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(London Metropolitan University after 1 Aug)

A thick, horizontal yellow brushstroke with a textured, painterly appearance, spanning across the width of the slide below the affiliation text.


Evaluating the use of a
virtual learning
environment for teaching
aspects of HCI

Aims & content



- ⌘ VLE support for HCI topics:
 - usability evaluation
 - interaction design
 - data privacy
 - on-line communication
- ⌘ VLE features:
 - on-line assessment
 - integrate learning resources
 - tracking student interactions
- ⌘ Student feedback & evaluation

VLE interface & navigation



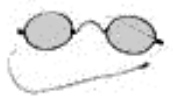



 **WebCT**

MYWEBCT | RESUME COURSE | COURSE MAP | RESOURCES | HELP

Home: View Designer Options

IM203 HCI (2001/2002 Sem A)

Home

<p>Course Menu</p> <p>▲</p> <ul style="list-style-type: none">Homepagee-Learning HubCourse ContentSyllabusCalendarGlossarySearchCommunicationMailDiscussionsChatStudy ToolsHomepagesPresentationsMy ProgressEvaluation ToolsAssignmentsSelf TestMy GradesLecturesJavaScript TutorWeb sitesWebCT HCI SurveyLearning Aids <p>▼</p>	 <p><u>Course Content and Related Materials</u></p>	 <p><u>Communication Tools</u></p>
	 <p><u>Study Tools</u></p>	 <p><u>Evaluation Tools</u></p>
	 <p><u>Web Sites & Tools</u></p>	 <p><u>JavaScript Tutor</u></p>

Group presentation area

Index of Im203 Assignment 3 Site

Group f4

Group members: -

F,

H

Form Prototype One

Form Prototype Two/Final Form

Minutes of Our Meetings

H 's Essay

I 's Essay

Tracking student interactions

Track Students: Designer Options

IM203 HCI (2001/2002 Sem A)

Home » Manage Course » Track Students » Show Distributions

First login: Oct 04, 2001 13:27 Last login: Nov 01, 2001 14:34
Total number of accesses: 117 Last page visited: IM203 HCI Week 5 Slides

[Show history of content pages visited](#)

Distribution of Visits for T

Page	Count	
Homepage	20	
Organizer Pages	22	
Content Pages	12	
Glossary	1	
Questions	8	
Discussions	Count	
Articles Read	54	

Number of Content Pages Visited by T

Number of different pages visited: 6
Total number of pages: 13

Continuous assessment



- ⌘ Identifying flexible attendance (the virtual student)
- ⌘ Weekly assessed exercises (& recording)
- ⌘ Multiple choice quizzes
- ⌘ On-line assignments (& plagiarism)
- ⌘ Tracking communication, documents & group work

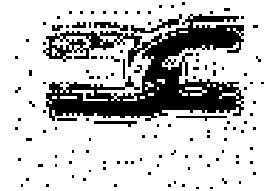
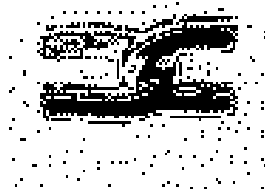
VLE features for teaching & HCI examples

- ⌘ Communication, e.g. whiteboard/chat
- ⌘ Presentation, e.g. home page & group
- ⌘ Organisation, e.g. calendar
- ⌘ Assessment, e.g. MCQ & essay/program
- ⌘ Public/ private, e.g. presentation area
- ⌘ Group/ individual, e.g. discussion topic
- ⌘ Synchronous/ asynchronous, e.g. diagram

Student home page

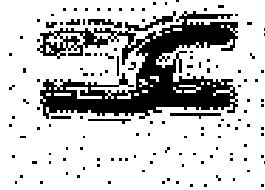
Student Homepages

Curricula for
Human-Computer
Interaction



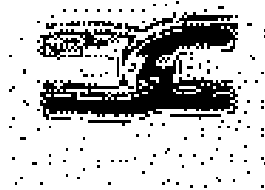
Challenging
Computing

Analysis of the field survey



Managing to meet
usability
requirements

p54(Role of Psychology
and Human Computer
Interactio)



isp

Asynchronous discussion forum

IM203 HCI (2001/02 Sem B)

[Home](#) » [Discussions](#)



Select a topic to see its messages

[Compose Discussion Message](#)

[Search](#)

[Topic Settings](#)

Topic	Unread	Total	Status
All	0	651	
Main	0	91	public, unlocked
Notes	0	0	public, unlocked
a1	0	5	private , unlocked
a2	0	0	private , unlocked
a3	0	0	private , unlocked
a4	0	5	private , unlocked
a5	0	8	private , unlocked
a6	0	2	private , unlocked
a7	0	0	private , unlocked

Chatting in the drawing room...

