

Who killed e-learning?

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Abstract

As the term e-learning is losing its popularity in favour of the next set of buzz words – ubiquitous learning, mobile learning, blended learning it may be necessary to consider why the concept lost its flavour, and also to consider if there is life beyond the death of e-learning.

This article considers a number of reasons for the failure of e-learning, and then proposes a model for integrating learning and business processes to enable sustained organisational learning.

Introduction

An alarming trend in current literature is the number of reports on the failure of “E-universities. Cardinali (2004) lists at least four monumental failures, including the UK E-University, Cardean University, Harcourt and Virtual temple. Romiszowski, (2004) shows how stocks in *Digital Think* fell from \$89.44 in 2001 to \$1.34 in 2003. Zemsky & Massey (2004) ask “Why did the boom in e-learning go bust?” This article is structured along the lines of the old English nursery rhyme “Who killed Cock Robin?” The poem refers to Robin Hood, who stole from the rich and gave to the poor. Similarly E-learning was supposed to provide a cost-effective solution to bring learning to all – did it have a similar fate?

“Who killed Cock Robin?” “I,” said the Sparrow, “With my bow and arrow, I killed Cock Robin.”

It is the contention of this article that the chief reason for the failure of e-learning lies in the misalignment between business objectives and training needs. In other words, the arrow was not on target. Too often e-learning strategies were based entirely on cost-driven models with return on investment (ROI) being cited as the chief motivator for its implementation. To make things worse the return on investment was calculated using a model comparing the e-learning infrastructure to classroom-based training. Of course, the more expensive one makes the instructor-led training (including travel costs of learners, hotel accommodation, etc) the cheaper e-learning becomes by comparison. Much of this will be expanded upon later.

In an extensive literature survey Alexander Romiszowski identifies 4 approaches to studying success or failure of technological innovation in education and training, which he abbreviates as “ELMN” with E representing Electronic or Technological, L being learning and the other two Management and Needs.

Romiszowski’s argument is that what killed e-learning was an over-emphasis of one of these four aspects above the other – thus leading to distorted strategies.

Romiszowski himself cites Khan’s (1997) framework for e-learning. As will be

shown later Kahn actually presents eight aspects to consider in developing successful e-learning.

Jill Galusha, as early as 1997, already predicted the death of e-learning when she published her list of “Barriers to learning in distance education”. There are four barriers: Student, faculty, organizational and course barriers. Student barriers include financial, family and work-related barriers, as well as lack of support both from family and friends, employers and colleagues and teachers (Galusha, 1997).

Faculty barriers: The most important of these is the lack of staff training. A further barrier is the attitude of the institution to distance lecturers who are sometimes seen as less prominent as their contact-teaching peers (Galusha 1997).

Organizational barriers: The first organizational barrier is lack of funds. There are three important cost factors: Initial costs, maintenance costs and upgrade costs. The second problem lies in the technology itself. Platforms could be unstable or incompatible.

Course barriers: Distance courses are often regarded as inferior (Galusha, 1997).

What often makes them inferior is poor design. Often the materials used for contact teaching are simply converted into electronic form. This way no value is added.

“Who saw him die?” “I,” said the Fly, “With my little eye, I saw him die.”

Of course, before speculating on who killed E-learning one might just make sure that he is really dead. The eye witnesses are plenty. The UK eUniversity (UKeU) is perhaps the most monumental failure to date. Started in 2000 with an initial funding of £62 million, with a recruitment target of 5600 students, it closed its virtual doors in 2004, having enrolled no more than 900, and being unable to sell their e-learning platform that had cost about £20 million to develop. (Garrett, 2004). Similarly Harcourt virtual university opened in 2000 promising to enrol between 50 000 and 100 000 students. It closed down in 2001 having enrolled 35 (Cardinali, 2004). Interestingly enough, those who actually saw the death of e-learning, saw it more or less at the time of its birth. Alisson Rosset’s “Confessions of an e-dropout” dates back to 2000, as does Gary Powell’s “Are you ready for web-based training”. And Galusha’s barriers were published in 1997.

“Who caught his blood?” “I,” said the Fish, “With my little dish, I caught his blood.”

