

Blended Learning and SME's: the Challenge for NCI Library: USB Key as a Learning Tool

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Introduction

The proliferation of the internet as an instructional medium has given rise to the growth of numerous types of online training. Distance learning, e-learning or blended learning are phrases exchanged frequently, as students and corporate employees log on to instructional sites at college, at the library or between staff meetings.

Although thousands of small businesses are established each year only a small number remain in operation within ten years of their inception [1]. Major contributing factors to the failure of many small firms are a lack of attention given to the development of a robust plan, goals and objectives, organising and resourcing for the new venture and the development of people assets.

Relying on instructionally solid features and simplicity in technical implementation it is no surprise that corporate managers and academic stakeholders are including synchronous education in their budget and strategic plans.

This is where NCI comes into its own. NCI offers a series of tailor made management development programmes for both public and private sector organisations. These programmes will lead to qualifications at the level of certificate, diploma and bachelors degree. Through the In-Company Training and Education Division, National College of Ireland aims to develop and deliver a suite of programmes designed to enhance the management capability of junior to middle level managers.

A cross section of our current client list includes, Glanbia plc, Midland Health Board, C&C Group plc, VHI Healthcare, Dublin Port Company, Symantec, Dublin Bus and AXA Insurance.

The web has promoted exploration, reflection, application, discovery, and overall has encouraged learner behaviours associated with higher – order learning [2]. Blended learning, a mix of self paced (asynchronous) work and instructor led (synchronous or face to face) elements is being promoted by many in the training and executive education fields as the best way to capitalize on the strengths of elearning, while maintaining the benefits of traditional training.

E. G NCI Certificate in Managing teams –

The interaction is through personal conferences and one to one discussion with lecturer, conferences with class and lecturer and online class discussion forum.

How the Programme Works.

Everything is done on-line using your PC and a connection to the Internet. You will work in a virtual classroom environment with other students from elsewhere in Ireland and/or abroad.

The Programme will be delivered on-line as follows:

Each week the lecturer delivers a formal lecture electronically to the class. As a student all you need to do is attach to NCI Online log-in using the id and password that will be assigned to you and pick up your lecture notes from there. Assessment will be done on a continuous basis. Assignments will be delivered online to you by the lecturer. You can complete these off-line and reconnect to submit them to the lecturer.

You will interact with the lecturer and with other students on-line through a number of means.

Personal conferences where one to one discussions take place between you and the lecturer.

Discussion conferences where discussions can take place between all of the class and the lecturer.

Student lounge conference where you and other students have a forum to discuss general topics with each other, like a virtual coffee room.

With blended learning as a method of teaching The library took up the gauntlet and realised this is where we needed to adopt a blended learning approach to the issue of information sourcing and literacy. Step one was the information sourcing and the concept of the Learner information key was formulated.

Because of technology limitations presented by the target user base (on- off campus/ online and in-company education , the college explored the various delivery options available to use. The main issues that arose are the issues of access, course speed, data tracking and security, maintenance issues, media elements and client preference.

In providing information sourcing and with the growth of the information society ultimately we decided on web-based delivery when possible, but it meant that we had to balance the need/ desire for a rich media solution with the reality of the low bandwidth of many of our users.

Adult learners need to be challenged, and our material needs to be interactive in order to move learners from cultural awareness, to knowledge acquisition to skill development. Although these criteria are essential to us, we also know that we must continue to solicit feedback and evaluation from our clients to better understand their requirements for intercultural training based on business needs , target populations and technical requirements.

The paper is a brief look at the practical experience of producing a 'blended' information source for learners at the National College of Ireland, in the academic terms 2005/6 and 2006/7. I will be looking at the experiences of the pilot programme in 2005/6, and the decision to proceed with the process in 2006/7, and to expand its distribution to all learners and staff at the College.

