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Academic Development Perspectives of Blended Learning

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ABSTRACT

Technological advances in every aspect of today's higher education environment create a forum for academic developers to re-examine existing delivery methods for professional development. Within the context of this case study, the term 'academic developer' is taken to encompass the role of learning technologist. In order to be responsive and accommodate the changes, traditional instruction methods are being extended to encompass the range of Web 2.0 tools available. Debate is ongoing in the area of blended learning as to the ultimate effectiveness of technology integration. Through exploration of the experiences of two academic developers involved in the design and delivery of accredited professional development programmes for academic staff in Ireland, the case is made for an effective balance in pedagogical and technological intervention. Both were experienced in delivery face-to-face instruction, had different levels of experience in online teaching and work collaboratively with academic staff. Experience from the two case studies suggests that a prerequisite for embedding blended learning strategies in learning and teaching is that the instructors recognise the need for appropriate holistic academic development to provide them with not only an understanding of how best to use the technologies, but fundamentally for enhancing their understanding of how to develop effective blended learning environments.

INTRODUCTION

Introducing learning technologies to higher education programmes raises questions about staff roles and the organization of academic development practices. Indeed, over the past decade, many higher education institutions are integrating multimedia and more recently, web 2.0 technologies into teacher education and academic development programmes albeit with varying degrees of success (Leonard & Guha, 2001; Kell *et al.*, 2009). This paper discusses the findings from two case studies evaluating the effectiveness of blended delivery strategies by two centrally supported educational developers charged with working with academic staff in providing specialized support.

To be truly effective, academic development programmes need to engage the academic/faculty staff in learning as professionals. Within a blended environment, this includes learning experiences grounded in both classroom and virtual practice and guidance to develop as professionals in each. Academic developers encompass the role of learning technologist and work collaboratively with academic staff. The findings of a study by Ooms *et al.* (2008) offer an opportunity to further understand this type of role, and the value of a staff development model that supports situative professional development.

As there are still conflicting messages from the literature on the effectiveness of blended learning, [not all studies report positive benefits from the ongoing mixing of technologies with classroom teaching], the main concern of this chapter is to seek clarity on this issue, within a pragmatic lens; this realistic perspective is important as many higher education institutions today are not immune from a range of economic problems and as a result, the metrics for excellence within blended learning may require redefinition.

Initially the terminology on blended learning is clarified in the chapter and by extrapolating from current case study practices, it reveals a need for effective scrutiny of the power of blended learning strategies within the field of academic development. Secondly, a synopsis of current research into blended learning is provided, with a particular emphasis on new forms of conceptual frameworks and methodologies being brought to bear in the field. A third section explores the heart of the chapter by deconstructing the power that blended learning can offer academic development practice through the discussion of two case studies. Finally, the paper concludes

with a look forward into what the future of blended learning holds for such professional development programmes.

Inherent in all this is the technological and pedagogical challenges that exist within the field, and it is important to raise debate about blended learning as well as disseminate best practice through case studies such as this. Recognising that international blended learning conferences and symposia are only in their early years, it is anticipated that this chapter will contribute to the ongoing development of a common learning and teaching discourse about blended learning strategies in use in higher education today.

BACKGROUND

This chapter will discuss the findings from a comparison between two case studies evaluating the effectiveness of blended delivery strategies by two centrally supported academic developers charged with working with academic staff in providing specialized support. Case 1 is from a blended two year part-time programme, the MSc Applied eLearning, which is open to academic staff from across Ireland. The programme is intended for professionals with an interest in eLearning in higher education and industry practice, including eLearning specialists and co-ordinators, researchers, teachers, tutors and lecturers, trainers in commercial enterprises, policy makers and managers, who want to explore the possibilities for training, education and knowledge transfer through information and communications technology. The programme is in its third year with over 30 graduates to date across the two years and a further 18 participants currently enrolled for this current academic year. The HE participants are varied in their teaching background from Apprenticeship courses to undergraduate and postgraduate degrees, and those from the commercial sector are from diverse fields; it is this combination of experiences that enriches the culture of the programme so that "*thoughtful discourse*" about eLearning becomes the norm.