The question to be asked, when viewing the graves of all the other great panaceas of educational innovation, 16mm movies, audio cassettes, video, interactive television, etc, is “When are educational administrators going to learn that people don’t want to learn from machines?”

Alas, we want to know that we have teachers, mentors, or learning partners and facilitators of some sort, who have *real* blood in their veins.

Making E the “blood” of learning is a common mistake. Clark (2002, cited by Romiszowski, 2004) for instance, presents a four-step model for E-learning:

Step 1: Design the E-Learning Product. Start with a powerful LMS platform and add a prescriptive Content Delivery System (CDS). Next, organize your content into three different types: Static (HTML Web pages), Multimedia (CBT, videos, and simulations), and Performance-based (hands-on labs).

• *Step 2: Build the Content and Delivery Infrastructure. This begins with proper instructional design, and quickly becomes a content development bonanza. In*

concert, you should begin working with your internal Information Technology team to construct the LMS/CDS platform and host the performance-based content.

- *Step 3: Create Comprehensive Student Services—Administrative Support (for online or phone questions concerning the operation of the system), Mentoring (for academic knowledge management, E-Mail, and 24 x 7 chat), and Technical Support (for configuration questions and general technical services).*

- *Step 4: Sell It!*

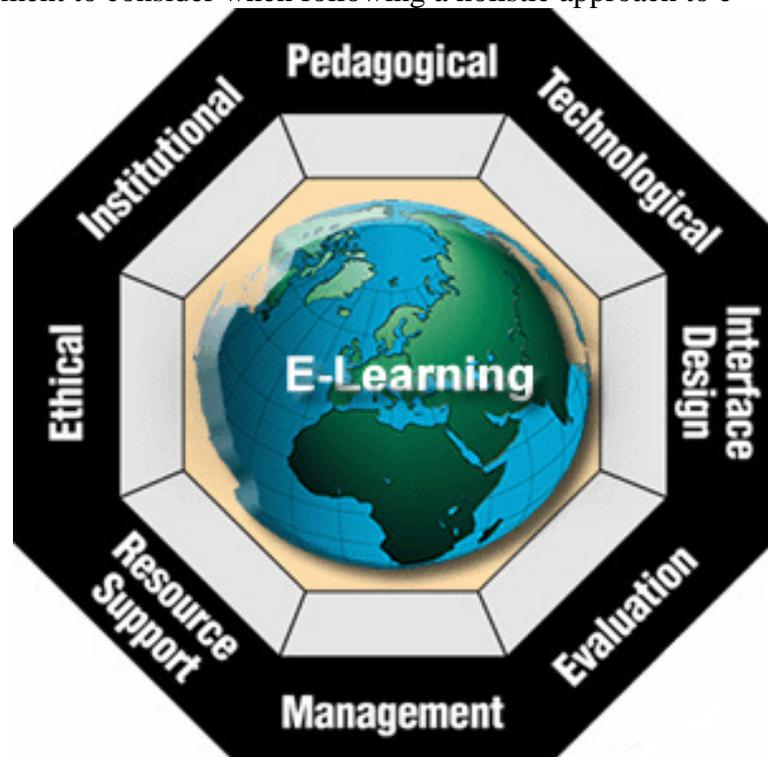
The procedure mentioned above is *exactly* what the UKeU did. Only, they could not find anybody to *sell it* to.

What has to be remembered is that, although the Internet makes it easy to deliver learning materials cheaply, and although various technological solutions make it easy to customise such materials, it is still very hard to motivate the learners to stay online, and to learn, as Alison Rossett points out so well in her “Confessions of an e-dropout” (Rossett, 2000).

Moreover, while much time and effort is spent on creating unique learning content, it is my belief that, given a few hours it would be possible for anyone to find just about any information on the Internet, mainly using Google and its derivatives and competitors. The question then is: *What does the university do?*

“Who'll make the shroud?” “I,” said the Beetle, “With my thread and needle, I'll make the shroud.”

If the shroud is that which covers the whole body, then Khan’s (1997) framework for e-learning is a useful document to consider when following a holistic approach to e-



learning that covers it all.

