Learning technologies

Are next generation learning devices up to the job? p20
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Winter 2010 IT Training 03
Putting learning in context

Back in September I had the opportunity to attend the IITT National Conference and while I missed the (as everyone told me) excellent keynote by Bob Mosher, I managed to go to a number of very interesting seminars. One that particularly stuck in my mind was Nick Shackleton-Jones’ session. His take on training was that it was not about data transfer, but about making people care enough to want to learn by creating an emotional context around the learning material.

This made me think that many of the current approaches to learning, such as the emphasis on communication, blended and bespoke training, bite-size learning and mobile delivery, are based, in one way or another, on this idea of putting learners and their respective contexts into the centre of the learning intervention.

One such example is Paul Matthew’s feature on e-learning versus e-reference systems. He argues that it is vital to understand learner motivation and context when implementing online learning systems as failure to do so can easily result in wasted budget, projects going wrong and frustrated users.

Also, our case study for this issue looks at an organisation that, from its inception, has put the needs of the learner’s convenience at the core of its teaching approach – the Open University.

And then there’s the analysis of a sub set of data from the Towards Maturity’s fourth benchmark research. Turn to page 18 to find out about changes in the telecoms industry, the pressure on L&D and new trends in both customer and internal learning.

New learning technologies are the focus of Gary Flood’s investigation in the world of next generation learning devices, where he examines the suitability of these devices for training content and purposes.

In his column Clive Shepherd takes a look at practical ways of using social media in learning, encouraging senior managers and those in L&D to try and direct its use to benefit learning and business performance.

And then there is the opportunity to get involved in strategic planning for 2011 – turn to page 24 to find out more.

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A round-up of the latest news and developments for IT training professionals

The summer has shown a change in the IT recruitment market, according to international recruitment consultants Badenoch & Clark. One noticeable trend is that banks are beginning to re-implement some of the software and other projects that had been put on hold, which means that there is a demand for contractors with testing analysis skills. Cost-conscious employers on the other hand are showing a preference towards permanent project managers over contractors. In addition candidates with .Net, C++ and C# skills are being snapped up by investment management companies.

For graduates just entering the job market, unpaid work experience is seen as the most valuable activity for increasing their chance of finding work, a survey of 1,300 IT professionals by CWJobs revealed.

Almost half of those surveyed feel that joining industry bodies is beneficial, and despite the increased use of social networking among graduates, IT pros say it is better to join industry bodies than to use blogging and social networking sites for job seeking.

Although cloud computing has taken the spotlight in recent months, almost 90 per cent of IT pros feel that security or mobile IT jobs offer superior opportunities. Linux, Cisco and Oracle are also seen as key skills for graduates.

Less clear-cut are opinions about the opportunities offered by the rise in cloud computing. While 70 per cent see cloud computing skills and experience as an area of opportunities, only 40 per cent of those surveyed believe that cloud computing will result in more jobs.

The survey also shows a significant difference in expectations between generations: Over two third of IT professionals in their early twenties state that cloud computing will result in more IT jobs, but only 28 per cent of those in their forties agree.

New skills are required for IT directors as collaborative working is becoming more widespread in organisations. A study among 3,500 employees across the UK, France, Germany, Japan, the US and 12 experts in innovation and business transformation conducted by Google Enterprise and The Future Foundation found that over the next decade it will become increasingly important for businesses to focus on the value of human interaction.
As a result, the role of the IT director will become more closely aligned with the HR director, as both will oversee virtual teams, manage the collaboration process, motivate staff and ensure smooth delivery of projects.

The study also found that UK employees who are given the opportunity to collaborate at work are almost twice as likely to have contributed new ideas to their company (62 per cent versus 38 per cent).

Almost 90 per cent of learning managers are still confident that they can effectively meet the learning needs of their organisation, the first UK Learning Trends Index survey, published by GoodPractice and The Learning Sanctuary, found. Over half of the respondents predict increasing their impact on corporate performance, and over half believe they will increase their status as a key strategic contributor to their organisation.

Over three quarters of respondents also predict a shift in learning delivery to using technologies such as e-learning or virtual delivery, with 50 per cent set to increase their use of web 2.0 technologies such as social networking. Two thirds of respondents believe they will be more reliant on using informal learning approaches.

With budgets being tight, one in four respondents are looking to cut their use of external coaches, 39 per cent are set to cut outsourced delivery partners. In-house training and instructors present a mixed picture, with 27 per cent looking to increase usage, 20 per cent decreasing and 53 per cent remaining unchanged.

**Supplier briefs**

**Global Knowledge appoints new director**
Global Knowledge has announced the appointment of Barry Corless as Business Development Director for Best Practice. Corless will be responsible for expanding Global Knowledge’s wider portfolio to offer more content and competency-led activities. Corless is currently Chair of the IT Service Management Forum (itSMF) and the chief examiner for the APM Group in ITIL version 2 and 3.

**New syllabus for software testing certificate**
BCS, The Chartered Institute for IT, has launched the new syllabus for ISTQB-ISEB Certified Tester Foundation Level Certificate. The qualification is aimed at anyone involved in software testing, including testers, test analysts, engineers, consultants and managers as well as user acceptance testers and software developers.

**New sales director at Redtray’s Managed Services Division**
Learning solutions provider Redtray has appointed Tracy Capaldi-Drewett as Sales Director of its ALTO Managed Services Division. Capaldi-Drewett has more than 20 years’ experience in the training industry in both sales and operational roles. He joins Redtray from Epic Performance Improvement Limited where he was Commercial Director. He joined Epic in 2005 as Sales Director following the sale of Epic to Huveaux. Strategic alliance with Cambridge University

**Next phase of ‘Britain Works’ launched**
Microsoft has launched the second phase of Britain Works, its three-year plan to get half a million people into employment by 2012. New opportunities will be created through a combination of work experience placements run by Microsoft, its partners and its customers, alongside 450,000 training vouchers and 3,000 new IT apprenticeships over the three-year programme. As part of the campaign, Microsoft has tripled its work placement programme from 50 to 150 new placements.

**New director appointed as Brightwave expands**
Training technology expert, Ashley Wheaton, joins Brightwave as Group Sales Director. Wheaton previously ran training technology business, InfoBasis (sold to Salary.com) and before that was Director of Global Learning Services at Microsoft. Wheaton will help to drive Brightwave’s future expansion and oversee the growth of the company’s new ready-to-use learning and performance services.

**New enterprise and solution architecture courses**
Training provider QA is expanding its business analysis training portfolio with three new ISEB-accredited enterprise and solution architect courses aimed at senior architects and those aspiring to this role.

The courses include a three-day Intermediate Certificate in Enterprise and Solution Architecture; a three-day Practitioner Certificate in Enterprise and Solution Architecture and a five-day combined Intermediate and Practitioner Certificates in Enterprise and Solution Architecture.

**IoD suggests scrapping Time to Train**
The Institute of Directors (IoD) has warned that the cost for employers associated with Time to Train regulations have been significantly underestimated and might undermine existing good practice in the planning and delivery of workplace training, with organisations pushed towards granting training on the basis of individual demand rather than organisational need.

The warning came only days after the closure of a five-week consultation, launched by Skills Minister John Hayes in August over the future of the legislation. The rules came into force in April this year for employers with more than 250 staff and are scheduled to come into effect for small and medium businesses from April next year.
Alan Bellinger

Work smarter # 2

Since the last issue many readers have challenged me on the ‘work smarter’ mantra, arguing that it’s easier said than done. I was in a meeting last week with an L&D manager in the public sector and it was a pretty challenging situation. My recommendation was that the L&D response should be one of ‘by all means cut activities that don’t contribute real value; but why would you want to cut any activities that generate value and contribution?’

Now that raises two critical issues – where are the sweet spots that provide you with an opportunity to generate value, and how can you put some metrics around that value?

Charles Jennings, in his blog post ‘Five Barriers to Learning’ (http://charles-jennings.blogspot.com/2010/04/five-barriers-to-effective-learning-in.html), contrasts the training mindset and the performance mindset. I suggest that there is a direct correlation between the performance mindset and the amount of increase in the L&D budget. When looking at the role of L&D and the contribution it can make, management is interested in outcomes and results – not inputs and methodologies.

In terms of projects that have a low implementation cost and a high impact, I can virtually guarantee that an increased involvement in informal learning will fit the bill. By developing initiatives such as facilitating open collaboration, building communities of practice, developing both performance support and knowledge bases, focusing on performance management and talent management, and providing FAQ support, you’ll be able to demonstrate initiatives that fully support that ‘working smarter’ mantra.

But that gets us to the second issue – putting metrics around these initiatives. The core element of the IITT’s value-add methodology is the assumption that the value-add that any employee generates is equivalent to the cost of employing them over that period. If it costs the enterprise £85,000 to employ an individual over 12 months, and if we can improve their productivity by 10 per cent by a learning initiative, that generates £8,500 of value. So if there are 60 such people in the organisation, we’ve generated over £0.5m in value. The trick is not to produce numbers like this yourself, but get your manager – or, even better, a business unit manager – to come up with the numbers. In this example, even if we reduced the benefit by 50 per cent, we’re still talking about significant productivity benefits.

I fully accept that this is not an easy argument to sustain; but if you start with a performance mindset, identify some critical opportunities and run the metrics, you’re well on your way to cracking this issue. And if you can do that, you’ll make sure that your L&D department is totally aligned to the ‘work smarter’ mantra.

BCS Learning and Development Specialist Group

Exciting changes in the BCS I&TTSG

Long gone are the days when ‘learning’ in the IT profession consisted of a gifted presenter with a series of PowerPoint slides and a working knowledge of their subject delivering stand-up IT training to an audience of often disinterested students. The modern L&D professional must have a comprehensive understanding of the theory and practice of adult learning, be a talented instructional designer, a project manager, a business change consultant, a coach, a mentor, a promoter of talent, a specialist in learning tools and technology, a skillful negotiator and a web 2.0 wizard.

