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MAIN FEATURE:

Designing high-impact learning: Translating research into practice

ALSO IN THIS VOLUME:

- Experiencing leadership
- Aligning virtual learning with business need
- Developing leaders for a world of uncertainty, complexity and ambiguity
- Generation Y and learning
- Perspectives: Leadership challenges

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Contents

My angle

Imagine a future in which robots have biological brains and neural implants link the human nervous system bi-directionally with the internet. Far from being the stuff of sci-fi movies, advanced electrode technology is making inroads, quite literally, into human consciousness. Kevin Warwick, Professor of Cybernetics at the University of Reading, revealed the details of his ‘Cyborg Experiments’ to the audience at the *Future of Learning* conference at Ashridge in August. While Professor Warwick can play the part of a consummate entertainer, his ground-breaking work is driven by a serious scientific agenda: to advance the treatment of neural illnesses. His work also shows what can be achieved when academics make connections across disciplinary boundaries.

The *Future of Learning* conference sought to foster cross-boundary learning. The organisers wove together design concepts from across the continents – from Ashridge in the UK, Mt Eliza in Australia, and the University of Cape Town in South Africa. Similarly, the audience came from higher and executive education, from academia, and from the commercial learning community, joining together in a lively exchange of ideas and practices.

Learning across boundaries has been a theme of management and leadership development for some time, both in the design and in the intended outcomes of a development experience. Use of metaphor and storytelling, music and drama, the physical and the psychological, the neurological and the physiological, are variously combined in the design of the development opportunities offered by business schools, consultancies and in-house training providers. I suspect that the professionalism with which these learning mechanisms are combined is also ‘variously’ applied. However, there are many examples of excellence in this field: individuals who can combine mastery of knowledge with skilful learning facilitation, and organisations that have slick processes in place to ensure that the design of a learning experience is rigorous and appropriate to the client need.

In this issue of *360°*, Ashridge faculty nail their colours to the mast, discussing their beliefs about learning as informed both by their research and experience. In the first article, *Designing high impact learning environments*, Ellen Pruyne surveys the academic research on learning and translates it into guidelines for high impact learning in three key areas: learner relevance, brain capacity and the degree of challenge.

This issue also places the role of experience in learning centre stage, recognising that formal education, however good, can only ever be a small part of an ongoing process of learning and development. Bringing experience into formal education is one way of expanding its reach and Megan Reitz in *Experiencing leadership* explains the importance of creating emotionally charged experiences, both positive and negative, for genuinely fundamental learning. In order to maximise such learning, the role of a skilful facilitator comes to the fore in their guise as a so-called “guide on side”. In the *Perspectives* piece, Dave Bond, Narendra Laljani and Stefan Wills discuss the role of business schools in leadership development.

We have all experienced the impact of the global economic crisis to varying degrees. Through their In the *Thick of It* research, Andrew Day and Kevin Power found that two of the major demands placed on leaders in recent months have been the containing of anxiety and the need to make sense of messy situations. Educational experiences that enhance the capacity for individuals to hold ambiguities in tension often incorporate a component of shared learning, leveraging the experiences of others in similar circumstances.

The theme of shared learning is one that remains prominent in good times as well as bad. The next generation of workers expects collaborative learning experiences, and values ‘doing’ over ‘knowing’, according to *Generation Y and learning*. The shadow side of Generation Y’s aptitude for problem-based learning and speedy problem resolution is a tendency toward shallow learning, devoid of reflection. The authors argue that Generation Y needs particular prompting to review and capitalise on each experience in order to deal better with the next.

Inevitably, technology and the future of learning are inextricably linked. Younger generations of technical natives have been driven by technical advances in their development of social learning habits and their expectations of information immediacy. In *Aligning virtual learning with business need*, Tony Sheehan argues that now, more than ever, virtual learning is about providing access to quality learning materials and quality information. To work, it should provide both shared learning experiences and on-demand learning, for all sections of the population.

I would like to conclude with a reference to Dr. Fridtjof Nansen, inspired by his biography which I am currently reading. Perhaps known best for his attempt on the North Pole in the 1890s, this remarkable Norwegian revolutionised polar exploration, made significant contributions to the fields of physiology and oceanography, and somehow balanced dedication to scientific advancement with a later career in international diplomacy and aid – Nansen won the Nobel Peace Prize in 1922 for his relief work with Russian refugees. The essence of Nansen’s astonishing, if intimidating, catalogue of achievement, was passion: he followed his heart and this drove his immense intellect and skill to positive ends. Our own achievements may be somewhat more modest, but to discover what makes us ‘tick’ and follow a trajectory that reinforces that purpose, will enhance our ability to learn and develop effectively in service of our chosen ends.

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Designing high-impact learning environments: Translating academic research into learning practice

The challenge now facing HR and learning and development professionals is to design learning environments and experiences that have high impact, and then to assess these to demonstrate that significant, measurable outcomes have been attained.
Ellen Pruyne calls for greater attention to learning design, guided by state-of-the-art research from a variety of fields and disciplines.

The current learning and development challenge

In the wake of the economic crisis there are escalating pressures on HR departments and learning and development (L&D) professionals to justify expenditures on management development and staff training. Increasingly, Boards and senior managers are demanding concrete and compelling evidence that L&D activities are effective, aligned with organisational strategy and contributing to the achievement of business results and organisational objectives. Line managers are turning down L&D opportunities for both their subordinates and themselves unless a persuasive business case can be made. Gone are the days of blind faith, when the training of executives in how to be good managers or leaders was simply assumed to translate into beneficial outcomes at the team and organisational levels.

If there is one word that characterises the new world facing HR and L&D professionals, it is undoubtedly *impact*. And if there is a particular challenge that now faces these professionals, it is one of understanding, explaining, institutionalising and demonstrating the impact of activities and programmes intended to promote learning and development. There are at least two important ways in which L&D professionals are being called to do this. First, they are being asked to design, or to oversee the design of, high-impact learning environments and experiences – the understanding, explaining and institutionalising part of the challenge. By 'high impact' we mean the achievement of desired outcomes in terms of individual learning and development that persist over time and contribute to the attainment of positive outcomes at the team and organisational levels. Second, L&D professionals are being charged with assessing outcomes and measuring results to demonstrate that significant impact is being attained. These responsibilities – learning design and assessment – require that such professionals become proficient in defining the nature and degree of the desired impact and in deciding the optimal ways to achieve and measure it.

The state-of-the-art in learning research

The experiential learning model of David Kolb and its companion *Learning Style Inventory* have been one of the most influential approaches in learning environments, including executive education programmes, for close to 40 years[1]. It is easy to see why this is the case, as it is a well-researched approach that has proved itself widely useful in education and training contexts. And yet the model is not without its detractors[2] and it is but one among many perspectives on how individual learning occurs. Nevertheless, it continues to be the only learning model that many institutions and organisations employ to guide them in their design of learning environments and interventions.

We are now awash with learning riches and have a multitude of options for supplementing the Kolb model. There is a plethora of learning theories, models and frameworks, not to mention empirical research in a number of disciplines, that can contribute to and enhance our understanding of how to support and facilitate the learning process. The challenge is not in the search for relevant literature but in determining which of the many sources available are especially worthy of our attention. In some disciplines, such as research on the brain, it is challenging for the scientist, let alone the interested practitioner, to try to keep up with developments in the field. Where is the payoff for the L&D practitioner in this burgeoning literature? And even more importantly, are these sources accessible and able to be translated readily and easily into individual and organisational practice?

The bottom line is that not all learning theories, models and concepts are created equal. Some are interesting ideas, but on further scrutiny that's all they turn out to be, as they have little or no empirical research to validate them. Alternatively, there are some that have been put through a rigorous process of testing and validation and proved themselves to be real and robust. It is these theories and concepts that hold special promise in terms of being translated into practical learning methodologies and techniques that produce significant impact. Thus these are the ones that appear worthy of the significant amount of time we can expect to spend in identifying, comprehending and translating them.

At Ashridge we have found several academic literatures that are proving especially legitimate and useful. We have turned to the dynamic skill theory of Fischer and his colleagues[3] in order to understand the developmental processes by which individuals learn and develop. We have come to terms with what facilitates and inhibits individual change by reading the work of Prochaska et al[4] on self-changers and the writings of Kegan and Lahey[5] on immunity to change. Ericsson's[6] research on expertise and Csikszentmihalyi's[7] research on highly creative individuals have helped us to understand 'learners extraordinaire', those individuals who have mastered the art of lifelong learning and turned it into worldly success. And of course no one is literate in learning these days without some exposure to the rapidly accumulating research on learning and the brain (for example Frith[8] and Medina[9]).

Once L&D resources such as these have been identified and comprehended, the real trick is in translating their findings into concrete practice. Some books and articles have been written expressly for the practitioner market, and their authors have been generous in recommending how to apply the findings in organisational and/or individual contexts. However, in many cases, and particularly with some of the brain research and with dynamic skill theory, the translation can be quite challenging to the non-specialist. It is for this reason that many organisations are hiring Chief Learning Officers who are already well-acquainted with adult learning theory. And it for this reason that we have invested significant time and effort in deriving learning principles and guidelines from the robust academic literature. We find that this investment has paid off in contributing to our understanding of the individual learning process and facilitating our ability to bring about participant learning on a more meaningful and consistent basis.

Learning principles and guidelines: some examples

In this section we review three concrete examples of how the academic literature can be turned into principles and guidelines for high-impact learning. These examples address three separate and distinct learning challenges: relevance to the individual learner, features of the learning environment, and the physical needs of learners.

At first glance these learning principles may not appear to be new and earth-shattering. However, in our experience across many organisations and contexts, it is striking how often these principles are not incorporated into the actual design and delivery of learning environments and experiences. Programme designers and teaching faculty tend to cram as much material as possible into programme sessions in their desire to offer maximum value to participants. We have found that, if they offer less material and pay more attention to learning principles like the ones presented below, they tend to see a noticeable difference in participant engagement, 'happy sheet' feedback and measurable learning outcomes.

Learning principle 1: Make it relevant to the individual learner

In recent learning assessments we have been receiving a consistent message from programme participants that they want what they learn to be directly relevant and applicable to their work. In pre-interviews before the programme begins they emphasise that "it's all about making it helpful to me in my role" and in post-interviews they again state that what was "most valuable was… applying it to what we do." Participants make it abundantly clear that concepts and frameworks that have no personal relevance, no matter how intellectually stimulating or sexy, are not valued or embraced.

The research on learning and the brain is in perfect accordance with the learning preference being expressed by our participants. Individuals construct their understanding of something new and unfamiliar by making sense of it in terms of what they already know, i.e. their existing knowledge and skill base. The brain is a vast and complex network of neural pathways and connections, much like a national transport system. If a new piece of road is constructed but never connected to the overall system, it does not get used and eventually falls into disrepair or gets replaced with something else. Likewise, unless a new concept or framework is explicitly linked to something with which the individual is familiar, a process called 'bridging' or 'bootstrapping', it is unlikely to be put to regular use and laid down in long-term memory. The neural circuitry in the brain – the internal road system – remains essentially unaffected by this new learning.

