
Blended Learning: Lecturers have their say

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Abstract

To investigate the overall blended learning environment in a tertiary institute a revealing case study reflected student and staff perspectives on the effective blended learning environment which is increasingly influenced by e-learning and emerging technologies. This particular paper focuses on the teacher's perspective on e-learning, emerging technologies and the blended environment which most universities and tertiary institutes have now embraced to varying degrees. Qualitative data on the use of online and blended learning experiences by tertiary staff were gathered by email surveys and supplementary interviews. The study synthesised results from multiple sources within a tertiary institute and made recommendations and gave insight into optimal blended learning environments within the tertiary sector. Overall, the study provided a perspective on the psychology and strategic view of the learning environment for the future tertiary institute.

Keywords

Learning environments, blended learning, e-learning, IS education

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Introduction

All staff at the Eastern Institute of Technology (EIT), Napier, New Zealand were invited to comment verbally and by email to the research questions on the effectiveness of blended learning environments stated in this study. 35 staff out of 380 equivalent full-time staff responded with comments from a wide range of perspectives including marketing, academic, managerial and administration viewpoints. Some of the email feedback was augmented with background interviews. Interviews were held with the Academic Manager, the E-learning Advisor, the information systems (IS) Head of School responsible for a successful flexible delivery certificate programme, and a group of IS lecturers involved in a flexible mixed-mode cluster of certificates. This study on staff views was held in the period of 2006-2007, and was set in the context of a wider four year case study investigation by the author which included student quantitative and qualitative data collection within the e-learning and blended learning environments (Skelton, 2007).

Literature Review

The purpose of any educational experience should be more than delivering content and achieving formal assessment outcomes (Fraser 2001). The experience in reality today includes places (virtual and physical), laboratories, lecture theatres, tutorial rooms, offices, libraries, learning assistance centres, computer-based systems and many varieties of Internet-based learning content systems. "Teachers often speak of a classroom's climate, environment, atmosphere or ambience. They consider it to be both important in its own right and influential in terms of student learning" (Fraser 2001, p. 3). The teacher can affect the entire atmosphere of any classroom in a positive or negative

manner. One special challenge for online teachers is the degree of influence they can have, within a learning management system, on the 'atmosphere' of the virtual meeting place. An additional complexity for the teacher in the blended environment is to balance the mix of timetabled campus classes and the activity online including the choice and quantity of e-learning material available on the Internet. Lecturers aim "to create a learning atmosphere that sustains motivation, promotes self-initiation and encourages collaboration" (Fetaji 2006, p. 4). A possible danger of pure online e-learning and fully flexible delivery programmes is a diminishing of the influence of the teacher or lecturer over the informal atmosphere of the learning environment. The inclusion of partially-qualified and lower-paid staff assisting in the delivery of flexible or online programmes also raises the issue of the qualified teacher being kept at arms length from the essential daily process of the learning environment. This relates to the efficiency and cost reduction business reasons at least partially driving the move to e-learning.

Research Questions

The research questions take a holistic approach to the entire learning environment in the tertiary sector which now seems to have a common approach to implementing e-learning and online courses within the overall offering of traditional and newer flexible programmes.

1. Are modern tertiary students experiencing a sense of being in a positive, encouraging learning environment? Has the recent addition of the learning management system (LMS) really enhanced the overall learning environments from the student's perspective? Previous research has provided some warnings for the losses

which may be incurred when online courses replace face to face interaction without adequate replacement for the traditional interaction. The competitive advantage of using the LMS may already be over with all tertiary institutes now utilising a web-based learning management system to some degree.

2. What elements help construct an ideal or optimal blended learning environment in a tertiary setting?

3. How can the best components of online e-learning be combined with the best components of the traditional 'bricks and mortar' classroom learning environments? Is there an ideal mix of the two types of environments?

4. Does e-learning in some form of implementation actually undermine or damage the 'real-world' learning environment? Are we simply forced by the trends and increase of Internet activity to 'jump on board' regardless of the cost to academic quality and sense of community?

Staff Responses

One academic with experience in setting up online and blended courses at various levels was supportive of the blended approach.

"No one ideal mix, but blended is definitely the best of both worlds allowing students flexibility but maintaining contact to prevent feelings of isolation and being "disconnected" from the learning process as many students (and lectures) feel."