To support the new L&D professional in IT, the BCS Information and Technology Training Specialist Group was renamed as the BCS Learning and Development (L&D) Specialist Group at the group’s AGM on 13 October. Constitutional changes allowing the group more flexibility in working with other relevant professional bodies in L&D as well as the IITT were also agreed at the AGM.

Jooli Atkins, Chair of the newly named BCS Learning and Development Specialist Group, said ‘We are delighted to have been able to make this change right now, when L&D is under pressure more than ever to prove value in organisations. Aligning what we do in L&D with business change is critical to the success of both, and the name change and our new constitution allow us more flexibility to do this.’

Paul Jagger, IBM and Committee member, said ‘The name change mirrors the trend in industry whilst also aligning the Specialist Group with the terminology used in both SFIA and the Chartered IT Professional specialism for L&D practitioners. This change is also an important step in positioning L&D as a critical enabler of organisational transformation within the IT industry and beyond.

‘The Specialist Group represents the interests of L&D practitioners in the IT industry, no matter their subject specialism, job role or the means by which learning is delivered, whether it be face-to-face, online, mobile or in tried and tested formats such as the printed page. Learning is the people side of successful organisational change.’

The event also saw the group’s first PechaKucha competition. Linda White won an iPad for her presentation entitled ‘How to woo, wow and win people’, which was judged in three categories – relevance of content to the Specialist Group, innovation and delivery using award-winning audience response equipment, provided by Turning Point. Links to recordings of the PechaKucha presentations of all entrants, Chris Bore, Ray Coulstock, Robin Oldman and Linda White, are available from the Specialist Group website. www.bcs.org/lttsg
In the first edition of IT Training Skills Watch, Paul Saville, Director of Marketing at C.B. Learning, looks across the total IT skills market with sales data from Computer Bookshops.

The self study IT book market provides a good barometer of what’s hot and what’s not, as it is compiled from tens of thousands of data points each month. These data points are not surveys or estimates, but actual title sales (volume as opposed to value). This analysis is also very current; here we have compared the sales from July to September this year against the same period last year.

Key trends

Windows 7 as the top seller is no surprise. The software sells seven copies per second across the world and has replaced Vista overnight as expected. Excel is the only software with three versions in the top 25. The 2007 release has maintained its number two position despite the very successful launch of Office 2010. New versions of Office are normally slow sellers and it can take approximately a year for the product to be adopted. However Office 2010 has gone against this trend and sold remarkably well since its release.

We have kept digital imaging subjects in this version of the Top 25 as we are always surprised by the volume of Photoshop CS sales when a new version hits the shelves and CS5 has not disappointed in terms of sales volume.

Apple has been showing strong growth for a number of years now, matching its growth in the industry as major hardware and software players. The iPhone Programming group has had a meteoric rise and has now settled in the top 25. There has also been a rapid rise of Android development books over the past 12 months (up nearly 150 places) and these are expected to break into the top 25 anytime soon. We firmly believe mobile development is here to stay for the foreseeable future.

In relation to development, the software engineering category has grown over the last year. This has been driven by Agile development (up 48 per cent), patterns and design (up 37 per cent) and classics like ‘Code Complete 2e’ running at double last years’ sales volumes.

Computing is the keystone of the improved efficiency required in the current economic climate and as if to reinforce this message, Romtec have reported that server sales have spiked upwards in recent months, doubling last years sales figures.

The clear message from this analysis is that IT training has an important role to play economically in the coming difficult years. IT training boosts the skills of the IT workforce and the economy needs a productive IT workforce to drive the efficiency savings required across all organisations.

In our next edition, we will be looking at Microsoft versus Open source server-based skills.

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Notable risers outside Top 25

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<td>Android</td>
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On the ground

How do you maximise the benefits and effectiveness of floorwalking?

With companies looking to maximise the utilisation of new applications, bridging the knowledge gap from older versions to the latest technologies is essential to justify the investment made on new software. If carried out properly, floorwalking can be a cost-effective and productive way to train users on-site over a short period, to ensure maximum benefit is gleaned from any application rollout or upgrade.

Planning must guarantee that all employees are reached in the most effective way. It is important to decide whether to have multiple trainers for one day or one trainer for multiple days. The full potential of floorwalking can only be reached if it is carried out in a timely fashion. Ensuring that training is done in line with the upgrade is imperative; otherwise productivity will be lost as employees try to teach themselves how to use the applications, picking up bad habits in the process. Continually review the process. Work with your trainer to evaluate over a structured period of time and ensure that employees are comfortable with training process.

For an application roll-out to a large number of employees, consider training in-house ‘power users’. Once trained, power users can train the rest of their department as necessary. As power users remain in-house, their expertise can also be used for follow-up queries. This ensures that costs are controlled, overheads are reduced and employees can carry on their day-to-day tasks with minimal disruption.

Nick Schacht, Learning Tree

In a perfect world, when doing a system roll out, you would make contact with everyone. But in reality you will still not hit about 5-10 per cent. By improving your process you will increase your hit ratio and improve customer communication.

Firstly about a month before the upgrade add a news event to your website, establishing the nature of the upgrade. You can also post relevant links to your social networking pages. Use an email marketing tool (for example www.constantcontact.com) to email customers who are affected by the rollout. This tool will also allow you to track which of your customers has opened the email, when they read it, if they followed any links for further reading and if the user forwarded the email to another address. If you can establish that 80 per cent of the emails were read, you can identify which 20 per cent of customers have not received the information.

Two to three weeks before the upgrade contact the remaining 20 per cent. This is can be done via phone or alternative email addresses. While it is an exhaustive and time-consuming process, it allows you to inform them of the update and allow you to ascertain the reasons for them having not read the email.

Michael Barclay, Active Training

Next issue

What to keep in mind when training a group that includes both staff and managers.

www.bcs.org/ittraining

Advisers:
Jooli Atkins, Matrix FortyTwo and Dave Britt, BCS Trainer of the Year 2006.
Training for gaming

When the game development firm DR Studios’ Clive Robert and his colleagues worked for struggled to get staff with the right skills, they decided something needed to be done. They launched Train2Game, a blended learning college that offers courses to qualify games designers, games developers or games artists and animators. Henry Tucker spoke to Clive about the college.

The skill shortage in the IT industry is something that has been talked about at length. However, one of the biggest issues that Clive noticed when employing graduates was that they lacked business skills and commercial acumen. This ranged from the inability to get into work on time to not recognising that the amount of time a person spends on one task has a value or being able to meet deadlines.

‘Developers are incredibly conscious of how much time and money they invest into a project and the difference between profit and loss on a particular title has become a real issue,’ Clive says.

Universal skills

When it comes to skills though, the situation is more complicated. Each studio will have its own proprietary software tools so it’s not possible for students to know how to use all of them before they start. What they need, Clive says, and what the universities, colleges and FEs aren’t teaching them, are universal skills.

Games are made up of thousands of different parts. Audio files, image files, video files, sections of code and so on are all managed centrally so that everyone who needs them can access them. However, Clive says, this way of working, called source control, isn’t always taught.

‘The idea is to document your code in a way that the rest of the
team understands and can work on,’ Clive explains. ‘It’s not so much the raw skill set of understanding C++ at a basic level, it’s the understanding of the way that you implement that codebase and content as part of a team and in a commercial environment.’

Developing the course
While the course came out of the experiences of Clive and others at DR Studios and there had been some concern that it would only be suitable for them, Clive explained that this shouldn’t be the case. The course was created in conjunction with other studios and, as Clive says, they ‘threw away the university syllabus’ and thought ‘what do we and other studios around the country need?’

One of the main things that they got rid of was a ‘history of gaming’ section, which is part of many university game courses. Clive felt that if someone signs up for a gaming course and doesn’t know about Pong and Space Invaders, then they should probably think about why they wanted to do the course in the first place.

With this in place, Clive and his colleagues still had to overcome the fact that each studio does different things and uses different tools. DR Studios, he says, tends to work on social simulation projects, but other studios such as Rebellion in Oxford do more action-orientated games.

Making it applicable
In order to create a course that was not just applicable to them, they spoke to the industry body TIGA with the idea that with their help they could put together an advisory body made up of not just industry people, but also universities.

‘The reason we have universities on there as well is that we all accept that we’re industry-orientated, but also that we’re not teachers. We had academia working with us to make sure we were teaching in a gated, scaled and scaffolded method. And so the games development team that TIGA pulled together for us looks at the course content in terms of “does this fit with the UK games industry development needs?” The academics that we have working with us make sure all of the content that we’re writing is written in such a way that it is structured, learnable and teachable.’

TIGA’s role is to manage the quality path through the advisory board, and the exam advisory board manages the course overall in terms of quality and difficulty and the relevance of each of the qualifying exams, of which there are three – one at the end of each of the modules. TIGA also checks that the tutor-marked assessment content is of a sufficient quality.

Fast-paced industry
The big issue with universities teaching anything that is as fast moving as the games industry is making sure that the course content is up-to-date. At university the problem is often that, once the course has started, changes can’t be made until it has been through its full teaching cycle.

Train2Game has been going 18 months and, according to Clive, they are on version five of the course already and have added Unity and Unreal development kits as part of the teaching process and also project management techniques like Agile and Scrum.

The course is benchmarked against the Skillset Occupational Standards and the Games Credit Accumulation and Transfer Scheme (CATS) points system and is currently of Higher National Diploma standard. It was marked down from being of degree standard because it is a distance learning scheme and does not include face-to-face lecturing and team work. Clive says they have now added the latter and hope to be reclassified.