Although it may appear fairly easy and straightforward to apply this 'principle of relevance to the learner', it can be trickier than expected in practice. I have seen learners state in no uncertain terms that a particular model, concept or example is just not relevant to their work because it is from a different sector, industry, country, or some other differentiating variable. Although L&D professionals are able to see the relevance across contexts, programme participants are often unable to do so without specific and concrete help.

There are a number of strategies that business school faculty and L&D professionals can use to help participants construct this bridge between what they are learning and what they already know. One way is through the use of explanatory metaphors and analogies to help participants see that what they are learning is similar to something they already know and understand. Another way is through the use of stories in which the meaning of the new information is made clear and the learner can link to the elements or aspects that are most personally salient to them. A third approach is to have participants explicitly work with the new material they are learning and attempt to apply it directly to their own work context, for example in action learning sets or live case experiences. The more learners work with the material and establish its relevance at the level of concrete experience, the more they are apt to connect it into their existing neural networks and retain it in their long-term memory.

Learning principle 2: Pay attention to features of the learning environment

When an individual is engaged in a memorable learning experience, they encode the features of the learning environment, as well as what they are learning, in the neural pathways of their brain. For example, if you are asked to prepare and deliver a speech to fellow participants in order to learn how to speak publicly, you will encode in your memory not only what you spoke about and how it was received, but also how you experienced the atmosphere or ambience and any specific people or things in the environment that managed to grab your attention. Later, when you are again exposed to these same people or to a similar atmosphere, your brain is likely to thrust the memory of that speaking experience back into your consciousness.

In one interesting experiment, researchers made individuals learn new material, either on a beach or in the sea. Their recall of what they had learned was significantly better when they were asked to remember the material in the same environment in which they had learned it – beach or sea – versus the other environment.

This tendency for learners to encode environmental features along with what they are learning has important implications for designing more effective learning environments and experiences. It is something well-recognised in high-risk sectors and industries such as the military and aviation, where simulations are typically designed to mimic the exact features of the environments in which individuals will use the skills and information they are learning. Time pressures, physical factors such as hunger and fatigue, insufficient information, conflicting demands from important stakeholders, and other key environmental variables can be incorporated into the simulation to prepare the learner for the exact conditions they may have to face in future circumstances. Such learning may mean the difference between life and death. Classroom simulations are often designed in the same way, allowing the learner to practise their responses in situations they expect to face in the workplace, such as presenting to the Board, facing the glare of the media, making a time-sensitive decision, leading a team, and so on. Although these may not mean literal life and death, they are often high-risk and high-stakes to the individuals involved.

Most of our working lives are not lived in such extraordinary situations, however, and we generally expect to derive some measure of enjoyment and pleasure from the time we spend at work. If we design learning experiences to prepare participants for the environments where they will normally apply what they have learned, and if we want them to feel motivated and inspired to use their learning back in the workplace, research suggests that we should design learning experiences to be engaging if not fun. Csikszentmihalyi[10] found that his highly successful experts, or 'learners extraordinaire', were characterised by lifelong enjoyment and absorption in their work. Seymour Papert at the MIT Learning Lab has advocated for a view of learning as "hard fun" (Picard *et al*)[11], i.e. engaging and challenging. People appear to learn best when they are neither under-stimulated or bored on the one hand, nor challenged beyond their mental, physical and/or emotional capacities on the other. It is therefore important for participants to monitor their own state as they engage in a learning experience to ensure that they remain within this optimal state, and to seek help or support if they find themselves slipping out of it in either direction. It is equally important that we create learning environments in which participants feel safe enough to take creative risks and wholeheartedly embrace the opportunities and challenges with which we confront them.

Learning principle 3: Accommodate the physical needs of learners

One thing we know from dynamic skill theory[12], from research on the brain (for example Medina[13]), and from the habits of experts and masters[14], is that physical factors play a significant role in learning and performance. And yet these factors are consistently ignored in the design of learning environments and experiences. For example, we know that, generally speaking, the brain demands a rest in the afternoon after lunch (the post-lunch slump), that mental agility improves substantially after a nap, and that highly creative people tend to sleep and rest a lot. However, in many programmes participants are expected to 'power on' through the afternoon, and faculty work even harder to grab attention when they see participants losing focus and staring off into space.

We also know that diet and exercise play an important role in attention and alertness, and yet many programmes are packed with activities that prevent participants from taking walks or exercising. Instead, participants tend to be plied with snacks full of sugar and simple carbohydrates (think biscuits and sweets) that cause an inevitable energy crash within a few hours of their consumption. Research has established that individuals do not learn well, and experience disintegration in their ability to perform at even their normal everyday level of functioning, when they are tired, sleepy, depleted of energy, or under the influence of addictive substances (of which sugar is one).

There are ways to build learning environments and experiences around the physical needs of the human body without sacrificing overall programme quality and time. One of the approaches used at Ashridge to encourage movement and exercise is an activity called 'walk and talk' in which two or three participants pair up and take a walk together while engaging in focused discussion. Another way we support participant physical well-being is by making healthy and nutritionally balanced snacks readily available, such as fruit, nuts and oat biscuits. A third way used in some programmes is extending the lunch break to allow participants time to exercise or take a nap and making up the time in the late afternoon or early evening when most people tend to be more alert. At the very least it is advisable for programme designers and tutors to pay attention to the post-lunch brain slump and favour activities that get participants moving and talking rather than passively sitting and listening. By paying attention to the physical needs of their participants, rather than attempting to ignore or override them, L&D professionals will find a more alert and receptive audience and the learning activities they have designed will achieve greater impact.

The ultimate test of learning impact

Ultimately, if learning environments and experiences are to attain high impact, they must be informed not only by cutting-edge research but also by direct evidence that they are bringing about the desired results in terms of both learning outcomes and business results valued by key stakeholders. Learning assessments and impact evaluations may have been optional in the past when training interventions were funded and carried out with blind faith that they would produce results of value to the organisation. However, in today's rapidly changing and economically challenging environment, such faith is no longer convincing, particularly to Boards and senior managers.

Well-designed learning assessments not only generate evidence of programme outcomes, but perhaps more importantly help us to understand the specific design variables that affect the learning experience in significant ways. In this regard such assessments become an invaluable form of research in and of themselves, with the potential to contribute to academic theory and to further improve and hone organisational practice.

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Experiencing leadership

As managers progress through their careers, they will experience occasions that prove to be critical in shaping them as a leader. In the Ashridge *Future Leaders Experience*, participants practise some of these critical events in order to be able to recognise and deal with them when they appear for real. Megan Reitz shows how simulations such as this accelerate the learning of a leader-in-waiting.

Eighteen participants face three tutors in Monks Barn at Ashridge at the start of the *Future Leaders Experience* (FLE). Normally at this point in a leadership programme the participants are being guided through a timetable of what happens when, the sessions they will go to, what will be covered and for what purpose. These participants, however, have no such clarity. They are told very little except that they will be running an organisation over the next two and a half days. As such they will need to work with each other, make decisions and manage critical events as they occur. Of course these participants knew this much when they signed up for the programme and so the lack of clarity is no surprise. However, that doesn't stop the deep sense of trepidation. They know that they will need to lead, but they don't know what the environment will throw at them and they don't know yet the diverse range of individuals with different strengths and development needs and – of course opinions – who they will need to manage. And isn't that a more realistic picture of what our leaders today are facing and a more realistic view of the environment in which our leaders need to be capable of learning?

The FLE is a response to the growing imperative for organisations to effectively develop their leaders. The 'war for talent', much talked about, seems to be hotting up[1]. Many organisations, particularly in the current economic climate, cannot solely rely on expensive and risky external recruitment drives to find the elusive leaders they need; they must focus their attention on developing their leaders from within[2,3]. Consequently, organisations are increasingly interested in the return on investment of their leadership development interventions. They want to know that the people they send on courses are going to come back having learnt the maximum possible and can make a real difference to the workplace. For business schools and other executive education providers, this means increasing pressure to come up with highly effective methods to facilitate this learning, and a mounting need to ensure it is firmly embedded.

Building 'muscle memory'

Many leaders claim that they learn most from their own experiences in their organisations[4,5,6], and research points to the importance of learning from experience in order to prepare oneself for the future and develop as a leader[7,8,9]. Gardner[10], for example, suggests that 'most of what leaders have that enables them to lead is learned, and what is learned is learned through experiences. Hence, central to better understanding leadership development is to better understand the nature of experiences that facilitate leadership development'. We know that leaders experience certain critical incidents in their careers which prove to be instrumental in how they perceive themselves and how others perceive their leadership capabilities[11,12]. The FLE works on the hypothesis that if a participant can experience and practise their response to a critical incident in a safe environment, when they encounter that experience in real life they will be more capable of successfully handling it. They will also know, on such an occasion, that it is important and a developmental opportunity. In this way, by coming on the programme, they build what the tutor team have dubbed 'muscle memory'. This term is commonly used to describe repeated movements which lead to physiological changes and brain-muscle or motor memory development, but is increasingly used more widely in general behavioural change (for an example see Fiorelli[13], examining the building of organisational ethical muscle memory). We use it to illustrate leadership practice which leads to an improved ability to deal with critical situations.

One previous participant, when interviewed about her experience three years after attending the course, highlights the muscle memory process well: '[if you] keep making steps into areas which are new and challenging and slightly scary, the more you do it, the more it becomes second nature and you kind of move on and you feel very confident in doing them'.

But to build muscle memory, the participant needs to feel they have genuinely experienced the incident, which means 'turning up the heat from the first day of practice'[14]; it means encountering the experience emotionally.

The emotional roller-coaster

In our research with past participants we asked what words they would use to describe the FLE. The spectrum of emotional terms included everything from 'fun' to 'frustrating' to 'anxiety-provoking' to 'enlightening'. A term frequently used is 'emotional roller-coaster' and this is integral to the programme's effectiveness, because if it is emotion-provoking and surprising, it seems it will be recalled well, potentially enabling more learning.

Brewer[15] claims that in order for events to be well recalled, they need to be unique, consequential, unexpected and emotion-provoking. Rubin and Kozin[16] interviewed students about their clearest memories and found that vividness of memories correlated with their rated importance, degree of surprise and emotionality. Emotionality seems to be a key element in recall. LeDoux[17] backs this up in his research stating that 'although explicit memories with and without emotional content are formed by way of the medial temporal lobe system, those with emotional content differ from those without such content. The former tend to be longer lasting and more vivid'.

