

Panel - It was a great idea at the time!

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Aims of Panel



- To provide a forum for computing educators to share experiences by talking openly and honestly about failed ventures
- To explore the characteristics of these initiatives to see what might be learnt from them
- To encourage and validate risk taking in teaching & learning
 - (unlike many academic venues where only successes are likely to get a hearing)



Panel Format



- Introduction and presentation by panel chair (est. 10 15 mins)
- Presentations by panelists (est. 10 15 mins each)
- Call for further confessional contributions from audience
 - 5 10 mins each
- Discussion (est. 30 mins)
 - Lessons for practitioners
 - What to avoid?
 - What to persist with and how to know?
 - How to manage risk?





Categorising CS Ed Research

- Review by Valentine (2004) of SIGCSE proceedings
- Six categories of article
 - Experimental (attempted to assess the 'treatment' with scientific analysis)
 - Marco Polo (I went there and I saw this)
 - Philosophy (attempt to generate debate on philiosophical grounds)
 - Tools (dev't of s/w or techniques for specific courses)
 - Nifty (whimsical category with interesting ways to teach topics)
 - John Henry (outrageously hard course experiences at the margin)
- Over 20 year period stable proportions for each type
 - Only 20% of papers in 'experimental' category (might be termed CS Ed Research)





Teaching 'Experiments' at the Edge

- "John Henry" (outrageously hard course experiences at the margin)
 - Examples of bad teaching?
 - Challenge of maintaining currency in a fast moving field?
 - Inevitable cost of pushing teaching practice to the edge?
 - Necessary 'experimental' failures?



A Global Collaboration Experience



- Mixed experiences with a Semester 2/2001 collaboration
- Presented as a paper at Ed-MEDIA 2003
- Custom developed web-based groupware application
- Teams of students (AUT & Uppsala) jointly performed a common task
- IT students who had never met had to collaborate across boundaries of different
 - time zones
 - Courses of study
 - Institution
 - Country
- Trial Design
 - Cybericebreaker task to become acquainted with collaborating partners
 - Web-site ranking task on which group had to reach consensus
 - 9 groups of 12 students each (one local subgroup from each country)
 - Approx 105 students participated over a six week period (sem2/2001)
- Early crisis during collaboration due to unadvised changes in technology environment!!



"The best laid plans..." Critical incidents Establishment Phase



Mediating	Incident	Trial	Technology-Use Mediator Actions			
Activity	Description	Week				
·			Person	Role	Action	Criticality
Establishment	Students report inability to acces database from outside campus	ss 1	IT Network technician	Security administration	Close firewall access to Notes Server	High
			Tony Clear	Collaborative trial Coordinator	Diagnose problem with Notes Administrator	
			Daniel	Notes	Consult with IT group colleagues, to	
			Wright	Administrator	diagnose problem, and advise resolution	
			-		Arrange space, FTP access and develope access rights on Online server	r
			Tony Clear	Notes Developer	Upload copy of Notes database to Online server & Check functionality and accessibility	
Establishment	Data ported across and online server database up and running	2	Tony Clear	Collaborative trial Coordinator	Create mail group and notify relevant parties (Uppsala trial coordinator, teachers, students) of database availability and location	High





