

# Learning from business

## Abstract

This critique discusses how businesses use and can use e-learning, including how learning is perceived as a business. Some useful and innovative ways to align learning with core business and to use learning in business are highlighted. Questions including 'Where are we headed in terms of e-business and e-learning?', 'What synergies lie between the two?' and 'Isn't it time we dropped the 'e' altogether?' are discussed.

## Introduction

As early as 2001, Lloyd (2001) noted that a survey conducted by the Delphi Group in Boston USA, of over 700 businesses '...found that two thirds of the polled companies have implemented some form of e-learning initiative' (Lloyd 2001:para:2). The top three reasons given to invest in e-learning were to '...have employees develop additional skills, to retain current employees and/or to increase the effectiveness of their sales force' (ibid).

Abouseif (2005) notes:

IDC Research (a global market intelligence agency) estimates that the global e-learning market is now growing at an annual compound rate of 150 per cent and predicts that it is now worth \$23 billion. Furthermore, Gartner Group believes that more than two thirds of Global 1000 enterprises now include e-learning as part of a formal Business to Employee (B2E) initiative. (Abouseif 2005, para:1) (My additions in brackets).

Australian training providers and industry are teaming up to further their business outcomes and performance through the implementation of e-learning programs.

## How is business using e-learning?

Industries these days must withstand (and indeed profit from) the global competition and networks they face. To do this requires a constant monitoring and maintenance of quality levels and skilled staff. Food manufacturing in Australia is one such industry, according to Mitchell *et al* (2005). To help meet these challenges, industries are collaborating with training providers where increased performance is the joint key outcome. To do this, training providers, more often than not, must specialise in an industry area, like food manufacturing. Powell's view (cited in Mitchell *et al* 2005) of a new approach to training, a business-to-business relationship is as follows.

While business managers recognise TAFE (Technical And Further Education) as a provider to the community for training, we also want managers to see TAFE as a provider of services to industry beyond traditional training, by jointly working to deliver measurable performance outcomes (Powell 2005 cited in Mitchell *et al* 2005:para:5).

Following Powell's comments then, SRI Consulting - Business Intelligence (SRIC-BI) (2003), (formerly Stanford Research Institute) reported on the effectiveness of e-learning

programs among a range of businesses across the globe (North America, Europe and Asia-Pacific). The results showed that the growth in e-learning worldwide has been rather measured and fairly consistent, and that much of the training businesses deem effective, is their own in-house 'home grown' training, together with off-the-shelf packages, which they regarded generally as being of good quality. Much of the e-learning employed by the businesses surveyed was used enterprise-wide to support value chain operations and business unit initiatives. About thirty per cent of businesses said they were in the early phases of e-learning adoption although there has been no actual measurement of what constitutes an 'early adoption' phase.

SRIC-BI's results (2003) attest to an opinion that e-learning initiatives in business are seen to be cost-effective and promise more productivity and increased employee performance. A refreshing point in their results is the effort made by businesses to quantify the successes they've had with e-learning programs. Forty three per cent said that the effectiveness of e-learning programs was measured by the 'number of learners trained' with other factors such as 'cost savings' over more traditional classroom-based training methods (38%), 'learner assessment/testing' (35%), learner self-reporting (34%) and 'return-on-investment analysis' (34%) not far behind. The 2005 Industry Engagement Project of the 2005 Australian Flexible Learning Framework (AFLF) funded e-learning advocates in Industry Associations. These representatives conducted surveys across their industry areas to record the uptake and interest in e-learning in businesses across Australia (See Useful Links for details). The results across the surveys conducted highlight the perception that micro-small businesses (that is, businesses between 2-100 employees) thought they could not possibly afford e-learning without information technology (IT) and instructional design support and thus, saw e-learning as being beyond their capabilities. This is nothing new, when businesses must look at their cost base. Day's (2005) results also show businesses are concerned about the initial set-up costs of e-learning initiatives. However, although the main barriers included the perceived set-up costs and lack of e-learning IT support, businesses commented that e-learning appears to be cost-effective, while offering employees more flexible training options. Day's data also showed that small businesses, in partnership with training providers, are finding the support and quality assurance necessary to make e-learning a real option for them.