The screenshot shows a Netscape browser window titled "IB203 HCI (2001/02 Sem B) - WebCT 3.6.2 - Netscape". The address bar shows "WebCT Chat -- ib203_02b/Room 4[Guest Access]". The main content area is divided into several sections:

- Output Interaction Box:** Contains chat messages:
 - Guest Access>> This is a student diagram saved after discussion
 - Peter Chalk>> It needs some more work
- WebCT Whiteboard -- ib203_02b:** A drawing area with a toolbar on the left. The toolbar includes icons for erasing, text, drawing lines, rectangles, circles, and arrows. The whiteboard contains a diagram with two boxes:
 - A box on the left containing the text "thank u for summting form" and an "OK" button.
 - A box on the right containing the text "NOT COMPLETE" and an "OK" button.
- Users Log:** Lists "Peter Chalk" and "Guest Acces".
- Current Users:** Lists "guest_im203" and "ib203_02b".
- Information:** Partially visible text "The drawing are".

On the left side of the browser window, there is a "WebCT" logo and a "Course Menu" with the following items: Homepage, e-Learning Hu, Course Content, Syllabus, Calendar, Glossary, Search, Communication, Mail, and Discussions. At the bottom of the browser window, there is a "Warning: Applet Window" and a status bar showing "259 656" and a font size control set to "Aaa".

Evaluation



⌘ Survey

generally positive

⌘ Recorded discussion

grounded analysis - coding +/- comments
(incomplete)

⌘ Student comments

open questions, positive response

⌘ Comparative metric data (new)

Some survey results



- ⌘ 6 I find WebCT helpful for working with tools like the JavaScript Tutor.
⌘ **AGREE 19 STRONGLY AGREE 7 (84%)**
- ⌘ 8 I find the WebCT discussion forum helpful for keeping me informed of important issues.
⌘ **AGREE 13 STRONGLY AGREE 8 (68%)**
- ⌘ 9 I find the WebCT email facility helpful for communicating.
⌘ AGREE 13 NOT SURE 9
- ⌘ 12 Using WebCT on-line assignment submission is a good idea.
⌘ **AGREE 14 STRONGLY AGREE 12 (84%)**
- ⌘ 13 Using WebCT on-line assignment submission is a good example of the future direction of education.
⌘ **AGREE 15 STRONGLY AGREE 10 (81%)**

Example from the chat room



⌘ Scripting:

⌘ LD>>I think we may be allowed to use flash script to do the programming

⌘ LD>>rather than javascript

⌘ DT>>ok that's good

⌘ DT>>that's more of HCI

⌘ LD>>i do not know how to write scripts using flash script

⌘ ...

⌘ LD>>yeah UB and N are experts at flash script

⌘ DT>>he got 90 right?

⌘ DT>>ok that nice to hear

Negotiating meaning...

- ⌘ LD>>ok here is the format of the feedback form
- ⌘ UB>>thats a big bug in the program...
- ⌘ LD>>the user should be able to select only one check box for each question though
- ⌘ UB>>then they should be radio buttons then
- ⌘ LD>>i will send u a text file of what it should look like give me a minute
- ⌘ UB>>cool

Student comments (sample)



- ⌘ 'WebCT has helped me get around the module as I seem to know where I am going and therefore am not following links that are I am not interested in'.
- ⌘ 'This module fills in the gaps left by other modules in the course, with respect to the interface between the user and the programs they are running. I wish this module or a prerequisite of it, was an option for the first year'.
- ⌘ 'First time users of WebCT will find it confusing... However, once the user is familiar with the layout and is use [*sic*] to the web site, it is very informative and useful as well as being a useful way to learn about human computer interaction'.

WebCT data over 3 semesters for HCI module

Semester	00/01B	01/02A	01/02B
Registered students (approx.)	100	165	98
'Active' students (did all assignments)	58	130	71
Discussion messages total	212	446	564
Average messages per active student	3.65	3.43	7.94 *
Average number of assessed exercises (AEs) completed per week	n/a	60	48
Proportion of students completing AEs per week, %	n/a	46%	67% **
Proportion completing AEs in log	n/a	n/a	65.5%
Proportion completing WebCT AEs	n/a	n/a	69.9%
Number of students producing WebCT home pages	10	111	81
Proportion of registered students with home pages	10%	67% ***	83%

Notes

* message posting became part of assessed exercises (AEs)

** introduction of WebCT-based exercises

*** home page production became an AE (in week 1)

n/a data not (readily) available

Conclusions



- ⌘ VLE particularly appropriate for HCI, also other subjects
- ⌘ VLE features can support teaching & learning strategy, eg continuous assessment
- ⌘ Student evaluation very positive
- ⌘ VLE tracking can supply evidence of learning for research & assessment

The ads...



- ⌘ HCI2002, Sept 2-6, South Bank University, London
- ⌘ Hello from Fintan
- ⌘ JICC 7, Jan 27, London Metropolitan University
 - ☑ (Java & the Internet in the Computing Curriculum)