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The Development, Delivery and Sustainability of a Blended Learning Initiative for Part-Time Undergraduate Students on Health Care Practice Programmes.

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Background

This paper reports on the investigation of the development and implementation of a blended learning approach. The study focused on four modules for part-time health care undergraduate students undertaking a Continuing Professional Development programme in the UK.

The research aims were to investigate:

- the extent to which the introduction of the blended learning modules met students needs and expectations
- the constituent factors of an effective and efficient infrastructure to support development, delivery and sustainability of blended learning.

This research provides insight on factors facilitating or impeding the development and delivery of blended learning, from the perspectives of the learner, the educator, support and management staff. Lessons learned can be used to inform institutional blended learning strategies.

Research Questions

Students and managers within local health and social care settings in the United Kingdom expressed the need for flexible access to learning opportunities. The Faculty of Health and Social Care Sciences responded to this need by devising a pilot study aimed to investigate the processes involved in converting traditional face-to-face, attendance modules into blended learning modules, an approach combining face-to-face and online delivery. In addition, the perceived value by students and teaching staff of the new delivery method was explored. The four modules were developed so that approximately 40% of course content would be delivered online. Approximate student numbers were 15 per module.

The four modules were developed by teaching staff in collaboration with an e-developer. In addition, for the development of three out of four modules an instructional design approach was taken whereby teaching staff also had access to an instructional designer, who advised on appropriate pedagogy of the blended learning modules. The remaining module was developed by module lecturers working solely with an e-developer. The project was strategically led by the Head of School and managed by a Principal Lecturer at the Faculty.

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Methods

A mixed-methods methodology was used to investigate this project, using a number of data collection tools. Data collection instruments were developed using the Tailored Design Method (Dillman, 2000).

A pencil-paper questionnaire was administered to students on the last day of their face-to-face contact within the module. The questionnaire contained 21 Likert-type multiple choice questions, 3 short answer questions and 5 open-ended questions.

Semi-structured individual interviews were undertaken with nine members of staff who were involved in module teaching, eight academic staff members from within the Faculty of Health and Social Care Sciences and one from clinical practice. In addition, semi-structured individual interviews were also conducted with the strategic lead, project manager, the e-developer and the instructional designer. The interview addressed the following 4 main areas: the development of the e-learning component, the collaboration with the instructional designer and the e-developer, the teaching of the blended learning module, student learning, and sustainability aspects.

The aim of the interviews was to capture the lived experience of the staff most involved with implementing blended learning. Interviews lasted for approximately one hour, were tape-recorded and then transcribed. Subsequently, immersion in the data, closely followed by thematic analysis were undertaken using the 'Framework' approach (Ritchie and Spencer 1994 in Gerrish and Lacey 2006). A number of themes emerged as being significant to both the process and impact of introducing on line learning into traditional face to face modules.

A total of 90 students completed a pencil-paper questionnaire, resulting in a response rate of 100%. 20 students were enrolled in the 12-Lead ECG Interpretation module, 30 students in the Mentorship Stage 2 module and 40 students in the Acutely Unwell Adult module.

Eighty percent of the students were female. Students' age varied from 23 to 56, with an average age of 37 years old. 25% of the students were younger than 32.

All module leaders, 4 in total, participated in individual interviews. In addition, the project lead, the project manager, an external subject expert from clinical practice, the instructional designer and the university e-developer coordinator were interviewed.

Frame

The strength of blended learning is argued to rest in bringing a new dimension of horizontal democracy to learning. Turning instructors and students into partners in the learning process, in contrast to the traditional model of learning hierarchy (student learns from instructor), has been coined as 'horizontal democracy of learning' by Bonk & Charles (2006). The studies conducted at the University of Tennessee and Stanford University show that blended learning improves learning outcomes. These findings were confirmed by a study undertaken at two higher education institutions in the UK (Boyle et al., 2003). Also in the UK, The Higher Education Academy conducted a study combining traditional research methods with site visits. Again, their overall conclusion is that students are very positive about blended learning (HEA, 2006). In addition, blended learning produced a stronger sense of community among students than traditional face-to-face or online learning (Rovai & Jordan, 2004). Also, student interaction and overall satisfaction have been shown to improve through blended learning (DeLacey & Leonard, 2002). However, blended learning developments take time and the amount of work involved, even when given support by e-developers, is often underestimated by lecturers (Ooms et al., 2008).

Adoption of blended learning is not a straightforward process for higher education institutions and its faculty (Hwang, 2008). Research over the past decade reports a generally positive view of blended learning (e.g. Garrison and Kanuka, 2004); however some publications report reluctance in adopting technology to support/replace face-to-face teaching (Ooms et al., 2008). Whether this reluctance is a result of disbelief in technology, lack of supporting resources or perception of lower quality, it certainly influences the development, delivery and sustainability of blended learning initiatives.

Research findings

Overall, students were satisfied with the e-learning component of their modules in terms of design, content and activities, and the delivery method. Students were also satisfied with the quality and quantity of online interactions with lecturers and peers. However, when asked to compare the in-class learning experience with the e-learning experience responses were ambivalent; although the majority of students would undertake further blended learning modules and would advise fellow students to undertake blended learning modules. It could be concluded that the perceived benefits of blended learning, being the flexibility of study location, study time and study pace, being in control of their learning and not having to go to campus, outweighs the costs. Unfortunately, these perceived benefits are not related to quality of learning but are related to the convenience and flexibility of the learning.

Students felt confident performing computer skills essential for undertaking blended learning modules and report to have access to the essential hard- and software required.

Students consider timely feedback on their performance and rapid responses to their queries essential elements of support.

Overall, the development and the teaching of the blended learning modules was experienced as positive by lecturers. Challenging was finding time to develop the online materials, to collaborate with the instructional designer and to overcome initial anxiety regarding accountability of quality and sustainability issues and initial anxiety about their students' anticipated reactions. The collaboration with the e-developers was regarded highly valuable and essential by module leaders. The collaboration could be improved by locating the e-developers close to the teaching sites. The support from the project manager was perceived as valuable. Participating on this project led the module leaders to reflect upon current curriculum and pedagogical practices.

In addition, thematic analysis of the interviews generated the following themes:

- Autonomy and ownership
- Anxiety and excitement
- Motivation
- Time and workload issues and support
- Reflection on pedagogical practices

Today, many traditional face-to-face courses are being converted into blended learning courses. The conversion of delivery methods requires valuable resources such as time, energy and money. It is conceivable that a study at another higher education institution may yield different results, however this research certainly provides a useful insight on the factors facilitating or impeding the development and delivery of blended learning, and this from the perspective of the learner, the educator, support and management staff. Lessons learned from this study can be used to inform institutional blended learning strategies.