To get an idea of how much time people would spend on the course, Clive says that they looked at Open University statistics. These show that people tend to spend between 10 and 12 hours a week studying. However, some of the current students are managing to fit in as many as 20 to 30 hours a week, which means that they will complete the course in around 18-20 months rather than three years. One reason for this, Clive explains, is that many of the people taking the course are those who are looking to re-skill and change career. They are invariably older than most graduates, but also have a commercial understanding and know the needs of the industry.

Peer opinion
So what do other studios think about their courses? Clive says that there are between 30 and 40 studios who know what they are doing and love it. The others, he says, fall into one of two camps: there are the open-minded ones who are waiting to see what the course can deliver and then there are others who say that university is the only way to get the right qualifications.

There have been a few complaints and discussions about the course, or more specifically about the MIS, the company who owns Train2Game, on the internet, but Clive thinks that the many of the posts have been unjustified.

‘This happens sometimes when people post to forums, especially from such a vocal community,’ he explains. ‘Those that had questioned the courses simply did not understand the concept of Train2Game and blended learning. To put this into perspective, the negative comments we have received are minute in comparison to the positive feedback received from our students – we address any comments on an ongoing basis to set the record straight and to ensure availability of correct course information. We have over 2,000 students studying with us – they are just as vocal in terms of their positive comments about the course.’
Not many people would readily associate academia with IT certification and being at the forefront of blended learning. Yet on its website the Open University (OU) describes itself as ‘a world leader in modern distance learning, the pioneer of teaching and learning methods which enable people to achieve their career and life goals studying at times and in places to suit them’. Also, since 2005 it has started to expand its offering in IT into the field of certification, bridging the gap that often seems to exist between academia and professional development.

The blended approach
The OU was launched in 1969 and is now the biggest university in the UK with more than 250,000 students.

The OU teaching model is based on what it calls ‘supported open learning’. It’s a style of distance learning that allows students to work whenever and wherever they choose, whether that is in their own homes, workplaces, libraries or study centres. Before the course starts they are supplied with course material, which can include anything from traditional text- or workbooks, online teaching material, CD-ROMs, DVD-ROMs and computer software, audio and visual recordings and equipment loaned for practical work.

Yet throughout the course students are also supported by a tutor, who can be contacted online or by phone, through online forums, student advisers and study facilities in their own regions and contact is possible with other students at tutorials, day schools or through online conferencing, social networks, study groups and events.

The technology
Much of this extensive network of support is made possible by the OU’s advanced use of technology in learning. From interactive DVDs and podcasts to virtual microscopes for geology students, the OU has put together an easily accessible pool of resources that provides students with all the material they need to learn and develop skills anytime, from anywhere with computer and internet access.

These resources come in many different forms and shapes, from a virtual environment that includes wikis, online tutorials, bespoke research tools and interactive computer-marked tests, to a virtual counterpart called OUtopia in Second Life, where students can adopt avatars, socialise with other

Connecting worlds

Long experience in blended learning and close cooperation with major IT certification providers have enabled the Open University to offer flexible career development solutions to IT professionals and those planning to enter the field.

The OU has put together an easily accessible pool of resources.
students and use it as a learning environment (for example, walking around a molecule or examining organs in a human body). In addition the university also allows students to learn via their mobile phones, has a vast selection of free educational resources on iTunes and boasts one of the most advanced digital libraries full of electronic resources and e-books.

Developing material
The OU has about 20 staff based in Learning and Teaching Solutions (LTS) who actively work on developing and supporting the tools within the Moodle-based Virtual Learning Environment. It also has a team of 10 staff whose responsibility it is to set up and support individual course websites.

The development of online materials is carried out as a collaborative effort between the academic staff working on each course and the specialist production staff working in LTS, for example, project managers, editors, graphics staff, sound and vision producers and interactive media developers.

These specialist staff are assigned to work with the academic teams producing the courses and are responsible for producing all the course material across the range of media, including online, print and DVD. LTS employs approximately 180 specialists within its media area.

Options for professionals
The flexibility that this online resource pool provides makes OU courses an attractive option for people in employment who want to develop their knowledge and skills, but cannot afford to take time out at work. About 70 per cent of OU’s undergraduate students are in full- or part-time employment and more than 50,000 students are sponsored by their employers for their studies. Most of its students work in the evening and at weekends, some of them in different time zones, making necessary the flexible approach to learning the OU takes.

In 2005 the OU began to add to its better known first degree and postgraduate qualifications the option for IT professionals and those who want to move into IT to learn and develop IT skills, acquire recognised certifications and also gain credits that count towards OU degrees. The idea was to offer individuals and employers an option for career development that was flexible enough to be reconcilable with work commitments and relevant to technical work requirements and skills, but at the same time provided a range of higher education options.

‘It is what the industry is demanding as far as discipline for the workforce is concerned,’ Andrew Smith, Lecturer for Cisco Networking at the OU, explains. ‘If we create courses that don’t meet what employers require, then our courses will become redundant very quickly. We see these courses as complementing our studies. A student in a computing discipline needs the industry and certification orientation as well as the academic element.’

IT certification
First in the row of IT certification offers was Cisco, who began setting up academies in the late 1990s as part of a not-for-profit educational programme when it realised that we were heading for a global shortage of people with the necessary networking skills to build and maintain the rapidly growing internet. Today the OU is the largest and fastest growing Cisco networking academy in the UK, with more than 3,500 students, offering courses such as Cisco Certified Network Associate (CCNA) and Cisco Certified Network Professional (CCNP).

Now part of the small team managing the Cisco courses, Andrew initially became involved with the development of the first OU Cisco course as a consultant. ‘All the courses that the OU develops get the input from externally recognised experts in order to be recognised by vendors,’ Andrew explains. ‘At that time I was working externally at a further education college and the OU brought me on board as a Cisco expert.’

Andrew and OU lecturer Nicky Moss worked together to create the first certification programme for CCNA that, in its delivery, was radically different from how the course had been done before. Usually the course is delivered face-to-face at a number of academies across the country, but the OU wanted to offer it via distance learning.

‘Cisco has very high standards for its training delivery, especially for the practical, hands-on experience, and we had to come up with a model that it was able to accept within its ideal of what good teaching is,’ Andrew explains. ‘We still have four day schools over a period of nine months where students get their hands-on experience, and we’ve also use NetLabs, which gives students access to routing and switching technologies, and a powerful network simulation tool, Packet Tracer, which helps them to understand the scale and complexity of the system. So there are three different ways of getting practical skills.’

While traditionally the OU writes its courses from scratch, for CCNA material so students would study to the Cisco model. ‘The Cisco material is excellent,’ says Andrew. ‘An essential element we added was material to make especially difficult subjects such as IP addressing as accessible as possible for students and give them the best possible chance to enhance their abilities.’
Expanding the offering

Since the introduction of the first Cisco courses, the OU has expanded its offering in the IT certification market, adding Cisco CCNP as a full postgraduate MSc in 2009, the CompTIA supported Linux+ in May 2010 and in October 2010 its first course as a Microsoft IT Academy, Microsoft Technologies.

‘All OU certification courses can be taken as a course that leads to the certification exam, but all of them can also count towards either a computing or an open degree if that’s the route a student wishes to take,’ Andrew explains.

Student numbers have soared since the introduction of the certification courses, with 3,000 plus students taking the Cisco CCNA, around 300 enrolled on Cisco CCNP and over 400 have signed up to do the new Microsoft Server Technology course.

So where does that place the OU in relation to the established IT training market? Kevin Streater, Executive Director, Employer Engagement – IT & Telecoms at the OU, says that rather than being in direct competition, the OU is aiming its offering at those companies and individuals that so far haven’t had access to industry certification, thereby complementing the established market. ‘We offer degree-based education for those who cannot fit into a normal study pattern,’ agrees Andrew. ‘We’re looking to reach the “unreachable”, for example, SMEs that cannot afford for employees to leave for an extended period of time, or for large organisations that want to train a large number of staff or individuals who want to develop their skills further. It is for those who can’t fit into a “normal” academic model.’

Future plans

At the moment the OU is also looking to become the first distance learning VMware Academy in the UK. Similar to Cisco, VMware already has an academy programme, but didn’t have a way of delivering distance training where there is nothing in the VMware space in the UK at the moment.

The OU stepped in not only to help develop the course, but also to help support the development of the academic community. ‘We had to support the development of a common community,’ says Andrew. ‘You’ve got to create the space in which to operate – everything was there, but not as yet connected, so we have acted as catalyst. For example we have successfully partnered with e-skills to gain national recognition for VMware and also with a number of awarding bodies – schools, colleges and universities.’

The course, which at the moment is still in the early stages of development, is planned for delivery late in 2011.
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As telecoms convergence expands across multiple industries, providers offer an increasing blend of fixed, mobile and IP services to their customers. As new generations of bandwidth-intensive internet services emerge, consumers are increasingly looking for more sophisticated services and solutions. The new communications superhighway that results is supporting the flow of ideas, communication, business and learning. But as soon as it is laid down, it’s dug up again, new lanes are added, new destinations are connected and even more new users are attracted by its promise.

So how do the industry’s customers and those in their supply chain keep up with the constant pace of change? Is the industry harnessing its own innovative products to deliver skills faster and more effectively?

Over the summer, Towards Maturity conducted their fourth benchmark of the use of learning technologies in the workplace. The IT & telecoms sector has always responded well to our benchmarks (in fact almost 10 per cent of our sample of 400 were from the sector this year), but we wanted to dig a bit deeper and so we supplemented the research with a more focused benchmark with eight additional organisations in the telecoms industry to explore how they were delivering skills to their customers.

Challenges

It is clear that old models of learning no longer cut it. One participant summarised the issue – ‘telecoms giants of the 90s are no longer and the monolith training programmes of the giants are not relevant in a telecoms world that has to respond rapidly, is under more competition, has to cut costs and respond more flexibly to changing customer need.’