Figure 1 A framework for E-learning (Khan, 1997)

As can be seen from Figure 1 Khan’s coffin has eight sides. Yet pedagogical issues are given equal weight with all seven others, although, admittedly it is at the top.

Nevertheless, a quick glance through my own repository of academic articles collected over the years will show a majority of articles similar to that of Gus Presteria (2006) who calls for his readers to “Put the learning back into e-learning” and

Russo & Benson's "Learning with invisible others" who consider the social aspects of e-learning.

Ironically Prester, although he claims to make it "Meaningful, relevant and engaging" (Prester, 2006), follows a highly technological approach – describing technological tools that he claims would have such results – and as such he himself becomes one of the grave diggers.

“Who'll dig his grave?” “I,” said the Owl, “With my pick and shovel, I'll dig his grave.”

Another of the predictors of the death of e-learning is Greenagel, (2002) who asks “Why we are missing out on the promise of technology?” He puts it down to a technocratic approach with too much emphasis on “Presentation models” where lecture materials are made available in the form of Adobe .pdf files, or PowerPoint slideshows. Generally he claims that there is too much text, and much of the interactive multimedia is both granular and “puerile”.

Further to this he argues that flawed models of return of investment mean that development costs are kept low – thus leading to poor programmes and low retention rates. According to Greenagel. Keeping costs low leads to poor programmes and low retention rate. He claims that the drop-out rate of e-learning courses is around 70%, compared to a 15% rate at regular colleges.

Moreover, “standards” of e-learning development refer not to quality, but to cross-platform compatibility. The well-known SCORM system simply ensures that various systems talk to one another, thus allowing re-usability of learning objects – that is to say if the objects were *used* in the first place. Finally Greenagel fingers lack of individualisation. The problem is that for learning objects to be re-usable, they need to be generic – and the more generic they become, the less useful they are to any individual user.

Once again, a cursory glance of my private library of articles on e-learning considers aspects such as virtual learning communities, participation rates in online discussions, and other socio-pedagogical aspects that may lead to learner retention. Thus, although Greenagel argues for an increased focus on learning, the focus again lies on the technologies associate with learning, rather than with the pedagogy of facilitating learning while concentrating on supporting and retaining learners.

“Who'll be the parson?” “I,” said the Rook, “With my little book, I'll be the parson.”

The parson clearly manages the event “by the book”. There seems to be a point at which managers in academic institutions lose touch with the key mission of their institutions – when they concentrate on running a business, rather than running a university. This leads to a focus on project deliverables and technology rather than people growth.

There is usually no clear e-learning strategy that integrates learning and business needs. The tendency of management to ignore, or even oppose learning, is not peculiar to universities. Over many years of presenting in-house *contact* training I have been amazed at the number of times managers have called employees out of the training room sometimes for an hour, sometimes for more than half of the two-day workshop – to do some *urgent* work. The cost implications of such managerial behaviour are alarming – the facilitator has been paid, the caterer, the venue, transport. More disconcerting, however, is the message that such a manager sends –

that his/her crisis is more important than the employee's personal career growth. For that reason I usually advise that in-house training be done off site. Although then sometimes people do not report for training at all.

Sellers of E-learning solutions use as a strong selling point that employees can learn *at their desks* – which is specifically where they are most likely to be interrupted by their bosses. It has been my experience that, when I do web-based training, I have to insist on a contact session away from the workplace – to ensure that the learners will be more scared of me than of their immediate superiors.

A further problem lies in a lack of commitment to maintenance. Once a system has been purchased and its ROI established it is expected to run forever, with no formative evaluation to see if it is actually doing what it was supposed to do, and without considering what is required to keep it working.

An e-learning strategy requires a concomitant change management strategy.

“Who'll be the clerk?” “I,” said the Lark, “If it's not in the dark, I'll be the clerk.”