E-learning advocates' survey results also noted e-learning uptake in areas including assessment, software and technical skills building and compliance training such as occupational health and safety and risk management. It seemed that for many of the businesses involved in the Industry Engagement Project e-learning was, currently, less than 20% of a business's current budget for structured training and that companies were looking to increase investments in e-learning in the next two to three years, predicting that within that time training providers would view e-learning as a cost-effective mode of delivery for Occupational Health and Safety, computer skills and induction training. A high percentage of respondents said they would be interested in the use of web and video conferencing. The following two scenarios highlight the success businesses have had in developing e-learning initiatives and summarise two of the business case studies in the Industry Engagement Project.

### **Scenario 1: SunWater (Queensland)**

SunWater has developed accredited training under the Water Industry Training Package for its bulk water service delivery personnel using e-learning as the main platform in a blended delivery approach. Modules include self-paced on-the-job activities utilising SunWater's own management standards and procedures, and formative assessment to reinforce learning and allow learners to better manage their own learning. Anne Ernst, SunWater's Business Improvement Manager, says that rather than technologies being a barrier to training, SunWater employees have embraced the technology, with 70% of the target audience volunteering to complete the Water Industry Operations Certificate III level. Anne also mentioned the use of a mentoring process which involved supervisors and industry assessors in building a sense of pride and ownership in the training program offered at SunWater (AFLF 2005), with a Water Industry Training Coordinator providing encouragement and support to students throughout the process. As SunWater's experience attests, the opportunity to learn and to improve training content and organisational processes simultaneously is a bonus. SunWater teamed up with Wide Bay Institute of TAFE to benefit from their e-learning expertise and used the Institute's learning management systems to deliver training to employees across the state of Queensland, with one employee in the ACT also completing the program.

### **Scenario 2: Department of the Environment and Heritage (Northern Territory)**

Parks Australia staff, traditional owners and tourism industry representatives in the Northern Territory have worked closely with trainers to develop a consistent and culturally relevant induction and parks information package for tour guides. The e-learning initiative hopes to deal with the high turn-over of guides at the Kakadu and Uluru-Kata Tjuta National Parks.

An important component of this (collaboration) was the development of a communications strategy and working group to make sure everyone agreed on the content before they started developing the course (AFLF 2005:10).

This online and CD-Rom based training program is combined with on-the-job, park based training, involving the traditional Aboriginal owners of the country.

From these examples we can begin to see the motivations of businesses to take up e-learning/training options. It is through necessity that we progress and the more businesses see e-learning as improving their bottom line, the more e-learning will be considered a viable training option. Industry has seen positive elements in using e-learning to maintain consistency and quality of training and to improve training outcomes in induction training, compliance, and in contexts where there is distance between work sites and employees.

With the impending industrial relations changes in Australia, businesses will need to consider training strategies to maintain a consistent skill base across an increasingly diverse and dispersed employee base, and to manage globalised networks and more flexible working hours. Businesses need training that is responsive, adaptable, quality assured and customisable for their specialised needs. E-learning can offer this, but should be provided with additional support and a realistic, and somewhat critical return on invest (ROI) outlook.

## How is learning itself a business?

As with any business plan, one must consider, among other things, the target market, the investment in business capital and the core product being offered. Learning should be considered in the same way. Who are our learners? What do they need? Where are learning dollars being invested? What products are we offering? What is our core business? Educators and trainers and their institutions need to be asking these questions so they can communicate to business and share a common language when engaging in e-learning opportunities.

Baumeister (2005) noted that knowledge production, as we know it, no longer occupies its traditional and unique position, learning is more than just a means to an end, and certainly in business, its use is often perceived as limited to that of a functional purpose driven by economic requirements. Is this a bad thing? Today's knowledge society heavily depends on an unrestricted and fast knowledge flow, headed by players like individual experts, higher education institutions, research and development organisations and independent, publicly funded, research companies. The modern process of knowledge creation is a networked one. In addition, social software increasingly allows individuals to enter into the knowledge creation arena, with technologies like wikis (For details see Useful Links) providing open platforms for knowledge creation.