Three out of five organisations that we spoke to provided learning to both internal staff and to customers, and across the board, users are demanding more flexible learning options – shorter, bite-size online learning interventions, more customised learning, more languages, more access and more informal learning support.

Speed is also a challenge, not just in just decreasing the time to competency, but in the ability to respond faster to customer demand. Some of this is related to the need to reduce the time from launch announcement to access to learning. Opportunities are lost when you can’t get learning to market fast enough, as Jennifer Howard, Head of Learning and Development, BT Innovation and Design points out. ‘We would rather not create interventions in-house for technology, but are forced to by lack of content on our strategic skill areas.’

So how is the sector addressing the challenges and building the skills?

More options, more flexibility

Qualifications for established technologies are still important in the sector (53 per cent of organisations in our benchmark offering IT professional learning to learners link it to qualifications) and the big providers such as Ericsson, Nokia, Cisco or Alcatel-Lucent all offer certification programmes to customers on their products, with some planning to increase it further.

But the route to these qualifications is changing with technology increasingly being used to help deliver, assess and support the process. Three in five professional skills programmes are likely to be delivered now with a technology component (up from...
There are some ‘traditional’ learning technologies that are widely used across the industry and have been for some time (for example learning management systems, electronic learning content and online assessment are all in use by 80 per cent or more of the sector). Others have been increasing over the past year or so, for example:

• 8 out of 10 are using or are planning to use rapid development tools.
• 9 out of 10 are planning to use virtual classroom.
• Over 50 per cent are using video on demand and 65 per cent are using podcasts.
• 1 in 3 are using complex simulations and virtual environments for detailed practice.
• Over half offer in-house social networking sites and 41 per cent plan to use them more. All of the telecoms providers in our review are using social networking to connect with customers.

Responding faster
These tools are paying off – 80 per cent of the sector found technology improved the ability to deliver learning faster and a third found that staff reached competency in their jobs faster.

Learning technologies are also helping to reduce time to bring new learning to market by helping the rapid transfer of knowledge and skills from the product development specialists to market. Mike Booth at Cable & Wireless Worldwide explained that the last 18 months have seen a dramatic shift in the use of web conferencing to disseminate the very latest product information. They hold a weekly seminar aimed at commercial colleagues who need to keep up-to-date with the latest products, case studies and innovations in order to support their customers. They also work with programme managers and product experts within the lines of business to develop a series of update sessions that are now a standing appointment in the diary.

Social media in learning
The sector is not shutting the door to third party social networking sites for their staff. Generally 48 per cent of companies allow access to third party sites such as Facebook, YouTube and LinkedIn, and this figures rises to 75 per cent in the IT & telecoms sector. Interestingly, those that use social media report significant increases in customer satisfaction and staff impact over those that don’t.

These tools are also being used to shorten the time to disseminate the very latest updates directly to the coal face. Jennifer Howard, Technical Operations at Cisco, hints that those that use social media report higher staff satisfaction and greater ease of feedback. The sector is still delivering the majority of learning in the traditional classroom, but there are clear signs that those laying down the superhighway are using it to speed up and transform our access to learning.

Learning on the move
Unsurprisingly, the telecoms sector is also significantly ahead of the rest in terms of delivery via a range of devices including mobile devices. Organisations are already investigating the opportunity that mobile devices are providing for individuals for assessment, immediate job aids and even location-specific advice and support as a result of GPS tracking. Sixty per cent of telecoms companies plan to use or increase their use of mobile devices such as PDAs and mobile phones for learning, with 55 per cent using or planning to use mobile applications.

What of the future?
All of those that we spoke to are clearly focused on using the technology infrastructures that they are creating to help redefine the way that learning is delivered. The growing use of mobile and social learning and the increased acceptance of the use of technology in general are driving the industry forward.

There is still a way to go as much is still delivered in the classroom and only a third of the sector are training their learning staff in blended learning approaches, but there are clear signs that those laying down the superhighway are using it to speed up and transform our access to learning.

To find out more
Find out more about the Towards Maturity 2010 Benchmark at www.towardsmaturity.org or contact Laura@towardsmaturity.org if you are interested in more information on the sector specific report.
Next generation training

Gary Flood takes a look at the suitability of the next generation of consumer devices in the world of learning and development.

Not got an iPad yet? I’ll let you off if you’ve instead got your order in for that new BlackBerry version, the new Playbook tablet computer – or if you’ve been too busy playing with your Kindle e-reader or new Android smartphone to order one. Oh, sorry, you’re waiting to buy the new Dell seven-inch version, making do with the Samsung Galaxy in the meantime.

Welcome to the new world of sexy electronic handhelds that let users navigate the web, download digital content – from the new coolest movies to the latest Professor Green hip hop tracks – and consume training and education materials.

Well – possibly. A look at the suitability for this next generation of consumer devices for training content has produced some mixed conclusions. On the one hand, no one is being so sceptical as to say they have no place at all, but many are urging caution and suggest that it’s going to be a while before we are going to classrooms only carrying such devices to do our training.

Screens for training

Without doubt our workplaces are beginning to be populated with high-quality display devices. ‘We met this week with a global law firm that wants to put iPads in its meeting rooms with prepared video content to help users of the rooms navigate all their features,’ Sam Kinstrey, MD of 2e2, says. ‘There’s no doubt that there is growing interest in using these kinds of devices in the corporate context as targets for training content.’

Others, such as Nigel Chadwick, Managing Director of Stream Communications, find that customers are asking for larger and larger flat screens in contexts like shop floors to be platforms for displaying health and safety company policy and news announcements to employees. This approach allows information to be sent to all signs over the company’s internal mobile network and updated as needed, say, training as well as specific messages like ‘remember to do end-of-day checks’. Pirelli, one of Europe’s longest-established and largest tyre manufacturers, for example, is in the final stages of considering the use of this sort of technology to deliver training and employee information via large digital screens.

Learning apps

Then there is the growing rush to produce iPhone and other smartphone apps as training mechanisms. To take just one example, sales, management and leadership training specialist Sandler has just announced such an app, ‘offering instant access to tips, tools, charts, feedback and a whole lot more’, as its press release gushes.

Other learning apps that were successfully launched this year are, for example, ILX’s ‘Snakes & Ladders App’ for the iPhone and iPod Touch, which aims to reinforce core elements of the PRINCE2 Foundation and prepare candidates for exams with prompted questions. Epic released a learning app for smartphones, The First Aider, which brings to life the curriculum for the Emergency First Aid at Work certificate introduced by the Health and Safety Executive last October, and LINE Communications created an app for the Royal School of Artillery (RSA) to help train UK troops in the use of fire control orders on operation. It is used on the iPad and provides a multiplayer environment for use inside and outside of the classroom.

People are already downloading such content to consume them in ways that work for them. Take Chris Dodson, Business Director
at advertising agency Archibald Ingall Stretton, who gets content like regular podcasts on internet marketing, such as a new daily paid-for ten-minute ‘how to’ video on to his iPhone and iPad at work.

‘I use the content to bolster my own knowledge and apply it to my day job and I also share interesting things with my colleagues and clients,’ he says. ‘What I really like about the content and why I paid for the premium content is that it is up-to-the-minute, super relevant and hot off the press – it’s a valuable resource.’

‘In many ways we see this as just the next step in the progress of terminal devices beyond the laptop, and our users agree, saying they want to consume this when and where they want in their busy schedules,’ adds Kelvin Newman, Creative Director at the firm that produces the content, Site Visibility.

Skeptics
But all this enthusiasm and potential is balanced by the nay-sayers. ‘We have investigated the use of iPads, PDAs and Kindles in the learning environment and they just don’t work,’ is the stark verdict of Robert Chapman, CEO of IT training firm Firebrand. ‘At this moment in time, there is no simple way to highlight, make notes or annotate on digital courseware effectively. Until a smart device is released that can handle this, it’s something that’s not worth pursuing,’ he warns.

‘Students need the flexibility to be able to quickly and effectively highlight or annotate digital courseware. On the current crop of devices the benefit of the technology does not outweigh the simplicity of using a pen and pad. For as long as this remains, students and instructors alike will prefer printed material.’

Industry experts do acknowledge there are limitations on what the current generation of touchscreen, highly portable devices can do. Essentially, this is still a mainly one-way transmission of information; students can look at text, pictures, diagrams, listen to words or video, but it’s still not that easy for them to work with the material.

‘I’d just never recommend this kind of device as a way to do things like take notes – it’s just not there yet,’ says 2e2’s Kinstrey. ‘But I think that kind of functionality is coming and it’ll be soon – easily in the next 24 months or so.’

**Commercial considerations**
Functionality may not be the only obstacle to this class of handholds playing as big a role as they might be expected to in the training context. Commercial reasons play a part too, according to Firebrand’s Chapman. ‘Some content providers are issuing digital versions of their training material at the same price as the print version, which doesn’t make sense to us. If we want to print a copy for the students it ends up being more expensive, given the massive volume of courseware. Ideally we want great technology that’s an improvement on – or at least neutral to – the printed version, which costs no more, and ideally less, than the current print version.’

**I use the content to bolster my own knowledge and apply it to my day job and ... share interesting things with my colleagues and clients**

Chris Dodson, Archibald Ingall Stretton

One can’t help noticing that there’s something of a fuzzy line between e-learning and the use of these new devices; to some extent, we are just pushing things like podcasts to new, ‘better dressed’ destinations, as it were. And so in many ways the lessons the training industry has learned about e-learning applies with this delivery mechanism too: ‘Content just doesn’t work on its own, no matter how funky – students need a blended approach and a support system that brings them into contact with others to make it all work,’ says Paul Naybour of Parallel Project Training, which delivers project management training content by podcasts, among other media.