Case 2 is a pilot project designed to support academics in their own use of blended learning using a virtual learning environment (VLE), Moodle (http://www.moodle.org/). This project was intended specifically for academics in language disciplines in the first instance, although it was intended to mainstream it within the university in the event that it was successful. The intention of this project was to provide a blended learning intervention as professional development for academic staff, which would then promote their use of blended learning in their own teaching.

The project invited participants to work within an online space for a period of one semester, availing of exemplar activities, tasks and materials which could serve as templates for their own courses. Four participants joined the project in its first iteration. Like Case 1, participants were expected to have an interest in eLearning in higher education but it was anticipated that they may not have used eLearning very extensively. The objective of the intervention was to encourage them to experiment and develop their experience.

Issues, Controversies, Problems

Blended learning in higher education is now widely adopted and growing rapidly globally (Elsner, 2006; Salmon & Lawless, 2006). The mix of blended learning at higher education institutions varies from course to course, depending on a large extent on the subject discipline and the skills of the lecturer in pedagogical knowledge related to using blended forms of learning as well as relevant technological skills. However, it is still the case in many blended learning environments today that they are suffering from a lack of interactivity. Many online classes simply provide text-based materials or recorded lectures- podcasts - to which students listen after downloading. Shen *et al.* (2008) argue that this format only reinforces the negative effects of passive non-participatory learning.

Shin & Lee (2009) argue that some educationalists believe online education shows promise as an innovative and creative pedagogical method, on the other hand skeptics perceive distance learning as inadequate and inappropriate as a substitute for on-campus f2f instruction. Ultimately, they believe that hybrid formats help form and maintain online community, and allow students to benefit from the best of both worlds. Such rhetoric is common amongst blended learning studies, and it is important to delve into the substance underneath.

Therefore, several challenges seem to remain in this area despite the substantial promise of web-based instruction and other information technologies; in addition to the technological challenges such as consistent connections, the pedagogical challenges of dealing with cognitive overload, the effort of remaining flexible, sustaining the social interaction from classroom to cyberspace and the holistic approach required to designing interactivity in blended learning also exist. Given these factors, it is important to raise debate about blended learning and disseminate best practice in the field. At a pragmatic level, actively seeking technologic interventions that can greatly increase interactivity in blended classes is the focus of this paper. Web 2.0 communication tools

such as blogs and real-time video conferencing have the potential to improve the connection between the classroom and the virtual learning environment.

In recognition of the definitional debates surrounding the area, the following section of the paper opens with provision of a definition for blended learning. What follows is an indication of the topical areas currently being researched in the field and the resulting benefits of blended learning that such research has suggested.

Importance of defining blended learning

Rosenberg (2001) suggests that *definition* is the wrong term, arguing that it's more important to understand the concept of blended learning. However in the literature, quite often a narrow definition of blended learning is presented. It is sometimes even the case that the 'blend' is referred to indirectly – something that will lead to a change but is not itself described or specified (Hughes, 2007). Davis and Fill (2007), offering a case study of how blended learning has been adopted in a university through a successful project in one Faculty, include only a very brief definition of blended learning:

> Blended learning, the combination of traditional face-to-face teaching methods with authentic online learning activities, has the potential to transform student-learning experiences and outcomes.
> (2007, p. 817)

Jennings refers to a blend of technologies (Jennings, 2005), while Swe Khine & Lourusamy (2003, p. 671) describe a module delivered using 'a blended learning approach', by which they mean the use of a customised CD-ROM, traditional tutorials, and online discussions. Osguthorpe & Graham (2003) cite a conversation with a journalist who had understood blended learning to mean any use of the Internet in the classroom. For most people, blended learning equates to blending instructor-led courses with online courses. Kerres & de Witt (2003) suggest:

> The now widely adopted term 'blended learning' refers to all combinations of FTF learning with technology-based learning: traditional education can be enriched with the use of technology and learning with technology can profit from FTF meetings (2003, p.101)

But they also point out that this is a shortcoming of the term – "a buzz phrase that is so open that anyone can agree on it" (2003:101). Osguthorpe & Graham (2003) argue instead for a concept that refers to a variety of media, and getting the best from each one:

Blended learning combines face-to-face with distance delivery systems. (…) the internet is involved, but it's more than showing a page from a website on a classroom screen. And it all comes back to teaching methodologies – pedagogies that change according to the unique needs of the learners. (Osguthorpe & Graham, 2003, p. 227)

They argue repeatedly for a blend that favours the learner and plays to the strengths of different media in different contexts. This is echoed by other writers, referring to "the thoughtful integration of classroom face to face learning experiences with online experiences" (Garrison & Kanuka, 2004).

