

## Exploring the Barriers to Effective Learning

**When unpredictable change becomes the only constant, learning on your own terms is an essential survival skill in these turbulent times, says Lars Hyland.**

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The unthinkable is happening. In just a matter of months, the financial upheaval in the US, UK and the rest of the world has shaken us to the core. What we once believed to be immovable - rock solid even - reveals itself in all its brittle fragility. It could be described as a financial "black swan" (a term coined by Nassim Nicholas Taleb in his book of the same name), a large impact, hard-to-predict and rare event beyond the realm of normal expectations. A black swan being a metaphor for something that could not exist or happen since all swans are believed to be white.

While this has a certain air of Douglas Adams' infamous "Infinite Improbability Drive" there is a growing sense that the seeming randomness of change around us is just the beginning of a fundamental reappraisal of the way we do things in many areas of modern life. That includes the way we learn, both in the workplace and within our education systems.

The rate of change really does feel like it is accelerating, which means just keeping up takes new levels of determination. Crucially, if efforts are not to become all consuming, we need new strategies and tools that help us to cope and prosper. Learning using traditional methods in this increasingly turbulent climate is rapidly losing its effectiveness and for that matter its audience. Embracing and harnessing new technology is simply essential. The good news is that while old institutional structures are crumbling around us, so too are the barriers to new ways of learning, sharing, interacting with our peers, colleagues, family and friends.

So what and where are these barriers? How are they changing? And what is its impact on learning in the workplace?

### **e-Learning benefits finally understood**

So with recession ringing in our ears, the traditional cut back in budgets does not appear to be brutally focused on training cost centres in contrast to days gone by. There is an emerging trend towards more effective, longer lasting investments in e-learning and performance support where the core benefits of a consistent and persistent learning experience can be offered to a large, dispersed group of people. Multimodal learning (or blended learning if you prefer) is much more common, where different mixes of media are used to create a more varied, engaging and impactful learning experience. e-Learning is a core component now rather than a novel add-on.

### **Attention and persuasion critical to engagement**

In an "always-on" environment there is a growing risk that we are becoming increasingly "time-poor" and beginning to suffer from an ever more fragmented attention span. This has its benefits and its distractions. Increasing numbers of people are happy to manage a continuous stream of SMS, emails and voice calls that challenge the effectiveness of the traditional "course" format. So rather than persevere with models that are at odds with the way we actually cognitively assimilate and consolidate new knowledge and skills, we can now provide instant and contextualised access to learning support at the point of need, wherever that may be.

Where individuals take more responsibility for their learning and development, they will vote with their feet - and rightly so - if they feel their time is being wasted. Communications are critical in persuading learners to spend their valuable time and attention on a learning experience.

### **The invisible LMS**

While bespoke e-learning development is on the ascent, there are still many organisations offering employees libraries of blandly designed content on

systems that make it difficult to find and use. The eLearningGuild in the US commented in its LMS 360 Report 2008 that Learning Management Systems score some of the lowest satisfaction scores they've seen in any research report. As the emphasis rightly moves towards the learning experience, the supporting platforms must become transparent - if not invisible - and present no unnecessary steps or hindrance to engaging with content, tools or people.

For more than a year, Brightwave has helped stimulate the trend amongst its clients for the provision of a learning platform that puts usability and accessibility at the forefront. This signals a move towards targeted learning portals in the workplace that can present learning content in a focused, context-sensitive manner.

## Universal broadband access

Everyone in the European Union could have, by right, broadband access by 2010. The European Commission's Universal Service Obligations (USO) demand that all citizens who want them should be able to get access to basic telephone services including a fixed line of sufficient quality to "permit functional internet access". "High-speed internet is the passport to the Information Society and an essential condition for economic growth," says Viviane Reding, EU Telecoms Commissioner.

But what about the other 3 billion people who have no viable access to the internet? Google, together with John Malone, the cable television magnate, and HSBC, have set up O3b Networks to put up 16 low orbit satellites connecting mobile masts to fast broadband networks, and in the process bring the cost down by 95 per cent. If these are operational in 2010 as planned, then it marks a huge step forward in ubiquitous access and for driving the use of the internet for learning and knowledge in the parts of the world with the most to gain.

In the workplace, we are already seeing the liberating effects of broadband access encouraging rapidly increasing levels of teleworking (admittedly after a slow start). According to the CBI, 46 per cent of UK businesses now offer teleworking to help with working-hours flexibility, reducing carbon footprint, downsizing pressure on corporate workspaces while at the same time increasing productivity. With more distance working comes distance learning. e-Learning support and online collaboration tools are essential for workers to engage with colleagues and teams often distributed globally.