The flat-screen, super-sexy handheld is here to stay – that’s not in dispute. But it may take a little while for it to be more than just a really cool platform to listen to the e-learning podcast you used to take in on your ‘old’ mobile or PC. Until these devices can better help us actually work on them, it seems the really cool technology for a lot of training applications will remain pen, ink – and good old fashioned attention.

**Promising signs**

Globally, a number of initiatives and product developments are under way that suggest touchscreen-based education is set for take-off. Higher education seems to be leading the charge here. For instance, one of Singapore’s leading institutions of higher learning, Ngee Ann Polytechnic, has been talking about extending its student learning portal by making iPhones much more a part of the fabric. The idea is to integrate its back-office LMS and student admin systems with e-learning so the mobile in effect becomes another part of the teaching whole.

Meanwhile, a university in Texas, Abilene, has given free iPhones to some 2,100 students (just under half of the student body) to encourage better interaction in the classroom. Lecturers say that as so many students think there’s no point taking notes as they can get all the information they want off Wikipedia when they need it, it’s maybe better to get them to use their iPhones to look up relevant information and discuss the information they’ve found, with instructors leading a discussion on which sources are accurate and useful.

And in the UK trials have already taken place of classroom-based touchscreens – so beyond the now mainstream electronic whiteboards – created by researchers at Durham University, the so-called SynergyNet, which is said to allow two or more pupils to operate a special touchscreen desk at the same time and let them interact directly with a finger or stylus with materials delivered electronically.
Many people put e-learning and e-reference into the same box. That single misunderstanding can lead to whole projects failing, budgets wasted on the wrong system and frustrated users who cannot use what they have been given in a way that suits their real needs.

You have probably come across e-learning, mobile learning, computer based training (CBT), electronic performance support systems (EPSS), technology-enhanced learning (TEL), reference ware, toolkits, online classrooms and many other labels.

Let’s ignore the labels for a moment and look at the function these products are designed to do. At its simplest, it is about transferring information to the end-user so they can do their job more efficiently. (I can already hear cries of anguish from system providers saying that their system does far more than this.)

Actually, ignoring the labels is important because they often mean different things to different people. For example, I have yet to see an agreed upon definition of e-learning; what it is and what it isn’t. This can make the labels misleading and inconsistent.

Instead, think about what you want and what function from a system to help you get what you want. It is probably something like:

- users can do their job (better);
- users have better interpersonal skills;
- users can pass an exam for regulatory purposes;
- users can get information in the moment to solve problems;
- users can handle conflict and disagreement better and so on.

Now consider how the users would use an online information system in order to achieve your goals.
E-learning or e-reference System

outcomes. You will find that the style of use will fall into two broad camps, or somewhere on a continuum between them:

1. **Know it**: Absorb information so that it is available via memory recall in the future without recourse to the original information.
2. **Find it**: Access information that will help solve a problem now.

One catchy way this fundamental difference in function has been described is ‘just-in-case’ versus ‘just-in-time’. This, in a nutshell, is the simple ‘KiFi’ model.

**Form follows function**

When designing something, you need to first consider the function and only then create a design that will enable the product to fulfil its purpose. Think of how a car differs from a truck. They are both motorised transport, but they are different in form due to the differences in function. In the same way that you can look at a truck and recognise it as a truck rather than a car, you can do this with Know it and Find it systems.

A good Know it system will:

- be interactive;
- thoroughly engage users;
- offer the content in digestible chunks;
- have ‘what did you just learn’ tests with corrective feedback;
- guide the user through a subject area in a logical and sequential way;
- probably have audio, video and extensive graphics;
- cater for different learning styles;
- have other mechanisms for embedding learning such as repetition.

A good Find it system will:

- make it easy and intuitive to navigate through all the content;
- have an easy search feature and full indexing;
- have a wide breadth and depth of content (encyclopaedia approach);
- have practical content that is immediately useable;
- be extensively hyperlinked between content sections;
- probably be mostly text-based with diagrams and visuals where they are needed for clarity.

**User motivation**

One area where the form of a system must be congruent with the function is user motivation; a very hot topic for these types of systems. When users need to go through online modules to embed information and learning (know it) and there is no clear and immediate need perceived by them to learn the information, results are typically poor. It’s an accepted learning theory that adults learn best when there is some urgency and when they are motivated to learn through their own need rather than an imposed need.

It becomes obvious that the online course itself must provide motivation and user engagement if it is to be in any way successful. Good courses cater for this with lots of ‘seductive augmentation’ extras to engage the learner, and then keep them engaged throughout a module. This is often done with games, extra pictures, video stories with interesting scenarios and more recently full blown participatory games.

But even with all of this, busy users with full in-trays will not willingly invest time in learning something just in case they might need it one day. They will, however, invest time in finding information that will solve a pressing problem or question and help them deal with their full in-tray. A user will typically only access a Find It system when they actually need some information right now. Before they even click the mouse, they have an intrinsic motivation to use the system and find out what they need to know. Thus there is no need for any of the extras that have the role of seductive augmentation to engage and motivate, and in fact, if they are there, they often get in the way of finding the information needed.

**Define your ideal system**

If you bought a car to do a truck’s job, you would probably fail to do your task. The same logic applies with Know it and Find it systems.

If you buy the wrong system to do a job, you will probably fail to get the job done.

So which do you need? A car, or a truck, or both? You need to go back to what you are seeking to achieve. What is the true user need and thus the required function of the system? Now you can decide on the solution: Know it or Find it or both!
Coming next year - 2011

Planning for the year ahead is always a challenge, especially when budgets are as tight as they are at the moment. So what strategic planning assumptions (SPAs) should we make for next year – Alan Bellinger gets the ball rolling.

You really shouldn’t start planning the new year without making assumptions about its key drivers. That’s what strategic planning assumptions (SPAs) are all about. The format of each SPA is the assumption itself, the background to it and the way in which it is projected to play out in organisations where L&D is leading edge (the As), not well recognised (the Cs) and those in the middle (the Bs). In addition, I’ve added a confidence rating (0.1 means there is a low level of confidence in the prediction, whilst 1.0 is as high as it gets).

1. In 2011 gross domestic product will grow by 2.5 per cent (0.7).
   The Office for Budget Responsibility has forecast 2.3 per cent, but I’ve gone for 2.5 per cent. If that’s the average growth, training budgets should grow at a similar rate, however the relatively low level of confidence reflects the risk of a double-dip recession.

2. L&D budgets in the private sector will increase by over 2.7 per cent in at least 75 per cent of cases (0.8).
   Given a period of GDP growth, there should be an increase in L&D budgets, but it won’t be a uniform increase across all organisations:
   As – average 3.5 per cent growth;
   Bs – average 2.4 per cent growth;
   Cs – static.

3. L&D budgets in the public sector will remain static (0.7).
   Given the level of cuts, the forecast for public sector budgets is poor.
   As – increase by 1.5 per cent;
   Bs – static;
   Cs – decline by 2.5 per cent.

4. L&D’s relationship with HR will become tenser as organisations seek to capture further productivity savings (0.6).
   In many organisations, L&D needs HR in order to have the political clout to operate effectively across functional boundaries, but HR will be seeking to extend its reach as it becomes less involved with downsizing activities, leading to tension with L&D. This will be especially true for those organisations where L&D is not well recognised.

5. Management’s expectations of L&D will be significantly higher as a result of increased focus on performance management and working smarter (0.95).
   Management will require L&D to make a significantly greater contribution to value-add, even
though budgets may not reflect this. This will especially affect those L&D departments that are already recognised as adding value (As).

6. The fall in formal learning activities seen over the last two years will stall, but don’t expect it to witness any growth (0.8).

We are now much clearer about where formal learning should be applied, but that clarity will not necessarily lead to growth.

7. The growth in informal learning will continue and earlier initiatives will start to show returns (0.85).

Those L&D departments that have yet to support informal learning initiatives are letting their employers down.

8. LMS providers will have a difficult year and the market will stagnate at best (0.65).

For years the LMS has played an increasing role in the services that L&D provides, but that trend is now being reversed. However, many of the LMS providers might reinvent themselves in 2011.

9. The effective deployment of learning technologies will be a high priority for virtually all L&D managers (0.8).

Learning technologies will form a critical part of many L&D departments’ measures, and most organisations will develop a learning technologies road map.

As – done it already
Bs – a definite sweet spot
Cs – still just using e-learning

10. Skills assessment will become a major area of focus (0.85).

As informal learning plays an increasing role so the need for skills assessment grows too; ‘mandatory training’ is replaced by ‘mandatory assessments’.

11. The growth in social networking continues as more organisations derive real benefits from collaboration (0.99).

Organisations will significantly extend their use of social networking and the benefits derived will be better documented.

12. The providers of managed services will increase their market penetration by at least 5 per cent (0.7).

This increase in penetration will come primarily from the Cs.

13. The key benefits that L&D organisations can achieve through shared services will be largely captured and they will not be a significant area of focus (0.65).

Shared services result from centralisation of L&D activities that produce operational cost savings. But they have been largely exploited in 2010.

14. There will be a substantially increased focus on integrating learning and work as the ‘work smarter’ initiative gains more traction (0.8).

‘Integrating learning into work’ is pivotal to the change from a training mindset to a performance mindset, but not all organisations will recognise the opportunity.

15. L&D organisations will be much more focused on ensuring that there are provable outcomes to their L&D initiatives (0.99).

For years, measuring the outcome of training has been a ‘holy grail’, but new approaches to measurement and assessment will put it within everyone’s reach.

16. IT-based performance management (PM) with comprehensive dashboards and scorecards will be a key focus area for L&D managers (0.8).

Not to be confused with the conventional appraisal cycle, PM is IT-driven and uses the detailed metrics from business intelligence to produce comprehensive performance metrics.

