

# **Finding Pedagogy for Blended Learning**

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## **Abstract**

This paper deals with the quest for a pedagogical response to the challenge and opportunity of blended learning in further and higher education. It reports on the preliminary research findings arising from an on-going project involving the development of a blended learning version of an existing course on entry-level management competences in the workplace. This research investigates the characteristics of a development process for live on-line instruction and asks if there are any circumstances where this mode can outperform traditional in-class instruction in terms of student participation, engagement and intended learning outcomes? The approach involves a combination of interviews with faculty and students at different stages, live in-class observations and subsequent analysis of archive recordings. The early findings indicate a surprisingly high level of engagement and participation contrary to the initial expectations of faculty and students. Insights gleaned from the pedagogical development process are also discussed; these relate to the adoption of clear terminology and symbols to communicate different modes of instruction, the requirement for pedagogy to emerge from authentic practice with student collaboration and degree to which the technology becomes invisible as the course progresses. The authors conclude that there is much more research required on the affordances of blended learning for enhancing student engagement and performance.

## **Keywords**

Blended Learning, Engagement, Pedagogy.

## **1. Introduction**

This paper deals with the quest for pedagogy. It is a search for something that is both elusive and important. What we seek is a pedagogical response to the challenge and the opportunity of blended learning in further and higher education.

There is little need to reiterate the impact of information and communications technology on all aspects of our lives. Our homes and workplaces are increasingly colonised by the digital world (Casey, 2009) and so too, we find upheaval and opportunity brought about by technology in the teaching and learning spaces of further and higher education (Oblinger, 2006). As a consequence educators struggle to respond, to adapt and take full advantage of these changing circumstances.

As faculty grapple with the panoply of digital devices, computers and the Internet, they face the challenge of finding or developing appropriate pedagogies to integrate technology and learning. This is not an easy task. Pushed one way, they risk over-emphasizing technical functionality to the neglect of intended learning outcomes; pushed another, and they may miss out on genuine opportunities to place the student at the centre of teaching. When technology is used wisely teachers can call on a vast range of resources to support learning and extend their reach well beyond the classroom. However, they may also find themselves in uncharted waters where different skills and strategies are required for teaching and learning.

## **2. Blended Learning**

Blended learning may be defined in terms of any mix of instructional approaches; however, it is often used to indicate the particular mix involving a combination of face-to face and on-line instruction (Graham, 2006; Osguthorpe & Graham, 2003). Although the terminology used in scholarship remains contested and somewhat unclear (Oliver & Trigwell, 2005) we suggest a three part delineation of the terms ‘e-learning’, ‘on-line learning’ and ‘blended learning’ as follows: E-learning is a broad term involving any use of technology to support learning. On-line learning implies instruction through the medium of the Internet; it may be asynchronous wherein the student reads, plays back or interacts with previously prepared instruction or it may be synchronous where student and teacher are communicating with each other in a live session. Blended learning is any mix of these with face-to face instruction.

There are many reasons why the adoption of blended learning instruction is advocated for use in higher education courses. For some, it may be regarded a cost-effective

alternative to the traditional classroom while for others student flexibility is seen as the key driver. However, there is considerable interest in scholarship on the potential of blended learning to transform and improve learning (see for example, Bonk, Kim, & Zeng, 2006; Garrison & Kanuka, 2004).

What if it could be shown that blended learning is not just comparable but preferable to traditional modes of instruction? What if, contrary to our first inclination, it could be shown that levels of student engagement and participation were both higher and deeper in a synchronous on-line class than could be observed in a face-to-face counterpart? This is the motivation behind the research described in this paper.

### **3. The CFLM Project**

We report here on the evolution of a blended learning project and the quest for an appropriate pedagogy to enable faculty to bring about successful student learning in new ways and in the new contexts and spaces that arise. The project is on going and involves the development of a blended learning version of an existing programme in National College of Ireland known as the Certificate in First Line Management (CFLM). This programme is intended to develop entry-level management competence for workers on an upward progression. The blended learning design process is led by the Centre for Research and Innovation in Learning and Teaching (CRILT) and from the onset the challenge was framed in terms of pedagogic innovation and authentic research.