A broad definition of role leads to a broad definition of eLearning, which leads to a broader definition of blended learning that includes knowledge management, online resources, search engines, amongst others. It can also refer to the wider issue of institutional change management towards increasing use of technology in programmes. Blended learning can affect the way people learn and can help to promote the experiential learning experience and enable or empower the learner. Blended learning may bring about major changes in the way educational material is designed, developed and delivered to people who want to access learning but have other constraints that affect the process of learning (Pailing, 2002). We can think of the 'blend' at the level of mixed modes and media for teaching, but also as an institutional 'blend' – moving towards accommodating open and distance learning with existing face-to-face arrangements. While this is not a new concern for educational institutions, the term 'blended learning' appears to connote this aspect of institutional activity to an increasing extent. At this level, the blend is a much more amorphous concept, requiring change management, and possible changes to structures and working practices outwith the classroom or module. The literature seems to reflect this amorphous quality: it documents a range of 'blends' in terms of paricular courses and modes of teaching, and indirectly in how it speaks of wider institutional changes.

Moore (2006) has eloquently argued that one of the predominant dogmas which has been so pervasive for so long throughout academia seems finally to be beginning to give way to a new way of thinking about how education can be delivered. That is the assumed superiority of classroom teaching, above all alternatives, seems now to be stepping to one side to allow for a more nuanced understanding of the suitability of non-classroom environments for formal study and the desirability of adding new forms of communications to enhance and sometimes to

supplant the professional lecture. The emerging view is of a mutually respectful relationship between teaching online and teaching in the face-to-face classroom and the idea that "each can do its proper work" is now encapsulated in the concept of blended learning.

Considering that blended learning can be accomplished through the use of 'blended' virtual and physical resources, it seems to typically include mixtures between technology-based materials and other ways of learning, where the right choices have to be made in the distribution of learning content, didactical approaches, ways of communicating and characteristics of learning environments, in the perspective of the type of learning process and characteristics of students. In the strictest sense, blended learning is anytime any instructor combines two methods of delivery of instruction. However, the deeper meaning lies in engaging the students of the current generation. Thus a better example would be using active learning techniques in the physical classroom and a social web presence online. Blended learning is a term that represents a shift in instructional strategy. Therefore, the blended learning paradigms available today include face-to-face (f2f) and online learning experiences in whatever combination makes the most sense for the audience, the context and the criticality. Blended learning has come to describe a well thought-out combination of eLearning and other teaching methods. Many people are now coming to see blended learning as something that has always been there: after all, classroom teaching has always been combined with mentoring, role-playing, coaching, and other techniques/strategies.

Blended learning, if one encapsulates the classroom itself as just another form of technology, is ideal for achieving some learning outcomes but not others. The potential offered by other learning technologies include control of the pace of learning, redundancy in practice, multiple testing, access to alternative media, and to a vast virtual library. Some academic staff retain a healthy skepticism about eLearning and any potential benefits it may have for their discipline and context. However, while blended learning is not a new concept, increasingly, academics are coming towards endorsing its value and noting that the future trend will use the concept of blended learning more effectively.

Research and Practice

Many educational researchers have discovered that online learning environments are particularly useful for communications and collaboration. When management and administrative tools that are available in most course management systems today are added to the mix, online learning environments have been seen to be fairly robust. However abandoning the classroom seems too

drastic and premature. The result is using both environments-online and face-to-face-in a planned and pedagogically opportunistic way. Yet, the research on and about blended learning is less convincing than online asynchronous education. Oliver & Trigwell (2005) have been some of the strongest protagonists in recent years against the term 'blended learning' for philosophical and pedagogical reasons. Their arguments from a philosophical standpoint centre on 'blending' either relying on the idea of dichotomies which are suspect within the context of learning with technology or else becoming ineffective as a discriminating concept, resulting in a lack of purpose. Pedagogically, they believe blended learning is rarely addressed from a student centred perspective, rather it is superceded by instruction or teaching.