Is learning then more about knowledge creation and management? Knowledge Management (KM) is the new buzz phrase that seems to be replacing the term 'research' in higher education institutions. Can we perhaps envisage, Hilse's (2000) '...value chain of knowledge management' (Hilse 2000, cited in Baumeister 2005:para. 31), as a business model to rejuvenate our education sectors, and grow the fledgling networks training and education have with industry? How might 'commoditised' learning impact our society, our life and work practices? We should keep in mind that knowledge is being seen as an outcome and an artefact, as well as a commodity (in the form of 'education') that is earning countries, like Australia, big money. However, development of exemplary practices and supportive processes in e-learning is slow. Perhaps education sectors need to take a leaf out of the business book in order to progress e-learning practices more rapidly? In referring to the academy, Baumeister said that '...(h)orizontal networking and more bottom-up approaches will not only help to raise the awareness of the individual lecturer to new requirements, but could also help the organization to adjust organically to the new situation' (2005:para.50). That is, learning can not only help us to respond to daily demands in work and life, but can build a bigger picture whereby learning is seen as a necessary and ingrained process that supports our continued development as human beings. In this we need to start with the basics, like a hierarchy of needs, in order to progress our thinking and advance our societies to become knowledge economies.

The multidisciplinary challenges of a global economy mean organisations need to develop 'human capital' in order to remain competitive in a knowledge economy (ibid) is this a direct quote. SRIC-BI's (2003) results showed that businesses were beginning to think about evaluating training in relation to its impact on customer satisfaction and bottom line gains. Businesses today focus on new products and production processes. Learning at work is aimed at facilitating a continuous improvement business-product cycle. However, are businesses using e-learning in particular to support innovative practices? SRIC-BI's (2003) results also showed that more recent educational

technologies such as simulation-based training, game-based content and virtual classroom sessions were not used as widely as more standard content based e-learning options and were perceived as being of lower quality than other forms of content. As Powell (Powell 2005, cited in Mitchell *et al* 2005:para.5) suggested earlier, it is up to training organisations to promote learning that is relevant to, and attainable in, the business setting. In particular, new technologies for learning, such as weblogs, podcasting and e-portfolios, have the potential to push training beyond the more traditional paradigms of learning and are set to engage employers and employees in the development of work-based communities of practice.

A tour around the World Wide Web reveals much business related activity using weblogs, podcasts, wikis and other forms of social networking software. Are these virtual tools widely used? What avenues of business are more or less likely to take up such technologies? What proportion of the use of these technologies is actually dedicated to learning? Finding well-documented evidence to such questions is not a simple feat. Current usage shows evidence of 'learning by doing' with some commentary and reflection by business analysts and writers. Dave Austin's weblog at [www.allbusiness.com](http://www.allbusiness.com) is a good example of what is going on online with new, more socially sophisticated technologies. Business professionals like Austin use these platforms for business-related commentary, reviews of current trends and products and advertising their services, expertise and entrepreneurial prowess. Austin (2005) describes social bookmarking for business as an alternative way to facilitate electronic work practices on a daily basis. (Social bookmarking is a growing computer network allowing users to personally catalogue and then share their bookmarks. See Useful Links for details) For example, social bookmarking, like RSS (Really Simple Syndication), may become a new form of workplace communication and information carriage for which we currently rely on email. New and alternative technologies such as RSS can potentially fundamentally change our work habits.

E-learning can potentially start where people are, for example, in their use of email, instant messaging, internet searching, and information processing, retrieval and storage. Learning enables us to contribute - as individuals and groups - both to our workplace and to our communities. E-learning is helping to stretch our conception of what it means to learn, by networking us to many aspects of our daily lives, thus blurring the distinction between formal and informal learning, and moving away from the traditional spaces, like classrooms, which we associate with learning. However, currently, e-learning is being used as an add-on to current teaching and learning practices, instead of helping to redefine it to tackle our work, life and global pressures. Businesses have an immediate financial and profit-based incentive to adopt e-learning approaches, as SRIC-BI (2003), AFLF (2005), and Day (2005) have shown. Can education sectors be responsive too? There's a world of difference between a 'tool' and a system of thinking and being (or a 'paradigm') and e-learning arguably falls into the latter (Baumeister 2005).

## **What is to come for e-business and e-learning? Synergies**

E-learning is not simply an educational tool. It carries with it political, economic and educational meaning where:

- political meaning refers to a system of contributing to social cohesion, for example,

- economic meaning, where e-learning is, for example, a sector of e-business in relation to knowledge production and distribution, and
- educational meaning as attributed to e-learning environments which offer 'knowledge and performance solutions' (Baumeister 2005:para.8).

