



Enabling A More Complete Education

Encouraging, recognizing and valuing life-wide learning in Higher Education

University of Surrey, Guildford, 13-14 April 2010

CONFERENCE PROCEEDINGS

Edited by Norman Jackson and Russ Law

**Surrey Centre for Excellence in
Professional Training and Education**

Introduction to e-proceedings

The main purpose of these proceedings is to provide an opportunity for the people who have contributed to the conference to document their contributions. Until recently conference proceedings were entirely text based but the enormous growth of internet-delivered multimedia means that traditional text formats can be animated and enriched through audio and video resources and hyperlinks to other relevant resources.

The proceedings are hosted on the Life-wide Learning Conference wiki and each contribution is hosted on a separate web page with a unique URL. In addition to a downloadable text file, the page includes video or audio (podcasts) when they are available.

When complete, the proceedings will contain the following types of resources:

- Papers written by invited speakers
- Papers written by other contributors
- Summaries of plenary panel discussions
- Video recordings and audio podcasts of presentations and discussions

After the conference our intention is to turn the proceedings into an e-book.

The e-proceedings and recordings of conference presentations and discussions can be found on the conference wiki <http://lifewidelearningconference.pbworks.com/>

*Editors: Norman Jackson and Russ Law
April 9th 2010*

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Dedication

Professor Michael Pittilo MBE 1954-2010

Professor Mike Pittilo, known as Mike to everyone, was the Vice-Chancellor of The Robert Gordon University until his death in February 2010. He was an inspiring and caring leader and a much loved friend whose untimely death at the age of 55 deprived Higher Education of a great champion for the sort of education that we surely need in order to prepare our students for the uncertainties and challenges that lie ahead of them. He believed in education that was relevant to and learnt in real world situations. He was passionate about the integration of academic and professional education, and his own personal and professional life was a testament to his beliefs.

Mike was to have contributed to our conference as a member of the institutional leaders' panel and we would like to acknowledge his contributions to Higher Education and Services to Health by dedicating our conference to his memory.



Come to the edge.
We might fall.
Come to the edge.
It's too high!
COME TO THE EDGE!
And they came,
and he pushed,
and they flew.

Christopher Logue

This was Mike's favourite poem. It sums up very well his views on what Higher Education was all about – building students' capability, confidence and will to be who they wanted to be so that when they were pushed... they would have the confidence, the will and the capability to fly and the resilience to pick themselves up and try again if necessary! These ways of thinking are at the heart of the life-wide learning idea.

Full Tribute

Unlike most people I know, Mike did not see a clear separation between a working relationship and friendship. When you worked with Mike you were also his friend and he made you feel very special, and when you were that close you almost felt like family. His ability to form meaningful relationships and to nurture those special relationships was one of the secrets of his success as a human being.

For many years I thought Mike was a Glaswegian but he was actually born in Edinburgh and moved to Glasgow when he was a boy. He was educated at Kelvinside Academy, Glasgow. His scholastic achievements at Kelvinside were modest and his school reports contain phrases like “bewildered and bemused” for French and “Airy fairy and lacks concentration” for English, as well as words to the effect that “this lad is going nowhere”. How wrong could they have been? But let’s say that at the time it wasn’t clear where he was going.

In one of those cruel ironies that life throws at us, Mike was due to return to his old school as Guest of Honour at Kelvinside Academy’s prize-giving this summer, and one of the messages he was going to give, from his own personal experience, was that, even if you are not particularly gifted at school, if you work hard, you can achieve much in life. I hope that message still goes out to the pupils of Kelvinside. They have in Mike a wonderful example of someone who aspired to great things, and through hard work, perseverance and making the most of his talents he pushed himself to achieve what he believed in – which was fundamentally about making a positive difference to the world around him.

Mike went on to study biology at Strathclyde University. There he was inspired by his teacher Professor Bill Huchinson, a parasitologist, and his life-long passion for research was born. Mike became a skilled electron microscopist and he worked at Glasgow Royal Infirmary after graduating in 1976.

In 1978, he moved south to take up an Agriculture Research Council fellowship at the Houghton Poultry Research Station in Cambridge, where he completed a PhD investigating the ultrastructure of coccidian, which are commercially important chicken parasites. His supervisor at North East London Polytechnic was Professor Stan Ball, and Mike and Stan continued to collaborate and publish throughout Mike’s working career. Indeed, on the day Mike died, a letter from Stan, who is now in his 80s, arrived suggesting a further idea for research collaboration. I think this illustrates one of Mike’s great qualities, his ability to maintain his friendships and working relationships over a life-time. He was a master at keeping in touch.

I have many fond memories of Mike dating back more than 30 years to when we first met at North East London Poly as PhD students. Some of my earliest impressions were of his inordinate politeness and generosity. He would always be the first to buy a round of drinks. There were four other PhD students in the lab and soon after he started Mike invited us all over to his tiny rented bedsit in East London for a Burns Night supper of haggis, tatties and neeps. Unfortunately Mike was not a great cook, and the food was rather underdone, but this didn’t matter as we all had a most enjoyable evening and the food was soon forgotten when we retreated to the local pub for a few drinks to wash it down. Mike remained a most loyal friend until his untimely death. Alan Seddon

In 1981 Mike started work as a post-doctoral research assistant at the Middlesex Hospital Medical School. Again using his electron microscopy skills, he was investigating the effect of smoking on arterial disease. But the most important thing that happened to Mike was the arrival in the path lab of a young trainee doctor. Mike was smitten with this pretty, hard working, bright, plain spoken but soft hearted young woman, and the partnership that was Mike and Carol was born: they were married in 1987. Carol's recollection was that she did all the work while Mike and his team would sidle in some time after nine, put the kettle on and spend the first hour talking about what they were going to do. Mike loved to think about the future!

I knew Mike from way back in the distant 1980s. He was in London doing a post doc with Neville Woolf at the Middlesex Hospital Medical School. I was the technician in the Electron Microscopy unit with him and Peter Rowles, Lucienne Papadaki and Dinesh Dasandi (and later Alan Seddon). I remember him being full of fun. In the lab there was the usual banter, leg pulling and practical jokes. One of my more exacting tasks was cutting sections for the electron microscope. Mike would creep up and flick my ears when he knew I couldn't retaliate – I'd get him back later – one way was by nailing his locker shut. We used to go running together around Regents Park at lunch time in an effort to keep fit ameliorated by the occasional drinking session. He left to work at Kingston University and we lost touch. With the internet it's so easy to look up your mates and see how they are doing – which I did a couple of years ago. I was impressed with how Mike was getting on climbing up the academic tree. I always said one day I'll pick up the phone or email him and see how he's doing. Funny thing is he came into my thoughts at the end of February so I looked him up at The Robert Gordon to find he had passed. Tis a shame he had to go so early, he was one of the nicest people on the planet. Chris Neal

By now Mike of course had a string of papers and he was ready to take on his first 'proper' teaching job. In 1985 he was appointed lecturer in biomedical sciences at what was then Kingston Polytechnic.

I met Mike on my first day at the polytechnic when I discovered him living in splendid isolation writing scholarly papers in a portacabin in the back yard of the poly. So my cheery hello was not what he wanted to hear and it was only after about my fourth knock that he opened the door and reluctantly let me come into his office, where I announced that he had to leave his retreat and move in with me. In fact I had already been to the office we had been allocated and given myself the best desk by the window with the telephone, leaving Mike the dingy corner which he made even dingier by surrounding himself with a wall of filing cabinets. But he had the last laugh because, as those of you who know Mike know, he was never far away from a telephone. So I became his receptionist, fielding calls all day long. I remember how irritated I was by the constant stream of young, mostly attractive, female students who were constantly queuing up for his attention and disappearing behind the filing cabinets.

I tell this story for two reasons: Mike's passion for keeping in touch with people over the phone and the deep care and attention he gave his students. As a teacher and tutor on the applied science course he was dedicated and committed, and well liked and respected by his students.

Mike's talents were spotted by the senior managers and in the space of ten years he went from being humble lecturer through senior lecturer, course leader and Reader to Professor and Head of Life Sciences. It was here that he first demonstrated his flair for getting the best out of people.

I have so much to thank Mike for. I first met him when he was a lecturer in the School of Life Sciences when working on a top up degree in Radiography. His patience, encouragement and support were evident from the start; he would never dismiss anyone's comments and took on board tasks easily. He had a social charm that put people at ease, the common touch, but this was matched with a steel determination and focus to get the job done. His career soared from Head of School to Dean then on to Principal at RGU, but it was the same Mike I first met. Nick Lock

In 1995, Mike became Foundation Dean of the Faculty of Health and Social Care Sciences at Kingston University and St George's Medical School (University of London). This was a real challenge in bringing about significant organizational change across the different cultures of a new university, a traditional university and the NHS to establish a new and successful Faculty of Health and Social Care Sciences. This was where Mike honed his mediation and negotiating skills. He seemed to be able to get everyone talking even if they didn't initially agree, and then to see the wider picture and step away from parochial interests. The Faculty has been a great success and Mike was very pleased to attend its 10th birthday celebrations in 2005.

I knew Mike as manager, colleague and friend. Since the sad news of his death it has become very evident to me the real impact that he has had on myself and I am sure all those that he came into contact with. His extraordinary interpersonal skills, positive approach to everything he did, calmness under pressure and energy for work or recreational activities can only be admired (I recall an example of Mike's persuasive abilities also for a supposed 'short' jog around Grand Rapids, Michigan during an academic visit). From his time as a Head of School at Kingston and subsequently Dean at Kingston and St George's, Mike leaves me a legacy of a working style that I continue to strive to emulate and for which his presence will be ever felt. Graham Morgan

Mike was appointed pro vice-chancellor at the University of Hertfordshire in 2001, where his responsibilities included academic planning, quality assurance and learning and teaching, along with the establishment of a postgraduate medical school and a school of pharmacy.

Over the years Mike has given good service to a number of national bodies. He was always willing to help and to give his time and expertise to such bodies on top of his already busy life. With the Higher Education Quality Council he contributed to the development of programme specifications. With the Quality Assurance Agency he chaired a subject benchmarking group for NHS funded health and social care subjects, bringing practitioners from diverse subjects together. Later he became a member of the QAA Board. With the Learning and Teaching Support Network he supported work on creativity in Higher Education. Through the Higher Education Academy and Leadership Foundation he helped develop the innovative Change Academy which was designed to help universities make difficult changes.

In 2002 the LTSN (soon to become the HE Academy) wanted to introduce a new team-based process ('Change Academy') to help institutions plan difficult change. We needed some institutional leaders to help us and Mike kindly volunteered to come on a study visit to the USA. His support and advice were very helpful and we managed to persuade the HEA and Leadership Foundation Boards that it was worth doing. Mike was great company and we shared many incidents together. I remember the first Change Academy was held in Dalmahoy near Edinburgh and Mike had to introduce one of the guest speakers. He did a good job, then promptly disappeared. But after about 20 minutes, during a discussion point, the speaker came over to me and said he'd lost his notes. Well it's hard to lose your notes on a lectern! I went to look for Mike and found him outside 'on the phone' to his secretary.. clutching a sheaf of papers that included the speaker's notes! That was Mike, a humorous incident was never far from him and but he was always generous in accepting his part in the story. For me that was his most endearing quality. It was what made him Mike and it did not belittle the respect we had for him.

Mike was such a loving, gentle man. I really liked him as friend, man and colleague, and saw him as a role model. I was looking forward to visiting him this spring when visiting Aberdeen. I hope he didn't suffer more than necessary and had a peaceful passing. I will miss him and light a candle in his memory. Fred Buining, friend and colleague on the Change Academy Team

Mike was proud of his Scottish heritage and he loved to celebrate and disseminate his culture. This photo was taken before his toast to the haggis at our first Change Academy in 2004.



For some time Mike had been working with the Prince's Foundation for Integrated Health; he was a critical friend to many of the complementary therapies, and he was keen to see them develop a research base to support their work. In 2003 he was asked to Chair a Department of Health Working Group on the regulation of herbal medicine, and so began a process which is still ongoing today.

Once again, Mike had to try to find and build consensus between the many different groups of practitioners of herbal medicine, and many of the tributes that have been paid to him relate to his sense of fairness and good humour which often defused difficult discussions and allowed people to come together. Mike's over-riding concern was to protect the public from the potential dangers of herbal medicine, and recent publicity has confirmed that patients are still at risk. The Department of Health is still considering the responses to the consultation but it would be a fitting legacy for Mike if statutory regulation were implemented. Mike was awarded an MBE for his services to health in January of this year, but sadly never got to attend the ceremony.

In 2005 Mike was appointed Vice-Chancellor of The Robert Gordon University. His pride in the achievements of the University was immense and he would tell everybody about RGU being ranked as the best modern university in the UK. He was proud of the strong tradition of educating students for the professional world and never stopped reminding me that his university had the best employability statistics of any university in the UK (marginally better than my own!). On a visit to the University in May 2008 Mike proudly showed me around the campus. It took a long time because every few minutes he would stop to talk to someone. Not a cursory "hello", but something personal, meaningful and friendly, so that you had the sense that that person went away happy because they had met him.

I had an epiphany moment while writing this tribute. A group of students were visiting us from Team Academy Finland and one of them said something that I felt fitted Mike's style of leadership very well. "Leadership is at its best when you are with friends, so if you can make your colleagues your friends you can be a more effective leader". I think this is what Mike did all the time.

I had the great privilege of knowing Mike when I worked as a Professor at RGU, and served as a staff representative on the institution's Board of Governors. He was a very inspirational leader, but also a modest person interested in all kinds of views and perspectives. He was also remarkably lacking in pomposity - not something one could say of all VCs. All his emails invariably ended 'Mike.' I recall visiting him in his office, to find him making coffee for his secretary, himself and me. This lack of pretension and care for others was quite typical. It shouldn't be remarkable, but of course it was. A one-off, a true gentleman and a very wise man. He will genuinely be much missed. Dennis Tourish

Mike was well liked by other senior managers outside the University. My own Vice-Chancellor Chris Snowden spoke very highly of him, and these tributes from David Eastwood and Sally Brown again sum up Mike pretty well:

*We worked together on a number of bodies over the years, and Mike was always generous in his commitment, his views of others, and his willingness to let others take credit. His integrity was obvious and unforced, and his commitment to the institutions he served exemplary. A fine man, a fine leader, a fine legacy, and a great loss.
Professor David Eastwood, Vice-Chancellor, University of Birmingham*

Mike treated staff and students with respect at all times and always offered help and support to everyone who needed it. He was a role model to me of what a senior manager could be like: a heroic figure who was never grandiose or self-important. I, like others, really miss him. Sally Brown, Pro-Vice Chancellor, Leeds Metropolitan University

Mike's illness was diagnosed in 2005 a few months after he was appointed as RGU Vice-Chancellor. He saw it as a great nuisance that interrupted his plans for the future, but his achievements are all the more remarkable considering his health. He was determined that life would go on and he would live it to the full. He dealt with his renal cancer in the same way he dealt with everything else. He got on with it. He didn't make a fuss, he was always positive and optimistic, and stoically underwent treatment after treatment. He kept his struggles private and never felt sorry for himself or sought sympathy, and never stopped working for what he believed in until the last few days of his life. As he said, he could no longer drive or walk far, but he could still talk and do something useful... and being useful was what mattered to him.

He always took a strong interest in the work of SCEPTRe and he had been to several of our conferences. When I talked about our life-wide learning idea he could immediately see the value and he believed in the idea that you learned useful things from every aspect of your life. He readily agreed to help us and re-organized a meeting so that he could participate in the leaders' panel and offered to write a paper, even though he was by now quite ill. Such was his commitment to trying to make a difference. So it is very fitting that we dedicate our conference to his memory and I hope that we can stand on his shoulders and try to make a difference.

What comes through the tributes to Mike like a shining light is the wonderful consistency of a man who was warm and friendly, generous in every aspect of his life, a modest, humble down to earth human being. He was a man of conviction and great integrity. He was full of enthusiasm, passion and vitality, full of fun and humour - a truly exceptional man.

He loved and lived life to the full and he was full of energy. Whether it was cycling, clay shooting, running, skiing, squash, photography, music, rambling or whatever, Mike threw himself into it. He was competitive and he wanted to be good at it but it was the taking part to the absolute best of his own ability that really mattered to him.

He was a champion, an enabler, someone who helped others to do the things that they wanted and needed to do; someone who was willing to set an example and to lead discussion, but also someone who listened and let himself be led by others. He was someone who got things done and made things happen.

Mike's great quality, as so many people who have paid tribute to him have said, was his ability to enable people to give of their best. In groping for something more meaningful to say, I am reminded of some words from 'Spoonface Steinberg', a wonderful play written for radio by Lee Hall. It's a story about a young girl who is dying of cancer and struggling to make sense of everything. She reasoned that:

When the world was made God made everything out of magic sparks
Everything there is, is made of magic sparks
And all the magic sparks went into things deep down
And everything has a spark
But it is quite a while ago since things were made
And now the sparks are deep down inside
And the whole point of being alive
The whole point of living is to find the spark

If you find the spark then it would be like electricity
And you would glow like a light
And you would shine like the sparks
And that was meaning of life
It wasn't like an answer or a number as such
It was finding the sparks inside you and setting them free

Mike was full of sparks, he was very good at finding his sparks and setting them free, and sharing his sparks with others. But, most of all, his gift to all of us who knew and worked with him was to help us find our own sparks and to encourage us to set them free.

Norman Jackson
March 2010

Enabling a More Complete Education

Professor Norman Jackson, Surrey Centre for Excellence in Professional Training and Education (SCEPTre), University of Surrey



Professor Norman Jackson is Professor of Higher Education and Director of the Surrey Centre for Excellence in Professional Training and Education (SCEPTre) at the University of Surrey, where the primary focus is on helping students develop their capabilities for the professional world.

He began his professional life as a geologist. A mid-career change via Her Majesty's Inspectorate led him into higher education as a field of study and senior posts with the Higher Education Quality Council, Quality Assurance Agency, the Learning and Teaching Support Network (Generic Centre) and Higher Education Academy.

An important strand of his work since 2001 has been to develop understanding of the meanings of creativity in higher education and the ways in which students' creative development is supported and encouraged. People are at their most creative when they are intrinsically motivated to do what they most want to do. This led him to idea of life-wide learning and the belief that higher education should be valuing and recognizing what students themselves do to make their own education more complete, while they are studying. He is currently involved in developing an award framework that will give concrete expression to these ideas.

Summary

This paper introduces the idea of life-wide learning and explains why it is important for higher education to integrate the idea into the existing paradigm of what a higher education means. Life-wide learning is an integrating concept that can assimilate and connect learning in and from many different contexts. It offers a rich conception of what learning and knowledge means and enables higher education to show that the learning enterprise it promotes is more directly relevant to the everyday world that students inhabit outside of the classroom. Above all it helps us value what learners are doing to make their own lives and educational experiences more complete, which provides the context for the emergent phenomenon of frameworks and awards for recognizing learning gained through co-curricular or extra-curricular activity.

Learning in and for a complex world

Four years ago SCEPTre launched its educational project with its '*learning for a complex world*' educational vision, recognizing that learning is a uniquely individual yet social act, and that it is a never ending and never complete story. How we prepare people for a life-time of uncertainty and change, and enable them to work with the ever increasing complexity of the modern world, is the perpetual 'wicked problem' shared by higher education institutions and educationalists all over the world. Directly or indirectly, this problem is the main force driving change in tertiary education. Our four conferences, formed around the themes of: learning through enquiry, immersive experience, learning to be professional, and enabling a more complete education, have all addressed this concern.

We deliberately chose the figure of *learning for a complex world* to provide a framework to integrate the pedagogic ideas and practices that were proposed as the basis for our CETL – namely learning through work, through enquiry and through self-regulatory and reflective practices (we use the term Personal Development Planning to describe these). We commissioned Julian Burton, a talented artist, to help us create an image that embedded these ideas about learning in an even richer picture of learning: a picture that emerged through conversation. Our symbolic wall drawing is intended to convey some of the complexity of learning, personal and professional development required to ‘perform and adapt’ to an uncertain, ever changing and perpetually challenging world. The picture tells a story that is far from complete – in fact one of its attractions is that it is a trigger for thinking and conversation and everyone can add the things that they think are important. As we grappled with the implications of this rich concept we began to realize that we could do much more to prepare learners for the complexities of the world by embracing a more holistic view of learning – a view that embraced the whole of their lives while they are studying in higher education. We are calling this *life-wide learning* to complement the well-established life-long journey that we all make.



Figure 1 SCEPTrE's symbolic picture

At the heart of our life-wide learning idea is the deep moral purpose of fostering learners' will or the spirit to be and become (Barnett 2005). An individual's life-wide enterprise contains far more opportunity for learners to exercise their will than the parts of their lives that are only associated with an academic programme. But will alone is not enough; alongside this intentionality learners must have the agency (ability to think, capability to act, self-awareness and

self-regulating capacity) to engage in ways that will enable them to act, influence events, achieve their goals and learn through their experiences. They must be, or learn to be, agentic learners (Bandura 2001). A life-wide learning enterprise contains far more opportunity and potential for the development of human agency than a formal education programme alone and this connects the moral and educational arguments for life-wide education.

Self-awareness is an important component of human agency. Being able to think about a situation, decide what to do, and act and reflect on the experience is fundamental to our epistemology. Personal Development Planning (PDP) has been introduced to encourage educators to pay more attention to this process. Life-wide learning provides a rich personal learning environment within which to practise PDP and the way that institutions are utilizing this opportunity, through their schemes for recognizing and valuing learning through different life experiences, is an important theme of the conference. Life-wide learning is a unifying and integrating concept because it enables us to bring together, within a single framework, learning in and from different contexts.

Employability

'*Employability skills* – the attributes that help people respond to the changing demands of the workplace and contribute positively to their employer's success and their own progress have never been more important' (CBI 2009). Being able to get a job on completion of a university course is the goal of most students and they will not be successful if they lack the experiences and attributes that employers are looking for. While most of the attributes CBI believes are important for employment (Table 1) can be developed through a formal

education programme, employers are looking for evidence that a student can demonstrate these attributes in real world situations (especially work situations). This is why the life-wide conception of a higher education curriculum adds value to the learning potential of students' higher education experiences. The life-wide learning concept recognizes that higher education can do more to help students develop and demonstrate effective use of a complex range of skills, behaviours and attitudes in contexts that employers would see as being relevant to their interests.

Table 1 CBI's (2009:8) list of employability skills

Self-management – readiness to accept responsibility, flexibility, resilience, self-starting, appropriate assertiveness, time management, readiness to improve own performance based on feedback/reflective learning.

Teamworking – respecting others, co-operating, negotiating/ persuading, contributing to discussions, and awareness of interdependence with others.

Business and customer awareness – basic understanding of the key drivers for business success – including the importance of innovation and taking calculated risks – and the need to provide customer satisfaction and build customer loyalty.

Problem solving – analysing facts and situations and applying creative thinking to develop appropriate solutions.

Communication and literacy – application of literacy, ability to produce clear, structured written work and oral literacy – including listening and questioning.

Application of numeracy – manipulation of numbers, general mathematical awareness and its application in practical contexts (e.g. measuring, weighing, estimating and applying formulae).