## Mobile internet access gets usable

The advent of Apple's iPhone and now Google's Android mobile platform is transforming the experience of using communications devices on the move. Innovations such as an intuitive touch-based interface, large, clear screens and powerful support for a wide range of applications is bringing mobile internet use

to life. Soon after its launch, O2 revealed over 60 per cent of their iPhone customers were sending and receiving more than 25 MB of data per month compared to just 1.8 per cent of their other contract customers.

While mobile internet access used to be the preserve of those with a natural interest in technology, this has now changed. Most of us are pretty ambivalent about the technology we use - we just want it to work. The iPhone is a great example of technology that removes most of the former barriers through careful attention to ease of use. Google's new Android platform, while perhaps lacking the glamour of Apple, could further open up the potential of mobile services that are intuitive, fast and productive.

There have been many of us in the e-learning industry - myself included - who have been tolling the bell for mobile learning over the past five years but it appears that we are at last trudging out of what Gartner's Hype Cycle terms the Trough of Disillusionment (remember WAP?) and sliding onto the Slope of Enlightenment. With a more powerful, easy to use, standardised and open platform, the opportunities for learning on the move will grow rapidly.

## Games become learning simulations

Games are firmly out of the teenagers' bedroom and are a natural part of developing experience in areas of personal and professional interest. Whether it is rearing virtual pets, performing virtual surgery or playing in a virtual rock band, whatever your interest there is almost certainly going to be an increasingly accurate simulation available for you to develop and practice your skills. Aviation led the way with flight simulators that once were £millions. Now they can be bought for little more than three thousand pounds (including cockpit controls and multiple monitors for a full 180 degree view).

More and more professions and job roles can and should be simulated. You wouldn't want to board a plane without knowing that the pilot has been through thousands of hours of practice, even though much of it on a simulator. This will dramatically accelerate the induction training period, which can often take several months before trainees become fully productive.

Mitra's self organising theories state that when learners feel empowered and self motivated, the difference in learning outcomes can be dramatic. What does this mean for the workplace? Well, similar young people are already entering the workforce and are demanding a more interactive learning experience. What works for them is an immersive, simulative solution that provides a safe, yet meaningful place to practice - and share their experiences with others.

## Social Networking means we can all be reached

The move towards simpler, integrated interfaces is one facet of the wider move to Web 2.0. Social Networking (whether Facebook, Bebo, MySpace, LinkedIn etc...) continues to explode in its popularity and develop in its application. Recent statistics from the European Commission state that just in the past year, the use of social networks has grown 35 per cent in Europe. Over half of the European online population visited social networking sites last year and the number of regular users is forecast to rise from today's 41.7 million to 107.4 million in the next four years. That's a significant growth pattern given that we barely understood the concept three years ago.

Sharing is at the heart of the learning process and being able to reach people with the answers, advice, knowledge, stories that you need, greatly accelerates the underlying learning curve of any individual. Social networking is now an accepted part of the landscape - and that includes organisations. According to the 2008 Cone Business in Social Media Study, 93% of Americans believe that a company should have a presence on social media sites and 85 percent believe that these companies should use these services to interact with consumers. Through sheer bottom up demand companies have to embrace these communities or face being sidelined in terms of their ability to successfully recruit and retain staff as well as their relationship with their customer base.

## A new scientific base for learning

While all these technologies evolve and develop around us, our understanding of how our brains acquire, process, hold and use knowledge and skills is striding forward. The unravelling of the deeper mechanisms of the mind will inform new, more robust instructional practices and support methodologies than we have at present. The fields of neuroscience, cognitive psychology, and anthropology are yielding fascinating insights into how we make decisions, how we remember (and forget), how our brain chemistry alters the effectiveness of the learning process. Who would have thought that blueberries have a positive effect on memory recall? Or that a six minute nap can boost your learning skills? (See my blog <http://larsislearning.blogspot.com/> for more on this theme).

Indeed, "smart drugs" are becoming more prevalent which clearly provide users with a cognitive edge. There are growing reports from the US that students are making full use of these drugs to gain an advantage at examination time. It is a trend also known as "cosmetic neurology," a term coined by Dr. Anjan Chatterjee, a neurologist at the University of Pennsylvania's Center for Cognitive Neuroscience.

## Conclusion

In times of rapid and radical change it is more important than ever that we find and adopt learning strategies and technologies that will allow us to adapt. The barriers to effective learning that I have listed can just as easily be thought of as frontiers. There is much work to be done but attitudes are altering at a brisk pace now that we have all embraced technology so fundamentally into our lives. In many ways it is the corporate and governmental institutions which are proving to have the slowest response to adapting to a new learning landscape. In short, be prepared, our very own "black swan" is just around the corner.

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