The decision to proceed with a different type of information device was taken initially for environmental and cost reduction in relation to printing/photocopying costs, to use a medium that was easy to produce and distribute and to encourage saving of material(s) rather than printing/copying. In order to achieve this, a USB key was chosen as the preferred method. As test groups all off campus learners(off site/distance) users were chosen as were first year students in a 3 year undergraduate

degree, flexible learners (who study away from campus, but attend 1 week in 4), and postgraduate learners.

As a librarian, I am conscious that there a large number of the students attending at NCI, have difficulty in getting correct information and many of them seem to have a negative experience. At a recent conference I attended one of the speakers spoke of giving learners what they want from information sources (libraries etc.) and not what we as professionals think that we want.

The pilot programme was set up and delivered in a 6 week timeframe, with no set parameters or formal feedback. When the decision to go ahead with the process in 2006/7 academic term was taken, it was decided to:

- Have formal feedback
- Memory/USB key to be titled Learner Information Key or LIK
- Work with NCI web interface, but also work separately
- Market the product (design, packaging, information sheet, information)
- Learner Information Key to be given to all NCI learners, faculty and staff
- Set up efficient distribution system
- Costs shared between various college departments as per previous USB key

The information contained on the key is from all department college wide, however, some departments are more proactive than others and we would hope to improve on the volume/range of information available in future years.

Contents: Brief Overview

Library Information: guides, contact details, borrowing facilities etc.

Learner Services Information: learner handbook, realising your potential,

IT Facilities and Services: acceptable usage form, I.T. guide, etc.

Off campus Information: course information, project cover sheet, programme outlines

Learner life: Examinations regulations, Learner handbook, counselling information, disability services, careers service, learning support

School of Business: Project coversheet, contact information

School of Informatics Information: Project coversheet, contact information

Faculty & Staff will also get the following information

HR Department: personnel forms policies and procedures, payroll information,

Library Information for Faculty: Video listings, case study information, staff Facts4U (Learner Information Key has 256Mb with c. 50Mb of this with pre-loaded, permanently).

Establishing Specifics of What we Wanted:

We had some idea of what it was that we wanted. The NCI learner key for 2006/07 was to be an improvement on the 2005/06 version. However, we were not sure of exact numbers required or of the finer details, such as USB key type, the colour and position of logos, the packaging and availability of lanyards etc. Not knowing these details from the outset led to delays in obtaining a final quote and placing the order as various e-mails to the chosen supplier had to be sent in order to establish the additional cost/possibility of each new detail/as it arose e.g., change in numbers, additional logo on back of USB key and lanyard, possibility of BIWIN brand USB key not working.

Obtain Quotes from Suppliers:

Quotes from two suppliers were obtained. We requested quotes from both companies who supplied quotes last year. One firm responded immediately, the other took quite some time to prepare a quote. Additional quotes were not sought as we didn't know of other firms who could supply the goods. Price was the main factor that determined our choice of supplier.

Compilation of Data to be Preloaded (Both Content and Interface):

Each department was asked to upload all documents/information, they wanted to provide to learners on the USB key, in a shared Folder on the NCI network by a certain date.

The deadline passed and only some departments had provided the required information. After numerous e-mails and phone calls all departments eventually provided the information required. However, this delayed the start of production. In addition, some files had not been converted to PDF format in advance. This delayed the process again. Some departments provided a substantial amount of information whereas others did not. This may leave some learners feeling resentful.

Efforts were also made to obtain a quote for the design of an interface to display, in an easy to read and aesthetic manor, all the information to be made available. One company was recommended to us. However, they proved most unhelpful and took some time in replying to our request. At the end of the day a member of our I.T. staff designed and built the interface. The same member of staff virus checked and loaded the data onto CD as requested by the supplier.

The delay in creating the interface also led to a delay in the start of production of the USB keys.

Breakdown of Costs:

The cost was distributed between departments within the College, based on student numbers and requirements of other departments, such as Human Resources, Information Technology and Library.