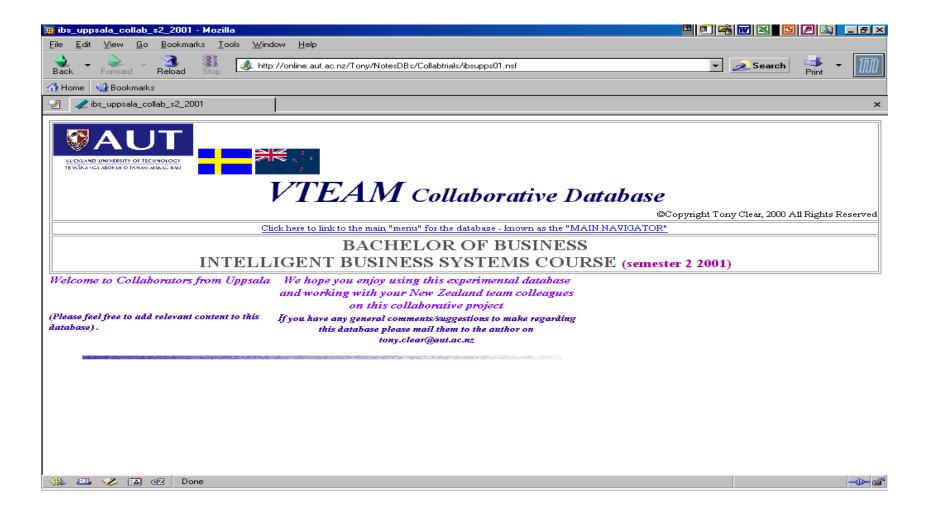
Online Server database







Notes server database





"The best laid plans..." Critical incidents reinforcement mode

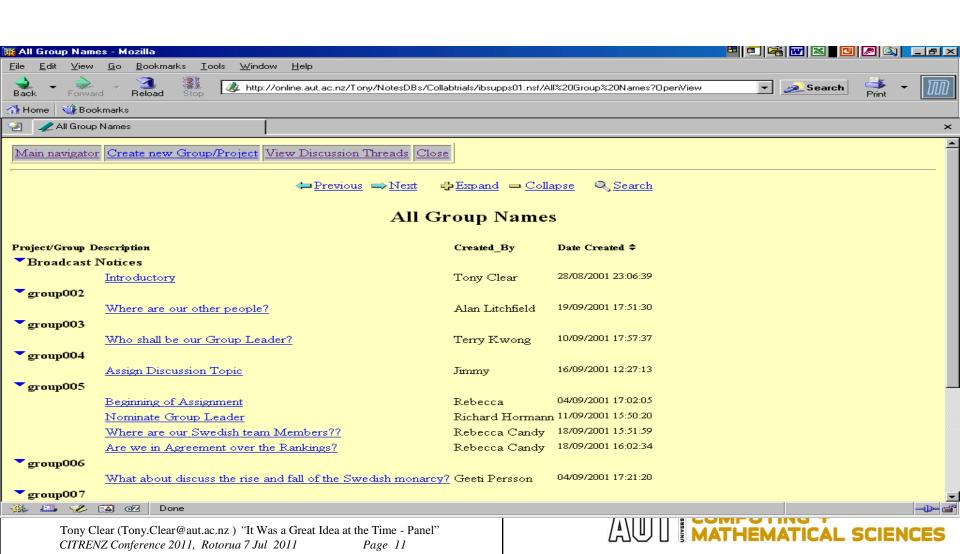


Mediating Activity	Incident Description	Trial Week	Technology-Use Mediator Actions			
.	I		Person	Role	Action	Criticality
Reinforcement	Auckland students continue posting to wrong Database	2 - 4	Tony Clear Kitty Ko Tony Clear	Collaborative trial Coordinator Class teacher Collaborative trial Coordinator	Notice problem, and advise students of correct database location details. Monitor and correct erroneous use Send group email advising URL of correct database	High



From the Notes Server database – discussion topics





Information Technology Environment and Roles at Play in International Collaborative Trial



- Educator as facilitator, e-moderator
- Educator as researcher, research design
- Educator as groupware developer
- Collaborative trial liaison inter institution
- Project coordinator
 - with classroom teachers at each institution
 - With IT support staff
 - Notes administrator
 - Network administrators (indirectly)
 - Security administrators (indirectly)
 - With students







Comments to the Author:

- Intention is significant.
- activities of the trial not well planned and prepared.
- significance of the research outcomes diminishes tremendously.
- issues reported trivial in nature
- mostly could be avoided by a more thoughtful preparation for the trial

- interesting
- not sure whether it adds substantial findings to the numerous reports about partially successful experiments.



Information Technology Development and Production Environments - Educator Control?



- Educator as groupware developer
- Prototype development mode (on-the-fly), environment inherently less stable
- Originally database hosted on Development "Notes" server
- Application level access rights only
 - security restrictions not enforced for students (inability to quickly correct errors, extra admin – defining usernames & default passwords)
- IT Dep't internal issue caused closure of firewall surmise
- Not noticed dev't on campus or at home via dial-in (still within firewall)
- Original misdiagnosis (Notes version and browser incompatibility?)
- Re-hosted on Production "Online" server
- Lesser developer access privileges able to create new database at client and move to server by upload only (thereafter able to modify)
- "issues reported trivial in nature"??
- "mostly could be avoided by a more thoughtful preparation for the trial"??



