorance.



*Web 2.0 has become a warm and dark space for people with too much time and too few ideas. They are shielded through the flawed assumption that if more “people” (and as a visitor to Second Life, I use this word advisedly ...) are involved in doing “something” then it becomes important.*

Tara Brabazon, *Times Higher Education*, 3 April 2008



## **Looking backwards to look forward**

**Dr Dianne Chambers**

## **Looking backwards to look forward: The last decade**

- **Technologies**
  - not huge changes...
  - cutting edge have become mainstream
- **Information**
  - vast increase in availability of information
  - in c 2000 information explosion on the web, and huge growth since then

## **The next decade?**

- **Technologies?**
  - What exists now, but easier, faster and more accessible.
- **Information?**
  - More information available and more accessible.

## Students in 10 years?

- Now about 10 years old.
- Have been using technologies all their lives.
- Expect 'all the time & everywhere' access to information via technologies.
- Are developing information literacy skills as we speak.
- Will value face-to-face learning opportunities.



## Staff in 10 years?

- Still busy!
- Technologies will need to be easy, effective and valued.
- Will need to see value for efforts required in using technologies on their teaching.
- Will need time to explore vast information resources, so that they can guide use in teaching and learning.

## Where to in 10 years?

- We decide!
  - Select technologies that meet our needs
  - Technologies integrated in all T&L
  - Face-to-face classes will be premium T&L
- Technologies
  - probably already exist, though may currently be hard/expensive/cutting edge
  - Need to be easy & everywhere
- Information
  - Staff & students need good information skills
  - Teaching will leverage off great information sources if staff have time to explore available resources



**Dr Gregor Kennedy**  
**Biomedical Multimedia Unit**





## What will our T&L environments look like?

### Curriculum and Learning Design

- relatively traditional
- more inquiry-based learning
- more self-directed learning
- more peer-based learning
- more interdisciplinary work

### Location

- lectures
- small (tute) groups
- online
- on campus
- off campus (international, community)



## What is now a necessity





## Internet dependence is not 10 years away...

### The rise of the Internet has changed:

- the way in which students are accessing information;
- the type of information that is available to them;
- their expectations about the delivery of services & administration;
- the web [2.0] tools that are available to them.

### To respond ...

- our technological infrastructure needs to be up to the standard set elsewhere or it looks passé at best, incompetent at worst.
- place value on ease, access and speed.
- emphasise searching and information literacy skills (embed in curricula, in policy, on academic board agenda).




## On the increase ...

Students will increasingly rely on deregulated information and tools for study.

### They will ...

- rely on poor *and* high quality content not sanctioned by the University (wikipedia and Yale);
- rely on 'user-generated' content that will come in a variety of formats (websites, blogs, wikis, YouTube, podcasts);
- find information by relying on community 'tags' and social networks, rather than just through Uni databases;
- rely on non University-based tools and applications that will need to be integrated with University systems.




 On the increase ...


True *Mobile Learning* will arrive on campus.

- hardware capabilities and wireless networks will improve;
- more informal learning in public spaces on campus;
- more personally owned, web-enabled, handheld devices in formal teaching spaces.

Students will increasingly 'Pull' resources.


- RSS (Really Simple Syndication);
- students will subscribe to information based on personal preference and need;
- lecture notes, powerpoints, readings, websites, student blogs, prac notes, popular media, etc, etc.



 On the increase ...

More 'online' simulation, role-play & investigation in teaching and learning.

- Decentralised, mass education will continue to provide strong impetus for their use.
- A continuum from simple simulations and online role plays to virtual worlds to fully immersive environments [?]
  - simple simulations, online practicals, etc.
  - online collective role plays;
  - online collective projects and authoring;
  - inquiries using established, complex databases & sets;
  - learning activities in online virtual worlds [?]
  - immersive, 3D environments with haptics [?]



 In the next 10 years ...

Students will continue – in diverse ways – to:

- create and share digital content online;
- play and be present online.

(facebook, flickr, delicious, YouTube, gaming, MSN, blogging, YouTube, iTunes, Second Life)

But what is the motivation or obligation to use these tools and activities in teaching and learning?

- students like them and find them socially engaging, so ...  
(does 'Digital Living' = 'Digital Learning'?)
- other Universities are doing it.
- it makes good educational sense, it will enhance student learning and/or students' university experience.



## Four heightening challenges for the University

**Dr Kerri-Lee Harris**



## Four heightening challenges for the University

### CHALLENGE 1

Learning how to teach students to be 'information discerning' ... that, is to differentiate between sustained scholarly work, meta-analyses, the sketches and snapshots in Wikipedia-like formats and sheer nonsense.

*By the way, can you please help me to find an important reference for my essay? As u know, the text book is really too thick, and as I search online using some keywords, I often end up with thousands of pieces, finding the reference really freaks me out!*

2<sup>nd</sup> year undergraduate student, April 2008



## Four heightening challenges for the University

### CHALLENGE 2

Striking a balance between the tailored and targeted information we directly provide for our students and the guided navigation and frameworks we offer for the wider body of information they will encounter.



## Four heightening challenges for the University

### CHALLENGE 3

Knowing when to encourage individual learning and when to encourage collaborative learning, and the types of information and technologies needed to support both.



## Four heightening challenges for the University

### CHALLENGE 4

Supporting and encouraging academic staff to engage with new possibilities and to bring their distinctive disciplinary objectives to bear on the use of information/technologies.



### Wouldn't it be nice if we built on these directions?

1. Hard-copy, browsable collections, computers and individual & group learning spaces being co-located and merging seamlessly on campus.
2. Optimising lectures through refining their role within the curriculum and supporting this with appropriate technology.
3. More students preparing (online) prior to classes and following up after classes.
4. Students becoming adept at maintaining digital repositories on their academic progress, achievements and accomplishments.



### Wouldn't it be nice if we built on these directions? (continued)

5. Undergraduate students having access to rich online datasets (such as quantitative data and image banks) with which to experience research-based learning.
6. Simulations used strategically to create experiences otherwise too costly or simply impossible.
7. Learning management systems becoming easier to use and educationally more versatile.
8. Educational content and tools becoming more openly shared between universities.





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