School of Business	20%
School of Informatics	10%
Library	20%
Continuing & Professional Development	20%
Human Resources	10%
Information Technology	10%
Learner Life (academic affairs)	10%

Placement of Order:

When a final quote had been agreed and all the required data compiled a purchase order number was produced and an order was placed with the supplier. The preloaded data was virus checked and loaded onto CD and couriered to the supplier as requested.

Communication:

The modes of communication for this project were meetings, phone calls and e-mail. Communications between the chosen supplier and NCI were excellent. The supplier

responded very quickly to every query we made, both by e-mail and by telephone. Communication within NCI proved more difficult. Various departments were involved in the project. As mentioned above, there were difficulties obtaining the information required for preloading onto the USB key. Some departments did not respond to e-mails or return phone calls. The same problem occurred when trying to confirm the breakdown of costs relevant to each department.

Time Frame:

At each stage of the process various delays occurred. As we had a deadline (we wanted the USB keys for the 1st week of September and the supplier had indicated a time frame of six weeks from the placement of the order to the delivery of the goods) and did not start the process until the beginning of July, each delay led to our 4 timeframe becoming tighter. Although the USB keys were delivered ahead of schedule, when the order was placed (4th August) there was no time left to facilitate any potential delays.

1st contact with suppliers:	07.07.06
1st meeting with staff:	12.07.06
Order placed:	04.08.06
USB keys delivered:	31.08.06

The entire process was very time consuming as so many people were involved and communication problems were plentiful. However, the end result is a very impressive USB key for every student that should be useful to them for their entire time at NCI and afterwards.

Perhaps, in future, the entire process could commence much earlier to accommodate the various delays that are bound to occur.

Advantages of the USB Key Produced for the Students of NCI:

- Reduction in amount of printing NCI has to do.
- Learners can access information anytime and anywhere provided they have access to a computer (this also caters to our off-campus learners).
- It encourages learners to use new technologies, computers and the web. With the simple instructions provided even the most computer illiterate learner should be able to use the USB key successfully.
- Inclusive: every learner will receive a USB key irrespective of the course/year they are attending.
- Learners can access information on how best to make use of the library facilities and services therefore, furthering their learning.

The USB as a Learning Concept

The Learner key is more of an information resource than a learning concept/blended learning method. The preloaded data is mostly made up of information sheets/fact sheets and forms.

The USB also provides links to the NCI website and to on-line library resources, perhaps encouraging people who wouldn't usually use those resources to do so.

The library information on the USB key is perhaps the closest to blended learning as it informs users how to avail of and make the most use of the library resources.

Likewise the off-campus material, it provides module outlines along with introductory material to the subject matter.

Consider users' business need and technical requirements, the course content and cultural appropriateness, and the enjoyment and ease of use of the course in order to make any learning experience meaningful and memorable for the participants.

What are the characteristics of the audience? How much time will they have access to the content? What connectivity issues do they have? What are the learning styles and education level of the employees? How motivated are the learners?

What are the characteristics of the content? How long before the information is out of date? Where is the content located? Are learning activities intended to inform people, develop skills, or build competencies?

It is essential to secure client / user participation during the development stage to address the direct needs of the stakeholders.

The key to blended learning seems to be selecting the right combination of media that will drive the highest business impact for the lowest possible cost. But how does and organization decide on the mix?

What combination of tools and media will make the biggest impact for the lowest investment?

Future Development:

Blended learning and the concept of information literacy, to be effective blended learning needs to marry the concept of virtual information and face to face interaction.

Learner profiles and the virtual library, (aspects of lifelong learning), due to the dynamic nature of learning and teaching, and the drive for lifelong learning, as information providers, we need to respond to the needs of our diverse learner profiles.

VLE's and the human dimension, it is vital at all times to keep the human dimension to the fore, when developing or delivering information using virtual learning environments.

References

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2. Thuring, M., Hannemann, J. and Haake, J.: Hypermedia and Cognition: Designing for Comprehension. Comm. of the ACM (1995) 53(8), 57-66.
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