Hands-on at a distance
Technology and alternative delivery

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Teaching for Learning
Overview

- Background
- Changing contexts of teaching & learning
- Changing roles of teachers & learners
- Needs for professional development of the ‘new classroom’ teachers
- Techniques for integration
- Tools for teachers and learners
‘the impact of information technologies on the social institutions responsible for knowledge production and distribution such as universities and schools is far less significant’ than on other social arenas such as industry, business or international relationships

(Chen, 1992: 161-2)
... and now

- individual or ontogenic technologies such as the internet, e-mail and chat ubiquitous in our daily lives
  → technology has become an acceptable and accepted partner in learning

- Manifest in:
  - Internet use
  - CMC incarnations of CALL
Computer Mediated Communication (CMC)

Since the ‘watershed’ of CMC when:

- graphic interfaces for web browsers started to become commonplace (about 1995)
- when ordinary people began to take up e-mail & the internet for their own purposes:
  - personal communication (with family & friends)
  - knowledge/information gathering purposes (library catalogues, newspapers, encyclopedias, school projects)
  - on-line shopping (amazons.com, e-Bay etc)
CMC: 3 modes

1. Synchronous (broadband permitting)
   - Web-based video/audio/text chat
     e.g. Webheads
     & TappedIn
     http://ti2.sri.com/tappedin/

2. ‘delayed synchronous’ (Enter Key dependent)
   - Text chat
   - some Virtual Reality (VR) environments
   - MOOs
CMC: 3 modes cont’d …

3. Asynchronous
   – forums/BBS/discussion lists
   – E-mail e.g. E-Tandem Project

http://www.slf.ruhr-uni-bochum.de/
The Information Superhighway & the Digital Divide

- Cost of hardware (computers, modems, other internet devices)
- Cost of connectivity
- Availability of connections
- Content divide
The Information Superhighway & the Digital Divide

- By 2000, Black households were increasing their spending on computer-related goods 14 times faster than White households (Bailey, 2000)

FIGURE 1
Percentage of U.S. Ethnic Groups Online

- White: 34% (1999), 44% (2000)
- Black: 23% (1999), 40% (2000)
- Hispanic: 36% (1999), 43% (2000)
- Asian: 64% (1999), 69% (2000)

* Projected.
Source: Forrester Research, Inc. (1999)
7 measures of market maturity for (South Asian) online content:

1. Total no. of Websites about (& in) the country
2. Local relevance & usefulness of this content
3. Local language standardisation & usage on Web
4. Amount of sub-national content (state/province level)
7 measures of market maturity for (South Asian) online content:

5. Presence of metacontent e.g. directories, search engines
6. Amount of ad revenues targeting online audiences via these sites
7. Presence of third-party services from online auditors, and market research groups

(Rao et al., 1999)
In China in 2001:

- 22 million Internet users
- Most likely male
- Aged between 18-24
- Have a Bachelor’s degree
- 76% access Chinese language websites
- Diving line therefore:
  - Education
  - Speak English OR
  - Another language represented on the Internet
- i.e. the divide is as much about knowledge as infrastructure
Changing contexts of teaching & learning 1

Technologies do not directly mediate learning … learning is mediated by thinking … Thinking is activated by learning activities, and learning activities are mediated by instructional interventions, including technologies. […] In order to more directly affect the process, therefore, we should concern ourselves less with the design of technologies of transmission and more how learners are required to think in completely different tasks.

(Jonassen, 1992: 2)
One thing that it is essential to realise is that the most interesting part of what is happening on the Web is not visible to the observer. What really matters is what is taking place in the communication between users of the Web … the critical difference … between content and connectivity.

(Felix, 2002: 12)
A realistic assessment of Web-based teaching is that it is *not a time-saving approach*, but rather a *time-shifting one*. Teachers will save on the time they would otherwise spend preparing elaborate materials, but they will also have to invest time in assisting in the organization of tasks and projects, moderating communication, and creating sound assessment strategies.

*(my emphasis - Felix, 2002: 12)*
Why use flexible delivery?

- Institution reasons
- Teacher reasons
- Learner reasons
- Learning reasons
Distance learning & flexible delivery

‘The old paradigm of on-site versus distant learners is blurring rapidly as the increasing availability of network resources and collaborative software stimulates a convergence. Technologies that were originally designed for meetings and conferences are now being pressed into service to provide the competitive edge for education, training, sales support and customer interaction.’

