

# Evaluating the functional and educational aspects of WebCT in undergraduate psychology

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# Aims of the Project

- To address effectively the current Faculty of Science Teaching and Learning Plan:
  - Objective 4 - 'Offer students access to many flexible learning techniques, especially on-line resources;
  - Objective 5 - 'Foster the practice of good teaching within the Faculty' and
  - Evaluate students' perceptions to see whether these objectives were met.

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# Advantages of eLearning

- Immediacy and accessibility of information provided through eLearning modes such as WebCT (Robinson & Shakespeare, 1995)
- eLearning allow students to learn efficiently and effectively with minimal disruption to their life and work roles (Barnard, 1995) - this is particularly important for the increasing numbers of part-time students, such as mature-age students and others who are employed full time.

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# Advantages of eLearning

- To achieve a high level of effectiveness eLearning materials need to be interactive, reflective and adaptive (Larillard, 1993).
- Teaching innovations in the form of on-line curriculum material, self-paced learning and practical demonstrations will encourage psychology students to become independent learners who experience a range of teaching and learning modes (Jones, 1997).

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# Psyc1001 innovations

## 1. Easy to navigate interface

The screenshot shows a WebCT interface for 'PSYC1001 - Psychology 1'. It features a navigation menu on the left with icons for 'Home', 'Lecture Materials and Inform...', and 'Assessment'. The main content area displays a grid of student photos and a 'SYSTEM INFORMATION' section with links to find information about the tutor.

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# Psyc1001 innovations

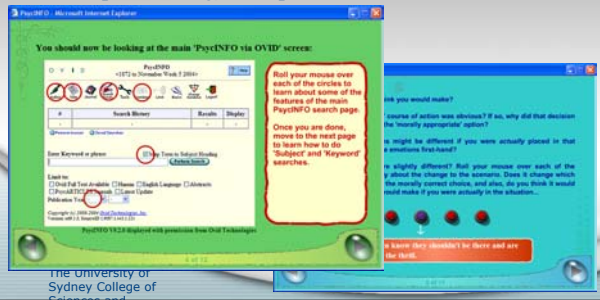
## 2. fourteen on-line multiple-choice quizzes (seven per semester) to assess students' understanding of tutorial and lecture material as they progress

The screenshot shows a 'Quiz 2 (WK2): Social Psychology (WK2)' interface. It includes a 'Time Remaining' section, a 'Questions Status' section, and a list of multiple-choice questions. The first question asks about Jane Elliott's 'Blue-eyed' experiment, and the second question asks about the effects of the experiment on children.

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## Psyc1001 innovations

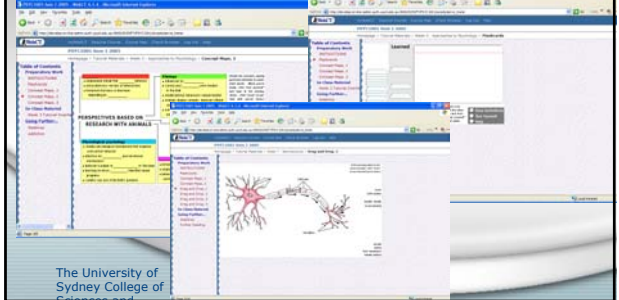
3. 'Flash-modules' developed within the school and tailored to specific teaching requirements (e.g. report writing) and specific tutorials



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## Psyc1001 innovations

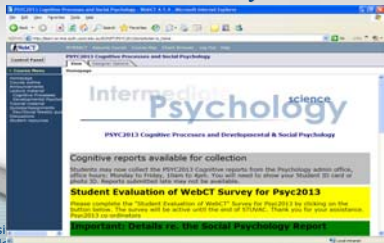
4. self-paced exercises that assess textbook material; including interactive demonstrations, flashcards, labelling of diagrams



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## Psyc2011/2012 innovations

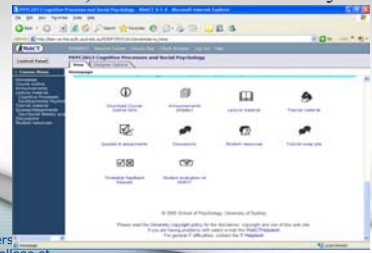
1. Develop a consistent set of online site shells for four units of study.



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## Psyc2011/2012 innovations

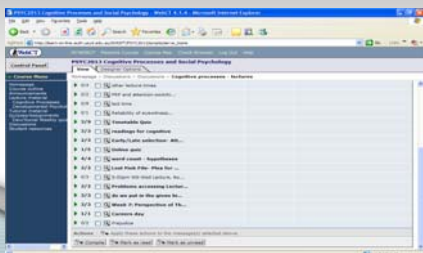
2. Develop complete online components (i.e. quizzes etc) for four units of study.



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## Psyc2011/2012 innovations

3. Train an on-line tutor to moderate the four discussion boards.



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## Method: Sample

- 957 PSYC1001 students ( $M$  age = 19.2,  $SD$  = 2.9)
- 200 PSYC2011 (Neuroscience) students ( $M$  age = 21.1,  $SD$  = 4.9) and
- 115 PSYC2012 (Statistics) students ( $M$  age = 22.3,  $SD$  = 6.7)
- Gender: 70% female and 30% male students
- Enrolment: 94% full time students
- Computer access: 88% had home access

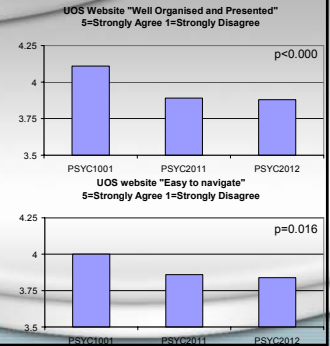
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## Method: Materials

- All participants completed the on-line 'Student Evaluation of eLearning' questionnaire developed for this project.
- Part A:** 5 demographic items
- Part B:** 11 functional and educational items
- Part C:** 3 open-ended questions and an overall satisfaction rating

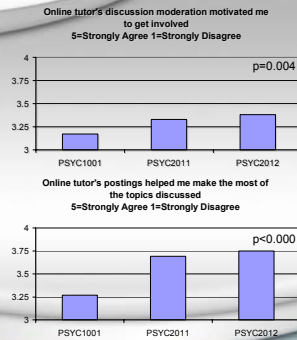
## Results: Functional Aspects

- PSYC1001 students reported significantly higher ratings of the WebCT sites in terms of organization and navigation.
- This may be explained by the single navigational pathways implemented in first year and the appropriate, hierarchical organization of materials.



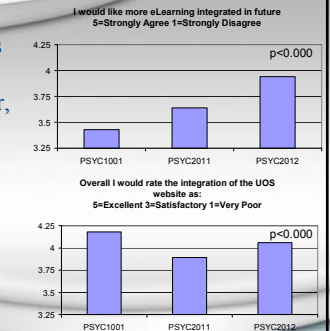
## Results: Educational Aspects

- We found evidence that employing online tutors assisted students' learning in the second year units and encouraged students to benefit from the online discussions.



## Results

- Due to a greater focus on developing online materials for first year, we found students were more satisfied with the level of online learning offered.



## Conclusion

- Since we focused most funding on the development of online educational materials in first year, and on the online tutors in second year, our results reflect the positive impact of these eLearning initiatives.

## Special Thanks to....

- Faculty Teaching Development Grant (2004) for the eLearning work conducted on Psc1001.
- The Flexible On-line Learning Team (FOLT) Strategic Development Project (2004) for the creating the WebCT sites for Psc2011/2013.