

A Case Study Examining Students' Use and Views of Blended and Distance Learning Online Resources and Their Impact on Student Achievement on a Module on the Graduate Diploma in Legal Studies

PENNY WIGGINS, University of Hertfordshire

Abstract This case study examines students' use of online resources whether as a campus-based or distance learner and maps use against performance on the module. The student voice is explored using questionnaires and interviews. The range of activities on offer included text based materials such as lecture notes with hyperlinks to significant resources, seminar questions with outline answers, formative assessment exercises online and in the classroom, PowerPoint slides, podcasts of the class based experience and shorter podcasts summarising the key points of a session, clickers in class and MCQs online, the use of presentations in the classroom and online, the use of role play, video and Elluminate. The use of the range of materials was monitored and students' opinions were sought at all stages to identify which were felt to contribute most successfully to learning. Students were analysed according to entry qualifications, mode of study and achievement on the assessment elements of the module in the context of their response to the materials offered, both in terms of their perception and their usage. The broad intention behind the approach adopted was to provide a learning environment which offered the opportunity for personalisation by each student to appeal to their favoured learning styles.

Introduction

This case study examines the experience of two cohorts of students studying the same module as either campus-based or distance learning students. The module uses extensive blended learning techniques accessible to both cohorts together with some dedicated resources aimed towards supporting distance learning students in their learning which are also accessible to both cohorts.

Context

This module is offered in the first Semester of a one year full-time programme or two year part-time programme for graduate students wishing to transfer to a career in the legal profession.

The programme combines campus-based and distance learning students on the same module databases within the managed learning environment (StudyNet), thus creating the opportunity for students to share and benefit from the online learning resources offered to both forms of study.

The Public Law module: the Approach Adopted

Campus-based students attend 16 three hour sessions, with each session focussed upon a particular topic. The session comprises of an interactive participative 'lecture' interspersed with the use of electronic voting system (EVS) questions to raise awareness of significant aspects and check understanding. This is followed by small group work, plenary discussion, more EVS questions, the use of tablet PCs to record student responses and detailed analysis of the conceptual and problem solving exercises set for each session.

A significant aspect of the approach adopted relates to the capacity of technology to 'capture the classroom' as permanent learning objects available to both campus-based and distance learning students. The technologies used which meet these requirements are:

- Materials for the module as a whole placed on StudyNet at the commencement of the module
- PowerPoint slides for each session posted in advance of the session
- EVS questions integrated into the PowerPoint slides to raise students awareness to key issues and questions within the forthcoming session
- An introductory podcast based around the PowerPoint slides of approximately 10 minutes duration which highlights the structure and key features of the topic
- A podcast of the interactive lecture session, broken into short – maximum 15 minutes duration – audio files clearly labelled to allow students to select the area of listening more easily
- Detailed notes prepared by the tutor to the 'seminar' questions, available immediately after the class
- Scanned or tablet PC files of students' work on the seminar materials
- The transfer of EVS questions used in class into a multiple choice quiz
- Short video clips with EVS/MCQs of law in action, from scripted short sketches taking place in the 'seminar' performed by the students providing a context to the curriculum content

To further support student learning, broader use is made of other functionality within StudyNet, including class discussion, wikis and blogs which allow for further examination over a longer timeframe of individual topics and the overall context of topics within the module. Other supporting material is also provided such as previous student work and analysis of past examination and coursework questions. Distance learning students have access to all the material posted on StudyNet and also have their own discussion forum together with personal individual support from one of the tutors on the module to support their own learning.

In areas which are critical to the assessment requirements of the module the tutors use Elluminate, online teaching software which allows the distance learning students to 'attend' the class online at the same time as the campus-

based students are attending the session. In this module it was used to provide feedback on formative assessment, summative coursework assessment and revision sessions. Elluminate permits file sharing and therefore any visual materials in use can be imported into the session. Online students can contribute orally and through a text chat box, raise their hand online to ask questions and can be seen through a webcam by the rest of the group. The session is recorded for subsequent access. These technologies support students through a form of 'just in time' teaching as well as reflecting Chickering and Gamson's Seven Principles of Good Practice (Chickering and Gamson, 1987).