( Wilson, 1997)
...and this is mainly due to the fact that

‘Just twenty years ago, few imagined what the future would hold for apparently trivial applications such as email. But it seems obvious today that the computer serves as a vital medium of communication, and not just as a calculating and information storage device. Its definition has changed in a direction determined by a social process.’

(Feenberg, 1999)
Shift in Pedagogical Approach to a design that is:

- Intentional
- Flexible
- Active
- Contextualised/Situated
- Experiential
- Learner-shaped
Based on an emerging meld of:

- Constructivism
- Sociocultural approaches
- Task-based approaches
- Ecological approaches
- Problem-solving approaches
- Collaborative learning approaches
- CSCL/WMCL
... and accompanied by

- Qualitative and ecological approaches to research into what we’re doing
Learning environments & changing roles

- Learners (especially younger ones) are as comfortable if not more so than teachers with the newer (communications) technologies (Felix, 2001)

- learners who communicate more frequently also use a wider range of media (Haythornthwaite, 1999)

- Learners prefer 1-1 over 1-many CMC interactions (Söntgens, 1999)
Learning environments & changing roles 2

- Social relationships are necessary before and in order for information sharing to take place (Haythornthwaite, 1999; Söntgens, 1999; Appel & Gilabert, 2002)

- After some familiarity and practice within an audio-enhanced CMC environment, learners appreciate the opportunity for real-time discussion of written and e-mail communication tasks (Kötter et al. 1999)
Learning environments & changing roles

- CMC environments can shape the increased range of communication strategies learners use during task-based CMC (Smith, 2003).

- Synchronous CMC tasks can expand the participant roles of learners beyond traditional writing roles and elicit more interactive negotiation of these roles (Abrams, 2001).
Learning environments & changing roles 4

- In synchronous CMC interactions learners:
  - used similar communication devices to f2f (face-to-face)
  - communicated through highly collaborative, negotiated interaction, ignoring inaccuracies
  - compensated for lack of non-verbal cues using keyboard symbols e.g. ‘smileys’ etc.

(Lee, 2002)
Cognitive style and Hypermedia

- ‘support does not always correlate with structure’ and
- regardless of cognitive style, learners want or prefer to interact with an instructor and
- regardless of cognitive style, learners achieve better when more resources (channels and suggestions for instructional paths) are provided

(Summerville, 1999)
Learning environments

- not just a physical space consisting of teachers, learners and resources/technology, but rather
- the essentially intangible conflux of:
  - Teachers
    - their pedagogy
    - their beliefs
    - their roles
    - their prepared materials and resource lists/sites
  - Learners
    - their needs-driven goals
    - their competencies
    - their learning styles and strategies
Learning environments cont’d

– Physical resources
– Technology
– Libraries

as well as:

– the virtual or ‘soft’ technology represented by:
  • software
  • internet facilities and resources

❖ and the networks among all of these in which learning takes place
Modes of flexibility – a continuum

- Teacher/institution-defined course & materials
  - Hybrid of on-line & hard copy
  - Hybrid of f2f & on-line
  - Fully on-line

- Teacher/institution-defined tasks based on range of teacher/institution-defined online resources

- Semi (guided)-exploratory – using on-line materials with teacher/institution-defined limitations or instructions & criteria
Modes of flexibility – a continuum 2

- Collaborative & self-/group-managed
  - Under guidance of a teacher
  - Learner-teacher developed curriculum
  - Collectively constructed tasks
  - Collectively constructed evaluation

- Exploratory/autonomous
  - With or without teacher guidance
  - With or without formal enrolment
10 insights from distance teaching
(Henrichsen, 2001)

1. Different ICT options each have their own strengths (& weaknesses)

2. Sophisticated ICT not necessarily better esp. in isolated areas/developing countries

3. Regardless of technology, solid instructional design & effective teaching methods are crucial

4. DE involves teaching & learning in new/modified roles

5. Teachers work as members of instructional/technical team
10 insights from distance teaching (Henrichsen, 2001) cont’d …

6. Importance & difficulty of creating & maintaining active, interactive learning

7. Importance of building a sense of community & overcoming isolation

8. Design flexibility is crucial

9. Evaluating students and program success is challenging

10. Reducing attrition also a challenge
Roles of a flexible teacher

- Designing/learning new protocols for interacting or turn-taking & identifying & responding to students in remote locations
- Up to 10 times more organising & planning
- Providing clear instructions (oral & written)
- Creating clear guidelines & structure for class conduct & expectations (Ts & Sts)
- Careful organisation of record keeping
- Increased personal contact via e-mail
- Training & supervising remote facilitators
Roles of a flexible teacher cont’d