Baumeister (2005) notes that many education institutions continue to underestimate the structural impacts and requirements of e-learning. We do this by trying to adapt the technology to traditional approaches instead of extending our approaches into new environments, processes and learning paradigms. As with business, learning must also contribute to innovation in order to progress society, economies, growth, and so on: '...pedagogy, as with business, has to innovate in order to advance' (2005: para.13).

Who owns the learning? Employees? Special interest groups? The 'company'? What becomes of the distribution of power in learning environments in the workplace? Do catch-cries of 'just-in-time' and 'just-for-me' learning still apply? Networking with industry, as Mitchell explains, '...is a new catch-cry within VET' (Vocational Education and Training) (Mitchell *et al*, 2005: para.2), but more needs to be done to understand the intricacies of such networking in order to capitalise on its full potential. Just as Austin (2005) mentioned social bookmarking, a similar website, *www.common.net*, was recently launched as a virtual social networking space for business professionals, and redefines the 'friend of a friend' (FOAF) technology, linking instead, people with similar business interests. It is not shown how effective such a system is, but its potential may be realised soon enough, as more users discover such social networking, business-related technology. E-learning training providers also need to lock on to these networks as they develop, in order to stay with the game in terms of offering relevant and attractive e-learning options.

Day (2005) noted that sharing online ideas and collaborating in the development of online training programs seemed to be more easily taken up in the commercial sector rather than the not-for-profit sector, thus it would seem the culture of sharing is influenced by more than simply goodwill! Perhaps the investment in training carries more weight in terms of a business's return on investment for training. The expectation to produce successful business outcomes is perhaps greater. It seems e-learning is highly effective in terms of socialising workmates, together with the additional benefits of informal learning in the workplace. Businesses have seen the benefits of work based projects, which allows workers to remain on-task and on-the-job. In addition, problem based learning is effective and helps to retain participants' motivation, especially as they address real learning and teaching issues as well as work based issues in the project and in their organisation.

Approaches to e-learning which include social and personal elements are on the increase. Emerging social software and so called 'pull' technologies like weblogs and podcasting for example, may offer businesses alternative approaches to embrace e-learning. Read commentators like Udell (2004) for more on 'push' versus 'pull' technology. So too, personal learning environments (PLEs) and e-portfolios offer much for companies seeking to develop more holistic approaches to the training and development of their employees. The discussions voiced since the early 1990s on work practices like teleworking can also be reinvigorated, especially when virtual environments are taken into serious consideration. These approaches are dealt with in turn below.

## Weblogs and podcasting

Gronstedt (cited in Kaplan-Leiserson, 2005) explained the advantages of podcasting as a training method in business as follows.

It's asynchronous and mobile - you reach people when and where they are. It's a low-cost and on-demand channel straight to the ears of the employees. With bandwidth expanding as relentlessly as the proliferation and price of MP3 players are declining, the opportunities for this new channel are seemingly limitless (Gronstedt, 2005, cited in Kaplan-Leiserson: para.23).

However, Gronstedt warned that it is not the 'silver bullet' for everything to do with online learning and training. It is limited in that it is linear and one-way, and thus, should be integrated with weblogs, for example, and other more interactive forms of training.

*Podblaze* founder Rodney Rumford (2005) outlined some facts and figures on the boom in podcasting consumption and the potential marketing and public relations (PR) businesses can capitalise on, using podcast technology. In reviewing the tapering off of figures of traditional radio listenership, Rumford comments as follows.

The podcasting market is growing *because* people now have *choices of content* to listen to....The market is also growing because people can now get the content they want, when they want it, and in the format they want. The ability to 'time shift' has fueled this growth. In much the same way that TIVO ([www.tivo.com](http://www.tivo.com)) has brought 'Time Shifting' to traditional television; podcasting is bringing 'Time Shifting' to audio media (Rumford 2005:7).

Rumford outlined ten benefits for including podcasting as part of your business strategy. These include additional communication potential, online visibility to your target market, increased visibility through search engines, and my favourite, an 'increased mind share' of your target audience (as people often listen to podcasts while doing other tasks online). Podcasting, however, remains a one-way technology but its method of delivery is part of the new form of pull technology (which includes RSS and blogging) leaving consumers in command of the information they consume. General Motors (GM) has been labelled as innovative in their approach to podcasting, used as a key component of their GM blog (See Useful Links for details). Their podcast format is similar to that of radio including exclusive interviews, sneak previews of new models and uses other marketing and PR communications strategies, like advertising and sponsorship. Hobson (2005) said that GM has taken a giant step forward in experimenting with this new medium, as sign that marks the start-up phase of business podcasting. In addition, companies like Volvo are sponsoring podcasts in weblogs like *Autoblog* (See Useful Links for details). As the use of weblogs and podcasting continues to rise, so too training in such technology will also increase and learning organisations should continue to keep an ear to the ground for news on future developments and align training to suit.