17 IT-based talent management (TM) applications will make a significantly increased contribution to business planning and capability models as well as to organisational effectiveness (0.75).

With better identification of performance metrics and operational effectiveness, employees with strong development capabilities can be identified sooner and can be provided with development opportunities that enable their potential to be deployed.

18 L&D operations will develop ever more sophisticated approaches to stakeholder engagement and will be able to demonstrate effective governance (0.7).

Stakeholder engagement is critical to the L&D operation as it becomes more critical to the enterprise.

19 Certification programmes that can show a direct alignment between certification and performance will continue to gain traction (0.85).

IT NVQs as well as both supplier-neutral and supplier-specific certification programmes will continue to gain acceptance, although the L&D community will be much more demanding in looking for justification for the programmes.

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**Your comments**

This is a ‘starter for ten’: let’s collaborate and refine them and I’ll publish a final set in the next issue. You can add your thoughts on the IT Training site www.bcs.org/ittraining as well as on the IITT’s collaboration site www.thetrainingprofesionalnetwork.com
Informal learning wins hands down

‘Informal learning is more style than substance’ was the subject for debate at the Oxford Union and the motion was voted down by over 80 per cent of the audience. However, there was no lack of passionate argument on both sides – in best Oxford Union tradition. Alan Bellinger reports.

The case for

The case for the motion was opened by Dr Alison Rossett of San Diego State University. She argued that informal learning needed to be integrated into formal learning and therefore, that it couldn’t stand on its own. She said that there was no evidence that informal learning had any impact on the bottom line and that even the term informal was both ‘arrogant and irresponsible’. Lewis did recognise that new models of learning will evolve, but she was adamant that informal learning wasn’t ready yet to play a part in those models.

The last speaker in support of the motion, Mark Doughty, one of the directors at Deutsche Bank, referred to a poster he has on his wall quoting those five immortal words from Apollo 13: not ‘Houston, we have a problem’, but ‘Failure is not an option’. He argued that when those Houston scientists were searching for a solution, they didn’t turn to Wikipedia, but relied on the skills they had developed over years of formal learning. Doughty was adamant that, in a crisis, you needed to know that the skills people were using to resolve the crisis were comprehensive, realistic and developed in an appropriate way. When the ‘pressure is on, you can’t rely on Twitter or Google’.

The case against

The case against the motion was opened by Professor William H. Dutton, Director of the Internet Institute at Oxford, who presented the audience with a raft of statistics on the growing use of the internet. He argued that the internet had fundamentally changed the way we do things: when we don’t know something we look it up on Google; when we need goods and services, we don’t go to a shop, but buy it online; when we need to get a message to someone, we email it rather than using the phone. He concluded by arguing that ‘people who don’t trust the internet aren’t people who don’t use it.’

Dutton was ably supported by Jay Cross, who is Chair of the Internet Time Alliance. He highlighted that times change rapidly, and we need to change with them, saying that ‘even Google could decline in the future, although we’ll still need search technology’. He summed up by arguing that informal learning ‘brought knowledge from the cloud to the place of work at the point of need’.

The case against was concluded by David Wilson, Managing Director of Elearnity, who argued that informal learning is happening every day at most levels of the enterprise and that it builds ‘real capability and real performance’. He said that ‘it’s not controlled, but it is information-led; it’s not measured, but it does have substance; it’s not in frameworks, but it is appropriate.’ He said that learning was part of work and needed to be integrated into work. And he concluded with what many believed was a devil’s advocate argument: ‘If we view informal learning as something that has to be managed by L&D, then we’re on the wrong path.’

The debate was ably chaired by Rory Cellan-Jones, the BBC’s Technology Correspondent. And there was plenty of interaction from the floor. This was definitely a night at which supporters of informal learning were in the majority.

Informal learning is not measured, but it does have substance, it’s not in frameworks, but it is appropriate

David Wilson, Elearnity

www.bcs.org/ittraining
In a bid to boost careers and to accommodate the growth in IT service management in recent years and the demand in this sector for specialised professional qualifications that enable job specific skill development, BCS has launched a suite of six new specialist qualifications in IT service management.

The qualifications aim to help IT service management professionals keep abreast of current best practice and maintain a competitive edge in the employment market. They are the first of their kind to focus on specific service management job roles in an organisation.

Michiel van der Voort, Director, International and Professional Development at the Institute, said: ‘In response to the growth in IT service management we have worked closely with our accredited training partners and examiners to develop a set of qualifications that directly support the skills development of service management professionals worldwide. They provide industry recognition of specialist skills and knowledge and will help individuals and organisations gain the credit they deserve.

‘IT service management is an important element in any business. These qualifications are part of our drive to ensure that IT practitioners are supported in their careers and can realise their true potential. Maintaining and developing professional skills is important for every professional, even more so in a very competitive employment market.’

Each qualification focuses on a single IT service management process and provides detailed knowledge and information on how each process operates within an organisation, based on industry good practice. The six qualifications are:

- Service Desk & Incident Management;
- Change Management;
- Service Level Management;
- Business Relationship Management;
- Problem Management;
- Supplier Management.

The qualifications have been developed in conjunction with the Institute’s accredited training partners and examiners. They complement the ITIL scheme and provide an ideal stepping stone between the ITIL Foundation and ITIL Intermediate Qualifications in IT Service Management. All six have been endorsed as ITIL complementary products each attracting 1.5 credits towards the ITIL Expert award. To ensure industry relevance, the qualifications are not limited to ITIL though; they also embrace COBIT, ISO/IEC 20000, and SFIA/SFIAplus.

‘Professional development against a recognised standard is critical for the effective assessment, recruitment, retention and reward of IT practitioners,’ continues van der Voort. ‘We have ensured that our new specialist qualifications map to SFIA and SFIAplus to ensure that they are relevant to both an individual’s career path and to an organisation’s skills framework.’

The Institute formally launched the new qualifications at this month’s itSMF UK Conference where IT professionals, employers and training providers were able to talk to BCS directly about the new qualifications, including how they support career development, increase the skills and capabilities of an organisation and offer the chance to provide a complete portfolio of service management training courses and qualifications.

BCS are now in the process of working with a number of training organisations, who are developing their training material, to deliver the new qualifications to employers and candidates across the world.

For more information on the new qualifications please visit www.bcs.org/iseb/specialist
Teaching adult learners

Paul D. Jagger, Business Area Manager for IBM Learning Development (Europe), takes a reflective look at Preparing to Teach in the Lifelong Learning Sector, an entry-level qualification in adult learning.

Preparing to Teach in the Lifelong Learning Sector (PTLLS) is the entry-level qualification required of anyone teaching in the further education sector on publicly funded programmes. The qualification became mandatory for new entrants to teaching in 2007, and by the end of 2010 all existing tutors, trainers and lecturers in further education are required to achieve this qualification.

The qualification is mapped to the Qualification Credit Framework (QCF) at level 3 or 4, with the student and tutor agreeing at the outset of the programme which level to aim for. The learning outcomes remain the same, the only difference being the assessment criteria for each of the assessed components of the qualification.

PTLLS and L&D

The qualification is directly relevant to anyone who aspires to be a better tutor, teacher, trainer, lecturer, instructor, facilitator or, as I prefer, L&D professional. Candidates for the PTLLS qualification do not need to be working in the further or higher education sectors and the award is equally valid (with some limitations explained later) as an entry level qualification for those L&D professionals working in the third or private sector. The content of the programme aims to provide a solid grounding in the theory and practice of adult learning, irrespective of subject matter. It is, in many ways, a ‘back to basics’ experience, but a rewarding and worthwhile one nonetheless.

In 2008, the Institute of IT Training (IITT) announced that its Trainer Performance Monitoring and Assessment (TPMA) programme would be aligned with the QCF Level 3 or 4 competencies identified by the PTLLS qualification. In short, this means that TPMA assesses against the same competency model as PTLLS. Also, the IITT has recently begun offering PTLLS as a qualification through its Academy, whilst TPMA assessment, leading to the IITT/BCS Institute Certified Training Practitioner (ICTP) Award, is delivered through the IITT’s authorised centres.

Structure

The PTLLS programme requires a total of 30 hours of classroom contact time. A typical part-time evening programme will last 10 weeks, with each class lasting three hours, with an average of two hours a week of additional study and assignment writing. Having completed the programme, I would recommend others to follow a programme spread out over a number of weeks, as time is required between classroom sessions to conduct research, write up assignments and prepare lesson plans and presentation materials.

The precise structure of the programme differs slightly from one provider to another. However, all PTLLS programmes will include elements such as the teacher’s role, responsibilities and professional boundaries; some theories of adult learning; motivating learners and strategies for dealing with barriers in learning; referral and support for learners with special needs; planning a programme of learning; planning a learning session; differentiation in the teaching environment; assessment methods; and a micro-teach (short teaching) session.

Assessments

The PTLLS qualification is achieved through the successful completion of a series of assignments. These include several written assignments, the completion of a reflective learning journal, planning a short teaching session, delivery of a short teaching session and the completion of a micro-teach (short teaching) session.
of a portfolio of evidence.

The micro-teach session is a 30-minute opportunity for the student to practise what they have learned in front of their colleagues. Students are expected to apply the lessons learned in the courses to plan, develop, deliver and evaluate a lesson on a subject of their choice. Typically the micro-teach session will be recorded and feedback will be gathered from the fellow students and tutor immediately after the micro-teach.

There is no formal examination in the PTLLS programme; however, it should include a series of informal assessments during the teaching alongside the assignments. These assignments are gathered in to a final portfolio (sadly still required in paper format) that will be assessed and sent to the awarding body for moderation. Throughout the studies, there is also great emphasis on personal reflection as well as giving and receiving feedback.