Application of information technology – basic IT skills, including familiarity with word processing, spreadsheets, file management and use of internet search engines. Underpinning all these attributes, the key foundation, must be a

Positive attitude: a 'can-do' approach, a readiness to take part and contribute, openness to new ideas and a drive to make these happen.

Entrepreneurship/enterprise: broadly, an ability to demonstrate an innovative approach, creativity, collaboration and risk taking.

A richer conception of learning, knowledge, knowing and thinking

But focusing only on the value of life-wide learning from the perspective of employability does not honour the full value of the educational concept that goes to the heart of what it means to be a human being (see Barnett, 2010).

Implicit in our vision of learning for a complex world is the notion that learners are the integrators of their learning from different parts of their lives. Integration not only embraces what has gone before (the concept of life-long learning) but also what is happening simultaneously in a person's life (the concept of life-wide learning that frames our conference). We have come to see integration as an important educational concept (Jackson 2009) and an important role of higher education is to enable learners to develop the cognitive abilities to integrate their thinking and learning to enable them to deal with new situations. The development of new award frameworks to value and recognize learning and development gained through experiences that are not part of a programme as a means of supporting integrative learning.

The ability to *transfer* and *adapt* learning to new situations is a requisite for being a successful learner in a complex world and Michael Eraut's contribution engages with these important dimensions of agency (Eraut 2010). One of the social ways in which we transfer and adapt learning is through *telling and listening to stories* and we have come to realize that the creation of narratives is an important feature of the frameworks we are exploring in this conference. In order to recognize the forms of informal learning we need to become adept at telling the stories of our learning and good at recognizing learning in the stories. Dave Snowden's

contribution helps us appreciate the importance of creating, telling and listening to stories , and shows us how technology can help us make more sense of the stories around us (Snowden 2010).

How we construct our lives, the relationships we build, the experiences we engage in and the meaning we take from these experiences is a very personal thing and we need to listen to the stories that people tell in order to develop our appreciation of the real meaning of life-wide learning. Ron Barnett has interviewed a number of students at Surrey and his keynote contribution to the conference will draw out some of the lessons he has learnt from the stories they tell. We have also invited some students to tell their stories of the important sites for learning so that we can better appreciate the value to them of their life-wide learning.

The human condition is to try to understand situations, to find things out in order to understand and solve problems and to integrate information, knowledge and experience in order to make wise decisions (Figure 2). Such wisdom is full of critical thinking and reasoning, imaginative creative thinking and integrated (connected, synthetic, relational and experiential) learning, and our progress and success as human beings is dependent on continuously searching for and growing new wisdom while retaining and using the insights that have already been gained. The ability to integrate our thinking, experiences and practice is the foundation for expertise.

Figure 2 We need to be able to think with sufficient complexity to understand the consequences of our actions. Source not known



One of the 'problems' with traditional higher education, as a vehicle for preparing learners for the complexities of the world ahead of them, is that it seems to take such a narrow view of what learning and knowledge are. Higher education is concerned primarily with codified knowledge and with its utilization by learners in abstract hypothetical problem solving. This is not to say that handling complex information in this way is not useful – far from it: it is an essential process for enabling students to learn how to think about and work with complexity. Life-wide learning allows us to engage a much richer conceptions of knowledge and knowing. For example, if we adopt Michael Eraut's (2009 and 2010) conception of personal knowledge we can gain a better understanding of the scope for the sources of knowledge that learners draw upon in a life-wide learning context.

- 'I argue (Eraut 2009:2) that personal knowledge incorporates all of the following:
- Codified knowledge* in the form(s) in which the person uses it
 - Know-how* in the form of *skills and practices*
 - Personal understandings of people and situations*
 - Accumulated memories of cases and episodic events*
 - Other aspects of personal expertise, practical wisdom and tacit knowledge*
 - Self-knowledge, attitudes, values and emotions.*

The evidence of personal knowledge comes mainly from observations of performance, and this implies a *holistic* rather than *fragmented* approach; because, unless one stops to deliberate, the knowledge one uses is already available in an *integrated form* and ready for action.'

Recognizing and valuing these forms of highly personal and situated knowledge and learning requires a very different approach to the assessment of a student's understanding of something they have read in a book and the question of 'how we do it?' is the central challenge for the sorts of schemes we are exploring in this conference.

Another important insight arising from Michaels' research into how people learn through work is that we are all either developing or regressing (according to the opportunities and needs we have) along, what he terms learning trajectories (Eraut, 2010: 63). Common sense tells us that this view of learning and holistic capability will be equally applicable to the broader pattern of learning across our lives. So a question to ponder might 'what would a set of learning trajectories look like that embodied the whole of our life-wide learning enterprise?'

The fundamental question for higher education is *How can higher education be higher if it ignores the higher forms of learning and the agency to create new and relevant knowledge, that characterize learning in the real world outside higher education?* In creating our proposition for life-wide learning and life-wide education we are not trying to reject the existing paradigm, rather we are seeking to extend and reshape the paradigm so that it is more inclusive in its conception of learning and knowing, and to achieve a better balance between different forms of learning and knowing in a range of contexts and situations. Dave Snowden's contribution (Snowden 2010) helps us see the added value in the life-wide learning, life-wide educational paradigm by looking at learning, knowledge and judgement in society, based on insights and learning from the natural sciences by:

- applying complex adaptive systems theory, sometimes known as the science of uncertainty, to learning and knowledge
- examining the role of the micro-narratives of day to day existence for research and knowledge transfer: arguing that we need to pay more attention to these in learning for and in the real world
- using technology as a tool to facilitate understanding and decision making, not to replace it
- measuring impact of actions in an unknowable future; alternatives to the tyranny of outcome-based targets

The amount of information we have to deal with everyday of our lives is an important dimension of the complexity of the modern world together with the increasing use and diversity of technology we are using to communicate this information. Building on Dave Snowden's contribution, the involvement of learners in new media and the cultures of participation some technologies spawn, has an essential role to play in the developing the agency and accomplishment of learners through their life-wide learning enterprise. Specifically, participation in this interactive, media rich world helps learners develop new literacies, capabilities and dispositions that are relevant and necessary to future learning in an information-rich, networked world (Jackson, 2009). Reinforcing Dave Snowden's arguments for the use of technology to facilitate our sense making from the micro-narratives of life, Richard Hall's contribution examines more generally, the technologies that are part of the ecology of new media, and argues that they provide essential agency to facilitate the recording/representation, evaluation and recognition of life-wide learning.

Nurturing spirit: *the will to be and become a better human being, the will to overcome*

The individual learner (you, me, our students, friends and family and everyone else) lies at the heart of our symbolic drawing and central to our learning and the way that we see and engage with the world is our will to

be and become. I agree with Ron Barnett (Barnett 2005:15) '*Will is the most important concept in education. Without the will nothing is possible.*' We cannot achieve anything of significance. We cannot make decisions about a situation we find ourselves in, we cannot act in ways that are ethical and appropriate to the situation and we cannot learn how to deal with the situation or learn from the experience. Willingness to be, to do and to become are important themes in Ron Barnett's paper (Barnett 2010) based on an interview study of university students' involvement for their life-wide learning enterprise.

But life is full of twists and turns and having the will to overcome adversity is fundamental to being resilient in a world of continuous and rapid change: just look at the disruption to people's lives caused by the current economic situation. Richard Hall's contribution (Hall 2010) explores the idea of a curriculum for resilience and argues that a life-wide curriculum offers more possibility of helping learners recognize and develop their agency to be resilient in a disruptive world.

There are particular situations that people encounter, known as immersive experiences (Jackson and Campbell, in press and <http://immersiveexperience.pbworks.com/>), which are particularly favourable to the development of personal resilience. These are situations of engagement and challenge that go well beyond what is normally encountered in every day life and they result in transformation – the person that comes out on the other side of such an experience is very different from the one that went into the experience. Such situations are difficult to engineer and the ethics of putting students into stressful situations is problematic. But such situations do naturally occur in students' lives (Campbell 2008). By embracing the idea of life-wide learning higher education can value and recognize the transformative learning and personal growth that emerges through such experiences.

A fundamental question for higher education curriculum designers is *what forms of experience nurture the spirit that will enable learners to become who they want to become and overcome the considerable challenges that many will experience in their professional and personal lives?* Our belief is that an academic, discipline-based programme alone cannot provide the answer to this question for many people, and SCEPTrE's efforts to add value to an already rich higher education experience has been motivated by this question.

A person's spirit is driven by their beliefs and values, but apart from the beliefs and values academics hold about 'what being a good student in subject X means', students have little opportunity to demonstrate important beliefs and values which make them who they are. For example the only way a student can demonstrate a work ethic commensurate with the expectations of a work environment is to demonstrate that they have applied this ethic in a real world environment. A life-wide curriculum enables and empowers students to draw upon and demonstrate their personal belief and value systems through their actions.

A More Complete Education: life-wide learning and life-wide education

What we do as educators and institutions is only one side of the educational equation. Learners are busy preparing themselves for the rest of their lives. Thinking about what learning for a complex world means led me to conclude that the only way we can prepare ourselves for the complexities and challenges that lie ahead is to take the whole of our lives into consideration. It seems self evident that we are who we are because of the way we have lived our lives and the way we currently live our lives and what we learn through our experiences holds the potential to become who we want or need to be. The term **life-wide learning** (Jackson 2008) embraces the many sites for learning that occur in a learner's life at any point in time. The concept adds value to the well established idea of life-long learning which captures the continuous set of patterns of learning that emerge from personal needs, aspirations, interests and circumstances throughout an individual's life. It follows that the idea of **life-wide education** (Barnett 2010) is given meaning and material substance through the intentional designs and actions of an institution or educational provider who

seeks to encourage, support, recognize and value learning from all parts of a learner's life. Ron Barnett will explore with us some of the implications of life-wide education for institutions.

When designing educational experiences we usually begin with 'our' professional concepts of a curriculum. We begin with *our* purposes and the outcomes we want to promote, create a design, think about the content, encourage learning through our teaching and learning activities, the resources we provide, and what and how we choose to assess what value. We may encourage the integration of the real world into our designs by choosing a context like work and create a design to enable learners to learn through the work placement experience.

But what if we were to begin with the learner and their life, and see the learner as the designer of an integrated meaningful life experience? An experience that incorporates formal education as one component of a much richer set of experiences that embrace all the forms of learning and achievement that are necessary to sustain a meaningful life. Integration suggests the bringing together of separate entities to make a new and more connected whole. We see study, work and play as separate activities because that is the way our culture sees them. But these experiences are integrated into our life along with all the learning that flows from them and we develop as individuals through the unique combination of experiences that compose our lives.

Beyond design *how do we as teachers encourage learners to integrate their learning from different parts of their lives?* John Cowan shares his wisdom on this question: wisdom that only comes from a life-time commitment to learning (Cowan 2010). He concludes that what matters to him as a teacher is exactly what matters to him as a learner. And there are lots of people in higher education, other than teachers, who are directly involved students learning and development whose important role can be more explicitly recognized within a life-wide learning paradigm.

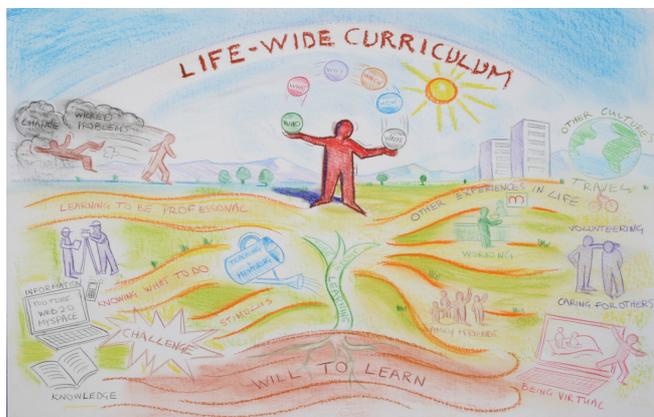
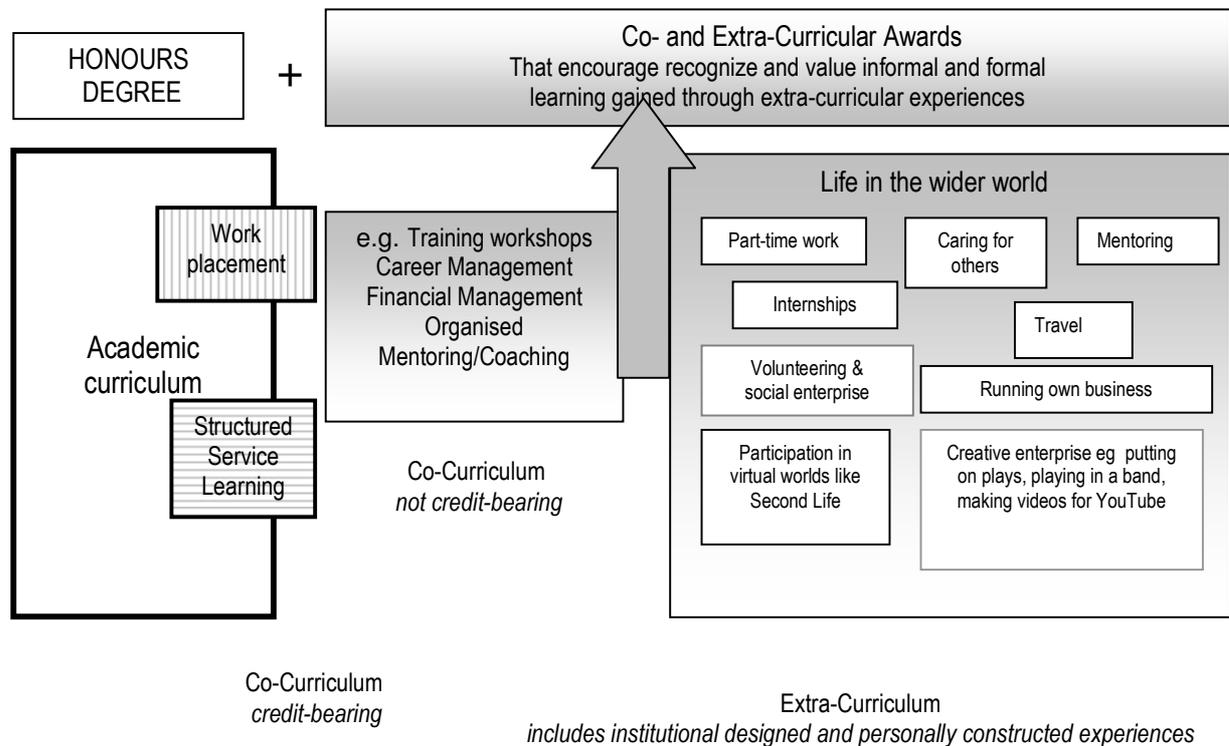


Figure 3 Symbolic drawing of a life-wide curriculum

We are using the term **life-wide curriculum** (Jackson 2008) to embrace the idea of an educational design that seeks to empower and enable a learner to integrate their learning from any aspect of their life into their higher education experience. The concrete expression of this idea (Figure 4) translates into curriculum map containing three different curricular domains all of which have the potential to be integrated into a learner's personalized higher education experience and be recognized :1) academic curriculum which may by design integrate real world work or community-based experiences; 2) co-curriculum – designed experiences that lie outside the credit-bearing programme which may or may not receive formal recognition for learning; 3) extra-curricular experiences that are determined by the learners themselves.

Figure 4 Life-wide curriculum (Jackson 2008)



Recognizing life-wide learning

But it is not enough to encourage and support learners in their life-wide learning enterprise *they have to believe that institutions value their efforts to make their own education more complete.*

Surveys undertaken by Tom Norton (Norton 2009) and Charlie Rickett (2010) have shown that co- and extra-curricular award and recognition schemes are now an important feature of the UK Higher Education landscape. This phenomenon is associated with all university peer groups and is especially well represented in the top 20 research intensive Russell Group and 1994 Group of Universities.

The emergence of co- and extra-curricular awards suggests that we are witnessing a system-wide adaptation that is fundamentally about making higher education more relevant to the lives of learners and recognizing that there is more to learning and education than *'just'* studying a subject.

With such a rapid growth in these awards and schemes for recognizing informal learning across the sector there is likely to be a multiplicity of reasons. For example:

- The restrictive nature of the traditional single honours course in UK HE which leaves little scope for broader educational considerations especially in research intensive universities (for example in contrast to liberal arts education in USA where these forms of learning are often integrated into the credit bearing curriculum).
- The drive for efficiency has progressively reduced contact time: in some courses students spend significantly more time doing things other than studying.

- The necessity of students to undertake significant paid work in order to support themselves through university and the recognition that there is a ready made context for demonstrating students' employability skills by recognizing that work is a valid context for learning.
- Increasing student and parental expectations of value for money. Institutions that can offer such awards can claim they are adding more value to students' educational experiences.
- The driver that employability has to be an important outcome of a university education so demonstrating a commitment to helping students' demonstrate their employability skills is an important strategic factor.
- The significant support being given by employers and graduate recruiters, as evidenced through sponsorship and direct involvement in institutional schemes, further reinforces the institutional, student and parental beliefs that these schemes are a worthwhile investment.
- Following others: Once there is movement others see the value and/or do not want to be left behind.
- A genuine desire to broaden and deepen the conception of what a higher education means and to embrace a much richer conception of learning: one that truly embraces the real world beyond the classroom

I believe that the phenomenon we are witnessing is a system-wide adaptive response to the wicked problem of how we prepare learners better for the complex world in which they will live and work. Like all emergent phenomenon the creative dynamic is leading to many different approaches being crafted and supported within specific institutional situations and circumstances. In creating this conference

Value, opportunities and challenges

The conference is all about sharing perspectives on the value, opportunities and challenges afforded by re-framing higher education in terms of a life-wide learning, life-wide educational paradigm. We are not suggesting that we reject the existing paradigm rather, and in sympathy with the liquid world we live in, we extend it to embrace notions of learning and being that are more familiar in and relevant to the world outside the classroom.

The particular contribution of the e-proceedings is to provide participants with an opportunity to explain and record their ideas in a text or image-rich format. This introduction has focused mainly on the value and rationale for life-wide learning and argued that there are significant opportunities for those institutions that adopt a life-wide educational approach to promoting students' learning and the use of co-curricular or extra-curricular awards to recognize such learning. There are however innumerable challenges and the purpose of the conference is to draw these out. Here are a few examples.

The ideas of life-wide learning and life-wide education are simply a way of framing a way of thinking about this problem – which should be seen as a opportunity to do more than we currently do rather than a chronic issue to be resolved. But we live in severely economically challenging times with many people losing their jobs, companies reshaping around their core businesses and substantial cuts in public spending and some public services (including higher education). Such a climate has the potential to stifle new ideas and drive people into risk avoidance. Yet these sort of unstable and uncertain conditions are exactly what we need to prepare our students for and we will not do this if we simply withdraw to mindsets that only aspire to core business. The real potential is in the added value beyond core business. **But if these ideas are so important and can add so much value to students' potential, why are they not core business?**

Life-wide learning poses significant challenges for the assurance of educational quality and standards. Learning occurs in diverse environments which cannot be controlled by institutions. Learning is

very personal and highly situated. It only has meaning to the individuals concerned. Unlike formal education where learning is the primary goal, in the life-wide learning context most of the learning is a by-product of doing things like working, significant traveling, volunteering, mentoring or something else. Personal development in these contexts is difficult to articulate it often involves the development of qualities and dispositions as well as new knowledge and skills. Furthermore, learning often emerges in a seemingly haphazard way through the process of doing things and reflecting on the experience. So how do we assure the quality and standards of these forms of education? What is it we are assuring and what do standards mean in these contexts? These are fundamental questions that have to be addressed. There must be but possible solutions but are they the same as those we apply to academic programmes where learning is controlled and we base our assessments on outcomes that we predict.

PDP practice with its strong focus on self-regulation, forward thinking, planning and reflective thinking, is an essential underpinning to supporting 'learning through experience' and making informal learning explicit. Technology – in the form of e-portfolios, social media and blogs has an important role to play in supporting reflective and planning processes. But technology alone doesn't work in reflective processes there needs to be interaction between a student, the technology and a significant other. **In a system that is strapped for cash how do we facilitate learning through reflective processes for relatively little staff involvement in the role of significant other?**

Then we have the challenge of Higher Education Achievement Report and its need for systems that can produce automated useful information about students' learning, including their informal learning. **The challenge is to connect and integrate people, IT systems and reporting processes so that they are not only efficient in generating and providing information but they are effective in really helping students learn and become more self-aware.**

Then there is there is the issue of whether the information generated through these processes is of direct value to employers when they come to recruit someone for their business. Successful completion of a co-curricular or extra-curricular award entitles a student to some form of certification but is the real in their enhanced knowledge about themselves and the creation of a portfolio of evidence or stories of their learning and personal development which they can use to demonstrate their qualities, skills, capabilities and attitudes to future employers. The Government is also saying that employers need more explicit information about informal as well as formal learning. Through the work of the Burgess Committee it has proposed a Higher Education Achievement Record as a means of providing this additional documentation. But many people in Higher Education are not convinced that employers will use such information, preferring to define for themselves the information they need, in the forms they need it, in order to make a judgement about the potential of person who is applying for a job. The relationship of HEAR to the information provided in co-curricular and extra-curricular awards and the value of these forms of information to employers is worthy of examination.

Our appreciation

SCEPTRe is delighted that so many colleagues and institutions are participating in our conference and we hope that the relationships developed will encourage the further development of a practitioner network. Our ambition is to support the initial documentation of schemes through our e-proceedings and poster gallery and we invite any practitioner or institution who has developed such a scheme to contribute an article or poster after the conference.

We acknowledge the support of a number of organisations – QAA, HE Academy, 1994 Group of Universities, Centre for Recording Achievement and Association, Graduate Recruiters and the World Association of Cooperative Education. Their support shows us that they also recognize this as an important development.

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Life-wide education: a new and transformative concept for higher education?

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Engaging the Curriculum in Higher Education (with Kelly Coate, 2005) and *A will to Learn: being a student in an age of uncertainty* (2007), have had an important influence on SCEPTRe's work and the idea of life-wide learning and life-wide curriculum.

Summary

If lifelong learning is learning that occupies different spaces through the lifespan – 'from cradle to grave' – lifewide learning is learning in different spaces *simultaneously*. Such an idea of lifewide learning throws into high relief issues precisely of spaciousness – of authorship, power, and boundedness; for characteristically, pursued in different places under contrasting learning conditions, the various learning experiences will be seen to exhibit differences in authorship, power and boundedness, as well as in other ways. In turn, such a conception of lifewide learning suggests a concept of liquid learning, a multiplicity of forms of learning and thence of *being* experienced by the learner contemporaneously. This concept – of lifewide learning – poses in turn profound questions as to the learning responsibilities of universities: do they not have *some* responsibility towards the *totality* of the students' learning experiences? Does not the idea of lifewide *education* open here, as a transformative concept for higher education? In sum, the idea of lifewide education promises – or threatens – to amount to a revolution in the way in which the relationship between universities, learners and learning is conceived.

Introduction

If a liquid age has arrived, perhaps too liquid learning has also arrived.ⁱ The tense is important – 'has' arrived; not 'is arriving' or 'will soon arrive'. The future is already here. There is an understandable tendency to cash out such a thought in terms of e-learning, especially the new generations of interactive learning, of 'virtual life' learning, and multimedia learning, with the learner learning through various media simultaneously. Here is liquid learning in full measure, it may seem, with its pedagogical frames weakening, and manifold experiences running together beyond the boundaries of disciplines, conventional standards of communication and sure understandings.