Administrators of regional centres were often in a unique position of being able to observe limited groups of students and lecturers operate in flexible delivery

modes. These regional administrators were perhaps closer to the learning and teaching nexus than most managerial or administrative staff. These comments also confirm the importance of peer support while studying in flexible or online mode.

"As the Manager of a regional centre, my experience is that the students that study online need a lot of support to stay motivated. We have some that come into the Centre and work regularly with another student that is doing the same online paper. This seems to work better. Most of them say they would prefer to be in a classroom situation."

A senior manager's viewpoint seemed to imply that the traditional learning environment may be holding the institute back from higher enrolments and from providing for the potential students requirements. These comments may indicate a managerial viewpoint that converting more courses to a pure e-learning mode would benefit a university financially and broaden the access levels of more potential students.

"It's about helping people get the knowledge -some want to come on campus and others don't. So for those that don't, why do we insist that they come here for orientations and classes? The best of each (campus and online) will not necessarily combine - as that might not be what the students actually want. Does e-learning in some forms or implementations actually undermine or damage the 'real-world' learning environment? No - this sounds kind of precious -isn't learning really about ensuring that people get the knowledge - does it matter if it's delivered on line or in a classroom?"

Some teaching staff involved with online or newer flexible courses shared their knowledge of features that help with blended delivery. Discussion forums provide a medium for class participation with the advantage that students have time to consider the question and think about their answer. One lecturer discussed his/her experience with students who may be reluctant to contribute to a discussion in the classroom or lecture theatre but may be happy to join in because they feel somewhat anonymous in a discussion forum, and are more comfortable writing than speaking. However, there are some students who, due to language difficulties, or the perception that their writing skills are inferior to those of their peers, will need some encouragement to put their thoughts into writing.

One staff member involved with commercial course delivery and management had received feedback from business clients who send their staff on block courses. The business clients indicated:

"They want quick responsiveness to technical issues when engaging in the online environment. Businesses think that the online system should look slicker and more up-market – Moodle is primarily built for academics by academics. Businesses with students on online courses want more structured groups and classes in physical settings to complement the online materials."

Students sponsored by businesses appear to require structured class tutorials to support their online courses. These comments would indicate that online courses designed for students involved in the workplace cannot be left in a purely online environment.

Some lecturers reported verbally that managing the online learning environments and mentoring remote individual students can take more time and resources per student than a standard class of on-campus students. An example was given of one remote student in another city who required special assessment locations and invigilators, and special tutor assistance which utilised at least one lecturer for several hours each week. These sorts of examples helped illustrate that institutions must sometimes absorb uneconomic enrolments in an overall programme which includes online, flexible or distance students. Some lecturers felt strongly that the personal contact by students with other students is often a strongly motivational factor in the enjoyment of any course. They also pointed out that institutes cannot assume that fluent use of computers by students and full access to broadband Internet exists in all homes (currently 84% saturation of NZ households, 2008).

"I feel that many people enjoy the people contact in education, and would not choose a purely online environment. However some people like the flexibility of pure online learning which allows them to work around work, family etc commitments or because they are not very mobile (e.g. older people, people in wheelchairs etc). Pure online learning can also be easier for people coming back to study - several people have told me that enrolling at a tertiary institute is quite scary."

Blended Learning Supported by Staff

The blended approach appeared to be widely supported by most academic staff. However, there was no particular consensus on how this could be defined, or indeed whether an ideal blended prescription could ever

be defined given the wide range of learners and breadth of programmes. This respondent also included a warning about implementing e-learning courses too quickly without adequate academic training, and raised the issue of retaining a unique set of knowledge.

"I think blended learning can be valuable in many ways. One is to encourage independent study. Rather than the lecturer presenting information, learners can be tasked with investigating topics. It is also easier to create learner activities."

Some academics were supportive of a blended approach to learning environments but saw the need for adaptability of the learning environment according to the type of learner and the type of course. The adaptability of the e-learning environment was also mentioned by academic staff where the scaffolding and depth of material can be changed automatically according to the usage of the student. This is one clear advantage of e-learning compared with traditional classroom settings. One lecturer also saw the role of the lecturer or teacher as the custodian safeguarding the academic quality regardless of the type of learning environment.

