Messing About with Technology in Higher Ed: Some Dispatches from the Field



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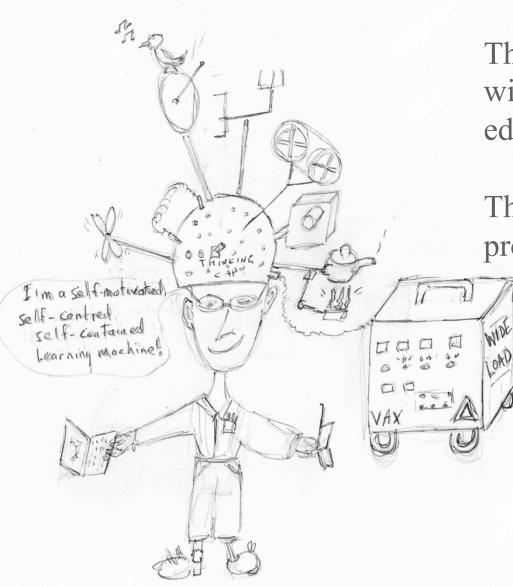
Overview

- Introductions
- Technology for teaching and learning and the element of change
 - What drives change?
 - Where are the changes?
 - How much can you change?
- Thinking about technology and change
- Dispatches
 - Some examples of messing about from the field
- Discussion



Change

• What can go wrong?



Things go awry messing about with technology in higher ed....

The early "Thinking Cap" project

Change

- More realistically.....
 - Failure due to "primary" barriers
 - Not sustainable, usable or scalable
 - No impact (or harm)
 - Appearance of change

Change

- Technology as an "agent" of change
- What drives change?
 - Theories, models, "best practices", "evidence-based research", competition, tools, constraints, opportunities, assumptions



Change Driven by Assumptions

- Assumptions about learners -- the" Digitial Native" and learner experience
- Assumptions about teaching constructivism, learner-centred and problem-based instruction
- Tapscott: Educating the net generation (1999)
- Prensky: Engage or enrage me: what today's learners demand (2005)

Frameworks

Grainne Conole provides another framework (<u>http://e4innovation.com/?p=328</u>)

At a glance representation	
Information and experience	"Content and activities" Could include course materials, prior experience or student generated content Readings, DVDs, podcasts, lab or field work, placements
Communication and interaction	"Dialogue" Social dimensions of the course, interaction with other students and tutors Course forum, email
Thinking and reflection	"Reflection" Internalisation and reflection on learning In-text questions, notebook, blog, e-portfolio,
Evidence and demonstration	"Assessment" Diagnostic, formative and summative Multiple choice quizzes, TMAs, ECA
Guidance and support	"Learning pathway" Course structure and timetable Course calendar, study guide, tutorials

Pedagogy

Goals (from UNESCO Policy Guidelines on Mobile Learning):

- Facilitate personalized learning
- Provide anytime, anywhere learning
- Provide immediate feedback and assessment
- Ensure productive use of classroom time
- Build new communities
- Support situated learning
- Enhance "seamless" learning
- Bridge formal and informal learning
- Improve communication and administration



Capabilities, functions

- Search
- Content distribution text, audio, video (library access, case studies, podcasts...)
- Assessment
- Polling
- Recording (voice, text, video, stills)
- Games
- Collaboration (blog, twitter, secure SMS messaging,telephony...)
- Support functions (reminders, alerts, schedules, deadlines...)
- Scanning (enhanced bar codes...)
- Location services: activities, tasks or content driven by location

(Adapted from C. Schofield *et al*, *Going Mobile in Executive Education*. Ashridge, 2011)