- Designing materials or creating learning paths with web-based resources
- Special training with technology (e.g. teaching to a camera or headset?!)  
- Establishing personal contact & creating a community  
- Asking productive questions appropriately  
- New strategies for ensuring comprehension & avoiding confusion  
- Structuring independent learning tasks
Roles of a flexible learner

- Increasing autonomy in learning approach
- Developing appropriate learning strategies
- Being responsible for own motivation & discipline
- Learning “process management” (Palloff & Pratt, 2001): new strategies for establishing & maintaining “presence”, interest, & turn-taking
- Learning how to encourage & critique others & give appropriate feedback (Palloff & Pratt, 2001: “collaboration”)
- Practise & learn to self reflect
- Demonstrate critical thinking to teacher & peers (Palloff & Pratt, 2001: “knowledge generation”)

(Palloff & Pratt, 2001: “knowledge generation”)
Horror stories worthy of Halloween

‘Our experience has been that online classes are sufficiently different from traditional (face-to-face) classes and sufficiently accessible that students who would do badly in traditional classes or who could not take them at all typically thrive in online classes.’ […]

The very features of online classes that make them so accessible to students – the freedom to participate in class at any time, from any place, without ever having to meet or speak to the teacher or other students in person – can also make such classes difficult and dangerous for unwary or underprepared faculty. Online classes can be unpredictable and potentially explosive.’ (Hailey et al. 2001)
Horror stories cont’d

- Volatile students create flame wars
- Inappropriate collaboration
- Unteachable moments
- Inappropriate channels for complaint

BUT

‘… “empower” means to allow the teacher to make mistakes – and teachers going online for the first time will almost certainly make them.’ (Hailey et al. 2001)
Solutions suggested

1. Use the right strategies & departmental support
2. Employ/learn new pedagogies
3. Address problems personally & early
4. Use unsolicited friendly e-mail
5. Pay careful attention to students
6. Demonstrate attentiveness by:
   - Frequent class visits
   - Learning to recognise & respond to warning signs
   - Posting messages often (“face time”)
   - Responding immediately to students’ e-mail
   - Using the phone to solve difficult problems
User-centred on-line course design (Blythe, 2001)

- Systems approach versus user-centered approach to Web-based course design

‘Because distance education requires instructors to take part in unfamiliar design practices, they must seek appropriate models. [...] Consider that a technology presents a gathering of artifacts and processes designed to enable users to accomplish a desired task.’ (p. 330)
A user-centered approach to Web-based course design

- Administrators
- Instructors
- Users (students)
- Support staff
- Web-based course

Power

Time
Interaction vs interactivity

- Interactivity is the activity learners have when there’s no interaction …????

  - The learner: who
  - Content: what
  - Pedagogy: how
  - Context: when & where
  - interactivity – the promise not yet realised

- van Lier: ecological affordance: the relations between perception and action of participants (2000)
Interactivity

… can be defined as the degree to which a communication technology can create a mediated environment in which participants can communicate (one-to-one, one-to-many, and many-to-many) both synchronously and asynchronously and participate in reciprocal message exchanges […]. With regard to human users, it additionally refers to the ability of users to perceive the experience to be a simulation of interpersonal communication and increase their awareness of telepresence.

(Kiousis, 2002: 379)
Interactivity (Kiousis, 2003: 378)

Structure of technology

Communication context

User perception

Speed

Range

Timing flexibility

Third-order dependency

Sensory complexity

Proximity

Social presence

Sensory activation

Perceived speed

Perceived speed
Internet as resource: Metasites & libraries

- Online dictionaries:
  http://dictionary.cambridge.org/
  http://www.onelook.com/
  http://www.yourdictionary.com/languages.html

- Libraries
  http://www.awesomelibrary.org/Classroom/English/Languages/Languages.html
  http://www.etown.edu/vl/forlange.html
Metasites & libraries 2

- Metasites
  - http://www.speakeasy.org/~dbrick/Hot/foreign.html
  - http://www.rong-chang.com/
  - http://www.csun.edu/~hcedu013/eslplans.html

Merlot – search on categories: Humanities
  - World languages, then search sites
  - ESL
  - http://www.merlot.org/Home.po
Skill- or interest-specific sites