Certainly, a narrative of liquid learning in those terms could be developed and such work is already in hand (for example, Bayne ; Gourlay; Savin-Baden; Webster and Robbins). *Here*, though, another narrative is proposed; a narrative of liquid learning in terms of multiple and simultaneous spaces. The two qualifiers are crucial: multiple *and* simultaneous. This form of liquid learning is the phenomenon of an individual inhabiting several learning spaces simultaneously and, in those spaces, experiencing not just contrasting learning experiences but even *contending* learning experiences. The phenomenon is not new: for one hundred and fifty years or more, individuals while at work might avail themselves of informal and learning experiences locally available (through, for instance, university extension programmes) and those extra-mural opportunities (outside the walls of the workplace) might even lead to revolutionary thoughts and activities. Today, in a liquid age, however, individuals inhabit simultaneously as part of their lives multiple learning spaces: work, non-work, family, leisure, social networks, occupational networks, social engagement and manifold channels of news, information and communication, not to mention physical and global mobility (actual and virtual), burst open the possibilities for learning.

In their medieval inception, right up to the middle of the twentieth century, universities saw themselves as total learning institutions. Their buildings – colleges – were turned inwards to quadrangles. They were locked at night. Entry was severely restricted. They offered learning spaces secluded from the world. This situation was not dissolved but accentuated with the formation of the disciplines. ‘The ivory tower’ was a powerful and not unfair image, in its depiction of research as a socially secluded activity. But the last half century has witnessed fundamental changes to universities: now they are in the world and the world is in universities. There is mutual ‘transgressivity’ across their boundaries. (cf Nowotny, Scott and Gibbons, 2001:21) Universities have become liquid institutions, a shift accentuated by the marketisation of higher education.

In these shifts, students are no longer entirely enfolded within universities but become customers engaging in market relationships with their universities. They have an independence from their institution: their market independence is mirrored by a new contractual relationship (they have legal rights which can and are increasingly enforced in the courts) and by a social and economic independence. Students have their own networks outside the university, virtual and physical. And they have an economic independence. Their very indebtedness aids this economic independence in a way. For being in debt (to banks, to the state, to the taxpayer, to private sector organizations and even to family members), they are now released from dependence on the university. In this regime, students become now just economic and social nomads but they become learning nomads, increasingly inhabiting all kinds of social and economic situations that afford different kinds of learning. In this milieu opens the phenomenon of *lifewide learning* (Jackson 2008).

Lifewide learning and lifelong learning

Lifewide learning, it is surely already apparent, is fundamentally different from *lifelong* learning. ‘*Lifelong* learning’ is learning across time, and ideally, as the term implies, more or less throughout a lifetime. It reminds us that learning can go on almost ‘from cradle-to-grave’. In this context, university education is simply an experience at a moment in time in an unfolding learning journey through life. (It is possible that an individual may experience university education more than once in his or her lifetime; but then we simply see university education as a series of stages – and perhaps intermittent stages - in that lifelong learning journey.) In essence, lifelong learning is a series of learning experiences in successive time zones of a life.

Lifewide education, in contrast, is learning in different places simultaneously. It is literally learning across an individual’s lifeworld at any moment in time. These places of learning may be profoundly different. These learning experiences will be marked by differences of power, ownership, visibility, sharedness, cost and recognition.ⁱⁱ The idea of lifewide education, in other words, reminds us that learning occurs in – as we may

term it – learning spaces.ⁱⁱⁱ In this context, university education may be itself seen as occurring in different learning spaces and may well have its place *alongside other learning spaces that the student inhabits* while taking his or her formal programme of studies. So, for 'lifelong education', we may read learning in time; and for 'lifewide education', we may read learning in space (or spaces).

Certainly, an individual's learning journey through life can be seen as involving both lifelong learning *and* lifewide learning. His or her learning will be moving forward through their lifespan (lifelong learning) *and* will involve many learning spaces (lifewide learning); and often, at any one time, the individual will be experiencing several forms of learning all at once. So the *timeframes* of lifelong learning and the *spaces* of lifewide learning will characteristically intermingle.

Through time and across space, the relationships between lifelong learning and lifewide learning are even more complex. For the learning experiences an individual undergoes simultaneously in lifewide learning will themselves be associated not only with different timeframes but with forms and spaces of learning that have different rhythms. Within a short period of time, as well as being committed to her course of study – itself a complex of learning experiences with different paces – a student may participate in a university sports team and its events, a weekly church service, some sessions in paid employment, and participation in a two-month charitable commitment in a developing country. Each of these activities has its own rhythm; fast and slow time jostle in her holding onto her learning spaces. From time to time, too, these commitments may overlap or clash; and so the student has to 'manage her time' and determine priorities as the various responsibilities are heeded.

Oakeshott (1989:101) spoke of university life for the undergraduate as 'the gift of an interval'. It was time out, a spacious space into which the student stepped, outside of the mainstream of society's structures. Now, much of that idea is passé. Higher education represents not an interval between stages of the press of the responsibilities of youth, but is rather a set of learning and developmental spaces *in addition* to those of the wider world in which the student is immersed and continues to be immersed. Now, the student is a person in society – whose age may range characteristically from 18-50 (and sometimes beyond that range, even among undergraduates) and his or her university education offers a set of learning experiences alongside many others enjoyed by the student already or that may be taken up while the student is enrolled at the university. Accordingly, if it is still to do work for us, Oakeshott's idea of higher education as 'an interval' needs reinterpretation: in an age of lifewide learning, just what kind of interval might higher education offer?

Places for a student's lifewide learning

We may distinguish different forms and spaces of a student's *lifewide* learning. While being a student, he or she may be involved in learning activities and learning processes (the examples offered are 'real examples', revealed in recent interviews at the University of Surrey):

- i *within a course*, some of a more *cognitive* kind (writing an essay, tackling computational problems) and some of a more *operational* kind (in a laboratory, in the creative design studio);
- ii *within a course*, *off-campus* and assessed (in the clinical setting; conducting a mini-survey);
- iii *within a course*, *off-campus* but *not accredited* (a field trip; even sometimes the work experience component of a 'sandwich' course)
- iv *on campus*, and *unaccredited* and *not linked* to the student's course (writing for a student newspaper, working on a student e-journal, running a sports or social society, running a student bar, working in a student shop)
- v *voluntary* and *unaccredited* but *linked* to the student's course (joining with a few other students and composing musical scores for each other's assessment, but outside the students' courses)

- vi *on campus, not linked to the student's course and accredited by a University (taking a language course recognized in some way by the University and separately from the student's degree)*
- vii *not linked to the course, off campus and accredited by an agency other than the university (taking a St John's ambulance course; taking a language course offered by an agency in the private sector)*
- viii *not linked to the course, off campus and unaccredited (singing in a choir; starting up entrepreneurial activities and trying to make some money in the process; engaging in voluntary work, perhaps in a developing country).*

This classification of a student's lifewide learning activities allows us to make five general points:

- That the student's learning often takes place in *a number of sites*
- That the student's formal course of study may constitute a *minority* of the learning experiences undergone by a student while he or she is registered for that course of study. (In some courses in the humanities and social sciences, after all, 'contact time' may amount to less than ten hours per week.)
- That much of the learning that a student achieves while at university is currently *unaccredited*, and involves unaccredited learning that is both *within* the course of study and unaccredited learning that is *outside* the course of study (either on or off campus);
- That much of the student's learning is *personally stretching*, whether it is on or off campus, and whether it is part of a formal course of study or not; it may involve situations quite different from anything hitherto experienced (across social class, ethnicity, language, nation, and other forms of social, cultural and economic differentiation)
- That much of the student's experiences outside the course of study is highly demanding, and may involve high degrees of responsibility (perhaps for others) and accountability such that it leads to major forms of personal development on the part of the student.

Forms of lifewide learning

One might be tempted to try to categorise the forms of learning achieved by students – whether on their course or outside of it – in terms of skills and knowledge. A student who becomes a member of the university's horse-riding team will gain much *knowledge* about horses and will learn also the *skills* of horse-riding. One might want to stretch the notion of skills here to include, for example, 'team-skills' or even – if captancy of the team is involved – 'leadership skills'. And the interviewees used the term 'skills' in reflecting on their learning. But the language of knowledge and skills is insufficient to capture the complexity of the learning processes that many are undergoing. Here are the voices of some of my interviewees at the University of Surrey:

- (i) *'[I was working] with UNICEF ... for a month, and I was volunteering and I was working with internally displaced people, people affected by war. [And I was] educating them about the journey (back to their home countries) and also what they're going to find when they go back, like what to expect in terms of how the water is, how the schools were, how the land ... if there were any mines, or any other diseases ...'*
- (ii) [a recent graduate]:
'... it was quite an adjustment when I came out of an environment, first of all where I was given feedback and support all the time; where I had grades that I could measure myself against ... it was never a question of skills ...'
- (iii) *'I think I've probably grown up a lot as a person ... I've had a lot more responsibility and I've tried to push myself into doing things that I wouldn't have done before I came. [For example], last year, I*

created a new society for the University. That involved quite a lot of responsibility and taking control and I've never been in that, sort of, leadership position before.'

- (iv) [a captain of a University sports team] *'I used to be quite shy ... but coming here and having to work in groups of people. I like having something separate from ... my academic work. It definitely ... boosts my enthusiasm. Getting out there every week and doing something you enjoy.'*
- (v) [a student with several interests and activities, including a part-time job]: *'You have to be different in different contexts because obviously it's not appropriate to be sort of completely yourself all the time. ... You have to sort of keep going ... amidst pressure. To me, it'd seem like you're sort of letting other people down ...'*
'... when I'm at work, [that] sort of gives you confidence with mostly with working with others ...'
- (vi) [a student involved in several societies involving different ethnic and religious groups]: *'so if you look at a person ... every star has a right to twinkle ..'*

In these quotations, these interviewees are reflecting on themselves and their learning and their development in ways that are not easily caught by talk of knowledge or skills. 'Enthusiasm'; keeping going 'amidst pressure'; growing in 'confidence'; believing that every person in the world 'has a right to twinkle'; overcoming one's 'shyness'; growing up 'as a person'; empathising with others so as to be able to help them; becoming self-reliant; and bearing the pressure of personal responsibility: terms, ideas and dimensions such as these might be caught in part by talk of knowledge (coming to know, say, more about oneself) or skills (learning, say, the skills of self-management) but those domains – of knowledge and skills – are ultimately inadequate to capture the profound forms of human development that are taking place through the students' varied forms and places of learning. Indeed, one interviewee (i) is quite clear: 'it was never a question of skills'. What is in question here in all of these quotations, surely, is the way in which each student is becoming more fully human.

In comprehending students' lifewide learning, therefore, we need to supplement the domains of knowledge and skills with a sense of a student's *being* and, indeed, their continuing *becoming*. Here, a language of (a) dispositions and (b) qualities may be helpful. In the quotations above, for example, we can see (a) the *dispositions* of:

- a a willingness to learn about oneself
- b a preparedness to put oneself into new situations
- c a preparedness to be creative in interpersonal situations
- d a preparedness to move oneself on, into another place
- e a will to help others
- f a willingness to adjust one's approach and self-presentation, according to context
- g a will to keep going, even in arduous settings

We also see the *qualities* of:

- a enthusiasm
- b confidence
- c empathy
- d care (for others)
- e energy

(NB: *These two lists – of dispositions and qualities – are by no means exhaustive and could easily be developed further by drawing on the full extent of the interview data.*)

All of the students *were* developing their knowledge and their skill sets. For example, the students I interviewed were developing *skills* for managing the many demands on their lives, for juggling the complexities of their lives and in analysing situations to determine how best to be effective; and some of the interviewees were quite explicit about how they were developing such skills. They were also developing their *knowledge* in different ways (such as gaining knowledge of first aid, of commercial practices, of national and even international organizations). So the domains of skill and knowledge remain important in understanding the learning achievements of students in their lifewide learning.

However, in addition to developing their *knowledge* and their *skills*, all of my interviewees were developing their *dispositions* and *qualities* as well. And in developing their dispositions and qualities, they were developing as persons. In developing their *dispositions*, they were developing a greater preparedness to go on, to engage with life, and to throw themselves into and to engage with strange situations. In developing their *qualities*, they were developing their own personas, and a way of imparting their own stamp on the activities into which they threw themselves. The totality of the student's learning experiences, we can see, is altering their *being-in-the-world*. This being is not fixed but is now in a process of perpetually becoming as the students engage with a continuing interplay with their environment, moving this way and that, and so unfolding in often unpredictable ways.

This set of considerations implies, perhaps, in developing any kind of self-profiling among students – for example, for any new 'Record of Achievement' or University Certificate alongside their course of studies – that students should be encouraged to reflect on how they have developed as *persons*. Whether the language of 'dispositions' and 'qualities' could be operationalised in any such initiatives on the part of the University would have to be subject to a kind of action research. Perhaps at least the idea of 'qualities' might be found to be helpful in students' self-monitoring processes (even if the idea of 'dispositions' turns out to be somewhat too abstract a notion for practical purposes).

Some intermediate questions

These reflections raise some challenging questions and reflections for any university.

- 1 *What is or should be special about the student's course of study, if anything?* One student interviewed was a member of a small group of students who met regularly and produced for each other's scrutiny artistic creations that were intimately linked to the purposes of their degree course but which were entirely independent of the course in that they were unprompted and were invisible to the tutors on the course. Students may be *more* active intellectually and imaginatively in the learning spaces outside their formal course of study. What then should be the aims of the student's course of study?
- 2 *What implications arise for the university, if any, from the students being in receipt of income from some of their learning activities?* Both on campus and off-campus, students are often in receipt of income. This income takes many forms: salaried (from an employer for regular work); wages for occasional work; self-earned, from entrepreneurial activities. Might students feel *more* involved in and committed to such activities (generating immediate income) than to their university studies? They may also be accorded considerable degrees of dignity, autonomy and responsibility in some of their experiences outside their course.
- 3 *What is the value, if any, of a student's lifewide learning for their academic studies?* Is there a relationship here or are their wider learning achievements held separate from their experiences on their academic programmes? (I return to this matter below.)

- 4 To what degree should the university take an interest in the student's informal and extra-mural learning? It may be that, for some students at least, its value lies precisely in its *not* being formalised and in the student retaining learning and developmental spaces that are their own, independent of the university. For many students, however, some positive stance on the part of the university towards students' achievements, learning and development outside their course would be valued. (I return also to this matter.)

In short, taking all of these questions together, what is the learning value of a student's informal, non-accredited and extra-mural learning and what stance should the university take towards it?

The University and lifewide education

Both lifelong and lifewide learning put challenges the way of university education but they are different challenges. If a student's university education is going to be succeeded, as it will be, by yet further forms of learning later in life, then that is one set of considerations. The university has then a responsibility to consider how it can help in enabling students to be effective learners through the rest of their lives. To that extent, a university would then be deliberately contributing to a student's *lifelong education*. The student's university experience would be designed to enable him or her to make further progress in their later learning experiences.

However, if a student's university education is, *at the same time*, being accompanied by all manner of other learning and developmental experiences, then that is another set of considerations. Here, the university would recognize that the student is engaged in a process of *lifewide learning during the period of their registration as a university student*. Then the question arises: what is to be the stance and approach of the university towards the student's wider learning experiences? Does the university ignore them or does it take them into account in some way? Does the university see its offerings as part of the student's lifewide learning? Does it thereby take on the role not merely of higher education, or even of lifelong education, but now of *lifewide education*? That is to say, in some way, the university comes to understand that it has a responsibility of *contributing to the enhancement of the student's lifewide learning that he or she is experiencing while studying at the university*. In this way, the university may come to play a deliberate part in contributing not only to the student's intellectual and professional development but to the development of the student's *lifeworld*. As Pollard puts it:

'... higher education courses have to become more meaningful in terms of students' lives-as-lived and in relation to development through the lifecourse.' (Pollard, 2003:178)

There are a number of forms of possible university response in recognizing students' lifewide learning and so developing the university's role in *lifewide education* (and they are *not* incompatible):

- i Encouraging and facilitating students in gaining worthwhile experiences beyond their programme of studies;
- ii Accrediting students' wider lifewide learning experiences;
- iii Offering opportunities for systematic reflection on those learning experiences such that the learning and personal value of those experiences are enhanced. Here, the university would be attending to and enlivening the 'biographicity of [the student's] social experience' (Alheit and Dausien, 2002: :17).
- iv Shaping the University's own courses so that they offer the student the best chance of maximizing the learning potential of their lifewide experiences (and, in so doing, bring about a greater positive relationship between the students' learning experiences both on and beyond their courses and enhancing the students' total lifeworld).

These forms of possible response on the part of the university are, in a sense, *levels* of response, for they denote increasing levels of engagement with the student's extra-curricula learning and development.

The academic value of lifewide learning

Here, I want to pursue question 3 above: *What is the value, if any, of a student's lifewide learning for their academic studies?* To what extent is there a relationship between the experiences and the personal development achieved by students in their lifewide learning and their academic studies? Here are some student voices on the matter:

Q: *'So, do you think that that side of your life is separate from your degree or does it help you would you say?'*

A: *'I think it helped me in a way ... because when I'm there I'm relaxed. ... It's separate in a way and it's associated in a way because there you see people from class as well. They'll help you as well with your course.'*

Q: *'Do you think [that these different kinds of experience] help each other?'*

A: *'... well, especially the society stuff definitely helped my degree – if for no other reason than just feeling more accessible to the lecturers and the tutors ... [in] being more confident in talking to them.'*

Q: *'You're being exposed to quite different kinds of setting. There are some links here, do you think?'*

A: *'I suppose that when I was at work I'd have to talk quite professionally to sort of senior people to me and then that would ... apply [to my interacting] with staff within the University.'*

In these quotations, and the earlier quotations, we see that students' learning and personal experiences beyond their courses:

- Offered a space in which students can meet informally but in collaborative experiences and so develop more collaborative relationships *within* their courses
- Helped students to gain more confidence in themselves that *carried over into the courses*, not least in their relationships with their tutors and lecturers.
- Developed a kind of generalised enthusiasm for learning which enhanced the degree to which they engaged with their formal programme of studies.

In other words, the idea – already suggested – is reinforced that, *in the university's own interests*, it makes sense for a university to acknowledge and to respond to, in some ways, their students' extra-curricula learning. Here, the idea is reinforced via the voice of the students themselves.

Towards a classification of learning spaces

If higher education is to respond to students' lifewide learning, then a classification of learning spaces becomes more than a theoretical exercise but of potential educational value. Learning spaces may distinguished – it is already evident - by means of a number of dimensions:

- a) *Authorship*: what degree of ownership does the learner have in the activity in question? To what degree can the learner author her own activities? Where does the power lie in the framing of a learning space?

- b) *Accountability*: To whom is the learner accountable? What form does that accountability take?
- c) *Responsibility*: For what range of activities is the learner responsible? Is the learner responsible for other people?
- d) *Framing*: How bounded are the activities of the learning space? To what degree are they regulated by formal and tacit rules and conventions?
- e) *Sociability*: To what degree is the activity of the learning space personal and to what degree is it a matter of interaction and even possibly collaboration?
- e) *Visibility*: How public is the activity?
- f) *Complexity*: What is the level of the intellectual demand? How complex is the activity?
- g) *Money*: How is the activity financed? What are its costs? Is there an income stream attached? Is the learner responsible for managing the income?

It follows that, in theory, a profile could be developed for any learning space: each such learning space could be interrogated as to how it stands in relation to each of these eight dimensions. Alongside such a profile, each profile could also be assessed as to the degree it helped to develop the kinds of dispositions and qualities identified earlier. The temptation might arise here to employ the term 'matrix' – that each learning space be analysed both against the dimensions of learning space and the dispositions and qualities that it might engender. Such a temptation should be resisted, for the idea of learning space now developing here is too messy and too inchoate to be caught adequately by such a regimented term as 'matrix'.

The straight and the smooth

In their book, *A Thousand Plateaus*, Deleuze and Guattari distinguish smooth and striated spaces. Striated spaces are characterised by walls, enclosures and roads between enclosures; smooth space is 'a field without conduits or channels' (409); it is nomadic, 'marked only by "traits"'. 'Smooth, or nomadic, space lies between two striated spaces ...' Are these not helpful metaphors for us here? Lifewide learners, we may say, are precisely nomadic learners, comfortable in moving from one learning space to another, even if those learning spaces are themselves bounded and subject to laws and procedure. Lifewide learners inhabit both striated spaces (the spaces of their different learning experiences, each with its own rules of procedure, however informal) and smooth spaces, the spaces of transition from one space to another, the spaces in which they can take a view of their learning and gather it into themselves. It is smooth space that is crucial for it is in smooth space that the learner moves; is not held in a particular learning spaces but always has the potential to move to another learning space. 'Smooth space is a field without conduits or channels'. (409) In smooth space, the learner decides on her own map and makes up her own territories. Smooth space is iconoclastic.

Of course, there is no sharp break between such smooth and striated spaces (as Savin-Baden (2008) observes). Striated spaces have their own space for movement, for the learner's spontaneity, daring and adventurousness. Smooth spaces are always in danger of being taken over and subjected to rules and procedures and become striated spaces.

Are there here student-types; those who love the freedom of smooth spaces, who will not be confined by any space, and those who prefer to reside in striated space, not necessarily content with the offerings of their course, but rather lacking the courage to voyage onto the slipperiness of smooth unbounded space? On the one hand, the nomad who hangs onto open space, even at the risk of overload of experience and missing appointments; on the other hand, the hermit who clings to his or her course as the only source of learning nourishment. The nomad is always wandering in and across learning spaces; and always preparing for new learning voyages.

There is a problem here. Does not the formal recognition of lifewide learning experiences and even achievements on the part of the university represent the sequestration of smooth space by striated space? Deleuze and Guattari observed that:

‘One of the fundamental tasks of the State is to striate the space over which it reigns, or to utilize smooth spaces as a means of communication in the service of striated space.’

(425)

After all:

‘Each time there is an operation against the State – insubordination, rioting, guerrilla warfare, or revolution as act – it can be said that ... a new nomadic potential has appeared, accompanied by the reconstitution of a smooth space or a manner of being in space as though it were smooth. .. It is in this sense that the response of the State against all that threatens to move beyond it is to striate space.’

(426)

Is the university not acting in the same way when it seeks to recognize lifewide learning? Is this not a process of corralling the unconfined into the confined? To bring it under control? Not necessarily. The educational value of the university’s response to lifewide learning depends on the character of the learning space that the university opens up. As noted, there is no firm division between smooth and striated spaces. The challenge to universities, therefore, in responding to students’ lifewide learning is to optimise smooth learning spaces. That is to say, to open spaces to the student that are both in themselves open and that encourage the students concerned to roam across their manifold learning spaces and so enhance the smooth properties of those learning spaces. The smooth and the striated both need each other. Here opens the need for and the value of systematic reflection.

