



The undergraduate experience of blended e-learning: a review of UK literature and practice

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Executive summary

The review of blended e-learning was undertaken by the Oxford Centre for Staff and Learning Development at Oxford Brookes University for the Higher Education Academy. The aim was to review existing research and practice on blended e-learning, identify key studies and issues, and make recommendations to guide future policy, practice and research.

Methodology

A key aim was to ensure that the review findings would be grounded in practice and relevant to the needs of the Academy's audience. Consistent with this aim, we adopted a methodology that combined traditional desk research with institutional visits and interviews with key personnel.

The review of over 300 studies of blended learning aimed to reveal methodologically sound evidence of the impact of blended learning on the student experience. We used a best evidence synthesis to identify the key papers with the aim of creating a manageable knowledge base for the synthesis. The following inclusion criteria were used in the selection of key studies: published since 2000, scenarios which blend technology with face to face teaching, experiences of undergraduates, representative of UK learning environments, clear rationales and/or objectives, embedded, evaluation of the learner's experience, justified and rigorous evaluation methodology.

The institutional visits and interviews aimed to give access to unpublished literature and to reveal practices that we could not know about as 'outsiders'. Interviews were conducted with seven institutions with reputations as long standing implementers of blended e-learning. The group represented a range of institutions including post-92 universities, research-intensive universities, and institutions with a sharp metropolitan focus or those serving a broader, regional area. We identified five attributes that were part of the blended learning agenda for some institutions: widening participation, enhancing learning, flexibility of provision, prominent e-learning early adopters, and computer aided assessment as a dominant feature.

What is blended learning?

Throughout this review we have been keen to find evidence of how the potential offered by technology is actually being interpreted and used by institutions, their staff and their students. We avoided reaching our own definition, noting instead eight dimensions implicit in the definitions we found: delivery, technology, chronology, locus, roles, pedagogy, focus and direction.

From the institutional visits and the review of course evaluations, we observed that there were three ways in which the term 'blended learning' was being used. Currently the most common type of blended learning is the provision of supplementary resources for courses that are conducted along predominantly along traditional lines through an institutionally supported virtual learning environment. Second, we found some, but far fewer, impressive examples of transformative course level practices underpinned by radical course designs. These often make use of technology to facilitate interaction and communication and replace other modes of teaching and learning. Third, we are aware of students taking a holistic view of the interaction of technology and their learning, including the use of their own technologies, although this is currently under reported and under researched in higher education.

What underlying rationales are being used for promoting blended e-learning?

Institutional rationales for blended e-learning were highly contextualised and specific to each institution. They included: flexibility of provision, supporting diversity, enhancing the campus experience, operating in a global context and efficiency.

A few course level rationales related to institutional strategy, particularly offering flexibility in time and place of learning. However, most rationales at this level were in response to practical challenges being faced by staff and/or in response to student feedback (loss of staff-student contact, large classes, inconsistency in quality and quantity of feedback between markers) as well as responding to the demands of professional bodies in vocational courses. The rationale reported most frequently by local implementations was maintaining quality in response to increasing cohort sizes.

What monitoring and evaluation strategies are being adopted for ensuring and enhancing the quality of blended e-learning?

All seven institutions we visited described current plans for initiating institutional monitoring and evaluation strategies to assess their students' experiences. All were finding establishing institutional level practices problematic. We suggest this was due to the pressure to implement rather than evaluate, the low status of pedagogic research, and poorly defined measures of institutional success in embedding blended e-learning. All institutions welcomed the opportunity to share approaches both through this review and the Academy's Benchmarking e-Learning project. In response to the requests for support around evaluation, we have taken the opportunity to highlight examples of suitable approaches and techniques and make recommendations for those wanting to undertake their own evaluations.

Despite the difficulties around establishing institutional level monitoring and evaluation strategies, we identified and described a number of effective practices in various levels of operation in universities: regular module evaluations being used to inform departmental action plans, triangulated evaluations of students VLE use and institutional support for the collection and dissemination of case studies. We also suggested the promotion of pedagogic research both within institutions and for assessing the impact of course redesigns and drew on the pedagogic literature to make recommendations about conducting such research, concerning triangulation of data, collection of rich data and planning longitudinal and ethnographic studies. Finally, we noted the importance of making use of the findings of evaluations in course planning and redesign and noted examples where this had been achieved.

What impact is blended e-learning having on the student experience?

We find that student response is overwhelmingly positive to the provision of online course information to supplement traditional teaching. Students make regular and frequent use of electronic resources with few reported problems of access. They particularly value flexible access both from home and on-campus. The impact of the provision of course notes is discussed in relation to support for students with disabilities and the possible impact on attendance. Students are concerned about the

costs associated with downloading and printing and are critical of inconsistent use between staff and modules.

We find from evaluations of redesigned courses, that while students recognise the value in the blend of face to face and technology supported activities, there are large individual differences in how they experience the blend. It seems to be important that students understand the role of technology in their learning and the implications for their study strategies and engagement in learning activities.

There is an increasing recognition that students are making use of their own technology as well as those provided for them and that they are doing this in ways that are not planned for, difficult to predict and may not be immediately visible to their teachers and researchers. Taking a holistic view requires an understanding of the individual. We found that where there is a significant individual difference such as disability or culture, this dominates the experience for the individual, although not in ways that are stable or predictable. Other individual differences which seem to be important are prior experience and attitudes towards using computers within learning.

What are the success factors for blended e-learning?

Drawing out themes emerging throughout the previous sections of the review, we make the following recommendations for successful blended e-learning in practice:

- *Use the term blended learning.* Although difficult to define, the term 'blended learning' is finding acceptance among higher education staff. We suggest that the advantages of the term include its poor definition - which allows staff to negotiate their own meaning - the implication of the protection of face to face teaching, and the implication of designing for active learning.
- *Work with and within your context.* We found that institutions who we had identified as successful implementers of blended e-learning had highly contextualised and specific rationales for their adoption of technology. Similarly, successful local implementations were often in response to a real relevant issues occurring at the course level.
- *Use blended learning as a driver for transformative course redesign.* The importance of transformative course level designs was identified as one of three characterisations of blended e-learning. Throughout the review, staff repeatedly identified engaging in course redesign as critical to their success. The valuable features of the course redesign were identified as: undertaking an analysis of the current course, collecting and making use of student feedback, undertaking the design as a team, designs which make explicit their underlying principles, and developing the course iteratively over a number of years.
- *Help students develop their conceptions of the learning process.* It seems to be important how students conceive of their engagement with the learning processes and activities within a blended e-learning context. In order to support students, it is vital that we are consistent and transparent in communicating our expectations about, for instance, attendance patterns or how to engage in purposeful dialogue in asynchronous discussions.
- *Disseminate and communicate results of evaluations.* The need to co-ordinate, promote and disseminate results from evaluations was identified as a crucial aspect of monitoring institutional strategies and course redesigns.