- CMC sites:
  - e-Tandem project
  - keypals
  - SchMOOzeU

http://www.slf.ruhr-uni-bochum.de/
http://www.iecc.org
http://www.otan.us/webfarm/emailproject/school.htm
http://schmooze.hunter.cuny.edu:8888/
http://www.uiowa.edu/~ddrhet/mainpg.htm
Skill- or interest-specific sites 2

- Web-based activity types (Patricia Pecoy)
  http://facweb.furman.edu/~pecoy/lessons.htm
- Internet activities for FL classrooms
  http://www.clta.net/lessons/
- Dave Sperling’s ESL Café
  http://www.eslcafe.com/
- Lauren Rosen’s ideas for Teaching on the Web
  http://polyglot.lss.wisc.edu/lss/lang/teach.html
Skill- or interest-specific sites 3

- Disney
- Speechgems: Pizzazz!
  http://www.speechgems.com/pizzazz.html
- Virtual language Centre
  http://vlc.polyu.edu.hk/
Skill- or interest-specific sites 4

- Writing sites:
  - Purdue Writing Lab
    http://owl.english.purdue.edu/
  - Ruth Vilmi’s Web World
    http://www.ruthvilmi.net/hut/index.html

- Listening resources: ESLGo
  http://www.geocities.com/eslgo/listen.html
Exploratory sites & tools

- Cultura (French/USA) cultural stereotypes
  http://web.mit.edu/french/cultura/
- TrackStar
  http://trackstar.hprtec.org/
- Bernie Dodge’s Webquest page
  http://edweb.sdsu.edu/webquest/webquest.html
- Travel simulations
  http://www.iei.uiuc.edu/travelsim/
Collaboratory sites

- Jennifer Robins’ StoneSoup collaboratory & list of sites:
  http://www.stonesoup.info/
  http://faculty.cmsu.edu/jrobins/collabs.htm
- The Inquiry Page
  http://inquiry.uiuc.edu/
- Urban Legends Reference Pages
  http://www.snopes.com/snopes.asp
- University of Minnesota’s Cooperative Learning Center
  http://www.clcrc.com
- Northwest University’s collaboratory site
  http://collaboratory.acns.nwu.edu/cwebdocs/index.html
Some other interesting sites

- British Council SearchEnglish search engine
  http://searchenglish.britishcouncil.org/

- Enchanted Learning is another resource-rich site for teachers and younger (language) learners:
  http://www.enchantedlearning.com/Home.html

- An excellent example of an on-line learning environment which incorporates many exploratory features (for learning Greek) is Hellas Alive ©:
“Hard core” sites

- Authoring templates
  - Hot Potatoes
    http://web.uvic.ca.hrd/halfbaked/
  - Bob Godwin-Jones’ Language Interactive website
    http://www.fln.vcu.edu/cgi/interact.html
  - The Swarthmore Makers
    http://lang.swarthmore.edu/makers/

- Web style guide
  http://www.webstyleguide.com/
“Hard core” sites 2

- Html tutorials
  - Basics
  
  http://www.homestead.com/prosites-vstevens/files/pi/very_basics/starthere.htm
  
  - For Kids (WebMonkey):
    
    http://hotwired.lycos.com/webmonkey/kids/
    
    - AWPA - Introduction to HTML (more technical)
    
    - Learning HTML 3.2 by Examples (everything you [n]ever wanted to know about html!)
    ☺
    
Resources sites

- Using images
  - Virtual Picture Album
    http://carla.acad.umn.edu/VPA/VPA.html
  - University of Victoria’s clipart library (Half-baked)
    http://web.uvic.ca/hcmc/clipart/
  - Copyright-free library of sketch clipart
    http://www.sla.purdue.edu/fll/JapanProj/FLClipart/default.html
  - Foreign language teacher’s clipart
    http://jobslide.com/directory/Teaching/Foreignlanguageteachers/clipart.shtml
Resources sites 2

- Electronic books
  http://www.gutenberg.net/
- Online news with activities
  http://abcasiapacific.com/livingenglish/
Courseware sites

- WebCT
  http://www.webct.com/
- Blackboard
  http://www.blackboard.com/
- Moodle (freeware)
  www.moodle.org
9 Rules of good technology (Downes, 2000)

1. Good technology is always available …
2. Good technology is always on …
3. Good technology is always connected …
4. Good technology is standardized …
5. Good technology is simple …
6. Good technology doesn’t require parts …
7. Good technology is personalized …
8. Good technology is modular …
9. Good technology does what you want it to do. And not something else.
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