Of course, just because an event is recalled clearly does not mean that the individual will learn and develop themselves effectively. However, there have been some interesting studies which shed some light on the role of 'positive' and 'negative' emotional experiences in the learning process. Ellis and Davidi[18], amongst others[19,20,21], examine whether failures – traditionally (although by no means universally) regarded as more emotionally negative – should be considered as better motivators than successes for drawing lessons from experience. They claim that 'the more negative were the results of the particular event, the stronger was the manager's inclination to recommend a more intensive process of learning from experience'. The reason they suggest is that when we encounter failure we are forced to revisit and revise our existing mental models, whereas when we encounter success there is no such pressure and we are more likely to simply become more confident and perhaps complacent in our use of our existing mental models.

However, if we examine our research with past participants, more respondents refer to the positive emotions which arose from realising that they could in fact lead others successfully, than they do to the negative emotions generated from tensions within the group or coping with uncertainty. Either way, we believe that depth of emotion is very likely to be a key factor in determining the depth of learning from experience. As Ruth Palombo-Weiss, writing specifically about the implications of emotion on training techniques, claims: 'The more emotionally engaged a learner is, the more likely he or she is to learn'[22].

No room for 'learned helplessness'

Hambrick[23] identified three kinds of people: those who make things happen; those who watch things happen; and those who wonder what happened. The role of the scholar, he argued, should be the first one even though invariably it tended to be the second. We believe that preparing the leaders of the future depends on abandoning some traditional methods of executive education and welcoming in opportunities which enable leaders to truly experience, and learn from, situations which are vital to their development and success.

A key way in which this is achieved on the FLE is through the number and role of the tutors. There is a minimum of one tutor per six participants and their role, on the surface, is to run the simulation, observe specific participants in order to offer feedback and coaching, and to link the experiences of the simulation to research and theory where relevant. On the face of it, however, they don't do much 'teaching' – so just why is the FLE so exhausting to tutor on! Sometimes standing back and 'holding the process' is harder than intervening, but we know that learning can be effective by doing just that. What we are attempting to develop in the participants is an internal 'locus of control' in relation to their learning. In other words, we wish to build the understanding that they are responsible for their own learning rather than a belief that their learning is dependent upon others.

The traditional educational experience does not necessarily aid some managers, many of whom have had a 'learned helplessness'[24] instilled in them. As a tutor, one experiences this as a weighty expectation from the participants that you will intervene, rescue and tell them what they should have done or what the right answer was all along. Of course the clear parallel process here is that this is exactly what happens with the common expectation of heroic leadership; a leader is there to know the right answer and provide it and carry the can should anything go wrong. At times, it is very difficult to resist this projection and constantly we are asking ourselves 'to intervene or not to intervene?' We must weigh up some potent questions. Is this all about my desire to rescue, be helpful, appear impressive and be liked? Am I responding to the weight of projection in the room and will learning genuinely be improved if I intervene or would it in fact improve if I don't?

Truly realising that one can choose to learn in pretty much any circumstances rather than expectantly sit back, arms crossed and wait for others to provide learning is enormously challenging but exceptionally important for our leaders-in-waiting. The skills of the tutor team in understanding themselves as well as what is going on in the room and having the resilience to work in that environment are paramount.

A second, third, fourth chance to practise….

The FLE is a simulation. But it is an extended one – it lasts over a period of more than two days. We believe this is important for two reasons. First, the participant has sufficient time to experience, receive feedback, form a theory and then experiment with new behaviour a number of times. If they are a little too reticent to try things on day one, by the time day two arrives the necessary reflection has occurred and the requisite courage has usually been summoned to give it a go. In other words, the participant is able to circle round the learning cycle a number of times[25].

Second, there is no escape! It is difficult (although admittedly not impossible) to wear a convincing façade for a morning or perhaps even a day. However, we find that over a stretch of two days, the 'real' person shines through and therefore the participant receives feedback which is based on how they are *really* perceived by others.

More than just a residential programme

The FLE is by no means alone in offering an extended learning process by engaging the learner both before the programme and then afterwards when they are back at work, but it is an important aspect of embedding learning which is far from universal and therefore worth reiterating. In addition to a 'learning guide' and journal to read and work through before their arrival, there are three coaching sessions – one before the programme and two after, at approximately one month and six month intervals. The CIPD report *Training and Development 2004*[26] emphasises the benefits of this: 'An overwhelming proportion of respondents (over 90%) believe that coaching is an effective mechanism for promoting learning in organisations. A key reason for this appears to be that it is considered to embed external learning from training courses back in the workplace – 93% of respondents agree that this is the case...'

In conclusion

The FLE aims to accelerate the learning of a leader-in-waiting. Our participants do not seem to have much time to spare for leadership development, and their organisations, whilst unwilling to see them away for long, nevertheless expect serious results on their return. That is why the tutor team of the FLE has developed the learning process described above. It is a process which accelerates learning very effectively and efficiently for its participants. It provides them with an opportunity to experience critical incidents and the emotional roller-coaster associated with them in a safe environment which nevertheless deeply challenges them to take responsibility for their own learning. We have seen extraordinarily tumultuous times over the past two years and things are unlikely to become more predictable. Therefore we must equip our leaders in a much more practical and positive manner. It is important to multiply the benefits of the development programmes we provide by instilling a real responsibility for learning in our participants. The FLE is one method of achieving this.

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Aligning virtual learning with business need

Learning is increasingly moving out of the classroom and straight into the workplace. Tony Sheehan advises how organisations can utilise virtual learning, and select the appropriate tools and technologies to align with the needs of the business.

In recent years, there has been a dramatic growth in the range of virtual learning interventions available to today's learning professional. These include the co-creation of content via wikis and shared learning experiences through avatars in virtual worlds such as Second Life – massive technology changes that were unavailable to the learning designer in the past.

Increased time pressure, due to factors such as the credit crunch, has led to an upsurge of interest in virtual solutions that allow learning without losing time away from the office. However, virtual learning on its own is rarely the best answer. A recent review of evidence-based practice in learning from the US Department of Education[1] has highlighted that successfully blending face to face and online learning leads to the best results. Virtual learning does have a real opportunity to make a significant impact in workplace learning, but only if organisations can select it appropriately and mobilise the right combination of tools and technologies to align with their business needs.

Many organisations continue to struggle to identify appropriate technology solutions for their needs, and are lost in a wave of continuously improving new technologies that make their solutions seem positively outdated. Over the last year, Ashridge has initiated a series of discussions to explore why this is the case and to craft a method to help organisations identify the most appropriate technologies for their needs. These discussions have been carried out with key decision makers, end users and – combined with an analysis of industry, technology and learning trends – have allowed us to identify five key questions that are fundamental to how virtual learning within an organisation can be effectively aligned with business priorities. We examine each one in turn.

What business environment are you competing in?

Predictable — Complex

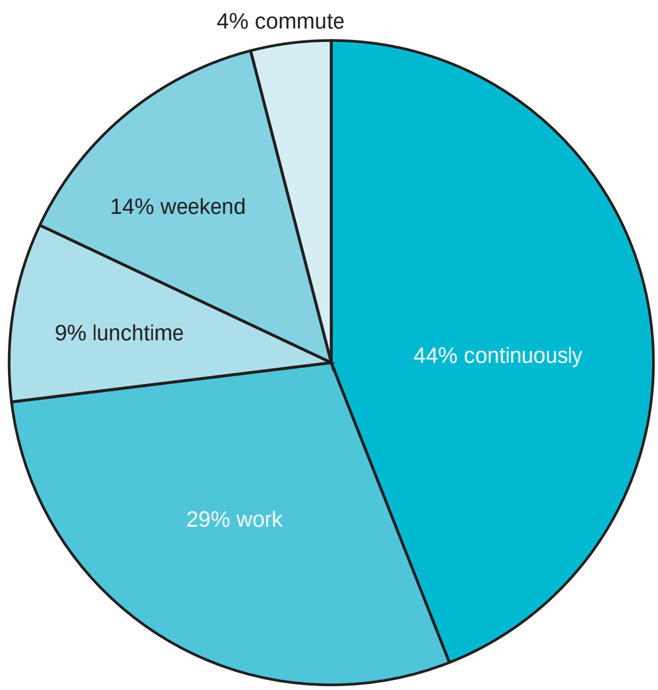
Many of today's leaders grew up in a world characterised by progressive, predictable change. It was a world moving at a pace that permitted five year plans and periodic analysis of the business environment. Perhaps in response to this, many schools, universities and business schools encouraged individuals to listen, to accept, to absorb and to pass exams based on demonstrating some level of competence in the clearly defined modules that they had chosen to study. Early virtual learning initiatives supported this, based around instructional models, delivering explicit knowledge and checking understanding through simple questionnaires.

However, given the rapid state of flux in the global economy, today's business environment has become far more complex, an environment characterised by urgency in decision making, agility of thought and decisiveness in implementation. The financial crisis has highlighted the weakness in seeking to carefully assess and predict change. In analysing the decline of Northern Rock Building Society in the early stages of the credit crunch, the British Bankers Association suggested that: 'No amount of regulation can ensure that wrong decisions are never made'[2].

Most organisations are now learning to accept complexity as a daily challenge. In these circumstances, the use of prescriptive virtual learning modules from the 'old world' where there was time to think may even be potentially damaging. "Learning becomes harmful because the lessons of experience gradually become inappropriate as technologies change and social trends progress"[3].

As the business environment gets increasingly complex, learning that responds to specific individual and organisational needs is crucial. A recent survey of 200 Ashridge clients highlighted that virtual learning must continually introduce quality resources to support changing business needs rather than constraining learning through fact based modules. Nearly half (44%) of respondents stated 'continuously' as their preferred time for learning, but increasingly it is something that has to flex around other commitments: 29% prefer to learn at work, 9% in their lunchtime, 14% at the weekend and 4% during their commute (see Figure 1).

Figure 1: What is the preferred time for learning?



In essence, there is increasing demand for content that is targeted to match this range of individual needs and to enable organisations to bring learning resources to bear as individuals learn on the job. As the recession bites, learning and knowledge resources have to provide flexible learning on demand rather than prescriptive knowledge delivered just in case.

This is not to say that old models have become totally obsolete; many conventional e-learning techniques based around streamed PowerPoint slides remain suitable for clearly defined and repetitive tasks such as compliance based health and safety training. However, most business challenges have become more esoteric. For example, is it possible to teach entrepreneurship? The principles perhaps, but the risk taking nature of many entrepreneurs seems almost inbuilt. As the business environment has moved from local and relatively predictable towards global and more complex, there is increased demand for a fundamentally different approach to learning that encourages curiosity as much as knowledge retention.

What is the decision making environment?

Reflective — Reactive

In a more complex business environment, the pressure on the knowledge worker to make the right decisions has become intense. Over the past 20 years, the world has been transformed from being driven by the pace of paper to being driven at the pace of technology. Face to face communication has been supplemented with mobile communications and knowledge work has moved from a reflective to a reactive activity.