Also discussing the philosophical basis for blended learning, Garrison et al. (2004) argue that changing student demographics, lifelong learning and technological innovation are transforming higher education. These changes are creating an increasing demand for knowledgeable, critical and creative thinkers, that in turn necessitate a quality, innovative and inquiry-based approach to teaching, learning and curriculum development that includes the integration of appropriate learning technologies. A number of other researchers focus on studies of computer-mediated groups that utilize social networking technologies and web-based collaborative models. Still, many of us almost instinctively think blended learning will be good for higher education. It is important to ask why.

Generally, many studies appear to pay attention to the need to achieve the perfect blend, if such a thing exists. Building on a number of earlier studies, Verkroost et al. (2008) have developed a four-dimensional model of blended learning, incorporating the following facets of learning: structured vs unstructured, individual vs group, face-to-face vs distance and self vs teacher-directed.

However, not all studies report positive benefits from the ongoing mixing of technologies with classroom teaching. In a recent large-scale study, Jones et al. (2009) discuss the negative aspects of technology as a disruptor; from a tutor perspective, the main disruptors being technology alone not automatically transforming a traditionally delivered courses into an online course. Even though a module works well in a f2f environment, it does not guarantee success in an online environment. A continuum of blended learning has been suggested by Jones (2006) as a guideline for staff wishing to incorporate technology into learning and teaching, ranging from basic ICT

usage such as PowerPoint presentations, to accessing online resources and lecture notes via the VLE, discussion boards/online assessment to whole modules delivered and moderated fully online. Research suggests that change is gradual, and moving towards a culture of blended learning is partly dependent on leadership at the institutional level but also from 'local' leaders in faculties and departments (Davis & Fill, 2007).

Within the field, there are a growing number of research studies carried out to examine student group interactions and processes in a blended environment. Specifically they are addressing issues of interactivity between learners and between learners and media. Much of the research that has been conducted to date has been quite far-reaching, ranging from investigations of the pedagogical implications of particular technological innovations, or focusing on the perspectives and experiences of learners and/or teachers, or indeed concentrating on the methodological implications of adopting conventional research methods in virtual and other learning spaces. In a brief discussion of six case studies, Osguthorpe & Graham (2003) demonstrate the adaptability of the concept of blended learning, but also identify six goals that educators should keep in mind as they design for blended learning:

1. pedagogical richness,
2. access to knowledge,
3. social interaction,
4. personal agency,
5. cost effectiveness, and
6. ease of revision. (2003:231)

In all of these, they say, the main focus should be on how the students' learning can be improved.

Hughes (2007) looks at the possible benefits of a blended learning approach with 'at risk' learners, but again refers to a management dimension: the benefits of online learning for these groups are firstly at the level of administration (for example, tracking student participation through VLE logs) and secondly around teaching and learning. Hughes's findings suggest some evidence to show that the blended support for the group had a positive effect on submission rates for assessed work, again suggesting an administrative pay-off for blended learning rather than a purely pedagogical one.

In their more recent research, Garrison & Arbaugh (2007) provide a comprehensive review of the literature associated with their evolved community of inquiry framework for blended learning, with a specific emphasis on the study of higher order learning.

From a pragmatic perspective, many higher education institutions today are facing similar problems: space constraints, increasing student enrolments, budget restraints and pressure to integrate new ICTs. Alongside this, there are demands to embrace a student-centred paradigm which obliges a re-thinking of teaching strategies at individual and institutional levels, from a content dissemination format to a question-driven search for understanding. Such inquiry is associated with and proven effective within low student-teacher ratios. The focus of blended learning is on using technology as a tool with which to think and learn. It is not a substitute for face-to-face teaching. When thoughtfully designed, blended learning approaches offer opportunities to enhance the campus experience and extend learning through the innovative use of ICTs. Meaningful learning events that are active, intentional, authentic and collaborative are fundamental to facilitating effective blended learning, and can capitalize upon the affordances of Internet technology.