The authors were actively involved throughout the project and it is worthwhile to describe the background and early stages, as this will provide further insight on the findings from research. The core team comprised members of faculty involved in teaching the traditional mode of the CFLM programme working collaboratively with researchers from CRILT.

One of the first challenges that needed to be addressed was to establish a conceptual framework for blended learning that was clear to all involved. Progress was initially confounded by different conceptions and assumptions about e-learning. A particular source of difficulty was the 'build' metaphor that has become associated with e-learning. As the name suggests, the build approach emphasises up-front work on the preparation of materials in anticipation of subsequent on-line student interactions to bring about learning.

Much of the current research and practice is focused on the potential of synchronous on-line instruction (Offir, Lev, & Bezalel, 2008) and related to this, there is much interest in areas such as the changing skill set required by faculty (Georgina & Olson, 2008) and the optimum conditions for student engagement and participation (Bonk, et al., 2006; Holley & Oliver, 2010).

Faculty who worked on the project were experienced teachers and experts in their subject areas; however, in terms of blended learning and on-line instruction they were novices. It is also important to note that from an institutional perspective this was the first full programme to be offered through blended learning and as a consequence there was no comparable practice elsewhere in the organisation. This was a 'green field' project.

The process began therefore in the abstract and the first challenge was to formulate a core instructional strategy. This was developed through a series of workshops. In the early stages the team found it useful to contrast the process of producing a film – analogous to the build approach – and producing a play which emphasises performance. As any theatrical actor will affirm, each performance is unique and although there is much work in preparation, there is also an unpredictable quality to the live process. Taking the theatrical metaphor one step further, the team agreed that the focus needed to be on student rather than teacher performance.

This brought into relief the first big challenge associated with pedagogic design for blended learning. Clearly the core instructional strategy was to focus on student performance; however, little can be achieved by way of preparation without students. It was decided to start with a small pilot group and to bring this group to a face-to-face session one night per week and later in the same week they would have an on-line session. This strategy was intended to reduce the risk of the unknown with the regular, face-to-face session acting as a fall back if any problems arose with the on-line mode. As it happened there were no problems and the group quickly adapted to the on-line sessions. Subsequent cohorts taking the programme by blended learning were offered a predominantly on-line option with a set number of block release days where they attended the college campus.

The team developed a simple system to communicate to students and colleagues how the different modes of learning were organised. There are three instructional settings each represented by a symbol: the rectangle signifies the traditional face-to face class;

the triangle an on-line synchronous class and the circle indicates self-directed learning. In all three cohorts of the programme known as the P, Q and R groups have commenced. The class size of the pilot (P) group was 10 with the Q and R groups comprising 20 students each. The research reported here is based on the tutor and student experiences of these instances.

#### **4. Research Question**

The research question is stated simply as follows: Can live on-line instruction compare favourably with traditional in-class instruction in terms of student participation, engagement and intended learning outcomes? If the answer is affirmative then we need also ask what circumstances and conditions can bring this about; and relatedly, how can we prepare students and faculty to ensure these success conditions. In other words we are on a quest for pedagogy.

It is reasonable to ask why we frame our research in terms of a 'quest to find' rather than a 'process to design'. There are two reasons why this is the case. Firstly, we start from a very thin base, there are few insights available by way of evidence from other studies or shared best practices. The second reason is bound up in the collaborative nature of our approach. We start by emphasising what we have in place and what we can draw upon; namely, the teaching faculty who we work alongside. Our premise is that they have the experience and the where-with-all to solve the problem as posed. It is a scholarly approach to practice leading to the formation of insight and thence expertise. The search is a collaboration to find the optimal approach through informed variation and reflection on practice.

Although this research is on-going we are in a position to report on some early findings and progress to date.

#### **5. Method**

The broad theme of this research is the quest for pedagogy for blended learning. There are many aspects to this and choices needed to be made early on in terms of the optimum area for investigation. As a means of narrowing the focus we decided to concentrate on those aspects of blended learning that were new to most people namely, the on-line classes. It was felt that examining tutor and student perspectives of this instructional setting would gain useful insights. It was also recognised that the software used could be set to make an archive recording of the entire on-line class. In this way a significant body of in-class data continues to be gathered. Researchers also

observed many live sessions, as previously discussed, this was part of the collaborative approach to support early stage tutors on the system. Much of what we report here is derived from student interviews Table 1 below gives details of the informants.