## Personal learning environments (PLEs) and e-portfolios

Liber (2005) observed that the PLE project team at the Centre for Educational Technology Interoperability Standards (CETIS), University of Bolton, United Kingdom

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(UK), has been working on developing the definition, scope and a reference model for PLEs. It will also be developing desktop and portal based prototypes. The project hopes to report early in 2006. Online PLEs are rapidly growing to encompass such approaches and are also being actively supported by research from the E-portfolio Research And Development Community (ERADC) that brought us ELGG (write in full in first instance) personal learning landscapes.

Businesses also see the relevance of PLEs and e-portfolios in the workplace. One example of the ever-widening use of e-portfolios in Canada is that of Avenet's partnership with Learning Innovations FORUM d'Innovations d'Apprentissage (LifIA), a leading e-learning organisation, to providing its members with access to e-portfolio technology, using *Avenet efolio*<sup>TM</sup> technology. LifIA is dedicated to the research and promotion of learning innovations for learners, organisations and communities. LifIA has opted for e-portfolios in the workplace, in response to the growth in e-portfolio initiatives which address '...public policy goals for educational accountability, labour mobility, and the promotion of lifelong learning' (LifIA 2005: para.4). This provides a good example of the increasingly blurry boundaries between 'both formal and informal education, workplace training, community and family involvement over a lifetime' (ibid).

How does this learning-business relationship sit with 'peer production' of knowledge, especially organisational capital and social networking? How do business and learning connect to, or conflict with, our social networks? Is there a tension between the 'company' and the individual requirements related to e-learning (Baumeister 2005), and the society in which both elements are embedded? What is required to free up this three-way dynamic so business, learning and networking can work more effectively together? Do we change the individual or do we change the organisational systems to better suit the individuals that work in them? Surely, we should be talking more about engaging learners in personal professional development that sees them create personal learning 'landscapes' or learning environments that record their learning experiences and ongoing development within the context of work, and ultimately, living. John Seely Brown (1996, 2000, 2002) actively espouses the concept of the social life of documents, information and learning, evidence that we could further see these personalised portfolios as 'living documents', Reviewing these questions in terms of e-business and e-learning seems to swing the floodgates wider and the possibilities of the electronic environment and the tools and techniques it offers us appear endless.

## Teleworking with technology

Teleworking is not all that new, but the ever-increasing range of electronic approaches to teleworking, like email, tele- and web-conferencing and virtual workspaces, has reinvigorated the discussions around teleworking. Europe in particular takes the lead in telework, home work and telecommuting practices, with new innovations to improve teleworking being unveiled. Websites like [www.flexibility.co.uk](http://www.flexibility.co.uk) provide employers with information and strategies to manage employees based at home. Australian businesses, like the Roads and Traffic Authority (RTA) NSW, are also providing their workers with teleworking options and have done so since the early 1990s (RTA 2002). The United States, too, has focused on teleworking and its benefits releasing [www.teleworkexchange.org](http://www.teleworkexchange.org) earlier this year; '...an online community focused on demonstrating the tangible value of Federal telework initiatives, serving the emerging education and communications requirements of the Federal teleworker community' (Business Wire 2005:para.1).

At a recent *Going Virtual: The Future of Work* conference (See Useful links for details) Ann Hudson, of *Groupiter Solutions* Australia, argued that we need to redress the balance between the adoption of technology for remote collaboration and the people and processes using the technology, through effective facilitation and group interaction. Monika Altmaier, *Siemens Business Services*, Germany called for more attention to virtual leadership in order for businesses to respond more effectively to today's globalised economy, increasing their competitive advantage through virtual leadership. Following the success of the inaugural *Going Virtual* conference in 2004, Shell manager, Mike Sinclair, declared '...virtual and remote working is the most important economic and political issue to face Australia for a decade' (*Going Virtual* 2004: para.1).