"I see a working combination of e-learning and the classical classroom approach, where the classroom approach typically 'teases' the student to find his way in the e-learning environment. The Internet is indeed a trend, and still arises in all aspects. E-learning might be something that goes with the flow without a firm argument if you just take into account to succeed at the exams. In real-life one encounters the Internet. In real-life one has to be able to do some sort of e-learning just to keep up with the pace of progress in

technology. So, I'd say, e-learning is not just potentially an efficient environment to reach more students, but also a necessary preparation to succeed in real-life careers. But to safe-guard academic qualities and sense of community I see a clear role for the tutor. It's exactly what a tutor needs to guide and verify."

Another academic staff member considered the modelling of usage of the blended environment by the lecturer as a critical success factor for students observing:

"Is there an ideal mix of the two types of environments? Again it depends on the level of integration wanted. Does e-learning in some forms or implementations actually undermine or damage the 'real-world' learning environment? Students can access material online and avoid coming to class as it is online anyway."

Staff were also aware of the potential resistance amongst non-IT teaching staff who may be mandated by the administration to launch online courses or move their courses into a more blended mode. This raises the issue that if a recommended blended learning environment was defined, the implementation of this may require additional time and training for all staff.

"Mandating a minimum level of activity in a blended learning environment is ok. Insisting that everyone have everything online is doomed to failure through lecturer resistance. However a sense of community can be enhanced."

Some staff have experience with flexible delivery courses that also attempt to provide a 'smorgasbord' of

different ways of accessing materials whether by CD-ROM, printed workbook, Moodle website, drop-in classrooms, together with a number of other mixed options. These courses are not primarily online e-learning courses.

"For me the ideal would be to offer the flexibility of online learning but have more regular on-campus workshops for those students that need the f2f contact. Everything done in a f2f class can be done online as well and sometimes in a better way. So, in combining the two."

Most staff did not believe that e-learning in some forms or implementations undermined or damaged the 'real-world' learning environment. They mentioned examples where students had thrived in the online environment.

"I don't think it does and I think the flexibility of online learning has opened pathways for many students who are too shy to speak up in class, as suddenly with online learning they get to have their say as well without others being present to "judge". In my experience I have found a greater sense of community in the online groups than some of the face to face classes. But, as with face to face classes, a lot depends on the personality of the tutor."

Once again, another lecturer reinforced the view that a fixed ideal mix of the online and class environments may not be achievable. However, if the two environments were considered in the development of teaching materials then a better integration can take place.

"The mix will vary depending on the type of course and the learning styles of the students. I do not believe there is such a thing as an ideal mix. The two environments should not be developed separately; the e-learning materials and traditional materials must be considered together as important components of the learning experience."

Another repeated reflection from active teaching staff was that in their recent experience some students were attending fewer classes due to available materials online.

"If online materials duplicate the traditional materials students often stop attending class and this can give students the impression that attendance is not necessary."

A non-teaching staff member with a strong interaction role with external organisations implied some resistance from teaching staff with the comments:

"We have to 'jump on board' with the internet and e-learning. We talk about 'lifelong learning', well that applies to teaching staff as well as students! I know that many teachers are 'fearful' of the power of the internet but I think that is because they don't understand its capabilities. We should all be learning new ways to teach more effectively and if that involves using the internet then 'bring it on'. I don't think that this needs to be at the cost of academic quality or the sense of community - it's more of a challenge for teaching staff to be creative about how they use it and how they monitor the use."

One staff member felt that the practical considerations of the effects of online learning were as important as the pedagogical aspects. The teaching load is often measured by the number of timetabled hours in a semester. As this teacher pointed out, that measurement technique may no longer be a fair assessment of teaching workload in the mixed-mode environment.

“Clear timetable of both in-class and online activities is needed for clarification to student and to staff. Step by step introduction to the technology - demonstrated, written, and practiced. i.e. accessible to learners at any time. Clear ground rules and realistic expectations for online participation and contribution High value placed on relationship with learner and the collective of learners both in-class and online. There needs to be regular contact by facilitator/tutor in online environment. Online and class-based activities are participatory and contribute to a collaborative learning environment.”

The insight required by the online teaching staff was also acknowledged by one respondent, as well as the potential for students to be contributing to the course knowledge and assessment framework. Training for staff was also seen as essential for the success of new programmes that include online learning. Staff also acknowledged that under some conditions staff themselves could be resistant to engaging with the e-learning environment. If the environment is driven from senior management rather than grown ‘organically’ then the institute may not achieve optimal results.