Outcome – Success or Abject Failure?



- Interlinked model teaching, learning and research
 - Experimental, Inherent risks
- Learning occurs when actors detect and correct mismatches or errors (Argyris, 1996)
- Partial group success (at subgroup level)
- Task Completion rates progressive drop off
- 2 of 9 groups overall successful in achieving consensus
- Delays and frustrations compounded by different semester timings Resulting loss of student motivation
- But insights gained teaching, learning & research
- Need to cope with risk of bad reviews
 - (perhaps based on lack of knowledge in an educational technology context?)



Conclusion



• Just do it!



Category - Teaching 'Experiments' at the Edge



 "John Henry" (outrageously hard course experiences at the margin)

- The Wintec School of IT experience:
 - NA600 Microsoft Windows Server Administration;
 A DipICT L6 course new for semester 1 2011
 - Based on the Microsoft Official Curriculum (MOC) 2274
 'Managing a Windows Server 2003 Environment'





Problems/Challenges/Cons



Tutor

- Under Done/III Prepared
 - Not Microsoft Certified Trainer (MCT) qualified
 - Unfamiliar with
 - Microsoft online environment
 - MS lab materials
 - The MS Windows Server 2003 (Two servers required – London & Glasgow) pre-configured using files provided by MS (limited number of cities)
 - Required to cope with large classes



Problems/Challenges/Cons



Students

- First real introduction to mixed learning environment (online theory and in class practical labs)
 - MS specific (while familiar with Moodle)
 - Chapter tests containing long winded/convoluted scenario-based questions
 - MS material very focused/narrow in subject matter
 - MS labs too brief/lacking guidance/how-to detail
 - Class numbers too large (for number of problems encountered)



Pros/Argument For



Tutor

- Detailed online learning material provided by MS
- Familiar with Windows Server 2003/2008 environment
- Ably supported by MCT qualified instructor and School of IT technician
- Flexible/able to adjust requirements/learning environment onthe-fly
 - Timetabled additional class to spread the load
 - Turned the chapter tests (1 to 10) into formative learning exercises (open book)
 - Moodle-based tests created by colleague checked & corrected by me
 - Provide immediate feedback for students
 - Create separate 'play servers', London and Glasgow, for each class



Pros/Argument For



Student

- Detailed online learning material provided by MS
 - Includes virtual exercises
 - Labs
 - Test questions for all chapters to practice on
 - Learning problem solving strategies; e.g. Ask Google (the right question)
 - Working together to support one another (reinforcing the learning experiences)
 - Open book assessments (in Moodle) & immediate feedback
 - Topic focus notes provided by tutor
 - Timetabled additional class to spread the load (sit the assessments in one, complete the practical labs in another)





Student Experience/Perceptions



	Wintec							
new survey graphic report	settings security cal text fields entries	stats form builder file manager	the library cross tabulation	results report data export	asp.net code	lisers	g out ucjg	
Surve	ey results				Choose and	other survey here:	e Evaluation	
	NA600 Microsoft Windows Server Administration							
?	Question's results to display	[Display all results (c	an take a while t	o load)]				
	Results layout :	Column chart						
	Results order:	Answer order						
	Date range :	to	Apply rar	nge				
	Apply a filter :	[Select a filter] Click here to edit / create new filters						
	Key:	1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree		







What about next time?





Addressing the Issues for 2012



WINTEC SCHOOL OF IT

PRESCRIPTION: NA620 WINDOWS SERVER 2008

NETWORK ADMINISTRATION

<u>Draft</u>

AIM OF MODULE: Students will gain the skills and knowledge required to

effectively install, configure and maintain server

resources, monitor server performance, and safeguard

data on a computer running Microsoft® Windows

Server[™] 2008

CREDITS: 7

KNOWLEDGE ASSUMED FROM: A+ certification and Network+ certification, or equivalent

2011

knowledge and skills.

STUDENT LEARNING HOURS: 70

CONTENT REVISED:

PRESCRIPTION EXPIRY DATE: Nover

NOTES:

November 2013

 This course partially prepares students to sit the Microsoft Certified Technical Specialist Exams; 70-

640 & 70-642

2. This module consists of a selection of Microsoft ELearning Courses, which must be administered by

a Microsoft certified Trainer.