A student observed that:

‘... I’ve sort of looked and sort of maybe reflected more on things that I have done that I wouldn’t really [have considered] an experience until now. Sort of swimming and part-time work – I would just not really [have] related them at all until [I started on the SCEPTrE Learning through Experience Certificate]’

Here, we glimpse the possibility that the benefits of students’ lifewide learning can be *enhanced through structured reflection*. Enabling students to come into a space in which they can draw out of themselves the learning that lies within them as a sediment of their wider experiences, and of which they are unaware, itself is a valuable experience. The multiple learning spaces of lifewide learning become landing points from which other learning spaces can be viewed. This is not merely a process of reflecting on the student’s lifeworld but is a process that helps to make sense of and so bring into focus the student’s lifeworld. No wonder that so many interviewees say, when invited to reflect on the value of their manifold learning experiences, that they grew in confidence. How are we to comprehend this non-specific idea unless we bring in a sense of a person gaining a sense of themselves as distinct human beings engaging in a lifetime’s work of continuous becoming, having multiple learning experiences and growing through those experiences? This is not to say that all those learning experiences are seen in a positive light. To the contrary: some experiences, subjected to the gaze of critical self-evaluation, will be seen as unsatisfactory. But that is often ultimately a positive experience, for the student can then turn in another more satisfactory direction:

‘I came to uni wanting to be a clinical psychologist ... but working ... with children with autism (and) by going to work at Broadmoor, it’s kind of led me to realize that I don’t want to be a

clinical psychologist. ... At the moment, I'm thinking that I want to go into animal behaviour ... rehabilitating captive animals back into the wild and breeding and things like that. So quite a strong focus.'

Experience, assimilation, reflection, accommodation: these are complex processes of personal transition and the universities can assist this process by opening spaces for systematic reflection. Such a movement on the part of the university begins an inversion of the university's educational function for here, the university would be orienting itself towards the student's lifeworld.

Conclusions

For two hundred years, the university has built its educational mission around knowledges that it has sequestered unto itself. The student was held in the university. Gradually, the student has been released back into the world (with sandwich years, clinical experience and real-world projects and acceptance that students will take employment during vacations and increasingly often work while learning). Now, in an age of liquid learning, students are as much as if not more in the world than they are in universities; and many of their extra-curricula experiences are yielding experiences of significant learning and personal development.

The university is, therefore, faced with the challenge of its stance in the face of such extra-curricula learning. Facilitating such extra-curricula learning, recognizing it by some form of accreditation and opening spaces for systematic reflection on such lifewide learning are the makings of a new pedagogical function for the university. Now the university turns itself outwards and shifts its pedagogical purposes from a concern with the intellectual growth of the student to a concern with his/ her lifewide development; his/ her total lifeworld indeed. This is a university that frames a mission for itself in part around lifewide education. Here, there is a journey not only for the individual student but also for the university, the ultimate endpoint of which is a yet further transition in which the university begins to consider the implications of lifewide learning for the character of its *own programmes of study* and the student's pedagogical experience therein. This would be the ultimate revolution.

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Notes

¹ I take the idea of the 'liquid' from Zygmunt Bauman. To my knowledge, Bauman has not actually employed the term 'liquid learning' but he has observed the implications for learning that arise from a 'liquid life' (Bauman, 2006: 118-19, 123).

² There is the makings of a literature on the idea of 'lifewide learning', for example, Skolverket (2000), Pollard (2003), Slowey and Watson (2003), Alheit and Dausien (2003) and Clark (2005). Two variants of 'lifewide learning' seem to be present: on the one hand, a sense that learning should connect with and is dependent upon a learner's wider life and, on the other hand, a sense that life-wide learning includes the informal and experiential. The concept being suggested in this paper – that of lifewide learning as *simultaneous* learning across *multiple* learning sites overlaps *both* of those variants but is somewhat distinct from them.

³ This paper has been written alongside a reading of Maggi Savin-Baden's (2008) book, *Learning Spaces for Knowledge Creation in Academic Life*. Although the conception of learning spaces there seems somewhat different from that adopted here (a sense of learning space as offering spaciousness as against, here, a view of learning space as a space in which learning may be spacious *or* congested), that book ranges across many of the issues raised in this paper – and many other issues besides – and offers a brilliant resume of the matters it raises. It also adeptly draws on the categorization of striated and smooth cultural spaces advanced by Deleuze and Guattari (to which this paper also refers). The book should be seen, I believe, as essential reading on the matter of learning space and the responsibilities upon educational institutions raised by modern scholarship thereupon.

Life-Wide Learning; 'What matters to me as a teacher?'

Professor John Cowan, Heriot-Watt University



Professor John Cowan entered academia after a successful career as a structural engineering designer. His research at Heriot-Watt University, Edinburgh, where he was the first Professor of Engineering Education in the UK, latterly concentrated on student-centred learning and the learning experience. On moving to the Open University in Scotland, he encouraged innovative curriculum development and campaigned nationally for rigorous formative evaluation in higher education. His passion for and professional interest in student-centred learning now spans over 40 years. During that time he has placed an ever increasing emphasis on preparing students to

exercise stewardship over their life-wide development while at University, and in lifelong learning thereafter. He continues to share his wisdom with higher education teachers at Napier University.

John's collegial spirit is well known. In describing himself he says, *"it's best just to think of me as a part-time teacher nowadays, with personal history to draw on and a willingness to share with some colleagues, if they want to innovate in areas where I have some experience."* SCEPTRe has benefited hugely from his willingness to share the wisdom he has gained from a lifetime of committed professional practice and personal and his own professional development (most recently in a set of iTunes podcasts).

Life-wide learning

I was introduced only recently to the concept of life-wide learning (Jackson 2008). I felt rather like Molière's (Jean Baptiste Poquelin, 1622-73) M. Jourdain, who was introduced in middle age to the concept of 'prose' – and immediately realized that he had been speaking in prose for most of his life. Here was I, for some years a pensioner, suddenly realizing that I had been engaged in life-wide learning for most of my adult life. And I was also realizing that I had been enthusiastically and actively promoting it with my students in most of my teaching. Why had I done so – and with what purpose and outcomes? Looking back, I realize that it all began from my very early professional experiences.

This highly personal account tries to demonstrate how I have integrated and put into action as a teacher the learning I have gained from experiences in different parts of my professional life.

A personal introduction

I was a fairly successful undergraduate student. I quickly learnt how to do what they expected of me in their coursework and examinations. I took what I needed from lectures and textbooks, and let the rest pass me by. I also made time for social and sporting activities. Soon I was well on the way to becoming an effectively responsive learner, a human "exam-passing machine - as indeed I had been at school – and a first-class honours graduate. But, even at that time. I was well aware of being far from satisfied with the limitations of what I was achieving.

Three days after I had completed my first year of university study in civil engineering, I began vacation work in a design office, as a fresh young indentured apprentice. It was an unusual apprenticeship situation, for there were too many apprentices, and too few qualified engineers. So the apprentices had to take on more demanding work than would usually have been the case. I realize now that this was my first opportunity to take responsibility for my own professional development, and to make my educational experience more complete.

There I encountered a situation which was quite different from what had been the case in my university-based education. Much was now expected of me from the outset. I was just given things to do and mainly left to get on with them. They were usually parts of jobs which mattered to a client, tasks unlike anything I had done before, and above all tasks which I had not yet been trained to tackle. I was expected to prepare myself with what I needed to know and be able to do. Most of this involved knowledge and abilities which had not featured in my first year studies. So, in order to cope, I had to borrow useful office textbooks, find the pages which would help me to meet these unfamiliar demands, and even take the right book home to be studied overnight. I was able to learn quickly but sparingly from my busy section leader, from my fellow apprentices, and from the senior partner who regularly went round the drawing boards, pointing out tersely where we were each going wrong, suggesting what we should give attention to, offering new options. I had to formulate good questions, to ask of seniors and peers in order to assist my learning and development, without my becoming a dependent nuisance. When I was asked if I could do something, I learnt that I often did no harm to my development and progression within the firm by taking a big risk and claiming "Yes, I can" – and then rushing home that night with yet another book to find out how to do it.

Three months later, when I returned to university for my second year of studies there, my perspective on education had been transformed. Stimulated by the confidence and insight gained during that challenging summer, I had come to know how I intended to manage my development. I was now determined to:

- Be responsible for effectively taking my own personal and professional development in directions which I would value.
- Actively follow up what I considered appropriate and substantial questions, chosen because their answers should help me to develop yet further.
- Make effective (but not exploitive) use of experts, resources, seniors and especially of peers whom I valued, to help me to progress.
- Regularly review my progress and forward planning, against professional and personal demands and standards.
- Pay adequate attention to my feelings and my values, as important factors in my development and my developing.
- Push myself to constantly take on new challenges through which I could develop myself, with the attendant and considered risks growing greater and greater every next time.

So I had discovered for myself the importance of self-regulation (Zimmerman 2000), and the forms of self-managed learning that are now known as Personal Development Planning (PDP), and increasingly feature in university programmes (Jackson 2003).

Unfortunately, in the remainder of my university studies, I was offered little opportunity to engage with these priorities, other than in my spare time and during my summer periods in the design office. After graduation I went on to join the same firm, as a full-time designer. There followed 12 years of self-managed and quite successful personal and professional development, in which I came in due course to be responsible for the development of the apprentices in the large section which I was soon leading. I encouraged them to do as I had done, and was still doing. Once a year we each took time to review our progress, to identify goals, and to plan for the twelve months ahead.

Then I chose to become an academic. It was a shock to see higher education from the staff side. I found myself expected to deliver teacher-directed, teacher-managed, teacher-assessed learning. I demurred – but kept my reservations to myself. However, as soon as I could, I actively began to live out the principles which seemed to be serving me so well in my own life, and which I was soon to find set out clearly, persuasively and authoritatively – and for me reassuringly - by Rogers (1967). Although I had not met the term at that stage, I was actually trying to promote life-wide learning. I was striving to prepare my students to exercise holistic responsibility for their personal and professional development after they graduated – by virtue of already having done so as students.

Gradually, in the days before mailbases, I built up my own circle of peers and authority figures with whom I found it helpful to air ideas, and from whom I might seek assistance with my challenges. They in their turn would make use of me, in a similar way. Had that not been so, I would have felt awkward about going back to them, repeatedly. This initially postal, then e-mail, learning community has been important to me, over the years, in my life-wide learning and that of my students. It was a while before I encountered the concept of socio-constructivism; but, again like M. Jourdain, I certainly practised it, even in these early years in academia. For my life-wide learning is a relational process, in which I nourish and maintain relationships in different aspects of our lives that help both parties to develop and accomplish more of our aims than would be possible were we simply self-reliant.

My pursuit of life-wide learning for my students

It is deceptively easy to formulate and declare principles, as I have just done here. It is less simple to apply them innovatively in real-life situations. In this section I will provide some examples which illustrate how I tried to incorporate the principles which came to matter to me from my own life-wide learning experiences. I will leave you make your judgements of their appropriateness and effectiveness.

1 Self-managed professional development (Cowan et al, 1973; Cowan, 1975; 1976)

The realisation that, during my experience as a practising civil engineer, I had learnt best when I managed my own learning, led me to create a Civil Engineering Learning Unit. This was a centre, in which our first and third year students could choose their own ways to achieve their programme's intended learning outcomes in Structures, Materials and Design. They could manage, in their own time, their selection and use of the pre-recorded learning materials which I provided for the various possible routes to that learning. At the peak of our operation, we handled roughly 1200 student contact hours per week, and copied over 1000 audio cassettes per week, to support the intended learning. This cost-effective development led to a significant reduction in failure rates, and a wholehearted endorsement by an independent evaluator of the enhanced quality of the consequent learning and development (Cowan, 1975).

2 Self-directed professional development (Cowan, 1978)

My early experiences had led me to identify and pursue learning which had attracted me, and which mattered to me, for one reason or another. I had decided, for example, that I wanted and needed to learn more about tacheometry – so I did so. Working on the design of an innovative paper mill, I felt the need to know and understand how high quality twin-wire papers are produced. So I added that subject to my agenda. I was therefore much attracted to the approach advocated by Rogers (1967), who at that time was preaching the educational gospel of "Freedom to Learn". I subscribed readily to the principle that students should not only be able to decide *how* to learn, but also *what* to learn.

Encouraged by student and other evaluations of the Learning Unit, I recruited volunteers for a pilot development in which first year students would freely decide what they should learn about the properties and use of civil engineering materials. The choice was entirely open, provided they gave some consideration to the common construction materials - steel, concrete, timber and masonry. The pilot was judged successful, and the course was offered as an option. After detailed independent scrutiny, it went on to receive an "Education for Capability" Award from the Royal Society of Arts.

3 Promoting a questioning culture (Cowan, 1987; 2006a)

During my time as an apprentice civil engineer I had learnt that the quickest and one of the most effective ways to learn was to ask searching questions of people who were much more experienced and knowledgeable than I was. Consequently I enthused when I chanced on Postman and Weingartner (1971, p34), who epitomised the questioning learner in telling terms:

"Once you have learnt how to ask questions – relevant, and appropriate and substantial questions – you have learnt how to learn and no one can keep you from learning whatever you want or need to know".

Suddenly I became aware of my hypocrisy. I claimed to value searching questioning – but I still subscribed to a university culture in which the main demand on students was to answer their teachers' questions (other than in the previous example, of course). I resolved to do something about this inconsistency.

I made it a requirement for my first year students of civil engineering to post, on the notice board in our crush area, a question written on a card. This question should be about some aspect of civil engineering, should be worth asking, and should be such that no other first year student could tell us the answer. If any student knew the answer, they could write it on the card (contributing to class and sometimes staff learning), and gain bonus marks for that. The card would then be taken down. The notice board attracted much attention. Every student managed to produce a worthwhile and as yet unanswered question before Christmas. I then rated the postings as one, two or three person questions – and invited bids from students in this class who would undertake to obtain the answers for us, as assessed coursework. After Easter, answers were presented in class and subjected to vigorous questioning, since the subject matter was examinable in June.

In this way I had established a question asking and answering culture – but at a price. The following year one of my colleagues led strong staffroom criticism. "These students keep interrupting my lectures to ask questions." "Are they trivial or irrelevant questions?" I asked in some concern. "No – but they're questions I don't want to have to answer until their final year!" No comment.

4 Self-assessed professional development (Cowan, 1986; 1988; 2006a)

A university had rated me a first class honours graduate; but I had judged myself to be seriously lacking in several respects which I deemed important. It was thus the judgements from *self*-assessment which had mattered to me, and drove me on to my next development activities. For the judgement to which I gave and still give most attention is my own self-assessment. It occurred to me that it also be useful to develop objective self-assessment on the part of students, before they graduated.

Consequently my final step towards offering completely self-planned, self-directed and self-assessed professional development took the form of a major third year course in Design, featuring genuine self-assessment. Here students each chose their own weekly goals, took comment on these from fellow students, managed their learning activity, and presented evidence of outcomes at the end of the week to peers, again for comment. They were committed to consider the comments from their chosen peers, but were free to disagree with or disregard them. At the end of each term, they self-assessed themselves to

their declared criteria, in an objective way. If they did so, their grades were accepted. Even as a pilot, this radical programme was accepted by the relatively conservative and searching Joint Board of Moderators of the relevant professional bodies.

5 Using peers (Weedon & Cowan, 2002; 2005)

My development has always owed a great deal to collaboration with others, being supported by them and on occasions providing support to them. This interaction with peers is central to developing, for me; so I have sought in my courses to encourage (somewhere) the same type of constructive interaction for the benefit of my students. I am still actively progressing this approach to lifelong professional development (Francis & Cowan, 2007).

My most suitable example of this approach comes from a later stage in my academic career, when a colleague and I were responsible for penultimate year project work in Social Sciences in the UHI Project (an acronym which it is forbidden to spell out!). We depended on what I would now call learning communities (Francis & Cowan, 2007). The project groups comprised students at separate geographical locations who were supported electronically by a facilitative tutor. Assessment was based partly on the group's development of their project and partly on their individual and initially constructivist development of their abilities of enquiry and critical and reasoned thinking. Groups were encouraged to be much in contact - by e-mail, on discussion boards, in chat rooms, occasionally by video-conference, and very occasionally face-to-face. Their development became essentially a socio-constructivist activity. Students rated the facilitated and structured peer interaction as the most effective contribution to their learning and development.

6 Becoming a reflective practitioner (Cowan, 1991; 1999)

As I have described, early circumstances encouraged me to be what I would now call a reflective practitioner. During that first working summer, my progress depended on my timely anticipation of my immediate needs, which I was to much later to call "reflection-for-action" (Cowan, 2006a). While interacting with peers and seniors, I frequently experienced immediate insights, as reflection-in-action (Schön, 1983); and at the end of that summer, my review was a reflection-on-action (Schön, 1983). So when I later encountered literature which extolled the usefulness of reflective journal writing, I was a ready convert to the contribution which structured reflection could make to my students' development. I opted to begin at the beginning of their tertiary studies, where a colleague and I were attempting to develop in our first year students of civil engineering some of the generic abilities which should stand them in good stead in their studies, their careers and their lives. That was a big target!

Each week we ran workshops along socio-constructivist lines. These were a new departure for the tutors, and an unfamiliar and unattractive challenge for the students, for which they showed little initial enthusiasm. I have written elsewhere (Cowan, 2006a) about the consequent risks of failure for the tutors, and the demands which this generated for us in our open ended facilitation of our potentially critical students. We took a big risk on the first occasion when we asked each student to compile a reflective journal, engaging with the question "What have I learnt about learning or thought about thinking which should make me more effective next week than I was last week?" In our Rogerian facilitative commenting on these journals, we then simply prompted writers to plan to test out their conclusions.

At that time, the civil engineers were taught Maths, Physics and Chemistry in a large class with all first year engineers taken together. So we were able to chart the progress of our students, relative to those in mechanical and electrical engineering, in these core subjects which we did not teach, and in which we believed the generic skills on which we were focussing should be proving relevant. We found a marked improvement on the part of many of our students in their ranking order in the composite class (Cowan, 1987), an improvement which it transpired they would maintain in their second year of study. During a later

evaluative visit for his own purposes, Gibbs found to his surprise (and to mine) that some students continued to keep reflective journals in their second year, though this was not asked of them. This was the only instance I can recall of students undertaking coursework which was not asked of them.

7 Giving importance to affective needs (Garry & Cowan, 1987)

It is probably not necessary to read between the lines of this account to form the impression that I was often uncertain, apprehensive, self-critical – and also lonely – as I faced self-set demands which were new for me. Affective support which I valued and which was effective was most important to me, at these times

So it was with strong affinity that a colleague and I summarised for a conference 25 years ago what we had encountered as the main support needs, when our students were actively developing cognitive and interpersonal abilities. We portrayed this as a fish ladder, with fish-needs lying in deeper and deeper pools, and requiring different types of support if they were to jump up and progress. [Sadly, when I first tried to produce a diagram, clip art offered no salmon, and I had to make do with sharks (as in the original Fig 1). I ask kindly readers to exercise poetic license in considering this -for me, historic - graphic.]

In our self-managed development

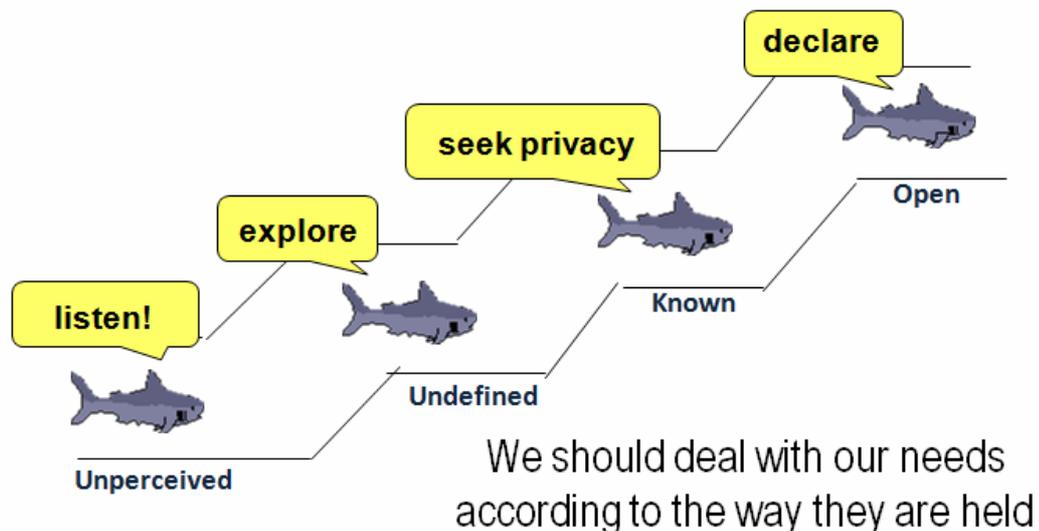


Figure 1: Fish ladder of support needs

We tried to bring out important distinctions in this figure. We suggested that learners can have four important categories of needs for support, each of which call for attention of a different sort:

- Learners who know what help they need, can succinctly declare it openly, and have no compunction in doing so. They simply require a direct answer.

- Learners who know what help they need, but are embarrassed for some reason about asking for assistance, require security before they feel able to declare their need, and probably still wish to do so confidentially.
- Learners who are aware that they need something, but cannot specify what it is sufficiently to indicate how they can be helped, want an opportunity and (preferably) empathic assistance to explore possible options for resolution of this undefined but important need.
- Learners who have needs of which they are blissfully unaware, can often only come to realize the existence of serious and unperceived weaknesses, and come to deal with them, through frank confidences conveyed by respected others.

We had found that needs, like salmon in a fish ladder, could effectively jump up from one of these levels to the next, and the next, given the appropriate stimulus, encouragement and support

All of these types of needs, barring the first one, embody affective as well as cognitive or interpersonal factors. In learner-directed life-wide learning, it is for the learner to take an initiative in recognizing and dealing appropriately with such a range of possibilities, and actively seeking appropriate support. In so doing the assistance of a supportive, but not directive, facilitator is both a desirable and an effective use of learning resources (Cowan & Chiu, 2009; Chiu & Cowan, 2010).

8 Having the courage, confidence and sense to take 'risks'

During my professional life, first as a practising engineer and then as an innovative university teacher, I have ever been aware of taking risks in breaking new ground, certainly with considered optimism, but usually without grounds for *knowing* that I could succeed. I felt that people cannot progress without doing something novel – either new for them or perhaps entirely without precedent (as in Example 4). Doing something without precedent, however well planned and considered, naturally brings attendant risks of failure.

I once designed an industrial building to be constructed from the roof downwards, eventually to sit on foundations which were to be newly constructed at the end of the process. Neither the client nor the contractor believed that this bizarre scheme was possible, although no other option had been suggested to cope with the constraints within which we had to operate. I only obtained reluctant agreement to proceed, by taking on the men and plant as my direct responsibility. That contract was a big risk. If it hadn't been carried through successfully in the very restricted time available to us, my firm would never have had any further contracts from that client (or perhaps from others).

Similarly, all of the educational innovations in my previous examples took great risks – given the possible consequences of ineffective education in a year of my young students' lives. Admittedly I never innovated educationally without providing a safety net for the students who were to be experimentally involved. And happily I never had to use any of my carefully planned safety nets. But they were always there! And if I had had to use them, it would have been a severe blow to my reputation – and my confidence.

