



## Exploring the tension between return on investment and pedagogical design

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In the current chaotic economic environment employers are seeking flexible ways to improve the skills of their workers and the productivity of their organisations. They are increasingly exploring Information and Communication Technologies (ICT) to provide this flexibility in a cost effective way. There is a tension between keeping course design and development costs down, yet maximising learner impact. The case study presented in this poster demonstrates how a “wrap around blended learning” approach can be used to achieve both goals.

Keywords: Blended learning, e-learning, return on investment, learner impact, instructional design

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### Introduction

In practice, e-learning typically involves interactivity, such as student engagement with stand-alone digital content, virtual simulations and communication between learners, their peers and their instructors. In essence ‘e-learning is pedagogy that is empowered by digital technology’ (Nichols, 2008a). When exploring e-training options, employers want to be assured the money they spend on training leads to improved skills, retention of staff, increased productivity and quality of product produced or service provided. In other words they require a Return on Investment (ROI).

Industries, trades, businesses and professions increasingly require highly skilled workers (New Zealand Government, 2009). In providing the necessary training required to upskill their employees they are increasingly using “blended learning” as a training solution. Blended learning typically involves combining aspects of traditional face-to-face activity (such as block courses) with computer-mediated support, for example using the communication tools embedded in a learning management system to accomplish an educational goal (Driscoll, 2002). It is perceived that blended learning benefits employees, who are able to remain in paid employment while studying in a flexible way that fits the time they have available for study, and employers, who are able to schedule training during periods of low pressure and reduce employees’ time off task.

Pedagogically, industry trainers are aware that the individual needs and learning style of the learner must remain central to course design to ensure that the course is effective and that the impact of the training offered is maximised. To them blended learning is not merely a “Lego Build” where the combination of face-to-face and e-learning activities are “clicked” together because the “blocks just happen to fit” with little thought of integrating the learning experiences of participants (Clayton, Elliott & Saravani, 2008). There is an inherent tension between the trainer’s desire to maintain the pedagogical quality of the learning event and the organisation’s desire to obtain the optimum ROI.

### Context

The fundamental goal of instructional design is to help the teaching and learning process by ensuring that education experiences are optimised for particular learning goals (Nichols, 2008b). However time and budget can constrain how a course is to be delivered. The tension that exists is between the creation of a course that will enable teachers and/or learners to meet learning goals established, and the limited funds industry and businesses have available for the training and development of staff. They cannot afford, and

do not want, a 'gold plated' course costing a great deal to produce that far exceeds the learning impact they want to achieve. But, the tension between these competing factors can be resolved.

Henry (1994) has outlined three basic approaches to the development of courses. These are:

- Originate: create an entirely new event
- Buy in: purchase readymade material and use this without modification
- Wrap around: base the learning event on existing resources such as text books and/or other existing learning material available.

To originate, or design a course from nothing, is very costly both in development time and financial resources. Buying in a readymade course is the cheapest solution, however readymade courses seldom match specific learners' needs exactly. The wrap around blended learning approach is a compromise between the two. With this approach, course development time is spent extracting key points from available resources such as text books and developing additional materials such as forums and activities to meet the needs of the learners in the organisation.

## Case study

A course designed for a small polytechnic to train emergency managers will be used for the case study. The course, Introduction to Emergency Management is a Level 6, 15 credit course. The majority of learners who will take the course are employed full time. For many, this is their first experience of academic study. The course will be run for the first time from January 2010. Learners will attend a block course of one week at the beginning and then use the learning management system, Moodle, to study via e-learning for the remainder of the course. Study guides have been developed to guide learners through various readings, matched with activities that are either done on paper and reported in discussions in Moodle or done as online activities. These study guides are available as a printable PDF accessible via Moodle. The study guide acts as a link between the reading texts, useful websites, Moodle course, tutor and fellow learners. The following screenshot shows a page from the study guide that was developed.

The polytechnic had limited funds to develop this programme, so approached a larger organisation to design and develop the course. This was the first time a course at this level had been designed for Emergency Management in New Zealand. This means that there were limited paper-based and online resources available for use. The cost and resource constraints, combined with learners' needs provided a challenge in designing the course. This poster will graphically illustrate the tensions between ROI and course design to maximise learner impact.

It is anticipated that after the course has been run in January 2010, a study of the impact on learners will be undertaken. The study will involve questionnaires and interviews with both learners and those involved in the administration and teaching of the course at the polytechnic where it is offered.

## Conclusion

Blended learning that incorporates e-learning is a very powerful way of creating flexibility in how trainers and educators train learners and how those learners study. There are three main ways to design blended learning courses; originate, buy in or wrap around. In this case study, the approach used was the wrap around blended learning approach. A study guide was created for the course that linked the various participants, resources and learning modes. This has proven to be a very cost effective method of course design.

## References

- Clayton, J., Elliott, R., Saravani, S., Greene, N., & Huntington, N. (2008) e-Learning in Industry: A Summary of Activities (pp80): e-Learning in Industry: Tertiary e-Learning Research Fund, Wellington.
- Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *e-learning*, 54(1 March).
- Henry, J. (1994). Resources and constraints in open and distance learning. In F. Lockwood (Ed), *Materials production in open and distance learning*. London: PaulChapman, 7-17.
- Nichol, M. (2008a). *E-learning in context*. <http://akoaotearoa.ac.nz/sites/default/files/ng/group-661/n877-1---e-learning-in-context.pdf>

Nichol, M. (2008b). *Designing for e-learning*. <http://akoaootearoa.ac.nz/download/ng/file/group-661/n882-designing-for-e-learning---3-in-eprimer-series.pdf>  
New Zealand Government. *Department of Labour, statement of intent 2007/2008*.  
<http://www.dol.govt.nz/publications/general/soi2007/13goals3.html>

RISK, VULNERABILITY AND RESILIENCE

SECTION 3

## Setting the Context

What do you believe is the hazard that possesses the greatest risk to your community and why do you think this?

Carry out an informal survey of five people who have no specialist knowledge of emergency management. Ask each person what they believe is the hazard that possesses the greatest risk to their community and why they think this.

Post a list of these hazards to the discussion forum, along with the reasons given for choosing them.

*This is a paper requirement: you need to do this in order to pass the course.*



## Risk and Vulnerability

Risk is unavoidable. It affects everyone worldwide, regardless of location or socioeconomic situation. There will always be a certain element of risk in the choices we make as individuals and as a society. Many risk factors are unknown, and some are unavoidable.

As individuals, we are responsible for the choices we make about risk management. This includes compulsory risk management, such as refraining from drinking and driving, and optional management of risk, for example, wearing safety gear for certain sporting activities. It also includes preventative measures to protect ourselves from illness and disease. In this way, we are able to limit our vulnerability to any risks we may face.

As a society, we have to make choices and decisions about the risks we collectively face and how we should best deal with these. Large-scale hazards have the potential to affect large groups of people, and may even lead to failure of local emergency response systems in the case of disaster situations. Collective emergency management plays a central part in reducing the effects a disaster may have on a population. This is generally, but not always, the responsibility of governments. (Coppola, p. 113.)

Reducing risk requires either reducing the likelihood of the event or reducing its potential consequences, or both. Risk management has financial costs, and may require environmental, economic, or social trade-offs. These costs and trade-offs must be weighed against the benefits gained from reducing the risk. 'Acceptable', 'tolerable', and 'unacceptable' levels of risk will differ between communities, and may vary over time. To assess risk, the probability of an event occurring and its consequences need to be known. (Officials' Committee for Domestic and External Security Coordination, 2007, p. 5)



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**Figure 1: Sample page of a study guide**

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