Many executives are suffering from what Hallowell[4] describes as 'attention deficit trait', where individual effectiveness is eroded due to continually conflicting demands on time and attention. Virtual learning solutions offer support to the anxious, time starved learner, providing access to content as and when needed to resolve business problems. At the same time, there is an onus on the learning designer to periodically encourage the busy knowledge worker to pause and reflect on learning. In their book *Think Again*[5] on why leaders make bad decisions, the authors highlight how misleading experiences and prejudgements can be a potential contributor to serious business mistakes. Acceleration in decision making is a fact of life – but it does not always result in the deeper learning required for lasting knowledge retention and the broadening of experience necessary to try and minimise errors.

In response, learning designers have had to face up to the increasing challenge of producing materials that challenge thinking yet can be delivered in accessible 'nuggets'. There is some evidence that the last few decades seem to have produced a shift in preferred learning styles from verbal to visual to virtual[6].

The need to support this trend with quality learning materials creates a great opportunity for virtual learning, but only if the virtual learning experience can be designed to engage as effectively as the latest film release, most powerful marketing campaign, most involving videogame or the most popular social networking site. This is far from easy given the investment that goes into these media. It is significant that many business schools have chosen to use existing film and media clips rather than try to recreate them, and that some Scottish primary schools have chosen to include popular Nintendo Wii and DS games into the curriculum rather than duplicate the experience with vastly inferior technology.

There is also a continued need to support those who do not prefer or are not as yet fully immersed in the virtual world. In a multi-generational workplace, paper remains valued (even by many in Generation Y) as a means of encouraging reflection, sketching and learning. There are undoubtedly changes from verbal to virtual, from static to vibrant, but there is no one best approach – the workplace is highly contextual and multiple learning styles and situations must be supported moving forward.

Who can validate the answer?

Expert — Crowd

Today's information environment creates a confused picture of expertise within the knowledge economy. We have entered a world full of bloggers, tweeters, podcasters, business and social networkers, each disseminating knowledge at an exponential rate which might, just might, be relevant to the current issue at hand. It is easy to dismiss much of this content as noise and just to seek out the view of the so called 'expert'. However, the 'expert' view is now less evident and the consequence of ignoring the sea of available information is often only really evident with the benefit of hindsight. In a recent legal case in the UK concerning the demolition of a British Steel plant, crucial information that was at the fingertips of a knowledge worker when a decision was made, was subsequently linked to a series of birth defects in the surrounding area. Despite the rapid evolution of knowledge in the area of environmental science, an industry analyst concluded: "To claim that you didn't know is now unacceptable"[7].

As business has become more interconnected, the ability to accept more than one view is not just valuable, it has become essential. The potential 'wisdom of the crowd'[8] is perhaps best exemplified by Wikipedia, an encyclopaedia written by the people for the people, maintained by the people. The notion of the conventional expert, teacher and lecturer has been challenged. Their role in face to face education has become more of a signposter or a facilitator. Virtual learning solutions have had to embrace both the expert view and the wider view where all individuals have a voice. The expert must clearly continue to offer a distinctive point of view, a direction for discussions, but must also accept the benefit of directing to other sources of knowledge on the web. Virtual learning must, therefore, cultivate the knowledge of individuals but at the same time encourage community debate and discussion.

In response to this need, the last two years have seen the emergence of powerful e-portfolio tools, where individuals have a personal space to collect their knowledge, share their thoughts (for example through blogs), but also connect to a wider community to co-create content through wikis and threaded discussion forums. Many of these systems can be opened up for assessment if desired, but their primary benefit is to the individual rather than the institution. Their user-centric nature is in stark contrast to more conventional learning management systems where the institution still has some control. However, the learning experience now must lie increasingly with the individual and the community in order to remain relevant in today's world.

What is needed to enable decision making?

Information — Insight

Over the last decade, information growth has outstripped people's capacity to absorb knowledge and their capacity to learn. In turn this has created significant risks that decisions will be made on the basis of readily available information rather than the most appropriate insight. Faced with such overload, where do people turn to for the information? Undoubtedly, Google and other internet search engines have become a powerful source of knowledge, but with 210 million hits for a search on 'strategy', there is little chance that such results will consistently provide instant, quality answers for the overworked decision maker.

Interestingly, today's widespread access to information via the internet has created an increased demand for better quality information searches from libraries, such as those at business schools. Rather than Google causing a reduction in demand for information professionals, the past two years have seen a four-fold increase in demand for complex literature reviews using the knowledge databases of the Ashridge library. Professionals need the best answer rather than the most accessible – provided that time permits.

Virtual learning must evolve in a similar way, not just accepting information, but always providing access to resources that provide insight and quality knowledge. Access and quality are only part of the challenge: "Most people fail to bring the right information into their conscious awareness at the right time"[9].

Do people search at the right time? The increased urgency and complexity of decision making in today's workplace raises a key challenge; how can people be made aware of the need to learn? Mistakes in the workplace are rarely deliberate, more often the results of inappropriate reuse of previous models in a new construct. Rapid access to information almost encourages this behaviour, allowing people to make decisions sound in the knowledge that back-up information is available. Unfortunately, people do not always search and strive to learn the right things.

Three factors are particularly relevant here:

- Knowledge delivery – just enough quality content, just in time
- Knowledge relevance – to the organisation, to individual preference and learning style
- Stimulus – a prompt, creating a desire for ongoing learning.

It is the last of these that presents perhaps the greatest challenge to workplace learning in times when people are incredibly busy. Formal qualifications create a need to engage with information to carry out assignments and to pass exams, but without these, what stimulus can the learning designer create for those in the workplace at a time of information overload? How can learning designers ensure activities are relevant and worthwhile?

Our research among clients suggests there is a need to design learning systems that:

- Alert the individual to potentially relevant knowledge
- Stimulate an interest in finding out more.

Technology provides a partial answer through customised updates on latest topics via RSS feeds or e-mail. Case studies based around business challenges are also proving to be an area of interest – mini case studies sent to individuals on a regular basis can help to reinforce learning and cultivate sufficient curiosity to engage with further learning materials. In both cases, there is a thin line between overloading learners with content and accessing actionable insights.

How can virtual learning develop the skills that businesses need?

E-learning — Re-learning

To support urgent decision making, the skills required of individuals have dramatically changed. Leadership today is driven by the ability to apply experience, knowledge and judgement. It is less about established facts and more concerned with interpretation, well informed instinct or gut reaction. It has been suggested that "NASA led the way to the Moon, but has now forgotten how to get there"[10].

Whilst the above quote may appear to be a perceived failure of NASA's ability to learn as an organisation, it perhaps ignores the 40 years' worth of innovation and learning that has occurred since the first landing. Why would we want to go to the Moon in 2009 in the same way as we did in 1969?

A critical skill in business today is perhaps less e-learning and more 'unlearning' and 'relearning' – the ability to disregard predefined rules and rapidly apply new knowledge and thinking. If not, learning can become an organisational challenge: learning becomes harmful because the lessons of experience gradually become inappropriate as technologies change and social trends progress. Organisations are unable to free themselves from obsolete lessons[11].

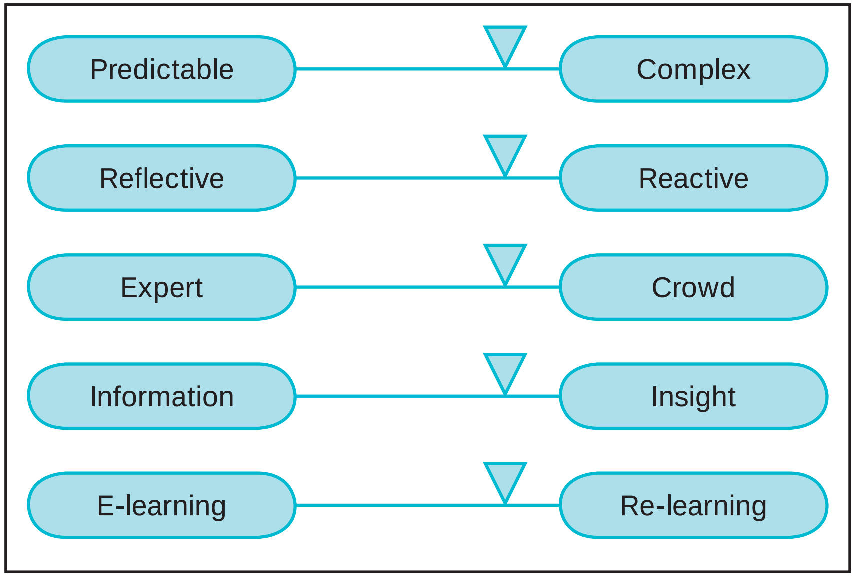
The challenge is how best to provoke thought, coach the individual and stimulate appropriate decision making through insight and inspiration. The days of static collections of resources that lie unused, unchecked and largely unappreciated are gone. Virtual learning must be visible, personalised, interactive, fun, applied and social.

The social nature of learning offers vast scope to improve the quality of content and learning experience. Themes can now be explored synchronously and asynchronously by large groups through online discussions, and it is also possible for learning resources themselves to be improved vastly through community discussions. Users of virtual resources are able to rate and contribute to content directly. Feedback is an engine of change, continuously challenging learning providers to create vibrant up to date materials – or suffer obsolescence as knowledge leaders for failing to do so.

Mapping the future

The five questions outlined above highlight the considerable opportunity for virtual learning to help integrate learning with the challenges of today's workplace. It is possible that both the general business environment and organisational needs will demand solutions across the full range of these dimensions, and conventional learning management systems will continue to support solutions aligned with the left hand side of the diagram (Figure 2) for years to come. However, at present the primary business need is to provide virtual learning interventions aligned with a position more toward the right hand side of the diagram.

Figure 2: Aligning current business challenges with dimensions of virtual learning



Virtual solutions are still often perceived as cost driven rather than a targeted enrichment or reinforcement opportunity that supports real world decision making. However, effective development of leaders is now widely accepted to follow the 70:20:10 Lombardo and Eichinger model[12], with

- 70% of learning through experience
- 20% through more reflective activities often actively involving learning from other people (coaches, mentors, friends)
- 10% through formal training.

It is ironic that much of the e-learning industry in recent years has targeted formal training, the least effective 10% component, using tools for knowledge delivery of facts with fairly straightforward quizzes to assess understanding. However, it is the other 90%, by connecting people and encouraging individual learning, where considerable scope exists to exploit the latest virtual learning technologies to create impact and relevant learning.