So success and development, for me, have usually only occurred through risk taking. Consequently I have tried to build in to my programmes opportunities for students to take risks. They have done so in pursuit of goals which they deemed important, but which took them into unfamiliar educational territory, and often took their tutors there, too. They have done so without fearing the consequence of a penalty for failure. Such risk taking has been profitable for many of my students, who have taken opportunities to approach their development in a risk-taking style.

For example, I recall a third year student, who (like his classmates) had been offered curriculum space in which to pursue a goal of his own choice, without risking being penalised for lack of success. He came to tell me in embarrassed frankness that, during his whole scholastic career, he had been petrified by information technology and computers. So he had cheated his way through assignments and examinations.

He now wanted to try to find a way to overcome that fear, and put his dishonesty behind him. How he tackled that challenge in self-directed development is an inspiring – and lengthy – tale. Suffice it to say that six months later, his considered and conscious risk taking had paid off. He went on after graduation, with great success and personal satisfaction, to teach computer work inspiringly to primary school children.

I recall three students from the far east, who were similarly faced with the opportunity to set their own goals and take risks in so doing. They sensed that learner-directed learning was important to me and in our system. “We have come from a teacher-directed culture”, they explained. “We want to develop the ability to be learners who direct our learning.” I asked how they proposed to do that, and they responded that they wanted me to teach them (dependently!) to be independent of a teacher. I did not point out that this request was a contradiction in terms. This student-managed development would thus be a risk for them – and a risky and demanding remit for me. We negotiated an acceptable plan together. It’s another long story, but we (or rather they) succeeded.

I recall a timid UHI student of social sciences who had come to see that her project should entail unstructured interviews, but who was petrified by that prospect. She took ample reflective time for her anticipatory process analysis, working out how she should and could - possibly - tackle what she saw as a risk of intense embarrassment if she dried up and could not find or formulate the next question. She went out to find and interview her first subject in great trepidation, and came home to reflect that it hadn’t gone too badly. After further reflection which was first reflection-on-action and then for-action, she saw how to make improvement on the morrow, with the next interviewee. And her confidence steadily rose with her developing ability, in successive reflections – and from her further risk taking.



Figure 2 Taking risks

All of these students, and many more, faced what they saw as serious risks of failure in their ambitious ventures in life-wide learning. All discovered that, having faced up to their risk, it was easier next time to go beyond that now familiar challenge. For they had found that they could then almost confidently take further risks, which they could not previously have contemplated. If they talked or wrote subsequently to me about their risk-taking, I would congruently share some of my experiences over the years in my educational work in developing countries. There I often took risks which carried me beyond any previous experiences, out of my comfort zone and right to the edge of what I was prepared to hazard. When the risks came off

successfully, it was then easier to go nearer to the edge, next time – according to the metaphor I have summarised in Figure 2.

How do I sum up my life-long, life-wide learning?

My (long) adult life has regularly featured personal and professional development which has been self-directed, self-managed and self-assessed. This has depended on my ability to question and reason and to innovate creatively, all of which has often been undertaken in constructive interaction with others, particular in respect of my affective needs. Much of this process has centred on objective reflective review, and has involved taking carefully considered risks.

I recognize that my development and activities have been driven partly by the needs and interests of others, and have also been helped and facilitated by others. This is the social dynamic within which socio-constructivist life-wide learning takes place. Perhaps we pay insufficient attention to this matter in a higher education system that is still focused on individual achievement.

If I were given the opportunity (with hindsight) to start again, I would not want to make many changes in the way I have approached my development. Mind you, I admit and have acknowledged that I sometimes got things wrong (Cowan, 1984b; 1989; 2006b). Nevertheless, as a university teacher, I hope I would adhere firmly to the principle that what is sauce for the goose can, and should be, sauce for the gander. In the fragments of activity in higher education which I have reported here, I have found that life-wide education, as I have experienced and wished it for myself, can be established in viable and effective experiences for students. This seems to me to be a desirable preparation for their subsequent stewardship of personal and professional development in the remainder of their lives, according to principles which my history appears to endorse. Since I can recognize the processes which have been constructive in my own life, I believe intuitively that trying to arrange similar experiences for students is the right thing to do. And I welcome the fact that universities like the University of Surrey are thinking seriously about how to encourage, recognize and value institution-wide the learning gained through the many different parts of learners' lives while they are studying at university.

The title I was given for this brief paper on life-wide learning was “What matters to me as a teacher?” My response is that what matters to me as a teacher is exactly what matters to me as a learner.

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The Balance between Communities and Personal Agency: Transferring and integrating knowledge and know-how between different communities and contexts

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Professor Michael Eraut is Emeritus Professor at the Sussex Institute of the University of Sussex. He is a world expert and the UK's leading researcher into how professionals learn in work place settings. His pioneering research has found that most learning occurs informally during normal working processes and that there is considerable scope for recognizing and enhancing such learning. His books include the highly acclaimed *Developing Professional Knowledge and Competence*. In 2007 he completed an ESRC-funded five-year study of how professionals learn in the early part of their careers, and Michael is working with SCEPTre to help transfer and adapt some of this research knowledge to the professional work placement context in order to improve students' experiences. But in this conference we are inviting him to look to the life-wide dimension of learning and to see what can we learn about the process of transferring and integrating knowledge and insights gained in one context to another.

Summary

Most undergraduates are members of several communities: their family, their friends, their university, workplaces where they earn money, and other types of social groups. These all involve engagement with other people; and that engagement plays a central role in their informal learning, whether or not they are engaged in formal learning. Good relationships with other people are known to enhance such learning within the appropriate domain. However, transfer of learning from one context to another cannot be taken for granted. Such transfer is often more challenging than most people expect, because learners have both to recognise its relevance and to see how it might be used in a different context. This paper sets out to show how people learn different things in different ways; but further learning is needed to merge different types of knowledge into holistic performances. While most undergraduates want to get a good degree through learning formal knowledge, they are also concerned to find career jobs with prospects that require other, more interpersonal, knowledge; and many of them are also looking for a new balance between their participation in families, friends and communities. This participation involves access to communities, an ability to engage with those they meet and a growing ability to contribute to their goals.

The paper argues that, in a period of rapid change, the concept of competence-based goals as indicators of a person's workplace capability is far too restrictive. Lifelong learning requires the use of lifelong learning trajectories, which can offer more freedom to be holistic, attend to the emotional dimension of work, and appreciate the significance of complexity. Life-wide learning contributes to the holistic development of a person and offers the potential for individuals to develop along some of their learning trajectories through different parts of their lives simultaneously.

Good feedback needs to go beyond these simple indicators to respond to a person's overall contribution to their working group and their community; and appraisals need to discuss future possibilities as much as past performance. What are the possible relationships between people and their communities, and how do newcomers find out what works best for them? Who is responsible for helping whom? Who actually helps them? How do people find ways to develop their own agency within communities? Data from working

contexts are discussed through both stories and questionnaires; but the overall context will be focussed on the issue of transferring knowledge and know-how between different communities and contexts.

Background

This paper has been written to support the exploration of the idea of life-wide learning (Jackson 2008) 'a unifying and integrating concept because it enables us to bring together, within a single framework, learning in and from different contexts.' (Jackson 2010). Over the last three years I have been involved in trying to transfer and integrate some of the knowledge I have gained from research into how people learn when they are working in a professional environment within the frameworks provided by a university and employers who develop placements to help students learn in a professional work environment. This contribution connects and integrates evidence from a number of sources, aimed at gaining a better understanding of the process of transferring knowledge and know-how between communities in the work environment. The observations may well be relevant to other social contexts and communities in a student's life-wide learning enterprise.

1. What counts as knowledge?

This section seeks to address the challenging problem of how an individual's understandings and capabilities may be represented and communicated in a social context by treating representations as mediating artefacts, whose meanings are clarified and to some extent reconstructed through the conversations they elicit.

Both knowledge and learning can be examined from two perspectives, the individual and the social. These can be considered as analogous to the particle and wave theories of light. An individual perspective on knowledge and learning enables us to explore both differences in what and how people learn and differences in how they interpret what they learn. A social perspective draws attention to the social construction of knowledge and of contexts for learning, and to the wide range of cultural practices and products that provide knowledge resources for learning.

In universities knowledge is primarily associated with publication in books and journals, and subject to quality control by editors, peer review and debate. This *codified knowledge* is then given further status by incorporation into educational programmes, examinations and qualifications. The model of knowledge creation is that of an organised, socially constructed knowledge base, to which individual authors and groups of co-authors add new contributions. Each discipline has editors and referees controlling the *acceptance of publications*, using agreed criteria. Journals use the criterion of *truth* according to the norms of the community from which they draw its readership. Some people in higher education regard these criteria as problematic, but those outside higher education are more likely to be concerned about its relevance.

Practical work in science, engineering and vocational education involves *learning knowledge* that has been shown to work, but cannot be fully described in books; and *cultural knowledge* that has not been codified, but which plays a key role in most work-based practices and activities. There is considerable debate about the extent to which such knowledge can be made explicit or represented in textual form; but the evidence suggests that its amenability to codification has been greatly exaggerated (Eraut 2000). What does appear to be generally acknowledged is that much *uncodified cultural knowledge* is acquired informally through *participation in working practices*; and is often so "taken for granted" that people are unaware of its influence on their behaviour. This phenomenon is much broader in scope than the implicit learning normally associated with the concept of *socialisation*. In addition to the cultural practices and discourses of different

occupations, one also has to consider the cultural knowledge that permeates the beliefs and behaviours of their workers, suppliers and clients.

Whereas codified cultural knowledge is frequently discussed in terms of its truth and validity, uncoded knowledge is discussed in terms of its ownership, location and history. Who uses this knowledge, where and when? Both types of knowledge may be investigated for their range of meanings, and this is where the interaction of social and individual perspectives is particularly enlightening. The theory of *situated learning* postulates that the personal meaning of a concept, principle or value is significantly influenced by the situations in which it was encountered and the situations in which it was used. Hence the personal meaning of a concept or theory is shaped by the series of contexts in which it has been used. Given today's rapid mobility, the sequence of such contexts is probably unique to each individual practitioner; and this may lead to them acquiring slightly or widely different meanings. Even codified knowledge is personalised to some extent.

I chose the terms *personal knowledge* and *capability* for the individual-centred counterpart to cultural knowledge, and defined it as "what individual persons bring to situations that enables them to think, interact and perform" (Eraut 1997, 1998). This enabled me to investigate the effects of personal knowledge without necessarily having to represent that knowledge in codified form. The rationale for this definition is that *its defining feature is the use of the knowledge*, not its truth. Thus I argue that personal knowledge incorporates all of the following:

- *Codified knowledge* in the form(s) in which the person uses it
- *Know-how* in the form of *skills and practices*
- *Personal understandings of people and situations*
- *Accumulated memories of cases and episodic events* (Eraut, 2000, 2004a)
- Other aspects of personal *expertise, practical wisdom* and *tacit knowledge*
- *Self-knowledge, attitudes, values and emotions.*

The evidence of personal knowledge comes mainly from observations of performance, and this implies a *holistic* rather than *fragmented* approach; because, unless one stops to deliberate, the knowledge one uses is already available in an *integrated form* and ready for action.

I have already drawn attention to the fact that students in formal education are focused much more on learning and personalising for use codified knowledge. They have much less experience or practice of developing these other forms of knowledge that are particularly relevant in the work environment. The relevance of the idea of life-wide learning (Jackson 2008, 2010) is that they may, in other parts of their lives, in which they are interacting in more social problem solving situations, be developing and practising using these other forms of knowledge.

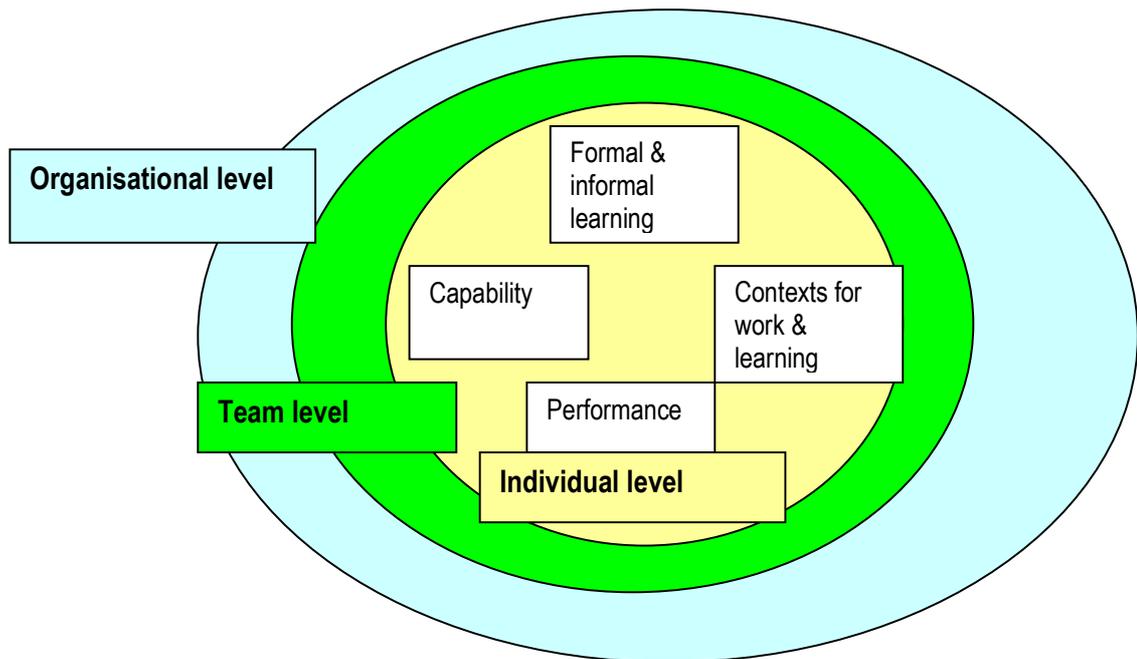
I have introduced the term *capability* in addition to that of *personal knowledge*, because it enables me to discuss the knowledge and learning of *teams* and *organisations* as well as that of *individuals*. The four factors in Figure 1 below are defined as follows:

- At the individual level I define *capability* in terms of *personal knowledge*, i.e. what persons bring to a situation that enables them to *think, interact and perform*. At team level, I define *team capability* in slightly narrower terms as enabling a group to *interact and perform*. I would also argue that the evidence for a team's capability has to come from *performances attributed to the team* as a whole, rather than to individuals within it, and to the *shared understandings* that create a team, rather than a group. I define *organisational capability* narrower still, limiting it to those *decisions, actions* and *understandings* that are attributed to the organisation as a whole, rather than to individuals or groups

within it. In each case I would limit such attributions to *well-informed observers*, external to the entity being observed

- The distinction between capability and performance is that *capability is normally inferred from a series of performances* and should not be judged on only one performance, whereas every performance is *context dependent*. Hence performances in more complex and difficult contexts should not be expected to be as strong as those in easier contexts. This applies at all three levels.
- Learning at individual or team levels may be *formal or informal*, but it would be very difficult to imagine informal learning by an organisation, rather than particular members of that organisation, especially because it would be very difficult to attribute learning that was not necessarily planned or conscious.
- The *context* for an individual could include people, events and practices at the level of working group, department or the whole organisation; but their relative significance could vary greatly both between organisations and within organisations. In general the most significant aspects of the context for an individual will be determined by those with whom they have the most contact and those who may be the most likely to exert power over them. However, it will be the understandings of the context that matter most; and in times of rapid change those perceptions may be dangerously narrow.

Figure 1 Key aspects of workplace learning



The four factors are always affecting each other. Capability is obviously influenced by learning but current capability also influences the ability to learn. Capability is required by job performance but is also developed through job performance. The context in which the individual is working and learning influences how their capabilities are perceived, how they perform and how they learn. An individual can be seen as highly

effective in one setting and not another. Individuals are in a dynamic relationship with their work setting being both influenced by it and being part of it themselves and through their relationship with others.

However, this dynamic relationship is often missing from competence-based assessment, and issues related to team and organisational levels get little or no attention. If we want learners to develop a social identity and contribute to society, we have to demand more than the acquisition of knowledge and achievement of individual tasks and assignments. We also want to know about how they have used their competencies in group contexts and how they tune their work to fit the specific needs of their customers, clients or colleagues. This would involve developing their capability and working relationships as well as their required competencies.

Another problem for all students concerns the transfer of knowledge between academic and employment settings. This is usually underestimated. My research in several professions suggests that in complex situations the transfer process typically involves five inter-related stages:

- 1) The extraction of potentially relevant knowledge from the context(s) of its acquisition and previous use;
- 2) Understanding the new situation, a process that often depends on informal social learning;
- 3) Recognising what knowledge and skills are relevant;
- 4) Transforming them to fit the new situation;
- 5) Integrating them with other knowledge and skills in order to think / act / communicate in the new situation (Eraut, 2004b).

None of these stages are simple and, although they are in a logical order there is usually a lot of interaction between them.

Salomon and Perkins (1998) made a distinction between forward-reaching and backward-reaching kinds of transfer. The *forward-reaching approach* anticipates that certain kinds of knowledge will be useful in the future, and is most likely to occur in education and training contexts. Nearly all the taught components of professional and vocational education are intended for future use at work; but the evidence that this happens as intended is often disappointing. *Backward-reaching transfer* is required when one faces a new situation and deliberately searches for relevant knowledge already acquired. This is very likely to occur with knowledge previously used in fairly similar contexts, when its relevance is quickly recognized; but committing time to searching for previously taught knowledge is rare unless someone has a memory trace that they can follow up quickly. The discourse and culture of the workplace are so different from most education and training environments that persistent searching for what is perceived as *past knowledge* is very unusual. A major reason for this lack of commitment to exploring knowledge from one's past is a general failure to understand that transfer is a learning process, which often requires a lot more time than most people expect.

In the following sections I examine evidence for the nature of learning and the transfer of knowledge in work contexts based on evidence from studies of students on, or recently returned from work placement and the research I have done on early career learning.

2. Evidence from stories of work placement

Over 50% of University of Surrey undergraduates complete a work placement that is relevant to their area of study. In 2008 SCEPTRe organised a competition to gain feedback from students returning to the university after their placement inviting them to explain what their process of learning to become a professional involved. 28 students participated in the competition and their stories were compiled and analysed by Riley (2010).

Student A started his degree with **Mathematics & Management** and got a placement as a statistical programmer with a small company doing drugs trials. For most of the time he worked with the same senior programmer and one statistician; but it was a small company and there was plenty of mutual consultation. What helped him at that stage was that, because the company had very rigorous Quality Control (QC) procedures, everything had to be checked twice. This enabled him to contribute as a checker well before he could participate in other ways. That helped to 'pay his way', and was a very useful way to 'learn the ropes'. He was tremendously unproductive at the beginning. For example, what took him one and a half days near the beginning of his placement took him only one hour at the end. They normally let him try something if they thought he could handle it. Then after Christmas they asked him to lead his own sub-studies (a technical term in Quality Control) in a new project.

To improve efficiency all programmers were encouraged to take other people's programmes and modify them. This ensures that you become familiar with what other people have done. If you get to see a trick that is quite neat, you recognise it as an efficient way of doing that job. In general you start many programmes by looking at what others have done for a similar task; then during the course of the project you modify it, sometimes extensively, sometimes just a little. Over time you learn your own style through observing everybody else's work. This maintainability is very important for the integrity of our work. They encouraged him to develop his own style. He was always improving his approach to programming as a result of first seeing other people's work, then seeking to improve it.

Everyone was involved in Quality Control, and end results were extensively reviewed. They all worked in the same office, they had a spreadsheet of issues for each project, and everybody was expected to contribute to it. Their system was for everyone to engage in informal chats on specific issues as and when they arose. As he became more experienced, he developed more contacts with other departments and this gave him "a whole new layer". They did different things, used different software and presented their data differently. He had to be very open minded to see where they were coming from. He had to understand what it meant to them.

"You learn by practice, I can remember a couple of occasions when I went stumbling in without being sufficiently conversant with their work. It's important to listen before you speak. It's similar to learning through observing other people's programming work."

Student B was a **Chemical Engineer**, who chose to do multiple placements with a contracting company. She started with a very busy senior consultant, who gave her nothing but filing. For her first three months she had very little interaction with other people, learned very little about the company, and "hardly grew as a person". Her second placement was challenging and entailed a lot of responsibility. Her manager was very good, intelligent and thorough; and she learned a lot from him. However, she still felt too scared to ask for help when she needed it. She had a personal project as well as contributing to the team as a whole. This involved sizing a line using a software package, a sudden jump in responsibility. Although she was shown how to use the software, "in my head I couldn't do it". She should have asked more questions at the time, but was too scared to do so. So she went to her friend from Surrey, who was in the same building, and got her to take her through it.

Her third placement was in a petrochemicals project, which she was part of a Systems Team supporting a Process Team. This was more like management work, and she had to communicate a lot with the process engineers. The process team was in Reading, while the drawings were done in Chennai. This was good management experience in how to set deadlines and make sure that other people meet them. She had to work with the X department as well. For example she had to set a deadline for a metallurgist of about 45, who always left things for the very last day. So she made the deadlines earlier, in order to be sure that the "real" deadlines were reached. She felt that she grew most as a person in that group, because of what she

had to deal with. For example, she had to bring metallurgists and process engineers together in order to do material selection diagrams. But this metallurgist didn't come to meetings or, if he did come, would sit talking on the phone. She thinks that she did well in getting him to contribute.

Her manager for the final placement was very clever in getting her a Process Role. First he brought her into the project as a Systems Engineer to cover for someone on holiday. This worried her at first, because she did not want to do any more Systems Engineering. But his plan was for her to get to know the group, so she could be more easily accepted in a Process role. Thus after two weeks she was moved to a process role to do chemical engineering.

Student C was from **Tonmeister**, Surrey's department for Music and Sound Recording; and her placement was with Chapel Recording Studios in Lincolnshire. The studio manager had been in the music and recording industry for many years before buying the Chapel and converting it into a recording facility. The other permanent staff comprised just two in-house engineers and a small group of administrative staff. Most of the work is done by incoming bands, who use the recording equipment and generally get help when they need it. She was put in charge of safety, which involved following the bands round when they were putting down cables and fastening them down before anybody could trip over them. It also helped to get to know them, and later in her placement she was often the only Chapel person there.

She "found that the two in-house engineers worked very differently: one engineer liked to do most of the technical running of the session himself after everything was rigged; and consequently most of her learning with him was through observing his techniques and asking questions. However, I slowly built up a rapport with him and he was eventually comfortable to leave me working alone tracking to Pro Tools, and later entirely in charge of a session. As the placement went on, he began to ask for my opinions on things such as how edits and microphones sounded as well as about instrumental tuning issues and recognising if microphones were in or out of phase. In contrast, the other in-house engineer allowed me to run Pro Tools on the night of my arrival and subsequently increased my creative and technical possibilities. My choices of microphone techniques and ideas for getting around technical problems were used as well as compositional suggestions during tracking. On several final mixes, I was involved as an equal partner for decisions and shared controls of the outboard, plug-ins and faders."

She then began to expand her sound repertoire as far as possible. It wasn't just the equipment. She saw different bands using the equipment in different ways and making different sounds, because there was a wide range of music coming in. So she picked up a lot of background knowledge about how to produce different sounds and what was appropriate for different occasions. She also learned how to relate to the bands, as they all had different personalities. This included helping some of the singers. One man had a throat problem, and she suggested an exercise she knew from her own study of singing, which cured it for him. She also introduced morning warm-ups to some visiting singers.