Recognition and follow-on

There are two primary awarding bodies in the UK who accredit providers to deliver the PTLLS programme, the OCR (Oxford, Cambridge and RSA Examinations) and City and Guilds.

Successful students generally receive their qualification (strictly speaking, an ‘award’ in the terminology used by the Qualifications Curriculum Framework), from one of these bodies. Then there are two relevant professional bodies that recognize PTLLS as a qualification criterion for membership at various grades, namely the Institute for Learning (IfL) and the IITT, when PTLLS is taken at QCF Level 4.

There are two follow-on qualifications, one aimed at those seeking Associate Teacher Learning & Skills (ATLS) registration and another aimed at those seeking Qualified Teacher Learning & Skills (QTLS) registration:

- Certificate in Teaching in the Lifelong Learning Sector (CTLLS), a QCF Level 4 qualification leading to ATLS registration through the IfL;
- Diploma in Teaching in the Lifelong Learning Sector (DTLLS), a QCF Level 5 qualification leading to QTLS registration through the IfL, equivalent to a Professional Graduate Certificate in Education (PGCE).

There is also a qualification entitled the Post Graduate Certificate in Education (PGCE), which is a QCF Level 7 academic qualification conferring post-nominal letters – just to confuse matters. QCF Level 7 is equivalent to FHEQ Level M. It takes some very clever academics to create this cats’ cradle mess of qualifications all addressing the same fundamental need – a teaching qualification.

Weaknesses?

One of the drawbacks of the PTLLS programme is that it is centred on the assumption that all learning takes place in a physical classroom setting, facilitated by a professionally qualified teacher, tutor or trainer. There is no coverage of informal learning, social learning tools or technology-based learning. There is no discussion on the validity of learning styles theory or wider issues of adult and workplace learning.

It also ignores the ‘elephant in the room’ of learning programme evaluation. There is an implicit assumption that once the needs of the learners have been fulfilled, the learning programme has been a success. No consideration is given to the needs of the sponsoring employer, the organisation funding the learning, or stakeholders outside the classroom.

A perfect example of this omnipresent ‘elephant’ was demonstrated in my programme: One of my fellow students was responsible for a course aimed at giving young offenders an alternative to a custodial sentence. The programme was judged to be a success if the students turned up each week, completed the assignments and the end-of-course exam. No consideration was given to whether the student immediately reoffended after the programme, re-entered the criminal justice system and ultimately ended up in jail.

In conclusion

To be fair to the programme, my views are those of a consulting L&D professional in the private sector. I believe that the programme would be best served if the preparation was for best practice in L&D as the starting point rather than being based on a qualification that was relevant more than 20 years ago (the curriculum for this type of award has not changed much in that time).

The programme itself is a rounded foundation in adult learning that complements the experience I gained earlier in my career as an IT trainer. For those L&D professionals who spend a significant part of their working year delivering learning, the programme is ideal. For those in roles such as learning project management, instructional design, content development and learning consulting, the programme is less relevant and other qualifications may prove more applicable.

Further information

City & Guilds website
www.cityandguilds.com

Telling Ain’t Training
www.astd.org/content/publications/ASTDPress/bookSearch/TellingAintTraining.htm

Preparing to Teach in the Lifelong Learning Sector
www.learningmatters.co.uk/title.asp?MyBid=538

www.bcs.org/ittraining Winter 2010 IT Training 29
Effective C#: 50 Specific Ways to Improve Your C# (2nd ed)
Bill Wagner, 352pp
Addison-Wesley, £28.99

Rating ★★★★★

When you’ve learned a new language, it’s easy to just start writing code that, when you look back at it, is abysmal. Practices and idioms that work well in one language don’t always transfer well to another. The Effective Software Development Series from Addison-Wesley tries to prevent you from doing that, and this book succeeds very well.

It reflects the style of the original Effective C++ books, written by Scott Meyers, perhaps unsurprisingly as he is the consulting editor for this series.

Starting with the basic C# idioms such as the use of properties instead of accessible data members, optional parameters and small functions, the author takes time to explain why you should follow the recommendations in each item. This is certainly not a typical coding-standard approach of ‘do as you’re told because I say so’.

The second chapter of the book describes the best ways to handle resource management in .NET. This is an area that can appear deceptively simple to the beginner, but is not always so. The advice given here should steer anyone away from making mistakes that will come back to haunt them.

The third chapter covers expressing designs in C#, and gives sound advice on implementing features of design patterns in C#. This gives a sound basis for users to implement the usual patterns found in complex systems.

Chapter four contains plenty of advice on how the latest version of the .NET framework can be used to write code more productively than earlier versions, including ways of implementing parallel algorithms using PLINQ. The coverage of the latest version of the library continues in chapter five, which describes the best ways to use dynamic types and late binding in your code.

Rounding off with a miscellaneous section that includes a much-needed item on the correct use of exceptions, this book is a great way to improve your C# coding. It’s a little repetitive in places, but overall it’s an essential purchase for the serious C# developer.

Reviewed by Jason Ross
MBCS CITP

The Future of Thinking: Learning Institutions in a Digital Age
Cathy N. Davidson, David Theo Goldberg, 320pp
The MIT Press, £12.95

Rating ★★★★★

I am fascinated by the future of thinking; the rate of knowledge obsolescence, new ways of acquiring skills and the profile of knowledge in the 21st century make this an area in which it’s critical to keep up to date. But before you go to buy this book on the strength of that first paragraph, do read the subtitle. This book is not about the future of thinking, but the future of learning institutions.

Oxford University was founded in the 12th century – among institutions, only the Catholic Church has been around longer in the west. But given the change in expectations of both students and employers, the question that this book addresses is how educational institutions should change to better meet today’s needs.

The book is a great example of processes for successful collaboration. It began as a draft in 2007 when it was posted on a collaborative website and comments were received from a wide congregation; further, three public forums were held and the list of collaborators runs to nine pages. The result is a very strong analysis of the requirements of learning institutions in the future and a vision of their role as ‘mobilising networks’.

Given the current debate around higher educational establishments in the UK and the coalition allegation that the current model is unsustainable, you would have thought that the timing of this book (published in March 2010) was absolute perfection.

The problem is that the closest it comes to a conclusion is to set out ten principles for the future of learning institutions. These are both insightful and (arguably) self-evident.

There is an acknowledgement that the traditional view of academia is one of ‘hate the institution, but I love what it did for me’, and the consequential demand that the institutions must change. But the over-arching issue is how. The authors of this book acknowledge that they don’t have the answer – the final chapter is titled ‘In)Conclusive: Thinking the Future of Digital Thinking’. So whoever writes the book that does come up with the answers is on to a real winner!

Reviewed by Alan Bellinger

Self study

Book reviews

Our IT experts review a selection of recently published books covering an array of subject areas. For more reviews, see: www.bcs.org/bookreviews

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Effective C#: 50 Specific Ways to Improve Your C# (2nd ed)
Bill Wagner, 352pp
Addison-Wesley, £28.99

Rating ★★★★★

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Cathy N. Davidson, David Theo Goldberg, 320pp
The MIT Press, £12.95

Rating ★★★★★

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Reviewed by Jason Ross
MBCS CITP

Reviewed by Alan Bellinger
Business Analysis Techniques: 72 Essential Tools for Success

James Cadle, Debra Paul, Paul Turner.

250pp

BCS, £29.95

ISBN 978-1-906-12423-6

Rating ★★★★★

Business Analysis Techniques: 72 Essential Tools for Success has been written by three eminent business analysts much experienced in their field. As an employee of BCS I was fortunate to be able to acquire one of the first copies printed and I haven’t put it down since. I’d like to point out that even though I’m an employee I’ve written this as an analyst, not as an employee.

It’s a book I’ve always wanted and now it’s here it’s better than I could ever have imagined. Each technique is carefully explained with the help of diagrams, and key points to note clearly headed. The language is simple but informative and is clearly structured. This makes it an extremely useful reference book where you can easily pinpoint the answer you are looking for and it makes it a pleasure to read.

Additionally the techniques are grouped into useful chapters: business strategy and objectives, investigate situation, consider perspectives, analyse needs, evaluate options, define requirements, and manage change. Each chapter has its own introduction and a minimum of five techniques to ponder over.

If ever you’re sat doing an analysis job and wondering about a good approach to take, this has to be the starting point. Even if you have a fair idea of what slant to take, this book will always give you a different point of view and alternative suggestion. It helps to remind you of the things you have forgotten, teaches you things you didn’t know and really gets you thinking about the best way forward.

The book is called 72 Essential Techniques. I’ve never known such a good title, it is essential and I’m wondering how I managed without it.

Reviewed by Abigail Newton MBCS

Data Modeling, A Beginner's Guide

Andy Oppel, 386pp

McGraw-Hill, £28.99

ISBN 978-0-071-62398-8

Rating ★★★★★

Data modelling is one of the only areas of computer science that the majority of people working in IT are likely to touch upon at some point in their career. Data is fundamental to the operation of all systems. Understanding how to model information, or at least how to understand the models produced by others is an essential skill. It is also an area where inconsistent understanding of concepts can be exacerbated by database management system vendor-specific implementations and approaches.

The book is aimed at the beginner and assumes no prior knowledge. It is also aimed at the professional working in the field who wants to expand their knowledge or perhaps to simply reaffirm their understanding of the fundamentals. The book covers database system development, data modelling and database design techniques.

Throughout the book an ‘implementation independent’ approach is used to establish understanding of the principles of design and modelling without concern for vendor-specific approaches.

Each chapter is well structured and designed to impart just the right amount of information to support the reader in the decisions and issues they need to be thinking about. All the concepts in the book are presented in a clear and concise manner, but it is in no way patronising. It identifies and describes all the activities and information necessary to make good design decisions. It also provides a good distillation of industry best practice in relation to database design issues, such as approaches to temporal data.