Looking to the future, the success of any virtual solution will continue to depend on recognition of its value from three major stakeholders[13]:

- Providers, who must think carefully about the interventions required for the individual/group and prepare learning materials appropriately
- Participants, who must be motivated to actively contribute time and effort to virtual learning and not perceive it as a less valuable learning opportunity than face to face
- Organisations, who need to support the learner in the business environment, allowing scope to both reflect and to apply the knowledge developed.

Our research has highlighted that the choice of virtual learning interventions now available has transformed the field from pre-prepared courses to flexible quality resources, from verbal voiceovers to engaging virtual debates, and from solitary knowledge absorption to social knowledge co-creation.

The business needs are visible, the solutions available, the possibilities endless; learning is increasingly moving out of the classroom and into the workplace; the challenge to virtual learning providers is to support this need with quality insights – just enough, just in time.

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Developing leaders for a world of uncertainty, complexity and ambiguity

From December 2008 to May 2009, Andrew Day and Kevin Power interviewed 50 executives and senior managers about how they were experiencing the impact of the economic crisis on their organisations. They summarise their key findings and outline the implications for leadership learning and development.

A world of turbulence, uncertainty and ambiguity

Our research highlighted how leaders were thrown into a world of uncertainty, ambiguity and turbulence by the economic crisis. They commented on the speed, breadth and depth of change as being greater than anything they had previously experienced. This resulted in a disruption to the stability and certainty of their work environments. Business processes, planning routines and systems in many organisations lost credibility as demand for their products or services changed dramatically. All the participants in our research commented on the heightened levels of anxiety in their organisations as a result of the crisis. In this turbulent context, leaders were confronted with the challenge of how to make sense of their worlds. Difficult and challenging questions included: How do I understand what is happening in our markets? How is our world changing and what might it look like in the future? What implications does this have for our business? What risks and opportunities does it present to us? And, perhaps most difficult of all: what if anything, could or should we do to respond to events?

What does this mean for the leaders of the future?

We are convinced that the world of organisations is unlikely to return to how it was before the 'crisis'. We sense that we are witnessing a shift towards a business environment that is more typically characterised by rapid change, discontinuities, and ambiguity. This might be one consequence of a highly complex, interconnected, global economic and social system. We therefore believe it will necessitate specific capabilities which are not readily apparent in organisations today.

Rapid and abrupt changes in an organisation's environment require creative, innovative and adaptive responses. Our insights from the research suggest that the future learning and development of leaders must help them to develop the capacity to:

- Take an *ecological perspective* on the role of their organisation within an interconnected web of interdependencies that stretches beyond the usual scope of 'economic interest'
- Help people to *make sense together* of events and the rapid changes that they are experiencing
- *Understand and work constructively with acute anxiety states*, including paranoia and fear, provoked by periods of turbulence and disruption.

We will discuss each of these three capacities in the following pages.

Taking an ecological[i] perspective

The economic crisis has revealed the degree of interconnectivity between organisations, sectors and markets across the world's economies. The near collapse of the global financial sector was the result of a tight web of interdependencies and collective behaviour that was based on deeply flawed economic assumptions. For example, unprecedented shifts in the volume of trade between the United States and China had huge repercussions for the world's logistics industries. The price of cargo has collapsed in response to the fall in demand for consumer products in the United States, not unrelated to the sub-prime effect on the housing market: in June 2008, the cost of a dry cargo vessel was $233,000 per vessel; by December this had fallen to $2,330. The International Airline Association reported a 22.6 per cent decrease in air cargo in the first quarter of 2009 and similar disjunctures have occurred in other global industries.

Aside from the potential for further growth, a key rationale for global expansion historically was to spread risk. Yet, what has been revealed is that the 'forces' of globalisation have paradoxically resulted in no safe havens from recession. As a director in an international property business remarked: "Our acquisition strategy was based on the assumption that the European commercial property and retail sectors were decoupled from the North American and Asian economies. How wrong we were."

Our research demonstrates the importance of leaders being able to look beyond the immediate horizons of their familiar business sector and market boundaries. In a turbulent and changing market, organisations cannot make assumptions about how customers, end consumers and other stakeholders are being affected and how they are choosing to respond. Waiting until they have responded can be too late and too risky. Developing an understanding of how relationships and patterns between and across sectors are changing is fundamental to anticipating and seeing possibilities early. This way of thinking is a fundamental shift from traditional linear, cause and effect ways of understanding the world. A reliance on analysis and statistical data works in relatively stable environments where models and frameworks based on what worked in the past are helpful. In turbulent environments, data and analysed information are either not readily available or no longer valid because 'non-linear dynamics' have changed the relationship between socio-economic forces.

Ecological vs analytical thinking

Ecological	Analytical
• Looks for patterns and interdependencies • Assumes complex, non-linear relationships • Focus is on description rather than explanation • Values curiosity, insight and intuition • Works creatively with paradox, uncertainty and contradiction • Extends peripheral vision beyond traditional boundaries • An interest in WHAT	• Values historical data and analysis • Identifies problems and solutions • Assumes cause, effect and linear relationships • Reduces phenomena down to individual issues • Seeks to restore or improve on the status quo • Depends on frameworks, models and tools • Seeks certainty and stability • An interest in WHY

An ecological perspective is perhaps a counter-intuitive way of thinking. It requires leaders to work with the multiple phenomena that represent the interaction of individuals, organisations, societies, cultures and environmental contexts. This is not a new idea in other fields of research. Gregory Bateson (1904 – 1980), the cultural anthropologist and holistic thinker, as far back as the 1960s observed that the Western mindset encouraged people to think 'as if' they existed outside of their worlds rather than participating in the wider ecology of which they are part. His concern was that our predisposition to want to separate ourselves from nature would inevitably lead to disaster for the human race[1].

After a year of record demand for its products, in early 2008 a division of 'Euroco' stepped up its production capacity to meet the backlog of orders which were still in the pipeline. It continued producing at this rate to maintain the required inventory levels so that supply chains could meet projected sales forecasts. However, by October 2008 the dramatic downturn across certain industry sectors finally revealed a sharp decline in orders. This was not a surprise to anyone, especially customer facing functions, and yet it took three months before production could be finally stepped down to reflect the new trading conditions. It was not until Quarter 2 in 2009 before the business had started to re-stabilise. The impact on profitability has been so significant that various departments and trading partners which had distant and transactional relationships have started to work more closely together. They are now discovering the value of being more curious about observations and experiences from colleagues, intermediaries, customers, other stakeholders and the wider landscape of economic relationships and environmental issues. As one executive put it: "Perhaps we had become complacent and could not see what was happening for our end customers and the context of what was changing in their worlds." The aim with the new approach is to create a culture of responsiveness, proactivity and intelligent adaptation.

In the context of organisational and business life, the adoption of a more holistic perspective requires a shift from left brain to right brain thinking; a trusting of the intuitive, emotional aspect of leadership and integration with the rational, logical side. Leaders of the future will need to develop their capacity to see how their organisations participate in complex, non-linear relationships which are inherently unpredictable, paradoxical and recursive. This is not easy stuff and the desire for certainty and solutions driven by shareholder (and other stakeholders) demands is a counteractive force against a more open ended way of seeing the world. But the scale, complexity and elusiveness of the current economic context have perhaps been a helpful provocation in inviting business leaders to think differently this time around.

Ecological thinking requires leaders to:

- Notice patterns and connectivity between sectors, markets, customers, suppliers, consumers and the wider communities/environments of which they are part
- Establish cooperative relationships with suppliers and customers which enables the exchange of perspectives and experiences
- Trust their intuition as well as utilising analysis and notice the 'soft signals' that would otherwise be ignored
- Explore possible, probable and unlikely scenarios to expand awareness of how the environment could change
- Question the long term repercussions of strategies and actions for the health of the wider 'ecosystem' that supports the existence of the organisation.

Making sense of rapid and abrupt change

Our research highlighted that many executives were struggling to understand and make sense of how the economic crisis was impacting their organisations. What's more, they were finding that a whole range of stakeholders, including employees, suppliers, shareholders, boards etc. were looking to them to give an account of what was happening. Leaders played a critical role in helping different stakeholders to make sense of the dramatic events and changes that their organisations were encountering. They did this by engaging in what we understand to be the process of sensemaking[2]. This is a social and psychological process that people adopt when they experience an unexpected or 'unintelligible' event. In turbulent and unpredictable environments, leaders need to create a coherent strategic narrative across the organisation which helps employees make meaning of their work and enables collective and coherent action. They need to engage in reflection and encourage their employees to do the same. Blind action, without standing back and reflecting, is highly risky in such scenarios.

Sense making requires leaders to facilitate conversations between individuals and groups who hold different perspectives or vantage points on what is happening, in an attempt to develop a shared understanding of what is happening in markets and in the organisation. This involves people sharing their perspectives, hunches and opinions and listening in return to the perspective of others. It is through such 'interactive exchanges' that new understanding and meaning emerges which then becomes the basis of creative adaptation and action.

In organisations that experienced perhaps the most dramatic changes in their markets, leaders had to create the environment for their people to seek out information, to engage in conversation with their customers and suppliers and continuously share any insights that were emerging. For instance, in several large professional services firms, teams were encouraged to talk explicitly with their clients about how they were being impacted by the crisis and to reflect back to those clients (as well as their colleagues) what they were learning. This was a form of sense making practice within and outside the organisation as a live emergent process. While the aim was to identify risks and opportunities, it also 'legitimised' the questioning of assumptions, beliefs and ways of working.

A managing director of a European consumer goods business found he was unable to cope with the crisis that his business faced in early 2009. His success in his career had been built on his ability to make improvements in operations through problem identification and rational analysis within an established operational framework. His leadership style was to take responsibility and think through issues by himself. He is a convergent thinker, who tends to make decisions quickly, close down options and move swiftly to action. During the crisis, his business experienced an abrupt fall in revenues as demand fell and prices collapsed. He was unable to make sense of the situation through analysis of data. In a highly anxious state, he lost sight of the bigger picture and became highly invested in a course of action which was not addressing the collapsing income of the business. As his anxiety increased he retreated from his leadership team and took on more and more responsibility. This left him feeling alone and isolated. When he reflected on his leadership after the crisis, he identified that he had not engaged his organisation in making sense together in the midst of the crisis, took too much responsibility for finding a solution himself and did not trust his intuition or that of his colleagues. Their anxiety prevented them from developing a shared understanding of the situation and agreeing how they could act as a group to address their challenges.

The process of sense making requires leaders to:

- Create space for teams to stand back and share their experiences and reflect on what they are noticing and how their interactions are changing with customers, suppliers, shareholders etc.
- Encourage curiosity and the questioning of hitherto unquestioned assumptions and beliefs about the organisation, its role and purpose, and ways of working
- Invest time in establishing networks beyond the limits of the organisation and recognise the importance of these networks for making sense of the extended environment
- Connect individuals and groups across functional and professional boundaries
- Encourage insights into customers and markets to inform product design, operational activity and services to customers.