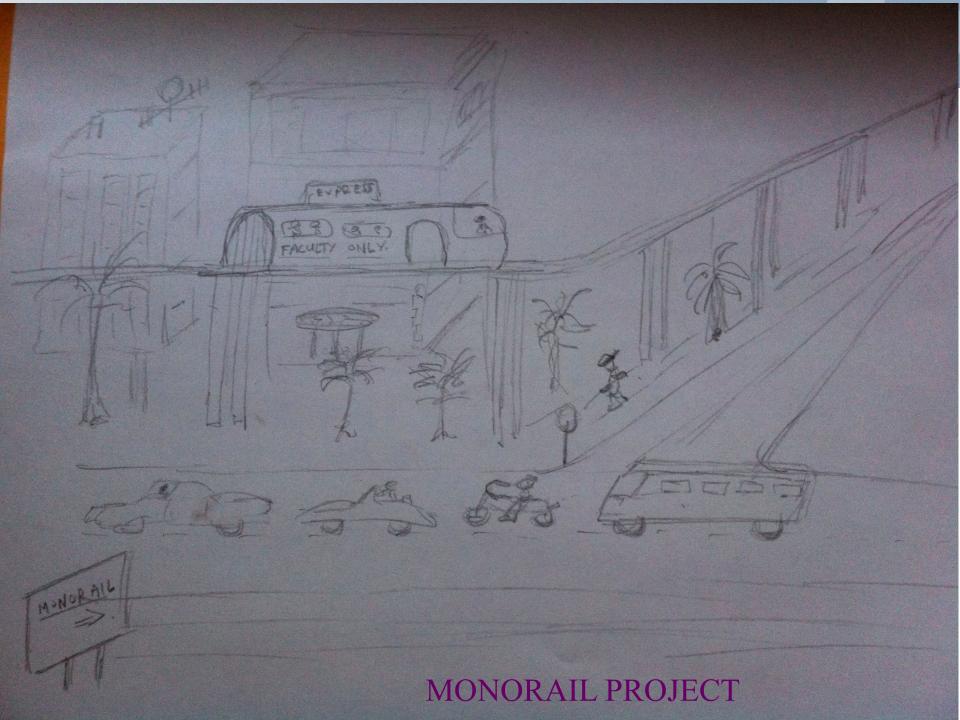


Dispatches

- Storynet an electronic memory for learning about software design methods and tasks
- Mini-cases for medical education
- "Prescriptive" learning for management development
- Using concordance for language learning

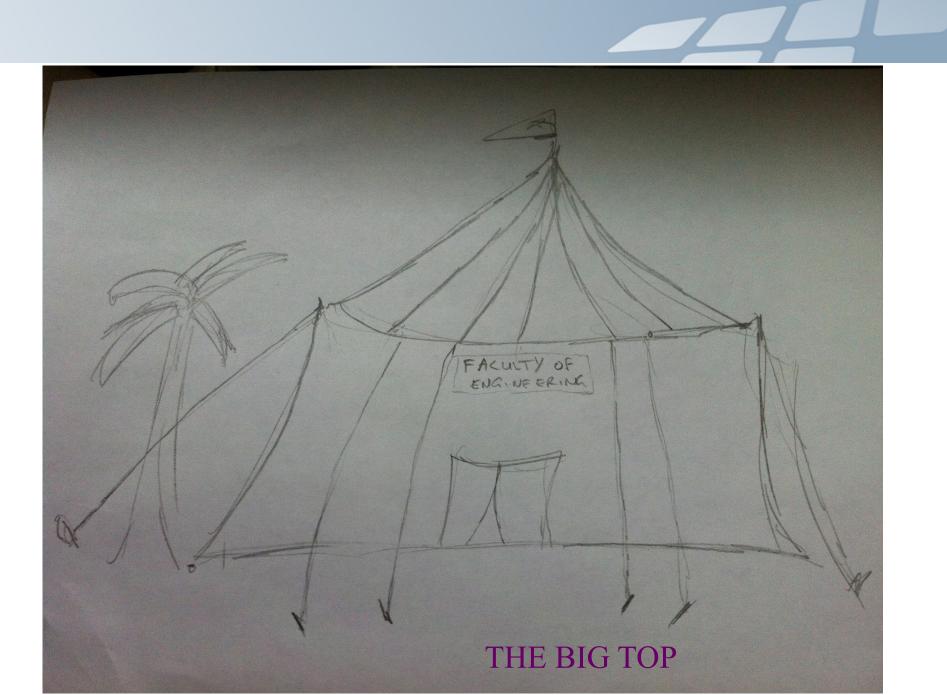
First Dispatch – Electronic Design Memory for Software Engineering