For McGraw (McGraw, 2001) sustainability in e-learning is about strategy – about not being in the dark. She calls for business-based approaches to e-learning, where e-learning strategy equals infrastructure. Romiszowski paraphrases McGraw's “building blocks” of infrastructure and strategy as:

- *a company's overall business strategy and architecture;*
- *the “technical architecture” (for delivery, presentation, and management of learning);*
- *learning strategies (defined as “experiences and content made available to learners”); and*
- *learner identities, needs, and issues.* (Romiszowski, 2004)

He points out, however, that, although a McGraw makes a case for a thorough needs analysis, her analysis remains that of a departmental or project manager, rather than a training needs analysis. In terms of learning needs, we still remain in the dark.

“Who'll carry the link?” “I,” said the Linnet, “I'll fetch it in a minute, I'll carry the link.”

The Internet, with its capacity to link web-page to web-page, business to business and person to person was seen to be the ultimate answer to training needs as this evangelical claim of Broadbent illustrates:

New training technology has not delivered the goods in the past. Audio cassettes never had a great market. Video-based training did not set the world on fire. And programmed instruction became the pet rock of the training world.... In the New Economy, today's jewels become tomorrow's jetsam. But e-learning can endure. The Internet makes the difference.... (Broadbent, 2001)

Ironically in the above quote Broadbent uses the failures of the foregoing technologies to argue for the *success* of yet another technology!

The Internet is a collection of computers, all sitting with their tails connected via holes in the wall. That's all. What would make the Internet succeed where other technologies have failed. The answer is – nothing. People don't want to learn from machines. People want to learn from people, and, as Diana Laurillard pointed out economies of scale have never worked well in education (Laurillard, 1993).

“Who'll be chief mourner?” “I,” said the Dove, “I mourn for my love, I'll be chief mourner.”

The irony about the death of e-learning is that nobody is mourning its demise. Academics and scholars are finding useful data to study in a forensic examination of the death of the course. The administrators are moving on to new projects, the learners are carrying on as usual, and the vendors are developing new buzz words such as blended learning, ubiquitous learning and M-learning.

“Who'll carry the coffin?” “I,” said the Kite, “If it's not through the night, I'll carry the coffin.”

Nobody wants to work through the night. Specifically not lecturers. Romiszowski relates a study by Doughty, Spector, & Yonai (2003) who found that “while students spent similar or only slightly longer time when studying online versions of courses, faculty and other support staff typically spent about twice as many hours teaching online versions of courses as they did when teaching the regular campus based versions of the same courses...” (Doughty et. al, 2003, paraphrased by Romiszowski, 2004). Furthermore, fewer students were enrolled in the online version, thus making the efficiencies even worse. A further complication lies in strong competition world wide for “easy options”. In 1998 there were two places where one could do an MBA in Pretoria – the University of Pretoria, and the University of South Africa. Thanks to the burgeoning of virtual universities in the following year, in 1999 there were 40 institutions offering an MBA in Pretoria. Of course it would be an MBA that is on offer. MBAs are notorious for being cash cows. You take a large group of bright, highly motivated students, you expose them to “big names” in the business world, who teach at greatly reduced fees because of the “honour” involved in teaching at your university, you get them to write term papers that are graded by graduate students, and you charge their employers vast amounts of class fees. If they complain, you argue that you are nurturing their entrepreneurial spirit, and encouraging them to become independent learners. The money you raise by the MBA is used to cross subsidise more labour intensive courses such as music and medicine. Of course those are the courses that will be attacked first by online competitors, and such “cherry picking” means that “the death of open education is here. It does not matter whether you are close by or on the other side of the world. Your competitors are cherry-picking easy-to-deliver, high-demand and lower-cost courses” (Zastrocky, 2000).

So, with e-learning firmly in the coffin, we need to consider the life hereafter. The pall is the symbol of the resurrection.

“Who'll bear the pall? “We,” said the Wren, “Both the cock and the hen, we'll bear the pall.”

Over the past few years there have been a number of calls to “take the ‘e’ out of e-learning – calls for a return to sanity – for a return to learning. I believe that the answer to a blended approach to learning lies not so much in the blend of media, but in the blend of business objectives and learning outcomes. In this respect Kessels & Plomp (1997) found that a systematic process of designing instruction led to more effective and consistent course development. Nevertheless, systematically designed instruction is only half the story. Although it is likely to produce better training materials, it will still be hard to show return on investment.