Pedagogy Underpinning the Approaches Adopted

The concepts behind Chickering and Gamson's work have been critical to the developmental approach adopted within this module. The technologies used on the module are mapped against their principles:

Table 1: Chickering & Gamson's principles mapped against technology

Principle	Technologies used
Encourages student-faculty contact	Class discussion forum, wikis, blogs, email, private discussion forum – student to student and tutor to student
Encourages cooperation among students	Class discussion forum, wikis, blogs, online activities – group presentation
Encourages active learning	Hyperlinked resources, online group work, multiple choice quizzes
Gives prompt feedback	Multiple choice quizzes, student seminar answers, tutor seminar answers, recorded Elluminate sessions
Emphasises time on task	Module timetable with referenced timeframe for completion of session activities in online discussions and group work
Communicates high expectations	Previous student work covering a range of performance – analysis and identification of key characteristics of what is required to achieve a Commendation or Distinction grade
Respects diverse talents and ways of learning	The variety of resources allows students to focus on their preferred method of learning, whilst at the same time provides opportunities for multi-modal development as a learner through experimentation with the range offered

As this is one of the first substantive modules studied by either full or part time students it is essential that the skills of studying law are embedded within the

module for students who are graduates in another discipline and engaging in their first experience of studying law.

The learning outcomes are demonstrated through success in the coursework and examination assessments. Knowledge and understanding is demonstrated through detailed legal analysis to both problem questions and essays requiring the higher levels of learning from Bloom's Cognitive Taxonomy required for level 3 study, particularly critical evaluation and synthesis (Bloom's Taxonomy of the Cognitive Domain, 1956). Skills and attributes are developed through formative assessment (a compulsory element of the module) upon which individual feedback is given. In preparation for formative and summative assessment, students are encouraged to write short pieces in class, for example, an introduction to a question or in a problem scenario, the approach they would adopt to discussion of a particular legal issue arising within the question. Students display these on the visualiser and gain peer feedback (supported by the tutor) of the approach adopted. This encourages collaborative learning in accordance with Chickering and Gamson's 2nd principle: "Encourages co-operation amongst students" (Chickering & Gamson, 1987). Distance learning students perform a similar exercise online in small groups with again peer and tutor feedback. A further small group activity undertaken within this module is a presentation on an aspect of human rights not covered within the course content. Again this develops co-operation and collaboration but also develops team working, writing skills and legal research into another area of law.

Past student work is examined by both cohorts online and in the classroom. Students are provided with a range of performance from past cohorts. The work is anonymous and students are not provided with any of the tutor feedback on these pieces of work. These are taken from both coursework and examination answers. The students are provided with outline answers, generic and specific marking criteria and in small groups "mark" the work. Students are generally very accurate in their assessment of the work, tending to have higher expectations than the mark originally awarded by the tutor. When the exercises are complete, the mark awarded is notified to the student groups.

Legal research skills are developed through the range of resources available on StudyNet. Activities at the outset of the programme together with research exercises undertaken within the module develop students' ability to find appropriate legal information to support their analysis. Students learn how to use online databases, electronic journals and e-books to underpin their development. Multiple choice quizzes are provided to allow students to check their understanding of these approaches.

Managing their own learning is a key aspect for students of embarking on this particular programme. The full time programme is particularly intensive, covering in an extended 36 week academic year, the material covered over two years of an undergraduate degree. This approach is justified by the SRA as appropriate for students who are already graduates and therefore have acquired the pre-

requisite undergraduate skills of learning through their past experience. This, however, does not take into account that there is no limit to the previous subject discipline studied by the student and students coming from a mathematical or scientific background may not have fully developed learning skills for a literary based, analytical approach required in the study of law. The tutors for this module have observed that campus-based students who are not regular attendees and distance learning students who are not managing to plan their time sufficiently to complete the weekly tasks struggle to complete the assessments successfully.

Research Methodology

The case study was researched using a mixed methods approach, through data analysis of the cohorts by gender, age, entry qualification and mode of study in order to determine whether there were any observations arising from these factors subsequently. A detailed analysis was then made of students' use of online resources and this was compared to achievement in both elements of assessment: coursework and examination with the intention of establishing whether there is a link to assessment performance. The students' voices were analysed through an anonymous online questionnaire and two interviews with a student from each cohort.

The Cohort:

The cohort comprises 15 distance learners and 11 campus-based students.

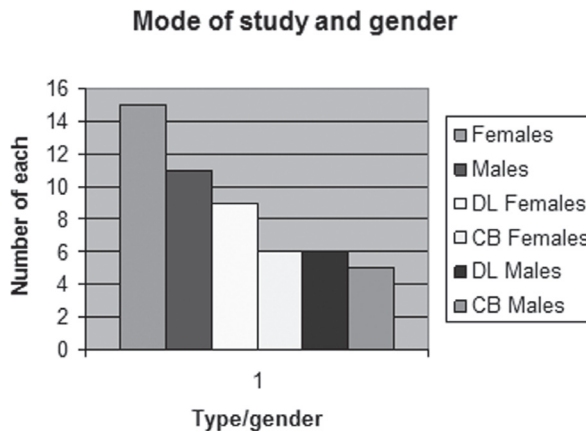


Figure 1: Mode of study and gender

There are 15 female students (6 campus-based and 9 distance learners) and 11 male students (5 campus-based and 6 distance learners). This distribution indicates the increasing attractiveness of women aiming to enter the legal profession, borne out by the SRA statistics. Women formed 13% of solicitors holding practising certificates in 1985 and 2007 statistics reveal the proportion to be 43.4% (Law Society Annual Report, 2007).