Research name	Group	Gender
Albert	R	M
Bernie	R	F
Connor	R	M
Diana	Q	F
Eamonn	P	M

**Table 1 – Students interviewed**

## **6. Findings**

In this paper we report on findings based on a thematic analysis of interviews conducted with five students drawn from the P, Q and R groups. We have organised the findings into three parts. Firstly we present the initial expectations of students prior to commencing and at the early stages of the programme. The interviews were all recorded with participating students so we asked students to recall how they felt at an earlier point in time. The second part is based around the experience of an on-line synchronous session. We present this as a description of a typical class. The third section deals with the overall perceptions of the course and advice they would give to others.

### *Initial Expectations and Early Stage Experiences*

Many of the students had already decided to participate in the CFLM programme before they were made aware of the option for blended learning. As expected flexibility and the reduced travel requirement were seen as big attractions for blended learning. As Connor, a recently commenced student from the R group reports:

*I don't have a car at the moment so it's very convenient to do the course at home on the computer. I also thought it's a very interesting thing to do the course online.*

As discussed, the blended learning configuration for students in the Q and R groups was different from the initial pilot (P) group. These later cohorts were only required to come on-site one Saturday per month to fulfil a communications and presentation module. Not surprisingly students on the Q and R groups were drawn from a much

broader catchment area. Even so, it is notable that all of the students admitted that they did not have prior experiences of on-line instruction and they did not know what to expect:

*I had no idea at all how that works and what it looks like. I have to say I am very positively surprised about blended learning. I thought it would be like watching a teacher giving a class, for example, a teacher is teaching and there is a camera filming the class and we will be watching the class and have to do learning from listening. I didn't think they would be the possibility to ask questions and interact. (Connor)*

In all of the groups students at the early stages were largely impressed with the degree of interaction in class and the manner in which they were able to engage and participate. As Bernie an early stage student reported “so far am impressed enough I think the idea that the lecture is live and you can get feedback and interact in real time is helpful”.

Group work is an important instructional strategy used in the CFLM programme and we were particularly interested in finding out about the student experience of groups in the first few weeks. As the P group was on site every week they quickly got to know each other and seemed comfortable working in groups in either the face-to-face or on-line classes. However, at the early stages the Q and R groups had not met on site other than for an orientation session. In general, Q and R students reported positively on the group experience and they seemed to get on with the task of working together on-line but not without some trepidation:

*The teacher put us in separate groups and rooms, and some of us were not really active. At this moment when it's just four of you and no one wants to talk, I find it difficult to have a discussion, especially when you don't see the other person. (Connor)*

In contrast:

*Not knowing my classmates, it certainly does not inhibit me from participating. I thought it was probably easier when you don't see someone because you can take a chance and say what you want because they don't really know you. (Bernie)*

## (2) Description of a Class

In this section we describe a typical on-line class. The description is a composite derived from the student and tutor interviews and researcher observations and notes. Our purpose is to convey the instructional situation as it is experienced from different locations and perspectives.

Albert participates from his home in Wexford. He uses a “personal little office” which he has organised for his study. In the first week of the course he got help from his

girlfriend and the college's IT support with the technical set up as, by his own admission, he is not very computer literate. Once everything was in place he found the set-up and the software very straight forward. Albert uses a headset with an in-built microphone for class participation. The regular on-line classes take place on Wednesday evenings and once a month he travels to college for a one-day session.

Brendan is the class tutor and he teaches the module on business management as part of the CFLM programme. Brendan did not know what to expect when it was suggested that he would work with others on the blended learning design. Although he is a very experienced teacher he had never conducted an on-line class before. Brendan's natural style in face-to-face classes is to provide many opportunities for student engagement and active participation. Brendan has discovered that this is also achievable in on-line classes but it needs to be worked at in a different way.