For this reason I believe that learning should form such an integral part of the business model that it cannot be isolated based on just one set of measures, ROI. I therefore suggest the integration of two models with which we are familiar. The cock and the hen must work together.

At the basis of the systematic design of instruction we will put the familiar “ADDIE” model of instructional design (Analysis, design, development, implementation and evaluation). For the business foundation we shall use Kaplan & Norton’s *Balanced Scorecard* (1992).

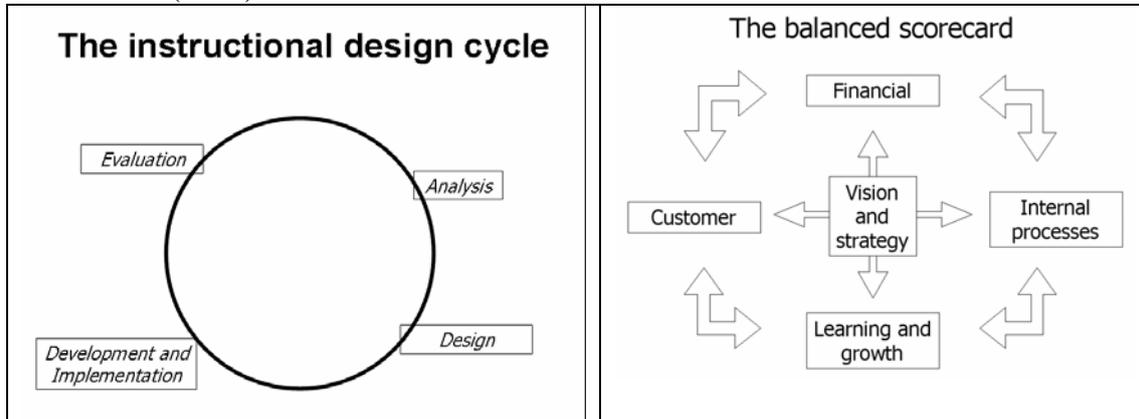


Figure 2 The ID Cycle and the Balanced Scorecard

Figure 2 shows how the instructional design cycle begins with a careful situation analysis, chiefly of the learning needs, learning materials and the learners themselves. Following upon this comes the design phase, which begins with the formulation of clear learning outcomes, and a sequencing of events to reach those outcomes. Thereupon follows the development of the intervention, which involves selecting some sort of learning platform and populating it. Implementation involves exposing learners to the content and controlling the process, while evaluation involves ensuring that the desired outcomes had been achieved. On its own its chief weakness is that it is too easy to do perform the entire process without actually considering the best interests of the business. The result of that often is an emphasis on generic training programmes, which are cheaper, but less effective. If, of course, one follows Kirkpatrick’s (1994) four tiered model of evaluation, then the highest level of evaluation is that of organisational impact – in other words, one asks “Did the training have an impact on the business”. However, unless the desired impact was clearly specified in the beginning, it is hard to measure if it has indeed been reached. The balanced scorecard places the vision and strategy of the company in the middle and then asks “to achieve this vision and strategy, what financial considerations are there, what internal processes have to be put in place, what learning is required, and how must we appear to the customer. The downside of this model is that it puts learning and growth together and at the bottom. Learning is thus lumped together with all the other corporate growth needs, such as infrastructure acquisition, etc. At the top of the model is the financial section, which, of course, is all too easily reduced simply to return on investment.

So, these are the cock and the hen. Now if only we can get them to work together.

“Who'll sing a psalm?” “I,” said the Thrush, “As she sat on a bush, I'll sing a psalm.”

When the words and the music come together, we have the psalm. The learning scorecard below shows how the Addie model superimposed over the balanced

scorecard (Figure 3) produces an integrated model for planning learning interventions that will be aligned with key business elements.