The book would be excellent supporting material for a computer science degree course or as a reference for the professional working as a database administrator or a data architect.

Reviewed by Dean Burnell

CSS Detective Guide: Tricks for Solving Tough CSS Mysteries

Denise Jacobs, 288pp

New Riders Publishing, £25.95


Rating ★★★★★

The book is clearly written and contains genuinely useful tips and tricks to get your CSS style sheets to behave. It’s split into two main parts; in part one we learn about the tools to use to investigate issues and some of the quirks of various browsers.

In part two there are six separate examples of problem CSS and each one is carefully described and solved. This is where I think the book fails: there are pages and pages of output and you find yourself flipping backwards and forwards between the source code and the screen shots. I searched the newriders website but could not find a downloadable version of these cases, which means that they become more of an academic exercise rather than hands-on experience. Overall it’s not a bad book, but it could be better with downloadable materials.

Reviewed by Peter Daly

CEng CITP

For further information on these books please contact the sales team at C.B.Learning.

Tel: 0121 702 2828
Fax: 0121 606 0478
info@cblearning.com
New certification: Live online event facilitator

The Institute of IT Training (IITT) has launched a brand new certification programme that will provide learning and development (L&D) professionals with essential online training environment skills, consisting of 14 hours of live online instruction, together with self study assignments and an assessment of those skills in a live environment.

The new certification is aimed at L&D professionals, irrespective of the subject matter, who want to build their expertise in delivering effective live online learning events. It provides the skills to maximise the engagement of remote participants, develop and produce engaging and interactive online content that will help participants learn online, and the techniques necessary for facilitating and managing live online learning events, meetings and webinars.

Although some training delivery and facilitating experience is beneficial, it is not mandatory as the essentials are covered in the workshop. However, in this case delegates may expect to spend more time in the self-directed study assignments.

‘Today’s organisations require L&D professionals to do more with less. They are being asked to deliver learning to more people, with less budget, and provide learning events that will save money but deliver increased business performance,’ explained IITT Chief Executive and architect of the programme, Colin Steed.

‘Live online learning – also called synchronous learning or virtual learning – can deliver this to organisations, but there are fundamental problems facing L&D management. The success of live online learning events depends entirely on the quality of your L&D professionals’ skills in facilitating live online events,’ he said.

Leading global L&D commentator Nigel Paine welcomes the new certification programme. ‘There has been a veritable explosion of live online learning over the last few years and that dramatic increase will continue as companies see the value of linking their staff to an expert in real time without having to ferry everyone to the same place. The skills for this new kind of teaching are ill-defined and vague. This initiative will be welcomed by all of those involved. It will increase the quality of teaching and, therefore, the benefit back to the company providing the learning. Everyone wins.’

Bob Mosher, Chief Learning & Strategy Evangelist, LearningGuide Solutions, agrees. ‘IITT lead the way in the classroom delivery standards and competencies and are about to do the same for the online training side. This is an invaluable certification for anyone who wants to excel in this space. Having a validated certification is a must to be successful in this emerging and powerful discipline.’

The BBC Academy’s Manager of Online and Informal Learning, Nick Shackleton-Jones, adds: ‘Organisations are looking for improved flexibility and efficiency by delivering events and training online. A common – and costly – mistake is to assume that the same skills are required for both live and online formats. It is good to see that the IITT offers credible learning and certification in this area.’

To find out more visit www.thetrainingprofessional.com or contact the certification team at the IITT on 0845 006 8858
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<th>Date</th>
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<td>27 October</td>
<td>Join in and link up – How to set up a LinkedIn profile and start connecting</td>
<td>LinkedIn is a powerful professional networking site that allows you to establish an online presence and use it as part of your social media strategy. This webcast will show you how to get started, how to build your network of connections, set up your own networking groups and manage your profile.</td>
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<tr>
<td>27 October</td>
<td>Windows 7 – not just a pretty face</td>
<td>Looking behind the user interface, Windows 7 has many powerful new features, such as libraries, jump lists and search options. Stuart Box, of Burningsuit, will show you how you can make Windows work for you.</td>
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<td>28 October</td>
<td>Postgraduate Diploma in Training, Learning &amp; Development</td>
<td>In this interactive session, Cambridge University’s Nigel Kettley and Judith Roberts will take you through the Postgraduate Diploma in Training, Learning &amp; Development, which has been approved by the IITT for Fellowship grade.</td>
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<td>4 November</td>
<td>Are your training materials DDA compliant?</td>
<td>The Disability Discrimination Act and the Disability Equality Duty legally obliges most British organisations to proactively provide accessible information to stakeholders with visual impairments and dyslexia. This 30 minute webinar, presented by Rachel Bagust, will help you to ensure your organisation is compliant.</td>
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<td>11 November</td>
<td>Top tips for excellent instructional design</td>
<td>More and more organisations are bringing their e-learning development in-house, taking advantage of rapid development tools to produce new courses. This webinar intends to give subject matter experts and training managers the tools they need to produce effective training material.</td>
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<tr>
<td>18 November</td>
<td>ITT accreditation for internal training departments</td>
<td>One of the IITT’s independent accreditation consultants, Michelle Parish, takes you through the benefits and process of ITT accreditation for training departments. In this session Michelle presents what the process for accreditation involves, the outputs in terms of reporting/recommendations and the real benefits to your department.</td>
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<tr>
<td>18 November</td>
<td>ITT accreditation for training providers</td>
<td>In this seminar Michelle Parish takes you through the benefits and process of ITT accreditation for training providers. This session presents what the process for accreditation involves and the real benefits to your organisation.</td>
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<tr>
<td>24 November</td>
<td>Painless presentations: for you and the audience!</td>
<td>Stuart Box, of Burningsuit, will show you how to give a presentation that gets your point across and keeps your audience attentive. Whether online or face-to-face, you can use these simple tips to improve your presentation style.</td>
</tr>
<tr>
<td>8 December</td>
<td>Home and away – using the cloud</td>
<td>This session shows you how you can use the mobile internet and remote working facilities to work anywhere, using the cloud and document and task sharing technology to securely access your working environment anywhere and at any time.</td>
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<tr>
<td>6 January</td>
<td>Designing effective e-learning interactions</td>
<td>When asked to define good e-learning, most people would say it should be interactive. But what does that mean? This session, presented by Stephanie Dedhar, will offer useful ideas for designing effective e-learning interactions.</td>
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For an up-to-date list of webinars and to register visit [www.thetrainingprofessional.com](http://www.thetrainingprofessional.com)
The webinars are free to all IITT members. If you are not currently a member, but would like to find out how to join contact the IITT on 0845 006 8858 or email mpateman@iitt.org.uk

For more information about the Institute of IT Training visit [www.iitt.org.uk](http://www.iitt.org.uk)
There is no question that social media is transforming our personal and business lives. I won’t reiterate the statistics because you know already what a fundamental difference it makes to be connected so comprehensively and so continuously, using social networks, blogs, Twitter, wikis and content sharing. Whether or not learning & development (L&D) professionals or senior managers embrace social media doesn’t really matter in the long run, because there is no turning back, only futile resistance. The internet and mobile technologies are changing our lives as completely as the invention of writing, printing, the telephone and radio/TV have done in the past.

However, should senior managers and those in L&D want to try and direct the use of social media to ensure a positive impact on learning and business performance, then there are at least four areas at which they can look:

**Formal learning:** There is considerable scope in longer, blended programmes, such as professional and postgraduate qualifications, and management development programmes to use social media as a vehicle for ongoing group collaboration. Examples include the use of forums to discuss issues and share ideas; the use of blogs as learning journals; the use of wikis for group collaborative projects; and the sharing of research using podcasts, videos and other content forms.

The exciting aspect of these approaches is in the changing role of online content, less as a top-down input from tutors and more of an output from students to be shared with peers. I have been using these techniques for something like five years now and have never encountered any resistance. In some cases the results have been transformational. Asynchronous (self-paced) group collaboration of this nature has no precedence in old media – it simply wasn’t possible before.

**Non-formal learning:** Social learning also has a place outside the scope of formal courses, but still in the cause of ongoing personal development. The most obvious example is the use of online communities of practice to share new ideas and debate issues, but those in more of a hurry are now as likely to use micro-blogging services such as Twitter and Yammer to quickly update peers on new developments.

**On-demand learning:** A great deal of learning takes place on-demand, at the point of need. Organisations can do their best to satisfy the needs of employees for on-demand information, but they will rarely be able to cover it all on a top-down basis. The gaps can be filled using social media. Employees can use social networks to find sources of expertise or offer their own expertise to others; they can also share their own content, whether textually, as screencasts, podcasts or videos in the familiar YouTube fashion. One of the best examples of this can be found in BT’s Dare2Share project, based on Microsoft SharePoint.

**Experiential learning:** Learning at work is as much about ‘learning from’ as it is ‘learning to’. We learn through our own experiences and the experiences of those around us, but only if we make a conscious effort to reflect. Here is where blogging can play a valuable role.

I know this discipline will not be for everybody, but for those that really engage with the medium the opportunities for learning exceed all others. Writing a blog post to capture an idea or review an experience forces you to reflect and clarify your thoughts. It greatly amplifies the possibility that the experience will be a lasting one – in other words you will have learned something.

Of course we have got by without all these techniques in the past and many organisations will make a determined effort to get by without them in the future. They may do this with the best of intentions, but they will be missing opportunities, opportunities that their more agile and forward-looking competitors may well be exploiting. Social media at work is not for every situation – it works best where expertise is widely distributed and employees have some discretion over how they spend their time. It also depends on a culture where knowledge-sharing is valued and rewarded, but that leaves plenty of us with a whole load of possibilities to work with.
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