Distance learners tend to be older and ages are spread more consistently across the range on analysis of age distribution. The overall mean of campus-based students is 29.8 with the male mean being 29.2 and the female 30.4. The distance learners overall mean is 34.7, males 37 and females 32.5.

Student use of Online Resources

Within StudyNet, monitoring of a student may be made by access to a learning resource or by reference to individual student access to all resources. Regrettably it is not possible to monitor the use of podcasts or videos due to the limitations of the technology. Data collection here has had to be obtained through the anonymous questionnaire.

A view of daily module access throughout the module reveals mean daily use of StudyNet is 33 accesses per day. It peaks at over 150 in a single day and activity can be seen as peaking regularly on the weekly cycle through the module at the beginning of each week when new materials were placed online.

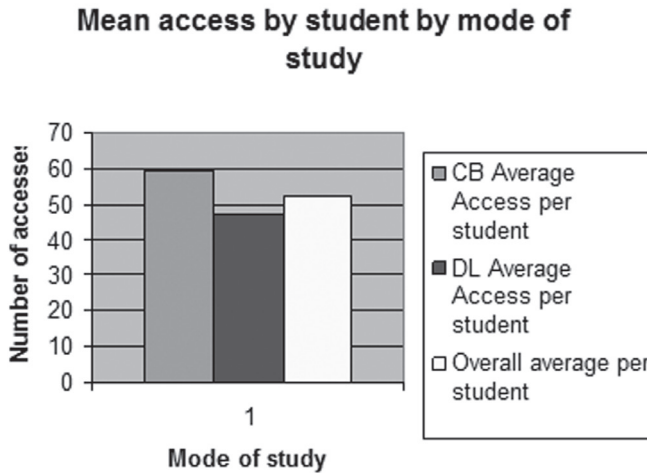


Figure 2: Mean access to resources by mode of study

Campus-based students make more use of the online resources than distance learning students with averages of 59.6 and 47.3 with an overall average of 52.5. This is an unexpected result given the opportunities for access and informal discussion amongst campus-based students. It may, however, highlight an aspect of the approach to online learning which is commented upon in relation to students' responses to the questionnaire and student interviews.

Performance in Assessment

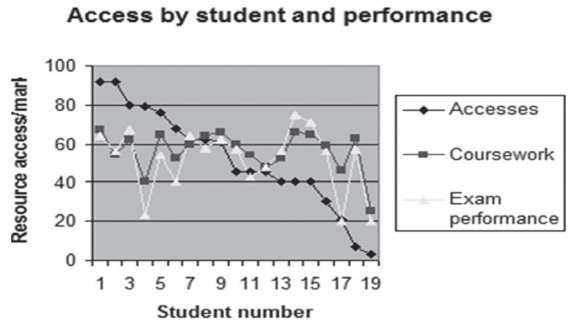


Figure 3: Performance mapped against access

This is perhaps the most significant analysis from the case study. The analysis of the use of online resources is to attempt to establish whether student performance in assessment might have been improved by accessing a range of learning resources provided within the module. Figure 3 clearly demonstrates no correlation with quantity of access and performance even when separated into mode of study.