Josephine had recorded students at Surrey but not professionals. They're quite different in the way they play and what they are trying to do, so she tried to adapt her recording to the cues she picked up from them. There is no common vocabulary, so you have to assess both what they are trying to achieve and what they are actually doing. Some are quite good about expressing what they want to hear, or what they feel about what they were currently doing. You have to interpret what they are saying and try to get the sound they want. She doesn't use technical words like "more bass", but descriptive words like "Do you want it more meaty or lighter?" They may not use the same language, but it's something they can understand.

One of the organisational innovations Josephine introduced was a Recall Sheet. When you are recording, people often want to go back to an earlier version; and there can be a lot of versions being tried out, any one of which someone might want to recall. So recorders were asked to make notes of each sound set up in

case they were needed later. She found this quite difficult using lots of scribbled notes; so she designed a sheet with appropriate headings which both reduced the amount of writing and made it easier to find the relevant parts of the set up. This made recalls quicker and more reliable.

Josephine also asked to assist the maintenance engineer on one of his fault-finding days. This enabled her to see the inside layout and how the bits fitted in together. She picked it up quite quickly, but had to ask lots of questions about what was going on. This additional know-how proved very useful. One day when she was doing a session on her own, something broke down, and she was able to fix it. Otherwise the whole session would have come to a halt. The band just took it for granted!

"I learned the importance of maintaining the correct atmosphere in the studio and it was interesting to observe how producers communicated with the musicians to earn their respect and encourage them to get their best performances. As the hours were very long, there were occasional stresses and irritations among the band members and, where I could, I found ways of diplomatically diffusing these situations, either by listening to an individual's complaint or simply by saying 'I'll stick the kettle on!' This greatly developed my confidence and interpersonal skills and helped me cope with difficult people in awkward situations."

These three examples of Surrey students in their third year demonstrate a number of key points. It takes some time for most people to adjust to new working contexts, even those with more experience than the Surrey undergraduates. As temporary employees, they rely on the good will of their organisations, who in turn try to help them learn. However, these three examples (and nearly all the others) show that two factors are crucial to the learning potential of placements: the support from those who work with them; and the challenges of the work they are asked or permitted to do.

Those organisations that seek to properly support and develop the capabilities of students on placement, enhance the reputation of their organisation and probably find some excellent potential recruits as well. Within that broad vision, many students learn in different ways and in different places, known only to those around them. However, students on placement also have to take the initiative themselves and look for suitable opportunities within their current placements. The balance between placement students joining communities of practice and showing personal aptitude and agency is also very important. Evidence relating to this aspect of placements is presented below.

3. Evidence from 125 third year students' responses to a questionnaire on learning during their placement year (months 7-8)

The responses to the competition led me to investigate the experiences of the next cohort of placement students by devising an appropriate questionnaire. This began with a short survey of previous work experience, as we felt it important to recognise all forms of work experience, not only those on formal placements. This showed at least 29 full time jobs lasting at least 3 months and at least 31 more people who had experienced full time work for at least a month. The number of part-time jobs was 112 lasting at least 3 months. At least 77 of the 3+ month jobs and 43 of the 1-3 month jobs involved learning something useful. The impact of such experiences should not be neglected when considering life-wide learning, especially in the area of human relations.

Before presenting any data, I should note that we subdivided our respondents into twelve departments or 'combined' departments; and looked for means 20% above or below the average for the whole cohort. This indicated that there were very large differences across subjects. Some may derive from the central nature of those subjects, some from the size of the placement organisations, and some may be connected with the way in which these subjects tend to work. In choosing data from six tables, I will be trying to look at these

responses and their significance for life-wide learning, not trying to deny the gains described by a large majority of placement students.

The first table (not shown) focuses on student participation in a wide range of activities by asking them to judge the importance and the frequency of each of 18 activities. In most activities the importance was higher than the frequency; and 12 of the activities had a highest department important score of 100%. The widest gaps were from Evaluation of situations (58 frequency v 89 performance), Presentations/performances (42 frequency v 81 performance), and Management of people (22 frequency v 71 performance).

Table 1 shows the University means for each of 10 Placement Quality ratings and 5 Career Outcome ratings. The University means for the **Very Good** quality ratings (5 on a 5 point scale) include six between 43% and 51% and four between 29% and 39%.

Table 1: Student views on Quality and Career Outcomes from their placements

Questions using <i>Very good</i> on a five point scale and <i>Low</i> for points 1+2	University Mean in % 126 students		Number of departments 20% above the mean (if more than 3)	Number of departments 20% below the mean (if more than 3)	Highest and lowest scores
	Low	VG	VG	VG	VG
Physical environment	2	45			83-20
Access to tools and facilities	5	44	6	4	83-20
Quality of relationships	6	50	4		70-30
Access to appropriate expertise	10	51	6		100-29
Supervision	9	45			67-20
Induction to the job	9	30	4	5	83-10
Informal support	5	43	4	4	83-00
Challenging opportunities	13	39	6	4	67-17
Allocation of appropriate work	8	31	4	4	62-10
Opportunities to be creative	18	29	4	5	50-09
Awareness of your strengths and potential	3	24	6	5	50-00
Awareness of what you need to achieve in your final year	7	41	5		75-20
Quality of what you achieved in your placement	5	29	5	4	50-10
Awareness of kind of work you want to do in the future	9	29		4	50-14
Awareness of the work you do not want to do in the future	5	24	5	6	50-00

The highest 2 headings were *Quality of relationships* (50%) and *Access to appropriate expertise* (51%); and the lowest 3 headings were *Induction to the job* (30%), *Allocation of appropriate work* (31%) and *Opportunities to be creative* (29%). In contrast, the three highest ratings for points 1 and 2 combined are 10% (*access to appropriate expertise*), 13% (*challenging opportunities*) and 18% (*opportunities to be creative*).

The University means for the **Very Good** ratings concerning Career Awareness were quite low. Four were between 24 % and 29% and the fifth (*awareness of what you need to achieve in your final year*) was 41%. However, none of these five **Low** headings was higher than 9%; so most responses were **OK** or **Fairly Good**. The wide range of departments scoring at least 20% above the university mean is notable.

Table 2a: Support for Learning Tasks and Projects

Questions using 1+2 (<i>low</i>) and 4 (<i>top</i>) on a four point scale 120 students	University mean in %		Number of departments 20% above the mean (if more than 3)	Number of departments 20% below the mean (if more than 3)	Highest and lowest scores
Tasks	Low	Top			
How much learnt from consulting others	10	66			91-46
Extent task choice allowed progress in taking responsibility	13	45		4	87-20
How much help did you have in learning assigned tasks	18	49	6	4	83-19
How much learnt from sharing tasks with others	23	40	6		83-15
Extent to which others listen to your comments and suggestions	18	31	4		67-14
Extent to which task choice allowed progression:					
in your range of assigned tasks	20	35	6		50-10
in task difficulty	23	36	5		62-17
Projects					
To what extent have you been challenged by project work?	24	43	4	5	100-20
How much responsibility have you been given in project work?	21	44			100-17
To what extent has participation in projects helped you to learn:					
more about its content?	12	54	5	4	100-17
new skills?	12	54	6	5	100-36
how to work with people on a focussed piece of work?	23	42		5	82-24
how to handle uncertain situations?	26	38	6	5	67-20
how to keep to deadlines?	19	46	4	5	78-17

Table 2a shows the University means for each of 14 questions: 7 concern Learning Tasks, and 7 concern Project Work. The University means for the top quality rating (4 on a 4 point scale) are headed by *learning from consulting others* (66%), followed by using Projects to learn both *new skills* (54%) and *content* (54%). Seven ratings were in the 40s (three on tasks, four on projects) and four ratings were in the 30s (three on Tasks, and one on Projects). The means for the two lowest ratings (1 and 2 on the scale) were seven between 10 and 19, and seven in the 20s. The 'highest' five of these lower options was *how to handle uncertain situations* in Projects (26%).

Table 2b: Support for roles

Questions using 1+2 (<i>low</i>) and 4 (<i>top</i>) on a four point scale 120 students	University mean in %	Number of departments 20% above the mean (if more than 3)	Number of departments 20% below the mean (if more than 3)	Highest and lowest scores
Roles If you were given a responsible role, were you expected to:				
develop initiatives or projects?	32 35	4	4	67-17
monitor progress?	27 31			83-10
evaluate outcomes?	35 26	5	5	78-05
manage people?	65 15		6	67-00

The last entry confirms the low score for opportunities to *manage people* in Table 1; and indicates that six departments were below even that rating, probably zero. The evaluation of outcomes appears to have been used in five to seven departments at most.

Table 3a below shows which of the types of people listed in the Left Column were chosen as the “most influential” by their placement students.

Table 3a: Roles of people selected by students as being the most influential for them

<i>Most influential people</i>	Person N	Person P	Person R	Total
Your supervisor	61	12	4	77
Your manager	20	34	9	63
Another senior person	4	27	28	59
Recent graduate	5	9	14	28
Experienced worker at graduate level	3	7	8	18
Experienced worker not at graduate level	2	4	11	17
Another student on placement	4	5	6	15

Table 3b below shows the quality of the support given by each of the three most influential people cited by each student. This is based, as noted above, by noting the percentage of ratings (+2 and +3 combined) given by each type of influential person listed for each type of help.

Table 3b: Help from individual influential person's N, P & R

The data used is the sum of the two highest percentages of a 7 point scale. The column heads show the number of responses given for each type of support	N 85-95	P 77-89	R 63-72
Helped you to accomplish your tasks	75	45	44
Helped you to understand situations	82	33	47
Helped you with collaborative working	63	52	50
Helped you with joint problem-solving	<u>53</u>	<u>52</u>	<u>51</u>
Guiding/introducing you to people who could be helpful	67	48	46
Guiding you on how to handle people	43	<u>51</u>	33
Guiding you on accessing relevant information	60	51	46
Encouraging you to take initiatives	60	38	35
Gave you tasks that offered learning opportunities	66	42	43
Gave you, or included you in, challenging project work	56	39	41
Gave you challenging roles that required initiative	55	44	33
Helped you to choose your work	40	<u>61</u>	28
Helped you to prioritise your work	41	<u>58</u>	29
Gave you constructive feedback on some of your work	74	43	41
Gave you constructive feedback on your work in general	69	47	32
Gave you constructive feedback on your mistakes or work below par	52	<u>57</u>	27
Gave you constructive feedback on your strengths and weaknesses	47	<u>63</u>	27

In most cases the Person Ns were the most appreciated, but in the 5 underlined cases Person Ps were more appreciated. This matches the higher proportion of managers selected as Person P. Person Rs came from a wider range of positions, and secured 40-59% (the two middle columns in Table 3c) on nine of the 17 modes of support. Although the percentages drop significantly from N to P and from P to R, a significant number of all three chosen persons appear to have covered a wide range of support roles.

Table 3c: Number of entries in each column for each interval of 10%

	20-29	30-39	40-49	50-59	60-69	70-82
Person N	0	0	4	4	6	3
Person P	0	3	6	6	2	
Person R	4	4	7	2		

Student views on taking personal initiatives

Table 4 below was designed to investigate the nature and level of personal agency used by students on placements. Each question shows how possible forms of personal agency are used or not used by the responding students. The pattern we chose is unusual, because for each form of possible student Initiative, we offered four possible outcomes. Two involve no action (N), and two involve taking some action (A) by approaching another person for help. In either case, the outcome can be positive (POS) or negative (NEG). The first column, *No Need*, is regarded as doing nothing but still a *positive* outcome. Those students don't need to ask, because it is already happening. However the second column, *Not Tried*, is regarded as a *negative* outcome, because it suggests that the students choosing this option would like to engage in the suggested intervention but are either shy or intimidated. If they do try, they may have a successful outcome - *Yes, success* - or an unsuccessful outcome - *Yes, but no success* - which suggests a reluctance to help the student.

Table 4: Personal initiatives demonstrating agency (104 students)

Line 1: University highest, mean, lowest (%) Line 2: Number of departments 20% above & below the mean (if more than 4)	No need	Not tried	Yes, but no help given	Yes, success
Exploring the situation	High Mean Low	High Mean Low	High Mean Low	High Mean Low
Have you asked if you could visit other sections, sites or departments?	60 22 0 5 5	50 20 0 5	22 11 0 5 6	83 47 17
Have you asked anyone about the different kinds of work in your organisation?	40 14 0 7 5	33 8 0 7	11 3 0 9	100 76 44
Have you asked anyone to introduce you to someone you would like to meet?	50 22 11 5	56 33 0	20 6 0 7	71 39 17 5
Have you overtly asked people for feedback on your work?	17 3 0 9	50 27 0	20 6 0 9	87 66 40
Seeking variety of experience	High Mean Low	High Mean Low	High Mean Low	High Mean Low
Have you asked to move to a different section or department?	86 52 20 5	50 27 0 5	22 11 0 5	40 11 0
Have you asked for new tasks in your current load?	40 12 0	40 15 0 6 5	23 9 0 7	83 65 40
Getting what you want	High Mean Low	High Mean Low	High Mean Low	High Mean Low
Have you asked to work with a different person or group?	80 34 11	56 24 0 6 6	22 9 0 6 6	60 33 11 5
Have you asked to work on a particular project?	40 21 0	56 26 0 6	33 9 0 6 6	71 44 17 5
Have you asked to be given more responsibility?	56 25 0 5	44 28 0	17 6 0 7	71 41 0 5
Have you persuaded others to back any of your initiatives?	44 24 14	50 25 0 5 6	40 9 0 5 6	67 42 11

We start our discussion with variations in the university means for the ten questions. Four questions come under the title “Exploring the situation”, two came under “Seeking variety of experience” and four were under “Getting what you want”. The same data can be found in the first column of each table, so the mean is always available for comparison. The presentation has been changed to accommodate both the four optional answers and the key information provided in other tables by using two lines of figures for each entry. The first line gives the highest score, the university mean and the lowest score; and the second line gives the number of departments which are 20 % above or 20% below the mean.

Three of the ten questions had a more than 50% response of *Yes, success*:

- Have you asked anyone about the different kinds of work in your organisation? (76%)
- Have you overtly asked people for feedback on your work? (66%)
- Have you asked for new tasks in your current load? (65%)

The next four questions had means over 40%, two were over 30% and one was only 11%.

The least popular choice was *Yes, but no help given* where the mean percentages of were between 3% and 11%, the two highest (questions 1 and 5) being linked to *visiting or moving to other sections or departments*. The lowest score for all ten questions was zero; and seven of them had more negative responses than positive responses. The numbers are too small to attempt any further analysis.

Question 5 also led to the highest *No Need* response of 52%. The next highest *No Need* was Question 7 with 34% wanting to *work with a different person or group*, while most others were between 20% and 30%. There are six questions with at least one zero response; and questions 3, 4 & 6 clearly have several departments with very few *No Need* responses. The question *Have you overtly asked people for feedback on your work?* has the lowest mean of 3, and nine departments had zero responses for the *No Need* option. This demonstrates that feedback can only rarely be treated as sufficient.

The *Not Tried* option is of particular concern, because it suggests that a significant minority, 8 out of 10 questions with means between 20% and 33%, either lack personal initiative or feel that their concerns would not be treated seriously. These students could probably be better supported if their reluctance was known to those responsible for their progress. Two questions, *Have you asked for new tasks in your current load?* and *Have you asked to work with a different person or group?*, have 6 departments at least 20% above their means, and three questions have 5 departments in that position.

Preparation and support before and during your placement

Until now, the main tables have centred on the activities and environment in placement workplaces. However, Table 5 below is specifically concerned with the university's own contribution to placements. The issues addressed are those over which the university and its students have the most influence. The fourteen questions were divided into four groups:

- Opportunities to meet students who have just returned
- Choice of placements,
- Support at department, faculty or university level
- Support during your placement year so far.

This group of questions used a four point scale: *None, Little, Quite good, Very good*. In order to limit the size of this report, Table 5 is based on our students' responses to the top two options alone: first through the combined scores of options 3 & 4, and second through option 4 on its own. Data from the other options will be introduced when helpful.

My discussions with students and faculty before the questionnaire was even suggested often raised the question of opportunities to meet students who had recently returned from their placements; and it emerged that some departments organised this, while others did not. The questioned not only confirmed this but gathered information about the quality and usefulness of current practices. 20% of our respondents reported no opportunities to meet returning students, and 32% reported little help from this source. Although some departments had a lot of students working from home who found their own placements, it could still have been helpful to them to have met a few returning students in order to get their advice on what they should look for when choosing a placement.

Table 5 Preparation and support before and during your placement

Questions using <i>top half</i> of a four point scale (3+4) [** X is used when 20% above the mean goes beyond 100%]	University means in %; 103 students		Number of departments 20% above the mean (if more than 3)		Number of departments 20% below the mean (if more than 3)		Highest and lowest department scores	
	3+4	4	3+4	4	3+4	4	3+4	4
Opportunities to meet students who have just returned								
From placements in your own subject/ department	47	18	4	4			71-20	57-00
From organisations to which you might apply for a placement	40	12	4	5		5	75-20	33-00
From particular parts of those organisations	33	8	4	6	6	6	67-13	22-00
Choice of placements								
Understanding the advantages of placements for your future career	89	40	X**	4			100-71	71-14
Help in deciding what placements would best meet your needs	66	22	5	4		5	100-36	57-00
Help in finding a placement	68	40	4	5		4	100-21	83-14
Support at department, faculty or university level								
General briefings on placements	83	23		6		5	100-53	50-00
Seminars focused on the nature and quality of placement learning	68	15				5	88-53	50-00
The work of the careers' service	54	13		5	4		87-20	43-00
Advice from administrative staff	53	13	4	7		4	100-20	33-00
Support during your placement year so far								
Through visiting tutors	67	30	4	6		4	100-33	50-13
Through contacts with other staff	41	15	4	5	4	6	68-20	50-00
Through discussing your placement report(s)	42	14		6	4	4	84-00	33-00
Making good use of your placement experience in future job applications	60	35	5	4		5	100-20	75-00

The most positive scores for (3+4) in the other three rows of data were 89% for *Understanding the advantages of placements for your future career* and 83% for *General briefings on placements*. Five responses had (3+4) percentages in the 60s, two in the 50s and 4 in the 40s. One department had four 100% ratings, and another very different department had two 100% ratings.

Finally, we compare the number of activities with average ratings 20% above or below the university mean. Two department groups with very high profiles at level 4 had 10 ratings 20% above the university mean, and a third had 13 ratings 20% above the mean. All three were in different faculties. This was mirrored by three departments with high ratings below the mean, two with 10 ratings and one with 13 ratings below the mean. This time only two faculties were involved. When we examine Table 5 more generally, we get a very large range of departmental ratings, which suggests that the university has both good expertise and opportunities to improve the quality of placements over time.

4. Evidence of learning in the first three years after graduation

My previous ESRC project on the Early Career Learning (ECL) of accountants, engineers and nurses developed three very useful tools. The first of these tools was developed from watching how ECL graduates were learning in workplace contexts; and our team discovered that 80 to 90% of the events we witnessed were best described as “working with learning as a side-effect”. This explained why interviews on their own failed to notice most of the learning, because the learners didn’t recognise it as learning. By starting through observation in the workplace, we could develop a discourse of description which could gradually be developed to include activities when we were not even present; as long as we did not fall back into asking “interview questions” that prompted a discourse of justification. We ended up with working processes on one side of our tool and learning processes on the other side. Activities like asking questions went in the middle, because they could be used on either side.

Table 6 A typology of early career learning

Work Processes with learning as a by-product	Learning Activities located within work or learning processes	Learning Processes at or near the workplace
Participation in group processes Working alongside others Consultation Tackling challenging tasks and roles Problem solving Trying things out Consolidating, extending and refining skills Working with clients	Asking questions Getting information Locating resource people Listening and observing Reflecting Learning from mistakes Giving and receiving feedback Use of mediating artefacts	Being supervised Being coached Being mentored Shadowing Visiting other sites Conferences Short courses Working for a qualification Independent study

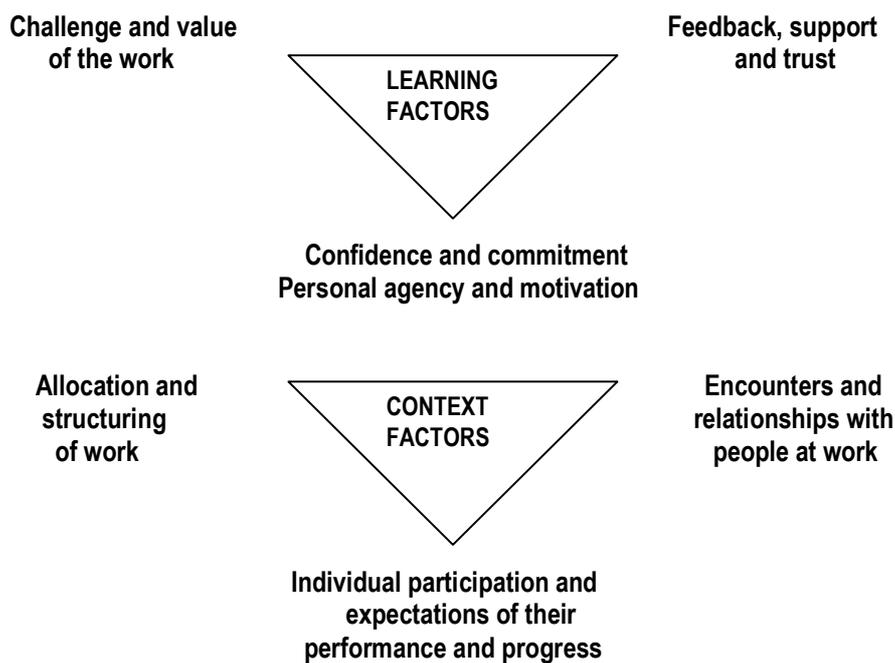
Four of these work processes have to involve other people and the other four could also involve other people. Thus there are good theoretical reasons for workers to mainly learn from other people, but not always recognise much of it as ‘genuine learning’ (Eraut, 2007b). One rarely noticed advantage of this manner of learning is the benefit for those with expertise. When they are working alongside a lesser expert, they can mention points or encourage them to ask questions as often as they can, without having to go into long explanations; because their colleague already knows much of the context including visual and auditory aspects that could be quite difficult to explain. Consider, for example, the clues to be noticed from the comment or question of a client. Moreover, engagement with some clients may enable some novices to learn things not picked up their own experts.

Our second tool was Figure 2, our Two Triangle Model for addressing both Learning Factors and Context Factors which we developed to show how the direction and amount of learning was influenced by key aspects of the workplace itself. This model is presented below, and has been explained in detail elsewhere (Eraut, 2007ab; Eraut & Hirsh, 2007); and examples of it were developed for the first three professions we researched for the ESRC project. Some of the complex interactions conveyed by the model need some explanation.