The learning scorecard

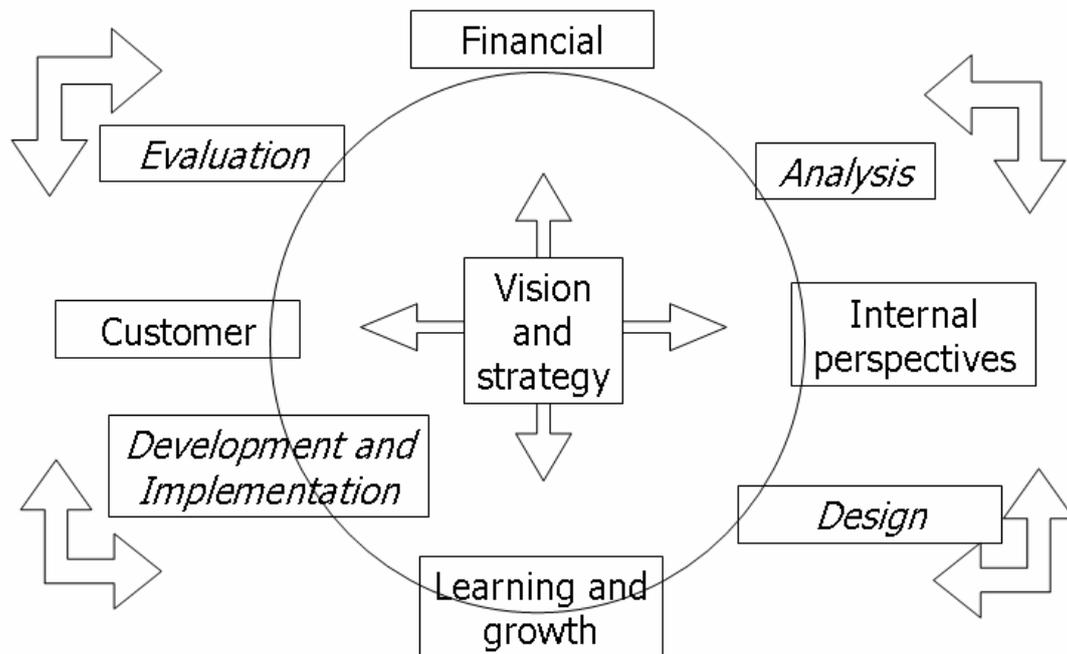


Figure 3 The learning scorecard

In this superimposed model the vision and strategy remains in the middle. At the top remain the financial considerations. The purpose of the business is to make money. When the vision and strategy is formulated, the same strategists who develop the balanced scorecard should also be analysing the learning need. After all, the purpose of learning and growth is to align the business resources, human and otherwise, with the internal perspectives, which will change depending on the vision and strategy. Training then needs to be designed to allow learning and growth that are aligned with those internal perspectives. Development and implementation means that training materials and experiences need to be created which will allow workers to satisfy the customer better, and evaluation will mean that we will consider if the increased match with customer needs is indeed producing the desired financial results. Now training is no longer an added cost item, it is an integrated system by which to arrive at the central vision and strategy of the company.

“Who'll toll the bell?” “I,” said the bull, “Because I can pull, I'll toll the bell.”

As mentioned before Kessels & Plomp argue that a systematic design approach/model led to more effective and consistent courses and programs (Kessels & Plomp, 1997). The reason for this was that such a systematic process ensured that all involved in the project would be “appropriately oriented, trained, motivated, and managed to ensure full cooperation at all times” (Kessels & Plomp, 1997, paraphrased by Romiszowski, 2004). Romiszowski emphasises this “bell ringing” to bring everyone on board when he claims that “A successful project is just 20% technique and 80% tactics.” It has been our experience that, no matter how much we try to analyse factors that lead to

successful implementation, or sustained use of technology in education and training – it always comes down to some human aspects that are simply impossible to quantify. We can hear the bell ringing, but we cannot find the clapper.

All the birds of the air fell a-sighing and a-sobbing, When they heard the bell toll for poor Cock Robin.

Now here's where my analogy with the poem breaks down. NOBODY is a-sighing and a-sobbing for the death of e-learning. Moore's law states that with the price remaining constant, computer processing power doubles every eighteen months. This law is often used in predicting how e-learning will take off and soar as technology becomes more and more affordable – and also as devices become smaller, more portable and ubiquitous.

But somehow they are missing the point – just as the technology is becoming cheaper and smaller, so it should also become more transparent – technology should not be the driving force behind learning. Learning should be.

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