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taking the training out of organisational learning

why we need to know less and learn more

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Abstract

Learning professionals face a mountain of challenges in the digital world.

These reflect the larger challenges being faced by societies across the world as they grapple with the express train of technology that has been accelerating towards us for the past 30 years or so.

One of the main challenges we face is to determine how we manage our learning environments in the face of an explosion of data, much of which becomes information and which, in turn, learning professionals have traditionally used as the raw material for the alchemy of knowledge creation and skills development.

We also face the challenge of adapting our learning environments to the changing ways that business organisations operate.

Finally, we need to meet the challenges thrown up by a new generation of ‘digital natives’ whose life experiences and expectations are very different to those of pre-digital generations.

This paper examines these challenges and discusses the options that learning professionals have in preparing to exploit the new ways of working with new ways of learning.

a world awash with information

We live, and learn, in a dynamic world that is awash with information.

As educators we need to understand why, and how, the flood mainly digital information is influencing the world in which we work and support learning and capability building in our organisations.

We then need to examine our approaches to organisational learning and modify them where necessary. If we fail to adapt to our rapidly changing environment, like the sabre tooth tiger, the dodo, and the Tasmanian *thylacine*, we will cease to matter and our profession, as we know it, will quickly becomes extinct.

The information available to humans is currently growing at a rate of 30% per year. This growth is increasing year on year and showing no sign of slowing.

Ninety percent of the new information generated each year is stored on magnetic media of some type. The vast majority is unstructured.

- 400,000 terabytes of new data/information was generated within email alone in 2005

- Alongside this a further 274 terabytes of data/information was generated in instant messaging

My own organisation, Reuters, is a significant player in the information explosion. Reuters produced the equivalent of 23 King James Bibles of content every day of the year in 2005 - in 18 languages. Our databases contain more than 3,000 billion discrete record fields, and at peak times the company updates the financial data it sends across the networks to financial institutions more than 23,000 times per second.

Along with information growth, we are witnessing a world where data and information is becoming increasingly dynamic. The half-life of most is getting shorter. Much of the information we interact with or use on a day-to-day basis has been generated in the recent past, and much will be invalid or out-of-date in the near future.

How will we, as educators, cope swimming in this torrent?

what do we need to know to do our jobs?

The phenomenal increase in information and the decrease in its half-life create specific and significant issues for the dominant training model used in many organisations across the world.

This model is focused on helping individuals build knowledge and skills to enable them to be more effective in carrying out their jobs. Knowledge is the basic building block of this model and a huge amount of time and focus is spent on it.

Learning professionals create and structure content and interactions in many and various ways using many theories, methodologies, approaches and technologies so learners can acquire knowledge and develop skills.

Once the content is delivered, the knowledge is transferred, and the skills are acquired, it is usually assumed that improved performance will flow as naturally as a river down a valley.

The core belief (and it is often nothing more than a belief) is that the newly-acquired knowledge and newly-developed skills will automatically transmogrify into individual, team and organisational performance improvement. This performance improvement will then flow through into business benefit and improved return on investment.

Sometimes effort is put into measuring whether employee performance actually improves as a result of a training intervention. Often, if measurement takes place at all, it usually stops at measuring improved cognition and recall of transferred knowledge. In a minority of cases acquired learning is measured, but this rarely extends to measuring improved performance or business impact.

So, even though we are all aware that we are operating in a world awash with unstructured information, many learning professionals and managers are still obsessed with the task of transferring information into the heads of learners/employees. They, and many of their managers, see that as the end-game of their endeavours.

Many training and learning practitioners follow this mantra in the knowledge that information is growing rapidly, and will continue to do so. And that much of the information we are exposed to changes rapidly, with decreasing half-life. They are also aware that people move and change in their work, and that the rate of change is increasing.

Yet they continue, eyes down, to develop often sophisticated programmes to transfer knowledge in ever-increasing volumes into the heads of learners without taking a step back to see the forest for the trees.

A further dilemma facing learning professionals who are solely focussed on building knowledge and skills is the

fact that research indicates that knowledge workers actually need to hold *less* knowledge in their heads to do their jobs than they did ten or twenty years ago[1].