Our evidence from this project confirmed that both confidence in one’s ability to do the work and commitment to the importance of that work are primary factors that affect individual learning. If there is neither *challenge*, nor sufficient *support* to encourage a novice professional to seek out or respond to a challenge, then

confidence declines and with it the motivation to learn. *Commitment* was generated through *social inclusion* in teams and by appreciating the *value of the work* for clients and for themselves as novice professionals. Moreover, concerns about career *progress* that arose from inadequate *feedback* of a normative kind tended to weaken novices' motivation and to reduce their *commitment* to their organisation. Finally, we recognised the importance of novice learners' *personal agency*, which recognises participants' own sense of choice, meaningfulness, competence and progress (Thomas 2000), which is not necessarily aligned with their employer's priorities.

Figure 2 Factors affecting learning at work: the Two Triangle Model



The *allocation and structuring of work* was central to our participants' progress, because it affected (1) the difficulty or challenge of the work, (2) the extent to which it was individual or collaborative, and (3) the opportunities for meeting, observing and working alongside people who had more or different expertise, and for forming *relationships* that might provide feedback and support. For novice professionals to make good progress a significant proportion of their work needed to be sufficiently new to challenge them without being so daunting as to reduce their confidence; and their workload needed to be at a level that allowed them to respond to new challenges reflectively, rather than develop coping mechanisms that might later prove to be ineffective.

Using these two tools provides a useful guide to both placement students and those who support them. As far as we can tell, most of the language used is readily available to current trainees; and the two tools suggest ways in which they might better understand their progress so far and find ways to discuss their experience to date with those they thought would listen. Connecting evidence relating to both the questionnaire and the two tools described above would help to prepare and support placement students, departmental advisors and employer supervisors.

5. Lifelong and Life-wide Learning Trajectories

Our third early career learning (ECL) project tool was a new approach to describing what is being learned on placements; because academic criteria cannot cover the full range. The main arguments for Learning Trajectories are to improve the representation of Personal Knowledge and to incorporate the principles and practices of Lifelong Learning. In particular, it seeks to include changes in context, variations in practice and changes in practice, and to ease the unreasonable burden placed on criterion-based assessments. Table 7 shows the generic typology of learning trajectories used to map the knowledge progress of the three ECL professions. At any point in a career, according to their roles, responsibilities and portfolio of work, professionals will be moving along a learning trajectory, either developing new expertise or allowing themselves to withdraw from parts of their portfolios. Willis (2009) demonstrates that the learning trajectory model is also valid for students on their work placement in her analysis of the same 28 stories described in section 2 above, using the learning trajectories framework as an analytical tool.

The added value of the life-wide learning dimension (Jackson 2010) is that development that is relevant to a particular trajectory may be taking place at other sites in a person's life without them recognising that it might also be useful in their professional role. This proposition remains to be evaluated but there is good evidence from student self-reports (Jackson unpublished data, Barnett 2010) that students are developing themselves in all sorts of ways that are relevant to these learning trajectories in different parts of their lives, while they are studying at university.

Careful attention to this third tool will show that many important features are incorporated, which are rarely considered in the practice of helping students learn to become a professional, in spite of their significance. Our list of trajectories was developed during successive research projects on early and mid-career professional learning, which enabled us to classify our findings on what was being learned under eight main headings: task performance, role performance, awareness and understanding, personal development, academic knowledge and skills, teamwork, decision making and problem solving, and judgement (Eraut and Hirsh, 2007).

This approach enables future learning to address both further development along trajectories and whether the right trajectories were chosen and combined in the most appropriate way. Within this overall framework it is still possible, indeed desirable, for different types of representation to be used for different trajectories and at different career stages. Hence another advantage is that learning trajectories problematise the role of occupational qualifications as signifiers of learning. Occupational qualifications are a very public rite of passage, which symbolises generic competence in an occupation; and this claim is backed by the use of apparently clear and specific criteria for assessment. In practice, however, these qualifications require both a specified amount of practical experience and the demonstration of competence in certain aspects of performance by successful candidates. The assessment process may require either that a particular level of competence is reached in each aspect, or that the performance as a whole is satisfactory, or both. However, variations in candidates' strengths and weaknesses are inevitable, because trainees are allocated to one or more placements, whose learning opportunities will differ in kind if not also in quality. So there are bound to be *significant differences in the performance profiles of trainees at the point of qualification*.

The main advantages of learning trajectories around the time of qualification are that:

1. They track aspects of trainee performance before, during and after qualification; and this should avoid the pretence that workers with the same qualification perform at a similar level across the range of occupational activities.
2. They enable continuity of learning by providing profiles of candidates' strengths and weaknesses at the time of qualification, and at appropriate intervals thereafter, which can then be used for planning some of their further learning.

3. Mapping progress over time also measures the ability to learn from experience, which is probably a better predictor of future performance than a single mammoth period of assessment.
4. They incorporate the principles and practices of Lifelong Learning by including both formal and informal learning

Table 7 A Typology of Learning Trajectories

<p>Task Performance Speed and fluency Complexity of tasks and problems Range of skills required Communication with a wide range of people Collaborative work</p> <p>Awareness and Understanding Other people: colleagues, customers, managers, etc. Contexts and situations One's own organization Problems and risks Priorities and strategic issues Value issues</p> <p>Personal Development Self evaluation Self management Handling emotions Building and sustaining relationships Disposition to attend to other perspectives Disposition to consult and work with others Disposition to learn and improve one's practice Accessing relevant knowledge and expertise Ability to learn from experience</p> <p>Teamwork Collaborative work Facilitating social relations Joint planning and problem solving Ability to engage in and promote mutual learning</p>	<p>Role Performance Prioritisation Range of responsibility Supporting other people's learning Leadership Accountability Supervisory role Delegation Handling ethical issues Coping with unexpected problems Crisis management Keeping up-to-date</p> <p>Academic Knowledge and Skills Use of evidence and argument Accessing formal knowledge Research-based practice Theoretical thinking Knowing what you might need to know Using knowledge resources Learning how to use relevant theory (in a range of practical situations)</p> <p>Decision Making and Problem Solving When to seek expert help Dealing with complexity Group decision making Problem analysis Formulating and evaluating options Managing the process within an appropriate timescale Decision making under pressure</p> <p>Judgement Quality of performance, output and outcomes Priorities Value issues Levels of risk</p>
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One important problem remains to be solved. In the opening section of this chapter we noted that most occupational activities require that several types of knowledge are integrated into a holistic performance. How then can we reconcile the use of learning trajectories depicting changes in aspects of performance over time with recognizing the holistic nature of most kinds of performance? Returning to our earlier discussion about the domain in which performances have been judged as competent or proficient, we decided that points on our learning trajectories should be treated as windows on episodes of practice, in which (1) the aspect of learning portrayed by the trajectory had played a significant part, and (2) the current

domain for the trajectory had been sustained or enhanced. This could only be achieved if each window included the following information about the performance:

- The setting in which it took place, and features of that setting that affected or might have affected the performance
- The conditions under which the performance took place, e.g., degree of supervision, pressure of time, crowdedness, conflicting priorities, availability of resources
- The antecedents to the performance and the situation that gave rise to the performance
- The other categories of expertise involved
- Any differences from previously recorded episodes
- Indicators of expertise in the domain of the trajectory having been maintained, widened or enhanced

This last point draws attention to the complexity of learning and performance in most professional, technical and managerial jobs. It is unusual for a performance to use knowledge from only one trajectory, and the seamless integration of personal knowledge from several trajectories may itself be an important learning challenge that goes beyond progress in several separate trajectories. The holistic nature of any complex performance should never be neglected. Within this overall framework it is still possible, indeed desirable, for different types of representation to be used for different trajectories and at different career stages. There is no one best way for describing complex knowledge in use.

The key concept behind this approach is that:

1. Entries are based on complete episodes of practice;
2. The data displayed in each entry represents a whole performance, involving not only the relevant trajectories but also the ways in which they interacted;
3. Each trajectory contains a sequence of entries which show how its particular track has progressed over time.

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Can technology help us realize the learning potential of a life-wide curriculum? Towards a curriculum for resilience

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Richard's research interests include the impact of new media on pedagogic practice and institutional structures, and more importantly upon learner-empowerment, agency and participation. He is interested in issues tied to the post-digital era and framing a resilient education. He is also concerned about Green ICT, and the impact of technology on climate change and energy sufficiency.

Summary

The role of technology, and in particular social media, at the interface between formal and informal learning contexts is under scrutiny. In part this is because of the contested nature of the impact of technology within existing curricula and the opportunities it affords for epistemological innovation. One emerging area of interest is the role of technology in learning futures, and more especially in managing life-wide engagement in a world of increasing complexity and disruption. Here, individual and social resilience, or the ability to manage disruption, is important. This paper sets out to examine how technology underpins life-wide learning and how it might be used to help realize the learning potential of a life-wide curriculum, by framing a more resilient education. Key areas of interplay between individuals and technologies are identified: firstly, the learners' contextual control of the management of tools and social rules that underpin their performance of tasks; secondly, the learner's development of their own digital identities and agency, through their engagement in a range of social networks; and thirdly access to near real-time feedback and support for learning, and modelling the value of divergent approaches. As a result, technology can enable learners to engage with uncertainty and civil action.

Introduction

This paper sets out to examine how technology is involved in life-wide learning and how it might be used to help realize the learning potential of a life-wide curriculum. The place of educational technology in pedagogic discourse is a core element of Technology-Enhanced Learning (TEL) research and development in higher education (Facer and Sandford, 2010; Joint Information Systems Committee (JISC), 2009a; Ravenscroft, 2009; Selwyn, 2010). In particular, work has focused upon the educational implications of such technologies for personalisation, informal learning and building resilience (Attwell, 2009; Hall, 2009a; O'Donoghue, 2009; Winn, 2010). It has been contended that the ability of users to work across a range of networks and tools, and to integrate them within personally-meaningful spaces, extends individual self-conception, self-presentation and self-knowledge (Parajes and Shunk, 2001; Franklin and van Harmelen, 2007). One hopeful outcome is that learners are able to negotiate and enhance their own digital identities in a range of social spaces, using a range of social media (University of Reading, 2010), in order to “pay particular attention to the epistemology of practice(s) in the social, professional and working worlds” and thereby deal with complexity (Jackson, 2008, p. 3).

However, there is a danger that some within the strategy or management of educational technology demonstrate uncritically determinist or positivist approaches, especially in framing how specific tools or media *are* revolutionary or *will* deliver specific benefits. Concomitant claims are made for the apparently uncontested opportunities for personal or economic growth that are afforded. The latter is demonstrated within, for example, the UK Government's approach to Higher Ambitions (Department of Business, Innovation and Skills (DBIS), 2009), or the Higher Education Funding Council for England's Online Learning TaskForce (HEFCE, 2010). There is a tendency for the “how” of technology to be elevated ahead of either the “why” or the constraints imposed by social or political economy.

These constraints have begun to be addressed at the level of both the institution and the programme. In terms of the former, Selwyn (2010, p. 67) has recently argued that educators need to address “educational technology as a profoundly social, cultural and political concern.” For Hemmi *et al.* (2009), the use of educational technology is problematic because the institutionalisation of Web 2.0 technologies actualises a reclamation and regulation of innovation within traditional, safe paradigms. In this view, some of the opportunities for the re-invention of higher education are lost. In a more radical view, the institutional use of educational technology in the idea of higher education has to be seen in the context of wider societal disruption, in the form of massive public sector debt, climate change, energy security and peak oil (Hall, 2010; Winn, 2010).

At the programme-level, Ravenscroft (2009, p.1) argues that practitioners need to consider “the current technological innovations as players in an evolving paradigm, and not necessarily clear solutions to well-understood problems.” Pachler and Daly (2009) go on to caution that practitioners need to know more about the specific strategies that are deployed by learners using social software, in order for the curriculum to be refined. Whilst Clark *et al.* (2009) stress that without such knowledge, practitioners cannot frame shared, co-produced epistemological strategies with learners, and thereby risk promoting ‘digital dissonance’. Clearly, these authors see the deployment of social media within and beyond the curriculum as contested and complex, with marginal room for developing a curriculum modelled upon personal integration and social enquiry (FutureLab, 2009).

Framed by these concerns, this paper scopes some possibilities for utilising educational technology and social media to support learners and learning activities within a life-wide curriculum. It takes Jackson's (2008, p. 1) view that “a life-wide curriculum is the most appropriate concept for a higher education experience that sets out to help students develop themselves for a lifetime of learning in an infinitely complex ever changing world”. The paper extends this view to develop the idea of a curriculum for resilience and coping with disruption as a way of adding value to the emergent concept of life-wide learning. The

qualities of educational technology that underpin that curriculum are highlighted, with examples of practice from one UK higher education institution. At issue is whether the deployment of educational technology can enable users to develop their decision-making and agency, and underpin a life-wide experience across higher education.

Some qualities of educational technology

Across higher education, social media, in the form of off-the-shelf virtual learning environments (VLEs) or Web 2.0 technologies that can be accessed over the web on a variety of hardware, are strategic elements of curriculum delivery. They are increasingly seen as tools that can be embedded, connected and aggregated within the curriculum at low cost in order to connect people, networks and information (O'Reilly, 2005). These technologies typically include the following functions: social networking; social bookmarking; user-generated content; virtual representation; the syndication of content including multimedia; and innovative approaches to content and application-handling, including augmented reality and aggregation. These functions or services can be accessed, increasingly, using a variety of personal and institutional hardware.

Their initial impact prompted practitioners to re-evaluate curriculum delivery, and led Sharpe (2006, p. 16) to claim:

As digital technology pervades everything around us, we can enrich each encounter to harness the global resources of the information world and of learning communities, to make it more appropriate in that moment to that individual.

Moreover, it was asserted that the openness and malleability of these tools empowers users to express themselves to others, and to take part in shared activities, in a variety of contexts (Franklin and van Harmelen, 2007). However, the emerging reality is that the use of these tools is shaped by more complex pedagogic and personal concerns. Hemmi *et al.* (2009, p. 29) note

a tendency for both teachers and learners to 'rein in' these potentially radical and challenging effects of the new media formations, to control and constrain them within more orthodox understandings of authorship, assessment, collaboration and formal learning.

These tensions occur within and beyond institutions, and impact the literacies developed by learners and tutors (JISC, 2009a; Trinder *et al.*, 2009), the relationships between those actors (Committee of Inquiry, 2009), and issues of identity, engagement, and marginalisation (Anderson, 2007; University of Reading, 2010). One outcome is an uncertainty about the effective use of Web 2.0 tools within traditional pedagogic spaces.

Recent curriculum design and delivery projects in the UK have begun a process of re-framing the pedagogic landscape (JISC, 2009b). One strand within these projects is developing an understanding of how institutional approaches to the use of technologies can be framed socially. For example, the Mobilising Remote Student Engagement project (MoRSE, 2009) is evaluating "the impact of fieldwork and placements on student learning and personal development through the integration of personal technologies and social tools", whilst the Information Spaces for Collaborative Creativity project (2009) is examining how learning technologies impact learner engagement with dialogic, 'creative conversations' in design courses. However, these programmes and projects need to be positioned relative to the personal and social contexts from which their outcomes emerge.

Technology in everyday life and the development of personal learning environments

The ability of technology to connect individuals and communities in a range of contexts has changed rapidly in the last decade. In the developed world, and areas of the developing world, access to networked, web-

based tools is impacting agency. This is accelerated through our ability both to utilise these tools on personally-preferred hardware, and to re-structure them to reflect our personal identities. Our developing knowledge of and capability in the use of technology, has prompted the recognition that the learning literacies, or digital epistemologies, that enable us to search, interpret, evaluate, utilise and re-purpose information is critical to becoming an effective learner. Jackson (2010) concludes these to be a core outcome of a higher education, and moreover that new media literacies have moved from being marginal to the generic outcomes of an undergraduate education to being fundamental.

In enhancing new media literacies, technology is a catalyst for the development of personal learning environment (PLEs), and these are receiving more attention (Attwell, 2010). The Ravensbourne Learner Integration Project (2008) argues that a personal learning environment (PLE) is 'a learning environment that is assembled through learner choice'. It encompasses the personalised aggregation of tools, networks and content from a range of formal and informal places, presented in a range of formats depending upon the nature of the personal tasks to be undertaken, and controlled by the individual user.

The PLE offers us a complex view of learning environments based upon differentiated user needs. The Ravensbourne Learner Integration Project (2008) has developed an assemblage model that focuses upon the individual's transition from private to public learning in the context of social software and communities of practice.

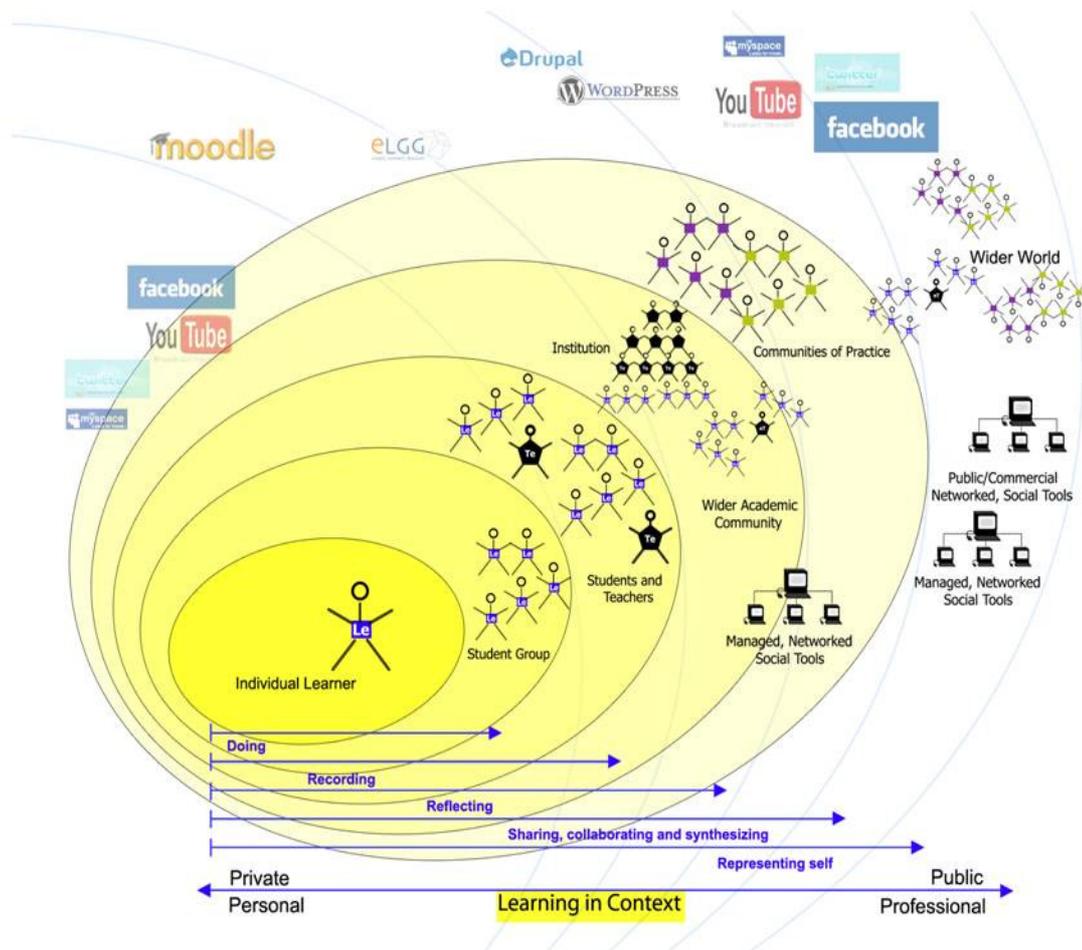


Figure 1: The Ravensbourne Learner Integration Model (RLI Project 2008)

The Learner Integration Model is important because it highlights the links between: personal mastery in specific domains; social learning in communities or associations of practice; and social media and technologies. It illustrates how self-education and critical literacy are enhanced through active participation with a range of media and within groups that make sense to the individual. This frames a constructivist paradigm where learners can situate themselves, in order to make and record actions, to reflect on those actions, to share decisions and thoughts with others, and to represent aspects of their identity within validated networks. By aligning the structures of PLEs to social contexts for learning, one can scope how users can manage the disruptions that impact life-wide engagement.

Disruption, educational technology and higher education

Technology and media literacies are becoming critical in the development of agency in the world (Hall, 2008), and in making sense of disruptive experiences. In terms of civil action, Non-Governmental Organizations such as Amnesty International regularly use social networking software like Facebook, MySpace and Bebo to lever individual agency for their campaigns (Amnesty International, 2010). Political parties have also engaged in the use of social media for associational gains (MyBarrackObama.com, 2010), or have seen such media actively used against them (mydavidcameron.com, 2010). The interplay between organizations or associations and technologies enables individuals to associate voluntarily to discuss, make decisions and act. As a result, differences in beliefs, values and histories, and the complexity of life-wide agency, are amplified.

This is important for higher education because studies have indicated that young people in particular are engaging with social media through personal technologies, as part of their everyday lives in civil spaces (Green and Hannon, 2006). In this way, life-wide learning automatically embraces the continuum of meaning-making that exists in both personal and private contexts, catalysed by technology. An outcome of life-wide learning is the development of a sense of being, and technology can underpin this through the creation of networks of identity (University of Reading, 2010) in multiple environments.

In thinking about the social contexts for educational technology, Attwell and Costa (2009) focused upon the development of “reality learning”, where personal learning and working environments could be integrated, and where access to open education can be facilitated. This is important for them because of the nature of societal change. Selwyn (2010) also argues that higher education needs to develop deeper understandings of the socio-cultural contexts within which educational technology is deployed, and how it connects into potential disruptions to our socio-cultural fabric, and our political economy. In the view of these authors, educational technology or social media cannot be divorced from their life- and community-wide contexts.

Some authors see disruption as central to these contexts. Winn (2009) raises issues of climate change and the need to reduce carbon emissions, linked to what higher education will look like in a world that needs to reduce its energy use. Some of the key thinking in this area is focused upon consumption of energy rather than the production of carbon. This is important for two reasons: firstly, the growing threat of peak oil (The Oil Drum, 2010) and the impact that will have on our ability to consume/produce, and on our energy security and availability (Natural Environment Research Council, 2009); and, secondly the need to own the carbon and energy we emit/use, in order to combat climate change. It might be argued that these problems are being amplified by energy availability and costs (The Guardian, 2009), public sector debt and the affect of a zero growth economy (new economics foundation, 2010).

Educational technology and social media do not exist in a vacuum. Alongside the fact that our use of technology within and beyond institutions is pragmatically bounded by energy availability, security, and the impact of debt on HE teaching budgets (Guardian, 2010), there is an ethical imperative to discuss the impacts of our use of technology on our wider communities and environment. This is a highly complex issue that frames personal and economic growth, affluence, technology use and our impact on the environment.

The Horizon Report 2010 (New Media Consortium, 2010) highlights the importance of openness, mobility, cloud, collaboration but argues that learning and teaching practices need to be seen in light of civic engagement and complexity. Facer and Sandford (2010, p. 75) move this much further in looking at technology futures, and they ask critical questions of “the chronological imperialism of accounts of inevitable and universal futures”, focused upon always-on technology, and participative, inclusive, democratic change. Such questioning then accepts the structural and cultural complexities of the use of technology, linked to societal development and political economy, and asks us to consider some of the deeper, life-wide ethical imperatives.

Developing resilience?