Within blended learning, constructivism has a different view on the processes of communication and learning, the nature of information and knowledge, the interaction with others, and the phenomenon of motivation. Many studies have reported that blended learning fits well with a constructivist approach. Reasoning is not linear, deductive or abstract in knowledge construction, but begins from the concrete and assembles a 'mosaic'. Von Glaserfeld (1995) argues that students be given the reason *why* particular ways of acting and thinking are considered desirable. This entails explanations of the specific contexts in which the knowledge to be acquired is believed to work. He has said that "constructivism cannot tell teachers new things to do, but it may suggest why certain attitudes and procedures are fruitless or counter-productive, and it may point out opportunities for teachers to use their own spontaneous imagination" (p.177).

This has profound implications for the whole approach to how learning programmes should be designed. Instructional design becomes concerned with facilitating the individual learning process, materials are incorporated to allow students to develop their own understanding, students are encouraged to integrate the learning experience into their own lives to make it meaningful are just some of the implications. Rather than a teacher–centric process, we have a learner-centric one.

Connolly et al. (2007) report on the online tutor's delivery style from seven HE institutions involved in the delivery of one programme; all tutors were keen to maintain an element of face-to-face teaching in their modules and felt it too difficult to gauge the depth of student learning without this. Online teaching was perceived as much more difficult and challenging than originally anticipated, with recognition that activities that work well in the classroom environment did not always transfer effectively online.

Schneider (2009) reports that on a blended teacher education programme, blogs and video conferencing were used in ways that gave teachers control over timing, content, and audience. Within an Irish continuing professional development context, Wall & Ahmed (2008) discuss the need to address staff concerns for integrating technology in blended learning programmes. The technology at the focus of their work was simulation games, and it was found that while these can play an effective role in the delivery of learning opportunities, careful planning, key milestone dates and mark allocation was required.

Trends in Academic Development Programmes

Teachers, especially those employed on a part-time basis, need support whilst tutoring online. Research indicates that increasingly specialist teaching certificates, degree programmes and resources related to blended learning courses and programmes are emerging. A qualitative study by Tisdale & Strohschen (2006) examined the nature of the cohort learning experience in an online master's programme from both staff and student perspectives; it found that asynchronous discussion boards were sufficient for discourse and study in the field of adult education, based on what they call a critical pedagogy.

In examining reasons for introducing a blend of technology to face-to-face instruction, Masie (2006) has argued that there are a variety of reasons drawn from the literature for creating blended learning: provision of multiple perspectives in content, cognitive rehearsal, importance of context, value sorting, learning being longitudinal, social, tacit and unstructured (p.22).

What we think of as cutting-edge learning technologies today differ significantly from just a decade ago. Students themselves are changing, too, as their practices are shaped by the technological environment. A number of trends should be considered for the nature of the blended environment:

- Classrooms are not the only form of learning space. While the classroom is assumed to be a primary location of learning, research suggests that a majority of student learning activity takes place outside the classroom.

- Social interaction is a growing part of learning. Assessment methods and performance metrics emphasize individual effort and achievement, but students increasingly are motivated by social interaction with their peers. Pedagogy is shifting to emphasize group activities and collaborative learning.

- Technology is natural. Computer and networking technologies that once might have appeared exotic (pervasive wireless networking, iPods, smart phones) or transformative are now considered mainstream. While some academic staff may perceive these technologies as a new part of the educational landscape, some students see them as a natural component of their lives.

- Internet resources can bypass peer review. The Web enables near-instantaneous distribution of information without formal review. It becomes increasingly important, then, for students to interact with one another and with teachers to analyze and critique online resources.

- Learning can occur out of sequence. Although lectures, books, articles, and other traditional tools present information in a deliberate, sequential manner, today's students are comfortable with overlapping discussion threads and parallel activities that may span different types of media, devices, and communities.

- Students construct content rather than just consuming it. Students are active authors of content, including video documents, online blogs, and other forms of digital expression. Whether delivering a report or going online to converse with members of an online community, today's students have a range of digital devices and software tools that allow them to create and shape content.

These trends emphasize that learning is becoming more social and informal and less structured. In contrast to the character of formal lecture halls and classrooms, modern learning space design seeks to provide freedom of access and interaction with peers. From a physical point of view, these places are increasingly conceived as comfortable, flexible spaces in which groups can interact and collaborate. Successful integration of technology and physical design into these kinds of spaces requires an understanding of emerging technology interfaces and new design approaches.