Brendan usually conducts his class from a workstation in the learning and teaching centre; here he has access to a blended learning producer who supports all of the on-line classes that evening. The producer fulfils many functions including making sure that slides are preloaded and class archives are set to record. She also acts as a trouble-shooter in case students find themselves in the wrong classroom. The colleges IT support are also on-call during all of the live classes. Brendan can also teach from his own home; however, he often chooses to stay in college.

In the beginning Brendan found teaching on-line to be a strange experience. He discovered a few tricks to make life easier. Students like to see him in picture at the beginning of a class - just to see a friendly face - but after a few minutes the camera is turned off. The class focuses on the discussion and whatever visuals he has prepared. For the tutor there is no eye contact with the students so Brendan likes to get going with interactions as soon as the class starts. His teaching strategy is described well by Dianna of the Q group:

*The teachers that we have talk about something and then they stop and ask for questions or opinions. You can talk or type it into the box. So while you are going along with the slides, you are aware that they are going to ask for your feedback and you have to make sure you understand it. It took a while to get used to talking online and that was a bit of an obstacle initially but once you do it, it is fine, you just get used to it.*

Brendan encourages the students to use the text facility as much as possible. In this way they are active throughout the session and able to write their comments simultaneously. Brendan can review students' posted comments and the software can

record this activity from week to week. There is also discussion time where students use their microphones to contribute. Albert comments on this mix of talk and text:

*I think both teachers tried to facilitate people to give their opinions and answer questions. Granted that it was not much talk and more text, it's much the same as a normal classroom really. It's just a matter of getting used to the way we come across when we are talking or texting.*

The duration of each class is 90 minutes and on Wednesday evenings Albert has two consecutive classes. Students can subsequently access an archive of any class including all of the interactions.

### *(3) Progression and Advice*

We asked students to contrast their experiences of the early and later stages of the course. We were interested in how their skills and practices as on-line learners might progress. Diana comments on how the blend contributes to student participation:

*People are more vocal now. The people who were shy have taken time to come out. The face-to-face helps, you get to talk to people physically. Some of us have not been to school for quite some time and we could even bond on that. The class are friends now while in the beginning we were shy and not quite sure, but having met up, we talk more during the breaks, we are more comfortable, we have all come out of our shells a bit which helps. Doing both online and meeting face-to-face in class has helped with that.*

We also asked students to give advice to others who may be considering a similar blended learning programme. The two comments below indicate the degree of emphasis the students themselves placed on participation and engagement.

*And just be in the classroom and make sure you are answering questions and you can be heard. It's important if you don't understand put up your hand with the little icon and say you don't understand, type into the box and talk. Don't be afraid of it, it's only talking to someone, you are not going to be jeered or judged on what you say, everyone is just doing the same thing as you are doing. (Diana)*

*I think the main thing would be to treat the on-line experience in a similar way to the classroom. For instance, even though you are not in a classroom, I think it would work best if you were in a comfortable situation at home or office, where you know you are not going to be disturbed by someone else. So even though there is a lot of freedom, try to set yourself up like within a class cause that's where you are. The other aspect is to concentrate on what's going on the computer during the online class. Because no one can see you, it's easy to drift away and instead of giving 90% you might be giving 60%. (Eamonn)*

## **7. Conclusions and Future Work**

This work is at an early stage and further data gathering and analysis is on-going. However, the findings provide some useful insights on the research question. Most

people, including tutors and students, did not know what to expect from blended learning. The reasons they stated for selecting the blended learning programme were connected with their circumstances – location, family commitments and work inhibited them from attending college regularly and the format was seen as a means of overcoming these. In general, students were surprised at the degree to which they were expected to be active during the on-line classes. They interacted through text and oral responses as individuals or in groups. Tutors need to proactively initiate and sustain student interaction but once everyone knows what is required the students cooperate and engage in class. Group work practices were possible in the early stages of a programme but were further enhanced when interspersed with opportunities for students to meet face-to-face. Students who participated in the blended learning programme were very willing to advocate this option to others and advised interaction from the on-set.

A case can be made that student engagement and participation on an on-line class compares favourably with and may even exceed that experienced in a face-to-face counterpart. Further research will be required to understand how to bring this about on a consistent basis. In the meantime the early results are promising.

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