Access and Performance by Mode of Study

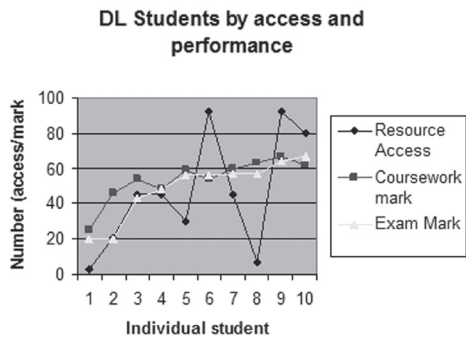


Figure 4: DL Student performance

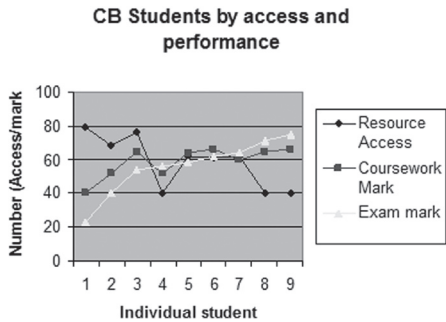


Figure 5: CB Student performance

Overall Grade by Classification

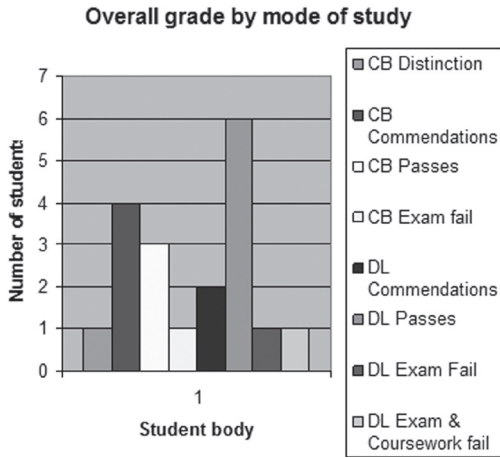


Figure 6: Overall grade by mode of study

Evaluation of the use of Resources

Judging from the results of this small case study, there appears to be no identifiable correlation between student access of a range of resources provided and performance in assessment.

In order to determine whether any other indicators emerge, the data was then analysed by age, gender and entry qualifications. Again no correlation was found in relation to age and gender, though entry qualifications did appear to correlate with performance.

Overall findings:

- No strong correlations were found to establish the main purpose behind this study: whether there was evidence that use of online resources correlated with performance;
- No correlation was found either with mode of study as an influencing factor;
- Age was also not a factor;
- The strongest correlation appeared to be having achieved an upper second class honours degree at undergraduate level, these students achieving a similar level of performance in the new discipline.

The Student Voice

Students were offered an anonymous questionnaire posted as a multiple choice quiz on StudyNet to comment on their experience of the learning experience of the module and specifically the online resources.

Nine responses were received:

Table 2: Respondents analysis by gender, entry qualifications and mode of study

	Gender	Degree	Higher deg	Mode of study
1	F	1st	Y	DL
2	M	2(2)	N	CB
3	F	2(2)	N	DL
4	M	n/a	Y	DL
5	M	2(2)	N	CB
6	F	2(1)	Y	CB
7	F	2(1)	N	CB
8	F	2(1)	N	DL
9	F	2(1)	N	DL

The questionnaire was designed to elicit how much use had been made by students of the range of resources available on StudyNet, which could not be tracked through monitoring.

Detailed questions on podcasts and videos

Table 3: Analysis by usage of resources

Study mode	Intro podcast	Lecture podcast	Podcast use	Video	Access C/W feedback video	Access scripted playlet	Access Revision video
DL	4	4	B	N	N	N	N
DL	4	4	B	Y	Y	N	N
DL	2	4	L	N	N	N	N
DL	2	2	L	Y	Y	N	N
DL	3	3	B	Y	Y	N	N
CB	2	2	B	N	N	N	N
CB	4	2	L	Y	N	N	Y
CB	4	4	B	Y	Y	N	N
CB	1	2	L	Y	N	N	Y

Key to table:

1) Introductory podcast and lecture podcast rated 1-5 against the letters A-E used in the questionnaire: A: 1-3 B: 4-6 C: 7-9 D: 10-12 E: all

2) B and L in frequency of podcast use refer to whether students selected both introductory and lecture podcast (B) or lecture podcast only (L)

As can be seen all students accessed podcasts with higher level use predominating as might be expected by distance learners. A split view appears on the use of the introductory podcasts. The response to the video resources is disappointing with less than half accessing the coursework feedback session on Elluminate, no students accessing the video of the short play conducted in class and only two students accessing the Elluminate revision session (though this was also podcast).

The final question related to whether students would prefer a video format to a podcast. Five of the nine expressed a preference for video with the remaining four preferring audio files.

Students were also provided with the opportunity to make free comments:

Table 4: Student comment

"While I don't feel I would necessarily benefit from a video of the lecture, the lecture can be difficult to follow in small parts when for any reasons; voices are not loud/close enough to the recorder to be heard. For example, when students speak in class".

"Video or podcast would be fine. Some of the videos did not work, thus I've selected No to question 12. Think it would be great to have open discussion forums. The school should provide the instructors better microphones as sometimes you cannot hear the podcast very well".

"I have felt that the techniques used have helped me study public law effectively".

"Teaching is of a high standard".

"I can't hear the IPOD thing".