Solutions and Recommendations: Two case studies of e-pedagogy

The intention in this section is not to directly compare the cases per se, as the subject and contexts are different. Table 1 shows a number of key variables for the two cases as it is useful to see at a glance the scope of each programme.

Programme Title	Case 1: MSc Applied eLearning	Case 2: Moodle for Languages
Number of Participants	16 participants drawn from academia and commercial enterprise	4 academic teachers
Context	Irish higher education; educational development; postgraduate programme on eLearning	Irish higher education; educational development; pilot project to foster eLearning development in specific disciplines
VLE	Webcourses^{TM}	Moodle
Other technologies in use	Podcasting Blogging Discussion forums & Chat ePortfolios Facebook Interactive whiteboard Live Classroom Twitter Wikis	Video HotPotatoes software Quizzes Discussion forums Online journal Use of target language resources on the web
Online activities	Individual Paired Collaborative project-based learning	Individual at the pilot stage Collaborative online discussions

Table 1 The scope of the two Cases Studies

Case 1

The MSc Applied eLearning is located in the Dublin Institute of Technology (DIT). As part of the blended solution offered by the programme, the Blackboard virtual learning environment is used, specifically its features of wikis, discussion forums, and chatrooms. While there is a presence in the research literature of positive outcomes about the potential benefits of asynchronous discussion, especially as an aide to flexible working (Black 2005), and reflective discourse (Andresen, 2009), within the programme to date, there have been criticisms of the Blackboard asynchronous discussion space by participants who favour GoogleWave; in addition to formatting restrictions offered by the technology itself, it appears that the expediency of interacting at one's convenience and the ability to thoughtfully craft one's response after reflective thought can limit

the effectiveness of the cohort. Previous research by McGarth & Berdahl (1998) has shown that the text-based online environment diminishes critical nonverbal communication cues and McConnell (2000) has subsequently argued that it increases the time required to make group decisions since students' postings are often untimely.

For some modules, including 'Instructional Design and eAuthoring' and 'Supporting Virtual Communities', the full cohort is divided into small groups for online collaborative work, with roles being rotated on a weekly basis. The groups are formed to compensate for prior technology awareness, gender balance, and previous specialist module completion. Over time, the participants come to rely on each other as sources of knowledge as well as the module tutors. Through the online group work experience, learning autonomy increases as confidence in the ability to make meaning online improves.

Central to the assessment strategy for the programme is the compilation of an electronic portfolio (e-portfolio) by each participant; the programme supports the use of Mahara, but other systems and the development of professional web sites is also allowed. All participants are expected to produce an e-portfolio as part of their master degree requirements. Over the two years of the programme, this becomes a collection of digital files organized into a personal space that is representative of coursework that participants produce over all modules on the MSc programme. As such, the e-portfolio is based on assignments and activities completed in and out of class to demonstrate participant skills and knowledge related to applied eLearning. Crucial to the success of the e-portfolio is a reflective commentary by the participant on their experience and progress through each module and any collective critical events of the programme as a whole. This reflective commentary is upon an analysis of how the participant has achieved the learning outcomes for each module and consideration of how completion of each module has progressed the participant towards the planning, design and development of their eLearning project in year 2, and any revisions that they have made along this learning journey. The reflective commentary includes evidence accrued from sustained participation in the online asynchronous and synchronous discussions from each module. The development of the e-portfolio is to help participants synthesize much of what they have learned, as well as create one cohesive package that demonstrates the skills and knowledge that they bring back to their professional practice and working context. In essence, it serves as a record of what each participant has learned during the programme. Undergoing the e-portfolio development process provides the programme participants with the distinct benefit of capturing the complexities of their actual teaching or

practice and it matches assessment to the teaching style of each module. It has clear goals, as they are decided at the beginning of each module and are clear to both tutors and participants alike.

It also caters to individuals in the heterogeneous class: since it is open-ended, participants can show work on their own level. Since there is a choice, it caters to different learning styles and allows expression of different strengths. Finally, it develops independent and active learners: participants must select and justify e-portfolio choices, monitor their own progress and set learning goals. However, encouraging reflective writing amongst participants can be challenging, alongside ensuring that adequate support is provided in the areas of reflective and academic writing.