Working positively with anxiety

The economic ‘crisis’ launched a wave of anxiety across organisations. We understood this as a response to the uncertainty, ambiguity and the fear of what might happen. The things that people had counted on were suddenly up for grabs and many of the givens of daily life were at risk of unravelling. Employees’ most significant fears were about losing their job[ii]. In organisations, anxiety is contagious and rapidly communicated from one individual or group to another. Rumours circulating in the organisation, industry or media therefore further amplified anxiety levels. We observed that under these conditions in many organisations people retreated to familiar and habitual responses. This is consistent with psychological theory and research which highlights how people attempt to reduce their anxiety when confronted with perceived dangers by repeating responses which have proved to be successful in the past. If you like, people desperately attempt to keep things going as they always were despite the fact that everything is changing around them. This can have problematic or disastrous consequences because the necessary process of sense making is averted.

A second damaging response to anxiety happens when individuals and groups start to blame and attack others for their predicament. This response serves to help maintain a positive self image and identity but at the expense of others who are labelled as the ‘problem’. In our research, we came across a number of stories which typified fragmentation where there were examples of blame, distrust and helplessness in people’s reactions.

In one organisation, a group of managers from a division were struggling to make decisions about how to respond to the impact of the crisis on their organisation. The group was very anxious about their future order book and met to decide how to act. We observed some individuals withdraw from the discussions, others became critical of past decisions and colleagues; whilst the group as a whole found it almost impossible to stay with a subject long enough to make sense of it within the group. Our overall sense of the group was one of fragmentation and helplessness in the face of overwhelming anxiety. In subsequent conversations, participants in the meeting expressed anger and frustration, fear about what would happen if they could not organise themselves more effectively, and feelings of helplessness about the situation.

We also heard accounts of organisations where people were taking a proactive response to ‘the crisis’ by showing initiative, taking responsibility and attempting to find creative ways to adapt to the changing environment. We could label this as a ‘transformational’ response. In these organisations, leaders played a central role supporting people so that they were not overwhelmed by anxiety. They helped people to identify where they could make a difference, engendered a sense of hope that it was possible to influence events, and did not resort to blaming individuals for the organisation’s predicament. In these situations, we had a sense that people pulled together in adversity to support each other and to take collective responsibility. This created an environment where individuals felt safe to take responsibility, to question widely held assumptions and to challenge existing ways of work. In highly anxious states, people look for connection and social support from others. Leaders who brought people together and appealed to a sense of community therefore helped people manage their fears and anxieties. Furthermore, such social structures and support provided individuals with a sense of belonging, security and a sense of meaning in their work. It is our belief that these organisations, through their response, created a social cohesion which will stand as a legacy into the future.

The leaders of the future will need to have the capability to help people to manage and redirect acute anxiety states. This requires them to be able to empathise with individual's fears, doubts and anger and to help them to make use of the energy behind their emotions. This is about engaging their own capabilities and skills rather than feeling overwhelmed or paralysed by events. To do this, leaders will need to be able to regulate their own emotions and tolerate high levels of anxiety. This is not a skill that can be learnt through traditional classroom teaching. It is more likely to develop through experiential learning which evolves from life experience and processes such as action learning, executive coaching and business simulation.

Leaders contain anxieties by:

- Being 'fully present' and meeting the organisation in its anxiety (rather than avoiding it)
- Being empathic but not taking responsibility for others' anxieties and emotions
- Helping individuals and groups to make sense of difficult situations by sharing information, their assessments and assumptions and listening to people's experience
- Providing clear direction and boundaries to the organisation which highlight where action needs to be taken and providing clarity about how individuals can contribute. This includes being clear about possible opportunities for the organisation
- Instilling a sense of 'hope' and 'confidence' in the organisation that by working together the 'crisis' can be addressed
- Creating a 'safe' psychological environment where people do not feel attacked or blamed for problems but encouraged to take responsibility and act where they have influence
- Developing trust in the organisation by being visible, open, showing a concern for people, being transparent and congruent.

Conclusion

In the future, organisations are likely to find that they are confronted with greater turbulence and uncertainty. Those responsible for the learning and development of leaders will need to develop their capacities to help their organisations function in such an environment and engage in intense periods of change and transformation. Our research suggests that these capacities will include the ability to: (i) see ecologies of relationships and interconnections beyond the usual scope of interest; (ii) engage in sense making as an emergent and collaborative process; and (iii) manage acute anxiety states so as to provide the energy for creativity and adaptive responses. This represents a paradigm shift for how many of us think about leadership in organisations. Such a shift cannot be taught to leaders in the traditional way; rather it can only be developed through hard won experience and experiential learning that confront leaders about their 'deepest' assumptions about the world and challenge them to access, and make use of, their own emotions and feelings.

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Endnotes

i. The first known reference to the term "ecology" is associated with Ernst Haekel who in 1869 used this term which he defined as 'the economy of nature.' The ecological perspective can therefore be traced back to biological theories that explain how organisms interact with each other and their adaptation to their environments.

ii. A Gallup poll conducted at the turn of the year showed that 45 per cent of US workers believe they face a greater risk that their job will change or be eliminated.

Andrew and Kevin are currently working with a number of clients who are exploring how to develop their capacity to respond to turbulent business conditions. If you would like to know more about this work, or the research generally, then they can be contacted at their email addresses above.

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Generation Y and learning

Research by Carina Paine Schofield and Sue Honoré has identified the learning preferences and 'missing skills' of Generation Y. They make recommendations for those concerned with this generation's development, and highlight the potentially positive impact of Generation Y on the future of learning for *all* generations.

Who *are* Generation Y?

Generation Y are known by many names: the millennials; the iPod generation; the me firsts; the internet generation; the echo boomers; the Nintendo generation; the digital generation; generation why; generation next; the I generation and the net generation. This article specifically refers to Generation Y as those individuals born after 1981. Other than being defined by their year of birth, who are they? Some common themes can be drawn from the existing literature, relating to their formative years, attitudes to work and relationships with others (Figure 1).

Over recent years this generation has been discussed at length in newspapers, management articles, books and journal papers. Questions have been raised around the changing learning preferences and the approaches required to meet the needs of this younger workforce. The lectures, books and rote memorisation that shaped the learning of the Baby Boomer and pre-Baby Boomer generations have been superseded by today's technology facilitated learning. This means that younger generations have been documented as learning in a way fundamentally different to previous ones. Recent articles have referred to a move from Learning 1.0 to Learning 2.0[1] with people as active collaborative participants not passive readers. Generation Y are typically described as technologically savvy, hands on, interactive and collaborative who want personalised learning[2,3]. There have also been changes in the education system, with the Generation Y student a demanding consumer, who feels less responsible for their own learning and holds educators accountable. The traditional model of delivering material inside and outside the workplace in order to reach this new generation has been rethought.

Surveys identify that Generation Y do value learning in the workplace (for example in a recent survey by Ipsos MORI[4], learning and development was ranked in the top five important job factors), but there has been limited research into Generation Y and learning generally, with many of the discussions in the literature being based purely on anecdotal evidence. There is a need to explore Generation Y in detail in order to go beyond the media hype, the assumptions and the stereotypes.

Ashridge research

Research was undertaken in late 2008 to identify the development needs and learning preferences of Generation Y compared to those of previous generations, and to provide recommendations to assist with future learning, teaching and workplace practice. The research questions were:

- Do young people learn differently from those who were young in the past?
- Is there something which has specifically impacted Generation Y?
- What does great learning look like in the future?

Research scope

Following a detailed literature review, qualitative and quantitative data collection methods were used:

- 59 organisations in both the public and private sectors (comprising 133 individuals) took part in face to interviews or focus groups
- 692 individuals responded to an online survey
- 284 participants completed a Kolb Learning Style Inventory[i].

Respondents were aged from 16 to over 63 years to ensure data was gathered from multi-generational participants in today's workforce – Generation Y, Generation X and Baby Boomers – to provide an in-depth, intergenerational viewpoint[ii]. The research was mainly UK-focused although online participants were global.

Generational definitions

The defining years used to categorise the generations were:

- Baby Boomers – 1946-1963
- Early Generation X – 1964-1976
- Late Generation X – 1977-1981
- Generation Y – 1982 onwards.

Figure 1: Generation Y at a glance

Formative years and influences	Attitudes to work	Relationships with others
Prosperity; outsourcing; higher costs; strong political leadership; decade of the child; expansion of technology; natural disasters; terrorism; drugs and gangs Technology: Rapid expansion of technology; technologically savvy digital natives Learning methods: Mobile; Web 2.0	'Decisive; individualistic' Start of career: Economic boom; corporate restructures Career progression: Career network rather than ladder; profession not organisation Value: Guidance; flexibility; self development and growth; making a difference Leadership by: Collectivism	Parents: Wanted children; parents as role models Authority: Respectful; courteous

Research findings

Generation Y have confidence

Generation Y emerge as 'confident'; 'honest'; 'demanding'; and 'vociferous' and they have high expectations, particularly when it comes to learning.

Experienced educators' comments include: "*In terms of learning you will get more honest, feisty responses from the younger generation. That is not about arrogance; I think it is about confidence. They are used to contributing. A classroom session is like a verbal blog. Why wouldn't you share opinion, because it matters?*"
– School teacher.

"*Their [Generation Y] feedback is quite brutally honest sometimes. It makes us raise our bar*" – University lecturer.

Generation Y learning preferences and expectation[iii]

When it comes to learning, Generation Y do not simply hold preferences, but expectations.

1. *Doing is more important than knowing*
Rapid technology advances have contributed to Generation Y having a much lower reliance on a personal knowledge database stored in their brain, and more on finding factual information at the moment it is needed. Knowledge is no longer perceived to be the ultimate goal of this generation; results and actions are now more valued than the accumulation or memorisation of facts.

2. *A need for immediacy*
Generation Y live in a 24/7 culture where there is little tolerance for delays, and like to receive information just in time and from several multimedia sources. For example, a university lecturer states: "*Learning is now very surface-level and last minute. In some respects that may be OK. In business, activities are date-driven and there is a demand for outputs.*"
To this generation, issues of time and difficulty in obtaining information are usually of more concern than accuracy. However, it is unclear whether this is because they are not concerned about accuracy, or because they are assuming most information is by nature accurate[5].

3. *Trial and error approach to problem solving*
As a result of not wanting (or needing) to accumulate knowledge, Generation Y are more interested in problem based learning.

Generation Y game systems, such as Nintendo, often involve problem-solving and decision-making and require constant trial and error to win: "*The fastest way to winning is through losing, since each loss is a learning experience*"[6]. *This contrasts with previous generations' logical, rule based approach to problem solving. Trial and error experimentation was previously viewed as an expensive and time consuming, with options not tried until after all the consequences had been thought through; "but you'll never win a Nintendo game that way!*"[7].