Flexibility of Approach and Delivery Important

Another opinion from an academic covered the threat of the costs of top-down driven e-learning causing teachers to be forced to deliver online or blended programmes without the relevant theory, skills and experience, to the detriment of the learning experience. Transitioning from in-class to a blended learning environment should not be assumed to be natural or easy (Duebal 2003). It requires existing teaching skills to be utilised in a very different context, and the transition can be enhanced through training, peer support and other techniques. Top-down driven e-learning may foster teacher resistance to engaging with the environment in positive and exciting ways to add to learning opportunities. Respondents also considered that the academic level of the programme should be an influence on the weighting of online e-learning versus on-campus or traditional materials. In fact, the lower level certificate courses appear to favour a more traditional structure with workbooks (paper-based) and more hands-on materials than Internet-based materials.

At foundation course level I think that it is critical not to overdo the online ‘stuff’ at the expense of the development of basic study skills and interpersonal skills. Blended learning which creates an environment which really makes learning more accessible for all students is the only valuable option. Where accessibility, for some, comes at the expense of the majority of learners then it may be that the more appropriate (and flexible) approach is to provide a fully online learning environment for those unable to access class based learning and to build a class-based

environment which incorporates e-learning at an appropriate level for the other group.

One Head of School felt that labelling a course as "online" may not always be helpful to the students. Students may wish to enrol in a particular course and then decide upon which delivery options are most suitable for them.

The mix of blended learning environments should be adaptable to the learning style of the student. The use of the word "online" tends to stereotype the course which can be off-putting to teachers involved and also students. Sometimes we find that students wish to enrol as a traditional campus student but reserve the right to invoke flexible, online or workbook-delivered learning environments after the initial enrolment.

Some practical courses (for example, computing or carpentry) will probably always require a minimum of campus based activities.

The flexible and blended courses must compromise some things, for example, the access to software applications, laboratory facilities and still need a physical resource for assessments.

From a management viewpoint, it can be difficult to prove that all students have been learning and undertaking the course apart from the assessment results. This is an issue with institutes and universities required to report to the government on the numbers of bona fide students actually enrolled, current and engaged in the course.

It can be difficult to measure the level of 'engagement' within a blended environment as attendance no longer is required necessarily. The number of 'contacts' may help e.g. phone calls, emails, use of drop-in classes, and assessment performance, but these may not equate with the normal scanning and interaction that takes place in a classroom-based course.

Commercial providers of online systems often provide a web-based and/or DVD learning environment but assessment for industry certification is undertaken independently by another company. Therefore, as long as the student makes maximum use of the resources and achieves a successful result on an external test the student and original provider are satisfied regardless of the learning style or type of usage of parts of the learning environment. Another staff member asked whether our campus will become just a place for students to plug in their laptops? At the lower levels students need to learn from other students – we may lose this in a pure online environment. Pure online courses can actually be less efficient than traditional campus classes in terms of economies of scale and number of tutor hours required to complete one cohort of students from start to finish. One team at EIT has pioneered new flexible National Certificate of Computing Level 2 (NCC2) and NCC3 programmes, providing workbooks, CD and bag, some online material together with drop-in computer classrooms with tutors. Assessment is performed on campus and through online evidence. This flexible-delivered programme has been very successful but is not dependant on online e-learning but rather a mixture of traditional resources, email contact, and the ability to work from home, work or on-campus. An interesting outcome has also been the new teaching environment of the lecturers involved

– most of the contact is by email or phone, with assessment verification also an integral part. The drop-in classes are mainly staffed by tutorial assistants rather than fully qualified lecturers. This example of the ideal blended environment has been successful in terms of student numbers and course satisfaction.

One academic with significant experience in developing and managing online courses had some warnings for institutes and universities.

In the race to get courses online many organisations are neglecting those aspects of course design and development that may be the pivotal factors in retaining students and ensuring their success. Lecturers and course designers (often one and the same), need training in both the pedagogical requirements of online learners and the technology skills to provide a seamless learning environment. They also need an allocation of time for course development and support of their students.

One staff member believed that there are lessons that can be learned from the environmental ways in which students learn outside of the structured teaching delivery and assessment methodology. This opinion illustrated the widespread belief in the powerful effect of the learning environment in general.