Wetzel and Strudler (2005) have identified the need for sufficient training and support, the need for small planned steps, strong commitment from teachers and technology people and clarity of purpose. Indeed, blended support is available throughout the e-portfolio development process; face-to-face workshops discuss the pedagogical, operational and ethical concerns that different implementations raise. Online activities with formative feedback focus on participants' ability to reflect on practice, to make connections with theory and to link relevant artefacts to goals or outcomes, all which argue Stefani, Mason & Pegler (2007) emphasise the constructivist nature of e-portfolios. Ultimately, the emphasis is on how to get the necessary pedagogical transformations so that participants benefit through the deployment of technology to support their learning process, not on technological solutions alone.

Case 2

In contrast to Case 1 described above, Case 2 will describe a voluntary form of continuing professional development for staff at NUI Maynooth. Previous institutional evaluations of the use of Moodle (McAvinia 2006, 2007, 2010) had indicated that, in common with many higher education institutions, the rate of uptake of e-learning was gradual (Kirkup and Kirkwood, 2005). Most people were using the VLE in the first instance as a means of sharing lecture notes and course materials. At the same time, numbers of students in all courses were growing rapidly. All departments were considering different means of teaching (and indeed course administration) which could exploit the VLE as a technology readily available to them. From the point of view of an academic developer, this was an opportunity to respond to existing needs and potentially introduce staff to the potential of blended learning for their work.

It was decided to develop a pilot course in the first instance for Humanities and Arts. Pending the outcomes of this, it could be mainstreamed to other subject areas. It might also be feasible to investigate accreditation in the future, as an incentive to participate in the course. Members of staff had previously indicated in our institutional evaluations that they did not have sufficient time to attend courses that might extend over a number of days or weeks, but were also expressed a desire to learn more about the VLE and how they could make more effective use of it. They also called for additional online training and support in the use of e-learning. They also suggested that they would welcome short, focused resources that would address specific tasks or activities. Taking this feedback into account, a course space was developed in Moodle designed to meet these needs in the case of people teaching in Modern Language subjects. Drawing on best practice as it has been described in the literature on computer-assisted language learning (CALL) (Levy, 1997; Chappelle, 2007), a range of activities and examples of how they might work was presented to the course participants.

Participation was invited from across all of the Modern Languages departments, and an initial face-to-face session was arranged in order to introduce participants to each other. Although formal participation was by a small group (four) in the first instance, this was considered a good outcome relative to the sizes of these departments, which are amongst the smallest in the university. Participants were asked to complete an online questionnaire within the course space at the start. This was to gauge their current use of the VLE in their teaching, and to ask them for specific areas that they would like the course to address. Taking account of the fact that they were predominantly using the VLE to share materials and resources, the first part of the course suggested ways they could enhance this and make materials easier to access and use for students. There were also examples of how authentic materials from elsewhere on the web could be included easily as part of their own courses.

Two of the participants had said that they would be interested to know more about how Moodle could support continuous assessment, and particularly quizzes for their students which are often repetitive grammar tasks. These are time-consuming to set and correct, and the use of online quizzes which could be marked automatically would greatly assist in this form of assessment. The next phase of the course addressed this issue, and made available a range of exemplar quizzes using HotPotatoes as well as Moodle's own quiz function. Guidance was provided in how to download and use HotPotatoes, and face-to-face training was available to participants on request.

Throughout this time, the course participants were also being encouraged to interact with each other in the online space. They were contacted weekly through the course *News Forum* with updates on what was 'new' in the course, and to encourage them to try one of the blended learning tools in the following week. They could also avail of a 'café' space, a separate discussion forum, to share their thoughts about the work and to help each other. Finally, they were asked to use an online journal as a *Weekly Diary* to record their reflections about engaging with the course materials and developing their use of blended learning.