## **Conclusion: dropping the 'e'**

The examples and various approaches in this critique highlight the use of emerging technologies like podcasting, wikis and e-portfolios and show that businesses are not shying away from e-learning, or technology in general. So too, institutes of learning are recognising that in order to stay ahead of the e-learning game they must confront e-learning with a renewed sense of what it means to teach and learn within new paradigms of living, working and learning, with an understanding of the social networks underpinning these. Both learning and business are aspects of life known universally, and thus are, in today's information rich world, recognised as global systems on- and off-line. So why do we continue to use terms like 'e'-business and 'e'-learning if the discussions here cover business and learning more generally? What the 'e' prefacing these terms has done, is force us to recognise new ways of doing business and learning in our societies by broadening our thinking within a new paradigm. It translates our thinking into, often innovative, actions, as we encounter new issues as well as answering old problems along the way.

Baumeister (2005) has called for learning institutions to foster more business-oriented strategies to deal with the growing information age and remain sustainable in an increasingly globalised learning and teaching climate. Day (2005) and the AFLF (2005) have outlined the uptake and effectiveness of e-learning embraced by industries across Australia, further supporting the need to continue to monitor e-learning approaches by the training and business sectors. Discussions ensue around new technologies like weblogs, e-portfolios and podcasting which promote social connectivity and knowledge networks, as well as personalising one's approach to learning, working and living. All these areas draw the discussion down to our systems of living, working and learning. Baumeister (2005) has called for fundamental, systemic change to our systems of learning, while business bloggers are evidence that work practices are being fundamentally influenced by new technologies and training organisations are connecting with business to remain relevant in an ever-changing business world, which includes the business of learning.

What appears to be a common thread in all of this is the attitude with which we come to these challenges surrounding our work and learning. If we are unwilling to change our attitudes and open up our thinking about these aspects then we will move faster towards capitalising on the benefits of educational technologies (and technologies in general). The virtual reality we increasingly live in cannot remain separate from our physical presence. The two must come together in our collective consciousness, so we can fully

embrace the possibilities offered by both realities, as the two live in - and influence - the other.

## Useful Links

Avenet efolio™

<http://www.avenetefolio.com/>

Autoblog

[www.autoblog.com](http://www.autoblog.com)

E-portfolio Research And Development Community (ERADC)

<http://eradc.org/>

ELGG Personal Learning Landscape

<http://elgg.net>

General Motors (GM) Blog

<http://fastlane.gmblogs.com>

*Going Virtual: the Future of Work*

Margaret Aspin, Director of Aspin Online Consulting in Australia co-chairs an annual conference on remote and virtual working called *Going Virtual: the Future of Work*. Speakers herald from training, research and business sectors and meet to discuss and debate the strategies and approaches available to improve the lot of a teleworker. The conference looks at creating virtual teams, organisational adaptability, online and enterprise collaboration and knowledge management. *Going Virtual* is set to happen again in October/November 2006. (Stay tuned for information on the 2006 conference!)  
<http://www.tni-australia.com/gv/default.htm>

Social Bookmarking

[www.del.icio.us](http://www.del.icio.us) or [www.bloglines.com](http://www.bloglines.com)

The Australian Flexible Learning Framework Industry Engagement Project

<http://flexiblelearning.net.au/industry>

Wikis

<http://www.wikipedia.org>

## References

Abouseif, A. 2005, 'E-learning brings world-class training right to your desktop', *AME Info*, 31 January 2005. Retrieved 20 November 2005 from  
<http://www.ameinfo.com/52996.html>

Australian Flexible Learning Framework 2005, *E-learning flexibility: providing business solutions*, Industry Engagement Project, Department of Education, Science and Training.

Austin, D. 2005, 'Social bookmarking for business', *The Web Applications Blog* weblog entry, 13 December 2005. Retrieved 17 December 2005 from <http://www.allbusiness.com/blog/WebApplicationsBlog/10796/003931.html>

Baumeister, H. 2005, 'Networked Learning in the Knowledge Economy - A Systemic Challenge for Universities', *European Journal of Open, Distance and E-Learning*, vol 1. Retrieved 17 November 2005 from <http://www.eurodl.org/materials/contrib/2005/Baumeister.htm>

Brown, J.S. 1996, 'The Social Life of Documents', *First Monday* Vol 1 No. 1, 6 May 1996. Retrieved 18 December 2005 from <http://www.firstmonday.org/issues/issue1/documents/index.html>

Brown, J.S. 2000, *The Social Life of Information*, Harvard Business School Press: USA.