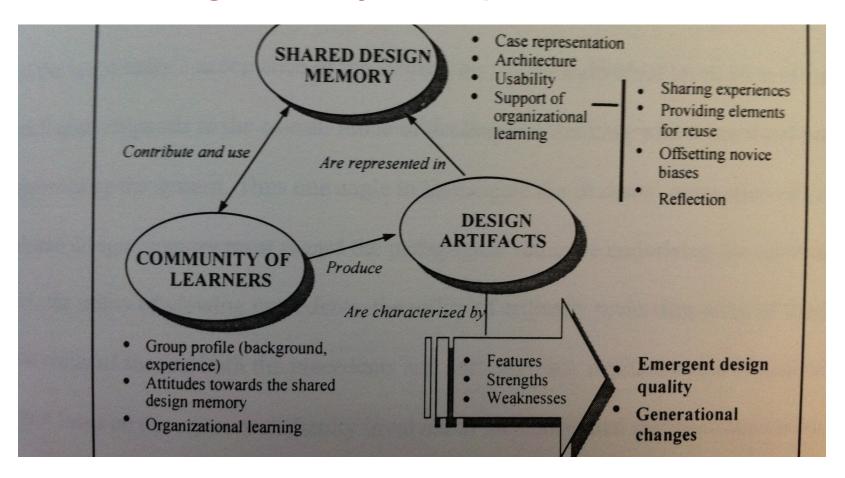


TELEPORTER PROJECT



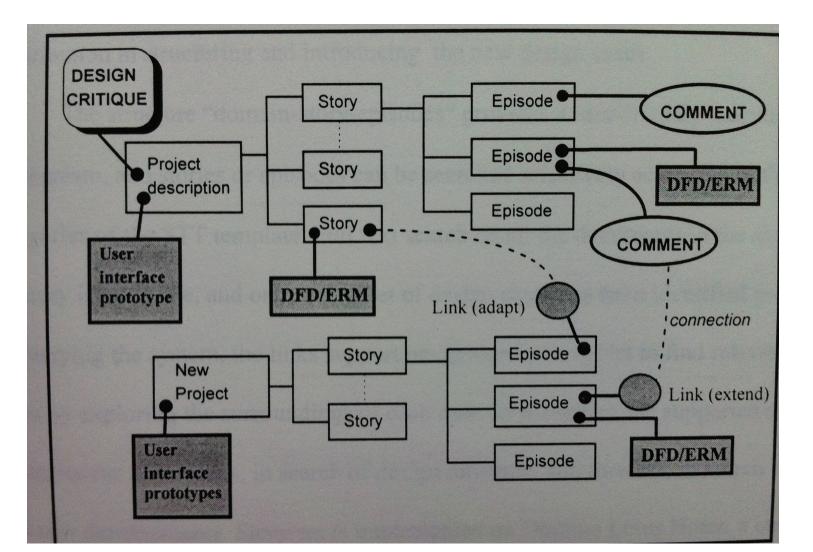


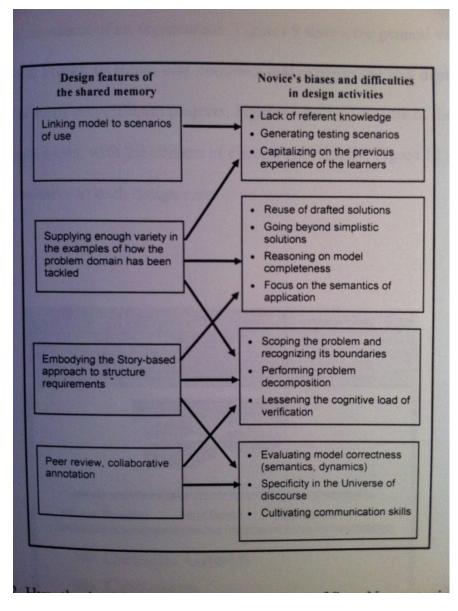
Shared Design Memory Concept





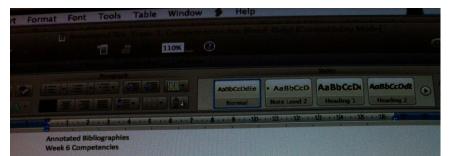
Design Memory Architecture





Hypothesized influences on novice biases & difficulties in design activities

Dispatch from my classoom



Instructions: Fill out the fields below in 11 pnt Calibri typeface. Post in the First Class drop-box, with the subject: "Annotated Bib". Indicate if this is topic 1,2, 3 or 4 for you (e.g., "Annotated Bib, topic 1, Change Management"). Abstract should be maximum 120 words, and can be shorter.

Annotated Bibliographies for Week 6, February 11 2013, Competencies

Reference 1:

Goleman, D. (2004). What makes a leader? Harvard business review. January 2004. 1-11.

Abstract:

This article focuses on research conducted on the relationship between emotional intelligence and effective workplace performance. The author analyzed several competency models in order to determine what personal capabilities drove outstanding performance. The competency models were created with the help of psychologists who interviewed senior managers and then analyzed the behaviours of star performers in order to build the models. When researching these models, the author divided the skills into three categories: technical skills, cognitive abilities and emotional intelligence. He then studied the effects of each category on performance. Overall, the findings indicated that emotional intelligence was a strong indicator of star performance, especially at higher levels within the organization. According to the author, emotional intelligence consists of the following components: selfawareness, self-regulation, motivation, empathy and social skills.

Reference 2:

Lombardo, M. & <u>Eichinger</u>, R. W. (2004). FYI: For your improvement: a guide for development and Coaching 4th Edition. Washington, DC: Lominger Ltd. Inc.

Abstract:

This is a book that I was first introduced too while I was studying HRM at McGill. It is formatted somewhat like a dictionary and includes a wide range of competencies. The objective of the book is to help people identify their personal strengths and weaknesses regarding workplace competencies, as well as how to better develop these competencies. Each competency includes a detailed description of the behaviours associated with the competency (what it "looks like" in the workplace), as well as what "overuse" and "underuse" of the competency looks like. There are also suggestions offered for each competency as to how an individual can better over or under use the competency, depending on their level of proficiency with each competency.

Reference 3:

Dispatch from Professional Education -- AMA Management Development & Blended Learning

- Improve learning in management development seminars
- Focus on pre-seminar preparation and post-seminar evaluation and remediation
- Offer individualized assessment and instruction based on use of Learning Content Management

Language Learning – using concordance strategies with text corpora



Dispatch from?

Cobb's PET 2000

- ESL academic setting
 - Students enter at Band 1 of proficiency test (500 words)
 - Must attain fluency (around 2000 words) by yr 2
 - e.g., pre-program podcasts
- Builds simple concordance with small corpora into regular weekly computer lab activites
 - Observes behaviours and any shift in belief systems
 - Gradually, students shift to contextual learning
 - Builds larger corpora based on 2000 word list
 - Shows strong effect for concordance

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Summary & Discussion