In contrast to Case 1, Case 2 describes a course in which the VLE was exploited as a blended learning environment in and of itself: a central concern of the pilot project was to showcase the range of tools and activities already available within the VLE. Participants could experiment with these in a 'safe' space before using them in their own courses. They did not need to search for additional tools nor consider the potential pitfalls of using externally provided tools. There were no costs involved either, and support and training were available as part of standard provision for whatever they wished to use in the VLE. The VLE was used to provide: access to authentic resources elsewhere on the web in a user-friendly manner, online quizzes using the Moodle Quiz function for multiple choice, and HotPotatoes integrated with Moodle for gap-filling, crossword exercises, word-jumbling exercises and drag-and-drop exercises. Moodle Forums were used for news and discussions, and the Assignment tool was used to create a simple reflective journal. The Moodle Questionnaire function was used for the initial questionnaire and also for a feedback form at the end of the course.

FUTURE RESEARCH DIRECTIONS

As part of our consideration of the future research direction of blended learning within academic development, we now revert to the cases to draw out key lessons learnt.

In case 1, from the academic development perspective, the main issues which need ongoing attention and blended support are the effect of different styles of e-portfolio implementation, from the software options to concerns about curriculum design. With the VLE itself, a less rigid approach has been adopted to the use of asynchronous discussion, with participants being encouraged to investigate other tools available for themselves. This is to avoid a risk which can emerge when learners use the VLE as their only technological tool, mistaking it for a complete

learning tool rather than an organisational one, and not being aware of other potentially better tools for certain jobs out on the open web.

In case 2, a potential benefit of using VLEs in this way is to encourage academics to use simpler versions of blended learning tools which they might then decide to use externally to the VLE. A good example of this is the Wiki feature in Moodle. The Wiki feature is extremely basic, and users of web-based wikis such as PBWorks usually find it too basic for their requirements. However, as a means of showing new or inexperienced users the principles of wiki authoring, and acclimatizing them to how wikis function, it is fit for purpose. Similarly with the Glossary tool, students can be encouraged to write collaboratively in a protected online space and to review each other's work, before working in a similar environment online or publicly. Some users will then progress to using a separate tool having learned with the basic feature in a VLE.

Case 2 also shows a transition from pilot to mainstream, with the development of an accredited module for members of staff at NUI Maynooth. Inherent in this will be an examination of whether blended learning is really an appropriate form of provision for busy staff. Feedback from the pilot course suggests that staff need accreditation as an incentive to do it – over and above considerations of how a course should be delivered. In reality participation in the course tailed off during the semester without formal assessment and accreditation to drive it.

CONCLUSION

McConnell (2006, p.8) suggests that the advent of electronic communications, the Web, the Internet, and associated learning technologies have produced a climate in which learning technology is seen as a means towards improving higher education learning and teaching. The situation has been developing whereby further waves of academics worldwide who are starting to use online technologies in their teaching, as well as being eager to explore different pedagogies, are providing higher education institutions with a considerable professional development challenge.

The broad question on quality blended teaching in higher education will continue well into the 21st century; and the concern of this chapter has been to illuminate understanding on the concept and practice of blended learning in academic development. Whilst approaches to blended teaching and learning practice may be multifaceted and varied, much share a common concern

with understanding the impact of blended learning for institutions, practitioners, students and learning technologists, be it technologically, educationally, personally or socially. Some educators have been slow to embrace technology within their preferred learning and teaching strategy, perhaps because it represents a significant change in some established institutional cultures, and this is an important consideration when introducing a new strategy for learning. Whilst blended learning is by no means new, it has been seen as a long-neglected idea and has been certainly attracting much attention in recent years.

The success of any learning material depends upon the ways the learner is able to use it, and this ultimately depends upon the ways lecturers incorporate its use within their modules and courses. An initial barrier to effective use of any new learning materials is the lecturer themselves. The main reason is that many academics have had no training and little experience in the use of communications and information technology as an educational tool. Experience suggests that a prerequisite for embedding blended learning strategies in learning and teaching is that the academics teaching the course recognise the need for appropriate holistic academic development to provide them with not only an understanding of how best to use the technologies, but more generally in improving their understanding of how to develop effective blended learning environments.

Next generation blended learning experiences, marked by the integration of mobile and personal devices, will evolve from f2f and online instructional blends toward a blend that also features modular content objects for personalising, customising and enriching learning at times and increasingly on terms defined by the learner.

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ADDITIONAL READING SECTION

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KEY TERMS & DEFINITIONS

Academic development; Asynchronous; Blended learning; Collaboration; ePortfolio; Learning technology; Web 2.0