

SOLE Case Study Series



Psychology

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Website: <http://sole.ilrt.bris.ac.uk/>

Executive Summary

This is the summary of the preliminary report, which analyses the results of a study of two Psychology modules using VLEs in two different UK Universities. The survey was carried out by the Learning and Teaching Support Network subject centre for Psychology (LTSN Psychology) as part of the SOLE project.

Purpose of the study

SOLE is a project funded by the Higher Education Funding Council for England (HEFCE) via the Learning and Teaching Support Network (LTSN) Tranche 2 initiative and the Joint Information Systems Committee (JISC) to undertake an independent evaluation of students' usage of virtual learning environments (VLEs) in higher and further education. The purpose of the study is to draw out the effectiveness of VLEs in supporting different subject areas, different national agendas (such as that of widening participation) and student learning in general.

Background

The Psychology case studies were undertaken during January to May 2003. Case Study 5 is set in a Psychology department within the School of Health and Human Sciences of a large post-1992 university. It explores the behaviour of undergraduate students in the second semester of a Cognitive Psychology module. The second case study (Case Study 6) comes from a large pre-1992 university and is based on undergraduates in the second semester of a research methods module. Both case studies focused on a full-time compulsory module taught on campus. Case study 5 (year 2) used WebCT, Case Study 6 (year 1) used Merlin.

The study methodology was based upon the evaluation framework set out in the handbook for learner-centered evaluation of computer facilitated learning projects in higher education (Philips et al., 2000). The research also drew upon the Critical Incident Technique pioneered by Lockwood (Gilbert and Lockwood, 1999). The main elements used were as follows:

Method	Week	
	Case Study 5	Case Study 6
Student questionnaires	1 and 11	1 and 13
Student diaries	3 and 10	3 and 9
Transaction logging	Throughout	Throughout
Recording of interactions	Throughout	Throughout
Interviews with tutor	1 and 11	1 and 13
Interview with students	11	13

Profile of participants

Case Study 5- 80 students were registered on the course and a total of 64 participants (42 females, 13 males and 9 for whom gender data was not recorded) completed at least one questionnaire. All participants who declared their age were between 18 and 21. Of those who responded 48 stated that they were educated in the UK and 4 stated "Other". Out of 55 participants who responded, English was the first language of 51.

Case Study 6 -175 students were registered on the course and a total of 129 (91 females, 22 males and 16 for whom gender data was not recorded) completed at least one questionnaire. Of those participants who recorded their age, 108 participants were aged between 18 and 21 and 5 were aged over 41. Of those who responded 110 stated that they were educated in the UK and 2 stated "Other". Out of 113 participants who responded, English was the first language of 112.

While every effort was made to encourage participants to complete both questionnaires in order to track students' experiences over time, inevitably some participants completed only one. Data was analysed for only those who had completed both questionnaires. In Case Study 5 there were 32 participants (6 male, 26 female). In Case Study 6 there were 40 participants (7 male, 33 female).

Learning models – explicit/implicit

Case study 5 - a Cognitive Psychology module, consisted of weekly 1-hour lectures and fortnightly lab classes. The VLE in this module was intended to be used for lecture preparation and self-assessment. It contained links to external resources, self-assessment tests and articles. Students were assessed by a 2-hour exam with multiple choice and essay type questions.

Case study 6 - composed of two parts (with 50:50 credit weighting). The statistics and research methods section comprised of two-hour weekly (non-compulsory) workshops, with the course content presented via the VLE. Students were required to work through tasks related to a different statistical test each week. The other 50% was a Tutorial Based Practical (TBP), which aimed to provide students with practical experience in carrying out an empirical project. It was taught by three 1-hour lectures and 5 hours of meetings with a graduate teaching assistant. Students were assessed by a TBP report and a 2-hour examination.

How the VLE is embedded in the pedagogy

For both case studies the VLE was primarily used to access information.

- Students in both case studies reported spending an average of just over three hours per week working on the module. This remained constant over time.
- Time spent using the VLE dropped from nearly 2 hours per week to just over an hour.
- The transaction log data shows that participants in Case Study 5 logged on to the VLE more often than participants in Case Study 6.

Case study 5 - The tutor at Case Study 5 believed that e-learning could be motivating to students. He hoped that they would take more responsibility for their learning and use the VLE to learn as they went along by using the supplementary material and self-tests. He also hoped that students would help each other and use of the discussion board to answer each other questions. However, only a limited number of students used the discussion area and it was often used for exchanging information on suitable textbooks or by the tutor for updates on changes in timetabling.

Case study 6 -The tutor at Case Study 6 used the VLE to help cope with increasing student numbers and so that the research methods component throughout the degree programme could be integrated. The tutor was also inspired by prior experience where she had used the VLE very successfully in other modules.