"I have found the module guide notes very comprehensive, the introductory podcasts a nice intro to the subject, and the lecturers very helpful and supportive. This has contributed greatly to my enjoyment thus of the course thus far".

Six students provided comments. Two referred to difficulties with the audio files and one refers to problems with the videos. This suggests further technological support may be needed by tutors for better quality. Students also commented positively upon the learning experience of the module.

Student Interviews

Two students were interviewed using a semi-structured approach. One distance learner and one campus based. They were asked because they share similar characteristics but one had chosen the distance learning path and the other campus based. Their profile:

Table 5: Interviewed student profiles

Mode	Teaching Resources	Coursework mark	Exam	O/A	Grade	Gender	Age	MA
CB	40	65	71	69	Comm	F	35	Y
DL	80	62	67	66	Comm	F	35	Y

DL Student had chosen the distance learning route as she wished to combine studying the programme with flexible part time working. She had completed an online Masters programme which she had found a very successful learning environment.

“My MBA was a genuine online learning experience with collaborative learning tasks requiring to be performed and assessed.”

She made the third highest access to the online resources (80), two other students having 92 accesses.

“I appreciated the range offered and felt well supported in my learning.”

She did, however, regret the absence of a more collaborative learning environment which she had experienced on her masters programme.

“I have tried to start discussions but usually only the tutors respond.”

She also commented on the poorer quality of some aspects of the audio and video files which she felt needed further technological attention. She had commenced her studies by listening to the introductory podcasts only but had gained greater benefit later from the more detailed, lively podcasts of the ‘lecture’ where she felt student participation from the classroom added to the learning experience.

CB Student had given up work to devote herself to her change of career and was keen to attend classes to form part of a learning group which she regards as more motivational than distance learning.

“I don’t use the online material very much – I find the classroom tends to provide what I need.”

She made more limited use of the audio and video resources, though she did access the additional written resources which she felt added to her classroom experience.

“The outline answers to the seminar questions, especially where we are considering a past exam question is really useful for revision of the topic.”

“The EVS in class is really useful for making me think so I don’t usually complete the online quizzes.”

She did not feel the need to re-visit the audio and video materials, having been present in the class when the events took place. She thoroughly enjoyed the classroom learning environment and had made contact online with some of the distance learning students.

Conclusions

The case study was undertaken, primarily to ascertain whether it was possible to establish a correlation between students access of online resources in relation to success in their learning. It has not been possible to establish this. The strongest correlation is between student achievement in their previous undergraduate degree and performance on this module.

The study has highlighted some specific areas for further research. The approach adopted, by the nature of the online resources used, is not formally creating a collaborative online environment (Salmon, 2002). Students may chose to participate in collaborative activities but these do not feed into the assessment strategy for the programme. Distance learners have performed on average less well than their attending counterparts, but there could be many factors contributing to this including, a lower proportion of students with upper second class degrees and available time for study and therefore the choice of distance learning.

The original design of the study was mapped against Chickering & Gamson's work but this appears too general an approach to provide the necessary detail for a comprehensive underpinning. By coincidence the techniques do, to some degree comply with the approach adopted by Conole & Fill (2005) who in their tool kit considered the ease of use by practitioners of particular forms of technology. In relation to the distance learning students the approach adopted fails to achieve a collaborative online learning environment, there is an absence of the scaffolding approach suggested by Salmon (2002) to introduce students through a step-by-step process to online learning, nor is the approach seated in Laurillard's conversational framework, though again some of the technologies used do correlate with her approach but there is a significant lack of overall structure. The absence for distance learners of a considered approach may be significant in the findings that these students performed less well on the module, even against the strongest correlating factor, an upper second class honours degree at undergraduate level.

References

Bloom, B. (1956) *Taxonomy of Educational Objectives*, McKay
Chickering AW and Gamson ZF (1987) *Seven Principles of Good Practice*, American Association for HE Bulletin

Conole, G. & Fill, K. (2005) *A learning design toolkit to create pedagogically effective learning activities*. Available at <http://www-jime.open.ac.uk>

Laurillard, D. (2002) *Rethinking University Teaching – a conversational framework for the effective use of educational technology* Routledge

Salmon, G. (2002) *E-tivities: the key to active online learning*, Kogan Page

Biography

Penny Wiggins, Holder of National Teaching Fellowship (2009), University Teaching Fellow, Blended Learning Unit Associate, Associate Head (Academic), School of Law, University of Hertfordshire. E-mail: p.wiggins@herts.ac.uk. Current teaching: Constitutional and Administrative Law, Law of Contract. Research interests: blended and distance learning techniques and underlying pedagogy of these approaches.