Brown, J.S. 2002, 'The Social Life of Learning: How can Continuing Education be Reconfigured in the Future?,' *Continuing Higher Education Review*, vol. 66, pp. 50-69.

Business Wire, 2005, 'Telework Exchange Showcases Federal Telework Dividends, Builds Online Federal Telework Community, and Tracks Agencies' Telework Progress', *Business Wire*, 5 April 2005. Retrieved 17 December 2005 from [http://www.findarticles.com/p/articles/mi\\_m0EIN/is\\_2005\\_April\\_5/ai\\_n13505670](http://www.findarticles.com/p/articles/mi_m0EIN/is_2005_April_5/ai_n13505670)

Day, D. 2005, 'Moving VET practitioners from traditional to online delivery', report for Individual Learnscope Project, *Australian Flexible Learning Framework*. Retrieved 15 December 2005 from [http://www.daylight-communications.com/learnscope/research\\_findings.htm](http://www.daylight-communications.com/learnscope/research_findings.htm)

Going Virtual 2004, 'Changing the future of work', media release 14 September 2004. Retrieved 18 December 2005 from <http://www.knowab.co.uk/GV04MR.html>

Hobson, N. 2005, 'Business podcasting is taking off', eBusiness News, *WebProNews*, 14 February 2005. Retrieved 17 December 2005 from <http://www.webpronews.com/news/ebusinessnews/wpn-45-20050214BusinessPodcastingIsTakingOff.html>

Learning Innovations forum d'Innovations d'Apprentissage (LifIA) 2005, 'Canadian Learning Organization Launches ePortfolio Initiative', media release April 2005. Retrieved 17 December 2005 from [http://www.lifia.ca/newsrelease/050411\\_initiative.pdf](http://www.lifia.ca/newsrelease/050411_initiative.pdf)

Lloyd, R. 2001, 'Survey tracks trends in e-learning', *Need to Know, Knowledge Management Magazine*, January 2001. Retrieved 21 November 2005 from <http://www.destinationkm.com/articles/?ArticleID=394>

Kaplan-Leiserson, E. 2005, 'Trend: Podcasting in Academic and Corporate Learning', *Learning Circuits*, June 2005. Retrieved 21 November 2005 from [http://www.learningcircuits.org/2005/jun2005/0506\\_trends.htm](http://www.learningcircuits.org/2005/jun2005/0506_trends.htm)

Mitchell, J. 2005, 'New model for industry training', *John Mitchell and Associates* weblog entry, 2 June 2005. Retrieved 17 November 2005 from <http://www.jmablog.com/NewModelForIndustryTraining.aspx>

Mitchell, J. 2005, 'Networking with industry', *John Mitchell and Associates* weblog entry, 10 May 2005. Retrieved 17 November 2005 from <http://www.jmablog.com/NetworkingWithIndustry.aspx>

Roads and Traffic Authority, 2002, 'About teleworking', Road and Traffic Authority, NSW. Retrieved 17 December 2005 from <http://www.rta.nsw.gov.au/trafficinformation/managingtraveldemand/teleworking/aboutteleworking.html>

Rumford, R. 2005, 'What you don't know about podcasting could hurt your business: how to leverage and benefit from this new media technology', white paper. The Info Guru LLC. Retrieved 17 December 2005 from <http://podblaze.com/podcasting-business-whitepaper.php>

SRI Consulting – Business Intelligence 2003, 'Quality and effectiveness of elearning: A survey of elearning practitioners', report for Learning-on-Demand, SRI Consulting Business Intelligence. Retrieved 6 December 2005 from <http://www.sric-bi.com/LoD/summaries/QEelearning2003-04.pdf>

Strategiy, 2005, 'PSUT holds E-Business & E-Learning conference', *Strategiy*, 24 May 2005. Retrieved 20 November 2005 from <http://www.strategiy.com/inews.asp?id=20050524121843>

Udell, J. 2004 'Push me pull you', Opinion, *InfoWorld* 14 May 2004. Retrieved 18 December 2005 from [http://www.infoworld.com/article/04/05/14/20OPstrategic\\_1.html](http://www.infoworld.com/article/04/05/14/20OPstrategic_1.html)