4. *Low boredom threshold*
In the media, Generation Y are often described as having low boredom thresholds and short attention spans. The research identifies very diverse views on this. For example, a university lecturer states: "*They are used to 'cultural snacking' – a bit of TV, a bit of internet, a bit of chat, but no sustained information gathering. Of course you do get good students who can focus, discuss and read, but the proportion of those who exist has lost critical mass*."
The research shows that some teachers are developing increasingly shorter segments of learning because of the expectation that Generation Y groups cannot concentrate.

5. *Multitasking and parallel processing*
Generation Y are most comfortable when they are engaged simultaneously in multiple activities such as listening to music, texting and writing. This is simply a way of life for them. The information overload will increase as technology continues to advance and all generations will respond by multitasking. Consequently, spending time on investigating a problem will be a luxury[8].

6. *Visual, nonlinear and virtual learning*
Visual modes of learning are preferred by a large percentage of the population, and are especially important for Generation Y who grew up with lots of visual stimuli[9]. Generation Y are also described as holistic learners – oriented towards a nonlinear and non-sequential learning[10]. This may be at odds with more 'traditional' delivery styles: "*Generation Y students are primarily visual learners, a style which research has shown will almost certainly conflict with the learning style and habits of almost any instructor*"[11]. Weiler goes on to suggest how changing from a presentation style lecture to a more hands on approach will increase both interest and information retention.

Encouragingly, the majority of educators and HR managers in the research are aware of this. For example: "*You wouldn't attempt to do an entire chalk and talk training course any more if you were to have any credibility*." – Business manager

More recently, there have been descriptions of a move not only from a verbal to a visual to but on to a virtual generation[12]. Virtual representations of learners are appearing in virtual worlds such as Second Life (see www.secondlife.com). The potential of such virtual worlds for learning services and any resulting issues are only just being researched[13].

7. *Collaborative learning*
Generation Y do not want isolated lecture based information: they value interaction, networking, active participation and staying connected – anytime, anyplace.

Literature also describes the increasingly 'horizontal' structure of learning: "*Institutional learning tended to be authoritative, top* *down, standardised and predicated on individuated assessment measure on standard tests. Increasingly today, work regimes involve collaboration*"[14].

The research respondents agree with these learning approaches. For example: "*There is a learning style in younger people which is learning by discussing versus sitting there and listening to other people. And now for the challenge… how do they get that seen as they are trying to be positive, they are trying to learn, and not trying to be arrogant? It's just the way that they have been brought up to interact*."
– Business manager.

Asked for their preferred method of learning, respondents of all ages use similar terms such as 'hands on', 'interactive' and 'collaborative'[iv].

8. *Constructivist approach*
The learning theory of social constructivism[15] states that learners learn by constructing their own meaning and understanding collaboratively, within the context of social interactions, through a process of 'meaning making'[16], as opposed to passively absorbing the contents of lectures or books.

Technology can enable social constructivism[17] and can also combine social learning with personalisation. Generation Y value both *social* and *personal* learning opportunities within the community context[18]. They see knowledge as an active creation process and are used to contributing and customising their work, knowledge and ideas to the community.

Generation Y's missing skills

As the research progressed, an evolving thread building and shaping Generation Y from birth onwards was discovered. At certain points, key behaviours were set, challenges were created and adjustments were made either by Generation Y or by those around them. We call this The Learning Journey[19] and along with technological changes has meant that Generation Y may be missing out on exploring more deeply, enquiry and reflection. They struggle more than previous generations with 'difficult workplace conversations' and need more support in becoming self-aware. For this generation to be successful as future thinkers and leaders, they may have to acquire these missing skills in the workplace. Ideally, in the future the educational system will be able to build them in from an early age.

Generation Y strengths and weaknesses

Figure 2 shows Generation Y strengths in green; weaknesses in pink; and a mixture of strengths and weaknesses varying within the Generation Y population in orange. The critical point(s) at which those skills are (or should be) developed are shown along the top row. The green skills should be exploited more often by older generations, who often focus on the pink portion. Each member of Generation Y is an individual, so that areas in the orange or pink need to be considered on an individual basis.

Figure 2: Generation Y strengths and weaknesses

Source >>	Home	School	University	Work
+	• Questioning established processes • Approachability and friendliness to all ages • Work-life balancing	• Networking outside organisation • Trust • Flexibility • Lack of prejudice	• Flexibility • Energy	
±	• Loyalty • Respect • Focus/ concentration/ attention span	• IT skills • Communication skills • Motivation • Creativity • Global outlook • Teamwork	• Communication skills • Global outlook • Teamwork • Managing others • Expectation of quality	REMEDIAL LEARNING
–	• Budgeting/financial management • Self-awareness/EI • Risk assessment/ risk taking • Taking criticism	• Written English • Risk assessment/ risk taking • Analysis/deeper thinking	• Analysis/deeper thinking • Self-management	

Some points to highlight are:

IT expertise
It is often assumed that all young people are IT experts and this is not true – some struggle with technology.

Risk
Young people have been cocooned and many have not developed an innate sense of risk assessment, whether that concerns crossing the road, conducting an experiment or taking on a new supplier.

Valid sources of information
Factual information is now acquired 'just in time' from many sources. The challenge to educators and business colleagues is to ensure that young people verify this information: "*Learning strategy shifts from a focus on information as such to judgment concerning reliable information, from memorising information to how to find reliable sources. In short from learning THAT to learning HOW, from content to process*"[20].

Communication
Many young people struggle with face to face communication, particularly in sending or receiving difficult messages from others. They also need development in understanding which medium is the best for a given situation. Although their intentions may be good, they may cause friction with others because of the methods they use.

Deeper learning
There is a concern, particularly amongst university staff and employers, that lack of curiosity is resulting in Generation Y having a shallow understanding about the world around them. In the UK the school system is geared to high examination pass rates, so driving a culture of 'know only the minimum to get the grade'. Generation Y may be missing the opportunity to reflect on data and to engage in more in-depth analysis. Their analytical skills often need developing, as they struggle with solving complex problems and with 'grey' issues with no clear answers.

The challenge to all educators is to 'fix' any bad habits and develop skills missing from earlier life phases. Employers are finding that some of the 'pink' skills (see Figure 2) are not good by the time Generation Y employees start work and many years of missed learning need to be repaired in the early employment years.

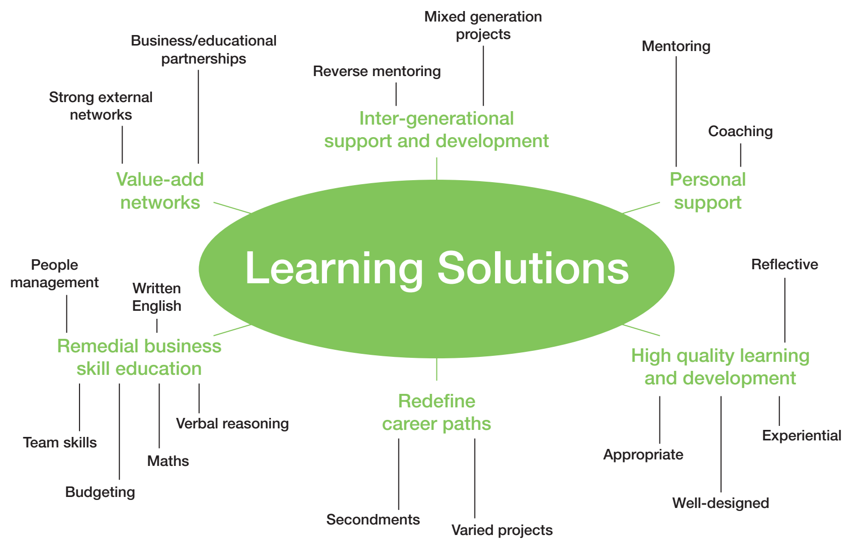
Recommendations

How does the research help those concerned with the development of Generation Y? Figure 3 outlines some solutions and recommendations, some of which are described in detail below.

Remedial education
As a first step, members of Generation Y may need to be encouraged to develop some 'basic' skills that were not developed in their earlier education. For example, verbal reasoning and written English along with mental arithmetic and concepts of budgeting, were all listed as key items by respondents. Although Generation Y have completed many more team-based activities in their youth than previous generations, they require help in understanding team dynamics and how individuals support team goals. Other soft skills such as listening, understanding personal impact, persuasion, influencing and people management were also identified as areas for development.

High quality learning and development
Learning must be relevant to the learner, applicable immediately and relate to real life experience. It must be interactive to encourage the developed skills of Generation Y such as questioning, supportive and open to new ideas. Where applicable, sessions should be facilitated rather than taught, as Generation Y are more comfortable with this and it gives them greater ownership of the outcomes and responsibility for learning. Learning interventions should also encourage development of some of

Figure 3: Learning solutions and recommendations



Generation Y's 'areas for improvement': deeper thinking, validation of sources, assessment of risk and impact, logical reasoning and problem solving, critical thinking, self-awareness and emotional intelligence. The use of experiential learning to embed learning in real life scenarios is critical. Learning must also use a mix of media, learning styles and approaches to retain attention and interest.

Personal support

Members of Generation Y demand support in their growth and development. Personal coaching and mentoring are seen as successful methods of retaining Generation Y workers and motivating them to achieve higher goals. They are used to positive feedback and encouragement, so a trusted personal coach/mentor is best positioned to introduce critical feedback, which may not have been commonplace in school or home life.

Inter-generational support and development

Reverse mentoring, where a more experienced employee and a new Generation Y employee coach each other in different aspects (for example, office politics and use of new technology), encourages the development of both parties and the sharing of ideas. The two people need to be well-matched in attitude with the same desire to make the relationship succeed. Equally, mixed generation projects provide learning for all team members and have been shown to break down stereotypical beliefs about different generations.

Value-added networks

Generation Y have grown up in a society where expertise and knowledge can be obtained from anywhere. These wider networks are rarely exploited in the same way by older generations and there is value in learning from Generation Y. One corporation has even developed a network which includes ex-employees, knowing that their contribution may continue to be high and that they may return one day.

Given that there is still some remedial learning to be done higher up the educational chain, some organisations and universities are looking at partnerships with those institutions which feed them, in order to tackle learning issues at source.

Redefine career paths

Most learning is now informal rather than formal, and much of that is achieved on the job. Rigid career paths do not suit modern business practice and are an issue with impatient Generation Y. There is a focus on finding ways of developing the individual, enriching learning and retaining Generation Y staff, such as involvement in small projects alongside the main job and secondments.

The positive impact of Generation Y on the future of learning

Generation Y are vociferous and demand high quality learning that meets individual needs, while older colleagues have the same needs but often have not asked for support. Technological advances provide new learning opportunities, but whereas there may have been pockets of early adopters in previous generations, Generation Y have the numbers and force to demand the more rapid use of appropriate technologies.