Students 'soak knowledge in' from the example of teachers, the lecturer's personality, values etc. Students also benefit from talk and conversation – "as you walk around" doing daily tasks in the presence of the class and students. Also the general environment is important: the physical landscape, buildings, use of music, books, journals, and that feeling of general

absorption. So official curriculum content may not be as persuasive as person-to-person content. How can these types of environmental and emotional experiences be incorporated into an online or blended learning environment? It will be a challenge, but I feel that we still need the personality of the teacher to be able to shine through. If we lose the personal influence of academics we run the danger of becoming a faceless institution driven by policy and procedures. The quality of the student experience remains an important aspect of our institutions (Corder, Horsburgh & Melrose, 1999).

Other examples of lecturers utilising features of the Moodle e-learning system include the use of online discussion forums encouraging students to participate in class discussions online. Some lecturers are beginning to provide incentives for student participation by making the forum comments contribute to assessment for the subject. This also allows students who may be reluctant to verbally participate in class to use the discussion board as a backup mechanism.

Conclusion

Examples of Moodle usage were cited by staff and various lecturers at EIT utilising the online e-learning software in diverse ways. Not only may they be different in depth of utilisation but the creative expressions within the online framework may also be reflective of the personal styles of individual lecturers. For example, some lecturers are still avoiding placing any course material on the LMS however this is becoming less likely due to most Faculties now requiring lecturers to display the course outline and skeleton lectures as a minimum requirement. A second group of lecturers includes those who are now placing

the minimum material on the LMS such as course outline, welcome and some lecture notes while still delivering a 'bricks and mortar' course. An emerging third group of lecturers comprises those who are currently adding a good range of materials on the LMS (PowerPoint lectures, lab sheets, tutorials, course outline and weekly commentary). A fourth group of lecturers have now progressed beyond course material placement and are now experimenting with interactive quizzes, chat and discussion forums, wikis and other Web 2.0 technologies. Also there is some evidence that this fourth group is changing some of their timetabled teaching rooms to better complement their online activities. A final small group of academic staff are now directly involved with some emerging purely online courses where their entire teaching interface is through an online mechanism. The third and fourth groups of academic staff are probably not acting under compulsion from their managers but rather are seeing the blended learning environment as an opportunity to improve their teaching, improve their student satisfaction, and create a richer learning environment overall for their students. Hennessey and Deaney (2004) confirm that teachers' confidence plays an important part in influencing their uptake of information technology and multimedia usage within their programmes. Tertiary teachers and lecturers will hold a wide range of pedagogical beliefs, IT skills and general confidence with new teaching techniques viewed as particularly influential (Mumtaz 2000).

Tertiary teachers and lecturers may therefore be placed on a gradient of mature utilisation of online e-learning environments. This aligns with Young's' e-learning maturity model (Young, 2001). Some lecturers are taking advantage of e-learning training opportunities,

are open to change and are confident enough of their fundamental professional teaching abilities that they are prepared to experiment (and perhaps risk failure in some sessions and e-learning features). Dawes (2001) confirms this observation of how academic staff develop professional expertise in emerging technologies and how their motivation helps them to evolve from being potential users through the stages of 'participant', 'involved' and 'adept', through to 'integral users' ultimately. This study has already mentioned the potential disintermediation of the teacher within the online e-learning or blended learning environment (Downes 2006). Another developing area on the wider Internet arena is the growth of holistic and commercial content providers which may also disintermediate entire tertiary institutions (Clear, 2002). The use of Internet search engines and the phenomenal growth of user-edited dictionaries and resources modelled on Wikipedia has seen the rise of information and knowledge which is outside the direct control of the teacher or institute. The growth of certification courses provided by commercial companies with a higher level professional appearance and incorporating instructional design also generally surpasses the presentational quality of material provided by the average university or tertiary provider.

Academic staff were generally positive about the emerging presence of the online learning environment, and were also supportive of the concept of a balanced blended environment. The balanced blended environment was supported particularly by those staff who defended the pedagogical need for on-campus real world learning experiences by students.

Managerial and non-academic staff at EIT also expressed strong opinions on the need for progressing with online initiatives but reflected on some concerns with some academic staff who appeared to be resistant to the emerging online learning environment.

In conclusion, this paper investigating tertiary staff feedback has illustrated the wide range of opinions and levels of blended learning utilization within one university or polytechnic. This would also suggest a wide mix of blended learning environments across several universities and this would provide a wider scope for further research in this area. Looking forward, the information systems community has an opportunity to influence schools, universities and tertiary institutes to successfully integrate e-learning and emerging technologies to continually re-create a blended learning environment which adapts but does not damage the main channels of operation.

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