Robert Kelley and his team at Carnegie Mellon University have been carrying out a longitudinal study examining this aspect of organisational learning for the past 20 years. Kelley has been asking knowledge workers the same question since 1986. The question is this:

What percentage of the knowledge you need to do your job is stored in your own mind?

The results of this study are interesting, especially for those who are focused on knowledge transfer as the dominant mechanism for building individual, team and organisational capability in companies.

Kelley's results point to a dramatic *decrease* in the percentage of knowledge people need to hold in their heads in order to do their jobs.

In 1987 respondents felt that they needed to hold 75% of the knowledge they needed in their heads. By 1997 this figure had dropped to between 15% and 20%. The figure for 2006 is expected to be between 8% and 10%.

Yet in the face of the obvious trends and inadequacies, many learning professionals continue to spend a huge amount of time and effort 'filling the empty vessels' in the hope that the learners will retain the knowledge and it will still be valid when the learner comes to use it (assuming it has been retained).

Why do they continue to do it?

Others of us ponder that question as we realise that the exercise is not only becoming more difficult but also more clearly futile.

Formal training overall is likely to produce less effective outcomes as the amount of information increases and the time between its generation and its redundancy becomes shorter. We need to look at other ways to build individual, team and organisational capability.

And the other ways have always been there.

the world of organisational learning outside training

The 70:20:10 rule is a good one. It describes the way adults in their work environments obtain the learning they

[1] Robert Kelley, Carnegie-Mellon University

need to do their jobs.

The rationale is as follows:

70% of adult organisational learning takes place on the job. This learning is gained through experiences that develop, through facing challenges, through solving problems, through special assignments and through other activities that an employee carries out on a day-to-day basis.

20% of learning occurs through others in the workplace, through the networks that an employee builds, through drawing on the knowledge of others from reading, listening and their storytelling, and through communities of practice, informal learning sets, coaching and mentoring, and support and direction from managers and colleagues.

10% of adult organisational learning takes place off the job, through formal learning 'events', whether classroom, workshop or, more recently, 'e' and blended learning interventions.

Therefore, 90% of organisational learning sits in the 'informal' or self-directed' category and only 10% sits in the 'formal' or 'directed' category. Yet experts[2] and experience tell us that most organisations invest at least 80% of their budgets in the formal learning part. It is inverse logic. Invest most of your company's training/learning money in activities where little of the learning takes place.

The bizarre logic is compounded by the fact that our research tells us that formal learning is generally less effective and less well received on a like-for-like basis than its informal counterparts.

It is worthwhile applying some thought to how each of these three categories is being impacted by new technologies and the rise of the 'digital native'.

the digital native and organisational learning

Mark Prensky, educational writer and futurist, has calculated that a typical 21-year-old entering today's workforce has on average spent 5,000 hours playing video games, exchanged 250,000 emails, instant messages and phone text messages, had 10,000 hours of mobile phone use, and has spent 3,500 hours online.

The life experience of theses emerging digital natives is very different to that of the digital immigrant, and even more remote from the digital tourist and digital Sunday driver, those who simply wish to continue in their ways without imposition from these emerging digital 'annoyances'.

[2] Jay Cross 'Informal Learning – the other 80%'

If we ask the question 'are digital natives different from us?', you are likely to get the same answer if the questioner is 35 or 65 years old. And the answer is a resounding 'yes'.

Digital natives are not a different species, but they might as well be.

They have grown up with technology. Today's 21-year old was born in 1986 – 11 years after the first consumer computers went on sale[3]. When this young worker started secondary school in 1991, Tim Berners-Lee and Robert Cailliau had already proposed a hypertext system for access to the CERN documentation and the World-Wide Web had been established.

This 21-year old worker's college career saw the rise of blogs, Wikipedia, Skype, podcasts, MySpace, YouTube, Second Life and many other social computing tools and environments.

It should be no surprise to us that the new entrants into the workforce are very different from those who have gone before.

This generation are natural milti-taskers (or, at least, very good fast-switchers). They innately use technology to communicate within and outside of their working lives.

This affects basic skills such as writing.