Generation Y also question established processes and challenge organisations to change their thinking. They network extensively, accessing a wide group of contacts and bring in a more open attitude to knowledge sharing. Having grown up in a supportive culture, this generation needs coaching or mentoring to help it succeed.

Ultimately high quality learning and development is the goal of people of all ages, not just the younger generation, but Generation Y may be a greater driving force for change than those who have gone before, resulting in benefits for all.

Conclusion

Generation Y's collective and individual learning preferences have already made an impact on learning. This assertive group seeks personalised, supported learning and development and wants to exploit the same methods of communication at both work and home. The education system may have let this generation down in developing certain skills, but Generation Y wants to progress, and with help from more experienced colleagues, may act as the much-needed change agents to help the development of all generations.

As one HR manager concludes: "*the stereotypical so-called learning and development wants and needs of Generation Y are not exclusive to them; they are the wants and needs of the whole organisation*."

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Endnotes

i. This sample was combined with a larger sample from the Hay Group, providing a total of 1017 individuals.

ii. The importance of individual differences: every generation can be defined by different beliefs, circumstances, value systems and life events. As such, generational theory is described by some as simply a 'convenient shorthand', particularly for analysis. It is important to remember that a generation is made up of individuals who need to be treated as such.

iii. This section describes 'typical' Generation Y learning preferences based on the research and a literature review which reviewed numerous texts including: Frand[6]; Manuel[9]; Oblinger[2]; Pletka[3]; Tapscott[21,22].

iv. A tag cloud visualisation of word frequencies used in response to this survey item can be viewed in Honoré and Paine Schofield[19] and is available online: www.ashridge.org.uk/GenYResearch

PERSPECTIVES

Dave Bond
Narendra Laljani
Stefan Wills

Leadership challenges

Over the last eighteen months of economic turmoil, leaders, their ethics, morals and judgement have been scrutinised and questioned. Indeed the whole topic of leadership and its role in business, politics and wider society has been the subject of great debate.

360° brought together three of Ashridge's leadership experts, Dave Bond, Narendra Laljani and Stefan Wills, to get their views on how the broad subject of leadership is evolving – and importantly – what are the leadership development challenges for business schools and other learning providers?

Dave Bond is Director of the Ashridge Leadership Centre, having previously been head of Leadership Development at the Rotterdam School of Management. A South African, he is a visiting faculty member at the University of Cape Town. Dave specialises in personal leadership development and executive coaching, and his work is characterised by a diversity of perspectives and experience, having lived and worked all over the world.

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360°: *We live in a very uncertain world with immediate economic challenges and longer term issues such as resource scarcity and climate change – what are the implications for leaders and leadership development?*

Dave: Extraordinary times require extraordinary leadership. We need effective leadership at all levels to address the myriad challenges that we all face.

I think we have lost sight of the fact that organisations and services are part of the broader human fabric, rather than ends in themselves, and for me one of the fundamental leadership challenges is to ensure that there is a better balance between the service of people and organisations and that of the common good. It is the fact that this is out of balance that has led to some of the problems we are currently facing.

Narendra: The entire domain of leadership is under unprecedented scrutiny. It's not an exaggeration to say that 'leadership' as a brand has been hugely damaged. Many are saying: "*Look where our leaders in politics and business have got us*." While economic circumstances and geopolitical forces have clearly contributed, there's also a sense that poor judgement, short-sightedness, and indeed the hubris and greed of leaders have also been responsible for the mess we're in. We need to re-visit our notions of leadership and the implicit models we hold dear. We need, as Dave implies, a renewed commitment to a balanced set of stakeholders and the service of others.

360°: *How have the recent hard economic times radically affected the development needs of leaders?*

Stefan: Organisations who believe in the development of their people will always find ways to keep investing in their human capital, almost irrespective of the ebbs and flows of the broader economy. The development needs of leaders are to some degree universal across different societies and changing epochs in time. Leaders will always need to be supported and educated in the ways and means of harnessing the collective energy of the group in order to meet the challenges of achieving something which serves as the driving force for collective good. In this sense, the development needs of leaders do not change significantly. The major change in difficult economic times is the need to get even more closely connected with others, to stay positive and provide hope.

Narendra: In good times, an underlying momentum can be mistaken for leadership. It's in tough times that leadership really gets tested. Also, tough times can be leadership development crucibles in themselves, so I think many potential leaders will be shaped – for better or for worse – by their experiences of the current crisis.

In terms of development needs, I would single out courage, resolve, determination – to deal with difficult issues, usually around people. As someone once said, the so called soft stuff is actually harder than the hard stuff. This means having difficult conversations about poor performance, and in some cases, letting people go. It's not easy to sit across the table and look them in the eye and be upfront with the uncomfortable truths. Most caring managers I know flinch, because you carry some kind of burden for years.

It is important to acknowledge the reality that leaders do not and cannot have all the answers, and do not and cannot always know what to do – even though there may be an organisational expectation that they should. So this is about having the humility to be open to the ideas and influences of others, and being able to engage, empower and enable others.

Dave: The recent research of Andrew Day and Kevin Power (see the article *In the Thick of It* on page 20) which has examined how organisations are coping with the recession provides some interesting perspectives.

They have found four patterns underlying organisations that were succeeding in fostering both resilience and hope during the current economic downturn: being fully 'present' in the organisation, fostering trust, actively engaging in the process of making meaning out of the apparent chaos of events, and creating a collective spirit. While none of these is a new element within leadership development approaches, all are clearly essential for survival and flourishing. Our challenge is to keep these in the foreground of leadership development at precisely the time when there are pressures to focus solely on 'hard-nosed' business issues.

360°: *What then is the role of business schools in helping to tackle some of these huge issues we all face?*

Stefan: At this juncture in history, business schools have an opportunity to play an increasing role in the development of how we live, work, relate to each other and continue to nurture sustainable organisations and wider environments. At the level of the individual, the basis for this is values-based leadership with a strong emphasis on personal morality.

Historically, education has played a powerful role in developing the individual and collective mind. As part of this, the world of business and commerce has been one of the most significant drivers of forward-looking change and development in all forms of human society. This is not to suggest that the growth curve continually moves in a positive and upward trajectory.

Narendra: I take the view that learning how to learn is the most profound capability of all, and by doing this, individuals and organisations can grow and develop as they engage with the countless experiences and challenges that confront them. Business schools can help to identify the generic capabilities that leaders need and help develop these.

Dave: Our colleague, Matt Gitsham – in conjunction with the European Academy for Business in Society in support of the UN Principles for Responsible Management Education - has done some excellent work in formulating a framework for looking at what these capabilities are. The research identifies three clusters of knowledge and skills that leaders need, to respond effectively to the new kinds of challenges and opportunities: 'Context' – the requirement to understand rapidly changing business environments and the most pressing issues; 'Complexity' – the need to be flexible and adaptable in the face of so much ambiguity and uncertainty; and finally, 'Connectedness' – the ability to understand the various actors in the wider landscape and to engage and build effective relationships with new kinds of external partners.

Narendra: It needs to be pointed out that good leaders existed long before the leadership development industry was born, and conversely many senior managers have gone through leadership programmes, yet mediocrity abounds in organisations. So business schools have to demonstrate that they make a positive difference in developing leaders. This will require us to acknowledge how development really happens – I personally do not think a one week classroom intervention oriented towards models and frameworks cuts it. It may move the needle a little bit, but that may not equate with long term development. We need more than that in our armoury and have to develop new and more potent development experiences.

360°: *What does make a successful leadership development experience?*

Stefan: I think there are four elements. First, more than ever, business schools need to work closely with organisations to identify individuals with the potential, the curiosity and the desire to go further. Second, the learning forum or experience needs to be designed and tailored specifically to the learning needs of the individuals and organisation. Third, it has to be delivered in such a way that people feel stimulated, supported, challenged and are provided with the right kinds of opportunities for personal and organisational growth. Lastly, more organisations need to realise that their own environments are places which should allow individuals the freedom to learn and grow.

Underpinning the development of effective leaders and leadership are some important principles. I have a firm belief that good leadership is rooted in self-realisation. Leaders need to understand how they connect with followers on intellectual, emotional and sometimes spiritual levels. A key principle is that of 'collective leadership' where all team members are focused on the creation of a strong collective energy and spirit, which ultimately enables a group to refer to themselves as a high-performing team. This links in with the principle of 'meaningful purpose' which serves to help a group or organisation establish an overall direction. The motivation to succeed and produce results stems from having a collective purpose and values which all the constituents hold.

360°: *Ashridge has just celebrated its 50th anniversary, so it is tempting to ask what you think good leadership development will look like in the future?*

Narendra: Forecasting, of course, is a notoriously hazardous business, but I certainly hope that new technology will enable business schools like Ashridge to simulate development experiences virtually and reach more managers in new and different ways that are uniquely constructed around their needs. We've seen how customisation around an organisation can make an impact. I think we're now entering an era of individualisation.

Stefan: A tangible return on investment is going to be ever more important. I also expect good leadership development to be thought of as a more natural part of our working lives, rather than as an activity which is primarily 'off-the-job'. Enlightened leaders and organisations know that their only sustainable, competitive advantage is their ability to learn, change and grow faster than their competitors. They are enthused by the fact that every day contains opportunities for some quiet reflection about how things have gone and how they could be done differently.

We all know that thinking is easy, acting is difficult, but transforming thoughts into deeds is the most difficult of all. Working even more closely with our leaders to help them with this transformation process, represents a very exciting future.

Dave: I agree with both of you, but I think we've entered an era where we must acknowledge that changes outstretch our capacity to imagine them. Technological shifts and environmental priorities will radically change the forms of leadership development in completely new ways. Developing the capacity to work comfortably, flexibly and responsively to complexity and diversity will become even more crucial. Yet, at the same time, I believe that it is individuals and the relationships with others which lie at the core of leadership and leadership development – that I think will continue.

360°: *What do you think are the big demands on executive education in the next few years in terms of content or process? What should business schools and other learning and development providers be focusing on?*

Narendra: I've already talked about the first one – individualisation around a person's context, needs and timescales. The second big need will be for providers to *demonstrate* organisational impact – for example, on culture or processes or values. Lastly, leadership development work with individuals and organisations will need to ripple through into business performance that takes into account both tangibles and intangibles.

Stefan: The greatest challenge for executive education will be the increasing pressure on breaking down and integrating the labels we currently refer to as researcher, coach, consultant and teacher. I dream of a future in which executive education is no longer constrained by such restrictive orientations and practices. There needs to be a more multi-disciplinary approach.

Dave: It's an established criticism, but business schools need to become better at practising what they preach. To work successfully with organisations and business, schools need to develop the capacity to flexibly re-invent themselves, adapt quickly and develop collaborative, creative responses to the ongoing changes and uncertainties that the world faces.

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