Student preparedness

- 80% of Case Study 5 students had used a VLE previously, compared with only 57.5% of those in Case Study 6
- 84% of Case Study 5 and 95% in Case Study 6 students reported having no concerns about using the VLE
- 65.6% of Case Study 5 students (80% of Case Study 6 students) were very confident or confident about “working and learning online”
- Students were less confident about “taking part in online discussions” 30% of Case Study 5 and 6.3% of Case Study 6 students had little or no confidence in this area
- 65% of Case Study 5 students; (90.7% of Case Study 6) students were very confident or confident about the “subject they were studying”

In general, Case Study 5 students reported being less confident to begin with than those in Case Study 6

Motivational issues

- In both case studies all students were motivated by “getting good marks in assessment” 96.9% Case Study 5 and 87.5% Case Study 6 (strongly agreed or agreed).

- 6% of Case Study 5 and 17% Case Study 6 students strongly agreed or agreed with the statement that they were doing the module because they “needed the credits”.
- The most noticeable difference was for the statement, “I am interested in the subject matter of the module”. More participants in Case Study 5 (84%) than in Case Study 6 (50%) (strongly agreed or agreed).

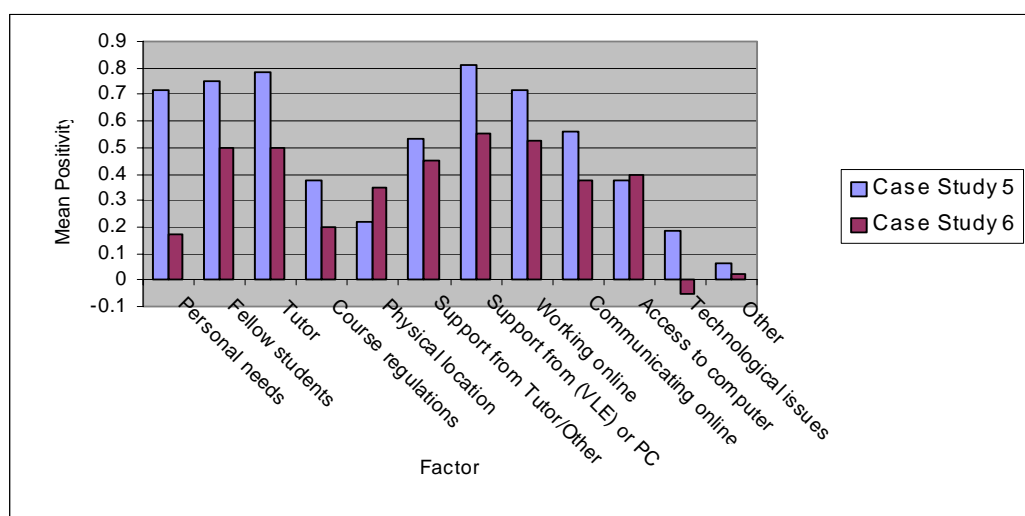
Case study 5: correlation between confidence and motivation

- Those who agreed that it is “important to do better than others in the group” were more confident in “using the Internet”, “working online” and the “subject matter”.

Case study 6: correlation between confidence and motivation

- Those “worried that they would not do well” generally rated their confidence about “the subject” and about “online discussions” lower than those who were not worried.
- Those who were “interested in the subject matter” reported higher levels of confidence in the subject as well as in “finding their way around” and “obtaining information in the VLE”.
- Those who were doing the module to achieve “personal goals” were more confident in “using the internet”, “working online”, “finding their way around in the VLE”, “ and obtaining information in the VLE and the subject itself”.
- Those who said that they were “good at the subject” were more confident about the subject in general.

The graph below shows that “personal needs”, “the tutor”, “support from the VLE” and “working online” were large positive motivational factors for students from both case studies:



How positive an effect each factor had on each participant’s motivation.

- Students from both case studies felt that support from the VLE or PC had the biggest positive effect on their motivation.
- Case Study 5 students generally gave more positive responses than those in Case Study 6. This was most pronounced when referring to “personal needs”.
- The only factors in which those in Case Study 6 were more positive than those in Case Study 5 was “physical location” and “access to the computer”.
- The only factor for which responses were negative overall was technological issues for Case Study 6.
- General motivation decreased over time in both case studies.

Student and tutor roles and behaviour

- There was a conflict between the tutors and students views of the role of the tutor.
- Tutors see the VLE as an opportunity for students to become more independent in their learning.
- Students whilst appreciating some of the more 'management type' benefits of a VLE still value a traditional student tutor interaction.
- In Case Study 6 the "academic" was reported as being the main source of support in using the VLE.
- In Case Study 5 students reported "textual resources" followed by "support staff" as being the main sources of support in using the VLE.
- The use of "peer support" increases in both case studies over time.