For young employees living in an abbreviated instant message type of world, writing more complex thoughts down is likely to become challenging. They have a different understanding of 'basic skills' – wanting to get high-level overviews and return for 'deeper dives' when and if needed.

They are global thinkers – technology has enabled them to have friends all over the world, and to keep those friendships going.

Finally, they are very much *just-in-time* and *just-enough* learners. They will go to the Internet or other sources in near real-time when they need information or skills, rather than wait to attend a class.

With respect to a quote from the late Frank Zappa, digital natives "go to college to get laid, and go to the web for an education".

And we need to take a long and hard look at how we can change our learning approaches and solutions to cater for these new members of the workforce.

new ways of working, new ways of learning

The new world of learning and development challenges not only the dominant knowledge/skills transfer model of the training world, but also many of the traditional organisational training structures themselves.

[3] Adapted from an article by Lee Rainie – London Financial Times, 2006

In the face of the digital onslaught and the rise and rise of the digital native, organisations need to get their houses in order before they can start to address some of the new challenges.

The first step needed is to ensure organisations structure their training/learning & development units for accountability.

Many training departments have, over the years, been structured specifically for *lack* of accountability and structured to support a 'conspiracy of convenience' where everyone, except the organisation itself, is a winner.

The conspiracy of convenience works like this:

1. A manager determines that his team is not performing well and not meeting the targets he sets them.
2. He decides that training will fix the problem so he asks the training manager to develop a course.
3. The training manager, sitting in a separate part of the business (often HR), with a separate budget, takes the order, designs and develops the training, and runs some workshop and classroom events to deliver the training against the manager's requirement.
4. No-one measures the outcomes, apart from some participant reaction 'happy sheets'.
5. The business manager feels he has fulfilled his obligation to address the problem because he has asked for a training course and it has been delivered.
6. The training manager feels he has done his job of designing, developing and delivering training. After all, that is what he's paid to do.
7. There is little or no business impact – nothing happens.
8. Everyone's happy!

preparing organisations to exploit new ways of working

A key to successfully preparing an organisation to exploit the new tools and weapons of the digital age and, at the same time, ensure that learning provision meets organisational needs and individual need, especially those of the emerging workforce, is to break this conspiracy of convenience.

One way to do this is to ensure that an organisation works to get *four* key pillars in place:

Pillar I: Structure for Accountability: ensure that the organisation structures its learning and development provision so that business managers are accountable for learning efficiency and learning managers are accountable for the effectiveness of business results.

An accountability-driven function can be organised in a number of ways. However it is essential that the accountabilities above are incorporated.

Pillar II: Align Priorities:
ensure that business priorities and learning priorities are aligned and prioritised.

Overcome 'quick fix' scenarios based on tactical solutions.

Getting the analysis right is the key to successfully solving enterprise, team and individual performance problems.

The IBM/ASTD 2005 research 'the Value of Learning' found that senior managers see learning's strategic value as building the strategy and capability necessary to address the future challenges of the enterprise. Whereas most Chief Learning Officers and senior training/learning practitioners are focused on moving beyond learning to focus on performance and talent issues related to the current needs of business units.

To overcome this lack of alignment, Chief Learning Officers need to develop strategies, approaches and infrastructures that can simultaneously respond to enterprise level strategic needs, business unit operational needs and individual development needs

Pillar III: Anticipate Change:
learning organisations need to be nimble and proactive. They must think and work innovatively.

The IBM research tells us that senior managers expect training/learning units to help them solve emerging business problems as well as existing ones. A learning function needs to be a strategic business tool, an agent for change, and an exemplar of a 'learning culture' itself, but it has to earn its place at the top table.

Pillar IV: Employ Technology:
without the widespread use of learning technologies an organisation will never be able to overcome the *richness-or-reach trade-off*. Learning offerings cannot scale, the speed to competence of employees is held back and, as a result, the organisation will operate sub-optimally.

Learning technologies are powerful tools and offer huge potential in organisational learning.

The arsenal of learning technology tools emerging with the growing maturity of Internet and with the emergence of eLearning 2.0 – the read-write Web of context, collaboration and communities rather than the Web 1.0 world of content, content, content.

When used effectively, learning technologies have the ability to light the touch-paper for an organisation to leapfrog into operational excellence.