One way in which the role of educational technology might be used to address the creation of a life-wide curriculum that can help individuals and societies overcome disruption, is through the development of shared values. This connects to the role of social media in the idea of higher education, and what higher education is for. Leadbeater (2010) has developed ideas around personal strengths and capabilities, focused upon personalisation of the curriculum, and the need for educators to develop disruptive approaches to the curriculum before they are themselves disrupted. One aim is to move education away from simply improving formal experiences, to re-form them (Jackson, 2008). This highlights issues of relationships and power, of anxiety and hope, of social enterprise and community-up provision, rather than centre-down imposition. These are all areas that might be catalysed by technology and which impact upon notions of resilience.

Resilience is socially- and environmentally-situated, and denotes the ability of *individuals* and *communities* to learn and adapt, to mitigate risks, prepare for solutions to problems, respond to risks that are realized, and to recover from dislocations (Hopkins, 2009). For Hopkins (2009), resilience is “the capacity of a system to absorb disturbance and reorganize while undergoing change, so as to retain essentially the same function, structure, identity and feedbacks”. This focuses upon defining problems and framing solutions contextually, around our abilities to develop adaptability to work virally and in ways that are open source and self-reliant, rather than reliant on third parties. Resilience is, therefore, more important than sustainability, in enabling communities to manage shock, disruption or vulnerability, and to find alternatives. This means working at appropriate scale to take civil action.

Within the Transitions movement (Hopkins, 2009) there are three elements to resilience that may have implications for the use of technology to enable a life-wide curriculum. Firstly, resilience comes through diversity, which encompasses a broader base of livelihoods, resource use, and access to enterprise and energy systems within networks. Secondly, modularity within communities or networks underpins increased self-reliance. Thus, the ability of communities to tap into ‘surge protectors’, such as diverse areas of expertise or resource-supply, can help them to achieve their aims. Thirdly, tightness of feedback loops, so they are not divorced from decision-making and action, ensures enhanced planning and delivery. In this way, it is vital that networks or communities develop and share the skill-sets of their members, and that those members become agents in the world.

DEMOS (2009) recently highlighted that we live in brittle societies, with over 80 per cent of Britons living in urban areas and relying on dense networks of public and private sector organizations to provide them with essential services. As a result, our everyday lives and the national infrastructure work in a fragile union, vulnerable to even the smallest disturbances in their networks, and both are part of a global ecosystem that is damaged and unpredictable. DEMOS argue that we have a choice between reliance on government and its resources, and its approach to command and control, or developing empowering day-to-day community resilience through engagement, education, empowerment and encouragement. Crucially, educational technology offers reach, usability, accessibility and timely feedback, and may be a key to developing these qualities, and as a result, life-wide learning.

How can social media help forge a curriculum for resilience?

Davis (2007) argues that empowerment may depend less on enhanced network democracy, which is managerial and driven by the power of specific cultures, than on strong independent community organizations capable of acting coercively [i.e. through lawful, direct action] against elites. He terms this an exit-action strategy that is developed and owned by communities, and which helps to overcome the colonisation of problems, resources and contexts by elites. The key for any debate on resilience is that defining a curriculum that is community-focused, may require institutions to become less managerial and more open to the formation of devolved social enterprises. This will need the encouragement of what Gramsci (1971) called organic intellectuals, who can emerge from within communities to lead action. Learners and tutors may emerge as such organic intellectuals, and in light of disruption, catalysing our learners' and staff teams' capabilities is vital. What power do they have to develop life-wide approaches towards resilience in an era of risk and threat? What is the role of educational technology in this process?

An important element here is what Davis (2007) terms "democratic 'co-governance'" within civil action, but which might usefully be applied to education, in the form of co-governance of the curriculum or of educational outputs. There is a complex interplay between the theoretical opportunities of educational technology for personal empowerment through engagement in contexts for narrative and authorship, and our understanding of how those tools are deployed and owned in reality (Hall, 2009b; Ravenscroft, 2009). One key issue is how technologies are (re)claimed by users and communities within specific contexts and curricula, in-line with personal integration and enquiry, within an uncertain world (Futurelab, 2009).

It is perhaps this focus upon uncertainty that should drive the creation of a resilient curriculum. Barnett (2008) argues for the learner's engagement with uncertainty and anxiety, and he re-frames this around spaces for an individual's will to develop, and in which they can be, become and act in a meaningful way. Central to this project is engendering a curriculum for reflexivity in authentic contexts, and in ways that enable disruption to be overcome. The following questions emerge, and the place of educational technology underpins each one.

1. What sorts of literacies of resilience do people as social agents need, and what is higher education's role in framing them?
2. What sorts of relationships enable these resilient literacies and modes of being to emerge?
3. What sorts of knowledge/understanding do these learners need to be effective agents in society?
4. Are our traditional modes of designing and delivering curricula meaningful or relevant?

By addressing these questions it is possible to think about how to frame and deliver curricula that enable individuals-in-communities to learn and adapt, to mitigate risks, to prepare for solutions to problems, to respond to risks that are realized, and to recover from dislocations. This demands the production of:

- authentic and meaningful contexts for decision-making and agency;
- enquiry-based tasks, in which skills, approaches, decisions and actions are developed and tested in real-world situations that demonstrate complexity and context;
- cross-disciplinary approaches, linked to a guild or craft-style experience rather than a Fordist, factory approach;
- negotiated rules for the scope, governance and delivery of activities;
- accredited outcomes through the specification of expertise and experience developed within authentic processes and outcomes; and
- relationships framed by mentoring and coaching.

Some qualities of social media that support resilience

The specific outcomes from four curriculum interventions at one UK University help in assessing the qualities of a resilient, differentiated curriculum, which in turn enable the development of life-wide opportunities for both individuals and communities.

1. The development of programme-wide, rather than module-level, communities of practice in Game Art Design enables students to produce their own spaces and technologies, and to negotiate both the co-governance of projects and the co-creation of project deliverables. Through negotiation between more experienced peers, tutors and a wider, industrial community, novice learners are mentored in the production of authentic outcomes. Programme tutors frame tasks around the development of digital media, using the University VLE connected to external tools that include: synchronous classrooms; a blog; a wiki and podcasts. Students used Facebook and Lulu.com to share and critique artefacts that are then presented on personal, learning blogs. The key quality of educational technology developed here is enabling spaces for authentic co-governance and co-creation of the curriculum to take place, between learners, tutors and industry.
2. In the History programme, learners' engagements with technologies on a core module, Presenting and Representing the Past, were based upon a mix of technologies encompassing: the university VLE for access to resources and discussion forums; podcasts of lectures and seminars; word or tag clouds of key lecture and seminar concepts; and, a personal blog or learning log. The learning log is defined as a 'transitional object' (Winnicott, 1982) that enables student reflection on the process of maturation as a learner and a historian. The key quality of educational technology developed here is the fusion of affective and cognitive approaches to learning. This enables the student to become herself, as a resilient performer and agent (Connecting Transition and Independent Learning (CoTIL), 2009).
3. The use of social media to support the development of peer-mentoring is vital as efficiency agendas impact contact time. The process of story-telling and facilitating therapeutic relationships between more experienced peer-mentors and their mentees, re-defines who has power to help and nurture in HE. Educational technology, situated within a culture that values devolved sites of power and authenticity, can develop motivation, self-efficacy and problem-solving within and beyond the curriculum. The choice of educational technology for delivery should emerge from a negotiation between mentors and mentees and not be imposed. In this way a mixed economy of institutional and personal technology can emerge. The key quality of educational technology implemented here is the formation of shared spaces for the development of communities of inquiry, focused upon differentiated skill-sets (Hall and Conboy, 2009).
4. The development of a University Certificate in Professional Development in work-based learning for Placement students in Pharmaceutical and Cosmetic Sciences begins to value explicitly the learner's reflection on her application of theory-in-practice, within a novel learning context. A different approach to accreditation, rewarding the affective and the reflective in a hard, experimental, scientific space, using industrial and academic supervisors as coaches is central. These learners are utilising both multimedia and text-based reflections, in order to re-think their actions in a practice-based setting, and to capture these within the relative security of an institutional e-portfolio connected to the University VLE. The key quality of educational technology utilised here is personal experimentation within a social space, framed by real-world tasks (MoRSE, 2009).

Readily available educational technologies are being used to enable solutions and responses to be developed within specific communities and at appropriate scale. Curriculum teams are defining and catalysing pedagogical and epistemological projects that are community-oriented, inclusive, negotiated, and enquiry-focused. Critically, the deployment of these technologies has implications for roles within higher education.

The role of tutor is as a more experienced other, able to provide good-enough support in context. Therefore, her digital literacy is a vital attribute in delivering mentoring and modelling, and in nurturing co-production and co-governance. This is an activist role and focuses upon helping a community to find its voice and exercise proper democratic engagement. This might include working in contexts and with people who are situated both beyond the institution, and beyond a specific subject. In the examples above, a key question is how tutors-as-mentors can use social media to broker engagement with communities beyond the university?

The role of institutions may be to facilitate social enterprise, affiliation, preparation, and resourcing for the transformation of communities. To create spaces within which a resilient curriculum is welcomed and actively encouraged, is a vital element, and as such institutions may need to re-think how open their educational technology and content can usefully be. This may mean that the 360-credit undergraduate degree becomes ever-more redundant in a world where we need skill-matching, sharing and problem-solving. The role of the institution will be to ensure that its technological infrastructure enables these socio-cultural opportunities for agency, community, decision-making, building relationships, and producing.

The role of the learner may become the ability to be, to co-exist, to survive and to thrive, within a range of communities, on a range of scales. In this context, Habermas' life-world (1987), or those informal, unmarketised domains of life, which are social, voluntary, and truly participatory are important in situating the individual within a life-wide curriculum for resilience. The key facets here are the ability to work with a range of peers to define problems and solutions, to make decisions and take action, and to receive feedback. For each of these facets, educational technology can support meaningful, developmental engagements, as noted in the following brief scenarios.

Scenario 1: journalism students work with civil engineering students, and a range of experienced mentors, to develop a communication plan, and action plan, and a lessons learned report for a flood-threatened town, in liaison with community activists. In this instance, mobile technologies are used to capture live images and updates, and to report actions and decisions on the ground. These can be developed using collaborative, web-based project management tools and wikis, and then disseminated via a blog. Local community activists can tag their own resources and contribute to the development of the wiki and blog, in real-time. As accredited assessors, student mentors and community activists are enrolled onto institutional systems, and act as critical friends throughout the process, providing formative assessment through an institutional e-portfolio. The use of social media enables collaborative engagement to be mapped, and then tied to the assessment of an individual's summative claim for their role in the project's process and outcome.

Scenario 2: Historians working through more experienced peers define projects within local, national or international communities. These projects focus upon contextualising specific community issues and scoping development or renewal projects, in terms of different histories and solutions, which are presented on a community blog. This approach involves engagement in decision-making and negotiation with external agencies, such as NGOs, local government, businesses and community groups, in order to frame authentic action. Social bookmarking and networking are used to capture and analyse past decisions and actions, which are enhanced through a process of commentary on the blog. As projects develop, they expand in scope to engage business studies students and community activists in the development of business cases and project plans for new solutions. Wikis are used to develop proposals, and social work students then take the lead on appropriately engaging and representing the user voice in decision-making, through a mix of mobile and social media. An on-line publishing tool, social networking technology and the blog are used to disseminate the outcomes to a wider audience. An institutional e-portfolio enables learners to share and critique their own content and decision-making with accredited mentors.

In both of these brief scenarios, a mix of face-to-face engagements, user-generated content and community-driven social media, prioritises an integrated and social approach to delivering community-focused

processes and solutions. Central to this strategy is a life-wide pedagogy that can respect the different skills and aspirations that individuals-in-communities offer, and which then prioritises meaningful and developmental agency. Educational technology is simply a means to enable a new vision for the curriculum. The qualities that it brings are contested but include:

- providing secure or open spaces, or a mix thereof;
- enabling the (re-)creation, augmentation, sharing and critiquing of user-generated content, in multiple formats;
- catalysing and maintaining relationships that enable skill-sets to be negotiated and aggregated; and
- defining relationships that inform and re-cast power structures.

Conclusion

A key in building a life-wide curriculum that enhances personal and communal resilience is engaging with uncertainty through projects that involve diverse voices in civil action. Clearly discourses of power will impact the values that are placed on certain skills, relative negotiating positions, and the nature of the projects that should be undertaken. A role for HE curricula is framing an understanding of these discourses and the contexts in which they emerge so that they can be challenged, and so that co-governance as well as co-creation is enabled and tested. In a world of increasing uncertainty, where disruption threatens our approaches, technology might enable individuals to engage in authentic partnerships, in mentoring and enquiry, and in the processes of community and social governance.

The networked opportunities opened-up by educational technologies offer educators the opportunity to reshape their pedagogies, to focus on a differentiated, personalised curriculum housed within a social learning approach. There is still a risk that the provision of frameworks for free associations between individuals will leave some people marginalised, and the creation of meaningful contexts that spark or forge opportunities for participation cannot be ignored. Despite this risk, the capacity of technology to improve the opportunities for people to work together to shape and solve problems, and to improve their beliefs in their own capabilities, is important.

Therefore, technology can underpin meaningful pedagogic opportunities in three key areas:

- I. It is possible to give learners contextual control in the management of tools and social rules that underpin their performance of tasks, through negotiation with them. In this way students can build spaces that align with their own personal schemas and strategies. However, issues to do with social anxiety, difference, self-conception and allegiance within closed groups, and marginalisation of certain users, all pose a risk to the successful performance of tasks and decision-making.
- II. Learner's value developing their own digital identities facilitated by a range of internal and external, non-academic associations or social networks. For formative development framing these types of engagements enables students to develop their self-concept and agency through experience in safe spaces, which can then be levered into new situations. Educational technologies offer an array of supportive networking contexts where learners can model practice and lever self-expression.
- III. Educational technologies facilitate near real-time feedback and support for learning, and modelling the value of divergent approaches. This creates an environment where they can be engaged and motivated, as long as assessment and support is given equitably and openly, and where they can see that participation is relevant.

One of the cornerstones of the use of social media is its ability to open up playful and trustful engagements in ways that were outlined by Bloom *et al.* (1960, p. 18) when they argued that "Education helps the individual to explore many aspects of the world and even his own feelings and emotion, that choice and

decision matters to the individual". It may be that by extending these playful types of opportunities using educational technology, staff can help to empower students in developing their own self-concept and life-wide learning.

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Learning in a complex world: creating meaning through narrative and the role of technology in augmenting human sense-making

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Summary

There has been a tendency of recent years to think of knowledge as thing that can be modularised, defined and packaged independently of social interaction and context. The world is seen as ordered with desirable outcomes that can be identified and measured. One of the many negative consequences of this is that teachers who inspire students to learn receive no reward or recognition, while those who are adept at creating and monitoring learning plans do. In *higher education*, designs that entirely prescribe, from the teacher perspective, what will be learnt and what will be valued in the assessment process, are divorced from learning in the everyday world where learning is a bi-product of doing something and is driven by the intrinsic motivations of needs, interests and ambitions. Eclectic learning, making novel connections and achieving serendipitous connections and outcomes is not rewarded, and the taking of risks – putting learners into to truly challenging and unpredictable situations where learning emerges through the initiative and agency of the individual – is avoided. We have to question whether we are really are preparing learners for the complexities of the rest of their social and productive lives, or for that matter preparing them to genuinely advance their field in an academic context. Are we creating too many specialists at the expense of those able to synthesise and create new insights across many fields? The fundamental question is, *How can higher education be higher if it ignores the higher forms of learning and the agency to create new and relevant knowledge, that characterise learning in the real world outside higher education?*

I will address this question in this paper and seek to establish a new basis for looking at learning, knowledge and judgement in society, based on insights and learning from the natural sciences. Specifically I will look at the:

- application of complex adaptive systems theory, sometimes known as the science of uncertainty, to learning and knowledge
- role of the micro-narratives of day to day existence for research and knowledge transfer
- use of technology as a tool to augment human decision making, not to replace it
- issues of measurement failing to produce its intended outcome, and even perverting education

Using these lenses, I will consider the forms of educational designs and experiences that are more relevant and useful to preparing learners for learning, knowledge and decision making in a complex world, and examine the value, opportunity and challenges that the concept of life-wide learning and life-wide education affords.

LATE CONTRIBUTION

Beyond the Curriculum: opportunities to enhance employability and future life choices

Tom Norton, 1994 Group



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Summary

The 1994 Group of research-intensive universities have for many years been working with students' unions to offer activities outside the curriculum in order to give their students the opportunity to broaden their university experience and enhance their employability. There has also been a strong commitment through the development of awards to formally recognize students' engagement in, and their learning from, such activities. Recognized co-curricular activity, run in parallel to degree programmes, is a route through which to meet employers' demand for skills obtained outside the academic curriculum and develop employability and career prospects of graduates. It is also, crucially, an extremely effective way of enhancing the experience of students whether they are undergraduate or postgraduate, from the UK or another country, or they are studying full-time or part-time. In 2009 a survey was conducted within the 1994 Group of universities to map the nature and extent of such awards. This paper summarizes the results of the survey and identifies key challenges to delivering and extending such activity.

Introduction

The graduate employment market is extremely competitive and as such it is crucial that students are well equipped during their time at university to successfully progress and achieve their potential in the workplace. This need has been made even more acute by the recession, with record numbers of students finishing university at the same time that graduate recruitment and the wider economy has come under pressure.

Employers greatly value the knowledge and skills that graduates develop whilst studying at university, along with the skills and experience they gain from undertaking activities beyond the curriculum. Studying for a degree helps students to enhance their intellectual confidence, logical thinking, communication and teamwork, and these skills are enhanced and broadened further by their engagement in activities such as volunteering, part-time work and involvement in their students' union. The most employable graduates are those which not only possess such skills, but are able to reflect on what they have learnt from their experiences and articulate how they have developed their skills and why they are important. The CBI has recently strongly urged universities to prioritize enhancing students' employability skills.

'Over 80 per cent of employers surveyed believed universities needed to prioritise improving undergraduates' employability skills.' (CBI 2009)

The 1994 Group of research-intensive, student focused institutions have for many years been working with their Students' Unions to offer volunteering programmes, careers development workshops and similar activities outside the curriculum in order to give their students the opportunity to broaden their university experience and graduate as well-rounded individuals ready to enter employment. In recent years there has been a strong and growing commitment from our universities to bringing together the various strands of such activity and formally recognizing it through the development of 'awards' that sit alongside students' academic achievement. Such activities are often referred to as being part of the co-curriculum. The co-curriculum complements the academic curriculum and activities may be credit-bearing but more commonly they are not credit-bearing.

In this study we are using the term 'co-curricular activity' to cluster together : a) structured programmes of activity leading to a university award, which may include receiving university credit; or b) university-facilitated programmes of events which do not lead to an award, but can be useful to enhance the student experience and employability.

Recognized 'co-curricular' activity, run in parallel to degree programmes, is a route through which to meet employers' demand for skills obtained outside the academic curriculum and develop the employability and career prospects of graduates. It is also, crucially, an extremely effective way of enhancing the experience of students in higher education, whether they are undergraduate or postgraduate, from the UK or abroad, studying full-time or part-time. Co-curricular awards are a way of formally recognizing and adding value to activity already taking place beyond the curriculum, building upon this with additional elements, guidance and reflective assessments, and encouraging greater participation from students in such activity. Universities increasingly making a strong strategic commitment to co-curricular activity and awards means they can enhance collaboration with students' unions, build up partnerships with businesses and strengthen their wider role within the community.

The fundamental role that non-academic aspects of the student experience play within university life was recognized in the 1994 Group's 'Enhancing the Student Experience' policy statement in November 2007 (Kay et al 2007). Further to its recommendation in this policy statement to work to promote the 'well-rounded' graduate, the 1994 group has gathered information on the co-curricular activity taking place or being developed at its member institutions. Whilst recognizing that such activity is certainly taking place at other universities in the UK, this report presents a 'snapshot' profiling the 1994 Group universities' progress in this area, in order to contribute to the sector's understanding of the impact of this activity. All 1994 Group members have long been running a range of activities beyond the curriculum in partnership with their students' unions. Some members have been recognizing these with formal awards for a number of years; others have awards at development or pilot stage. All members have a strong level of commitment at a strategic level to this area, and are keen to share practice with the sector in the hope that this contributes to an open dialogue and the opportunity to present the results of this work at the Enabling a More Complete Education conference, is a further manifestation of this collegial spirit.

The survey was undertaken through a questionnaire which was sent out in June 2009 to all 1994 Group institutions. It covered, the nature of the activity being taken, the measuring of success, the resources and commitment required and the challenges to delivering it effectively. Questionnaire responses highlighted particular areas of interest which were subsequently followed-up in greater depth and supplemented by evaluation reports and information publicly available on institutions' websites. The resulting report (Norton and Thomas 2009) summarises and analyses current practice, highlights examples through case studies and looks forward with recommendations for universities, business and the government. This paper is an edited version of the report.

Thirteen of the nineteen universities surveyed in the 1994 Group are running or have approved a co-curricular award; another is in the early planning stages. The awards recognize skills development activities, employment, volunteering, engagement with the university and community, leadership and management, student enterprise and other extra-curricular activities. Several awards are flexible in the combination of activities required for completions, whereas others have a more precise framework to follow. Royal Holloway offers two separate programmes rather than an all-encompassing award and Exeter operates two levels of award – students which have completed the Exeter Award may progress to the Exeter Leaders Award. The following sections describe and illustrate some of the main features of these awards. Further detailed case studies of awards and activity are available on the 1994 Group website: www.1994group.co.uk

Nature of activity

A student participating in the *Leicester Award for Employability* is required to:

- Attend three interactive workshops throughout the academic year
- Complete two pieces of reflective writing based on their work experience
- Participate in e-learning activities via Blackboard
- Give a short presentation at the end of the programme

There are several support sessions planned throughout the year to help students with all aspects of the programme. The Award is formally endorsed by the University of Leicester and will appear on a successful participant's academic transcript.

The institutions without a formal co-curricular award have more informal activity, which particularly focuses on volunteering and does not involve a formal assessment process. The University of Essex runs a formal Certificate in Community Volunteering, equivalent to an NVQ Level 2, in addition to its informal volunteering project. The University of East Anglia runs an informal volunteering programme, which has been running since 2004 and currently offers 198 local volunteering opportunities with 177 organisations. There are also several optional modules or certified courses on career development, including at St Andrews, which offers a certificate supported by PricewaterhouseCoopers LLP which has three levels – bronze, silver and gold – depending on the amount of time committed and points earned. Also, in addition to running a Volunteering Unit, the School of Oriental and African Studies has introduced a 'language entitlement' allowing every undergraduate to register for at least one African, Asian or Middle Eastern language course during his or her time at the School. This diversity in activity reinforces that there is no one 'right' model for co-curricular activity – each institution is different and has developed activity that meets its own circumstances and requirements.

The *York Award* requires participants to demonstrate the skills they have gained across the breadth of their academic and non-academic experience at university, including their work-related experience and personal interests.

'Sam', a chemistry undergraduate, received a York Award by demonstrating:

- Academic study: the employability skills developed by studying for his Chemistry degree
- Work experience: the transferable skills gained from his vacation job working in the DEFRA Central Science Laboratory, from his part-time job in a bar, and working at a children's summer camp
- Personal interests: the employability skills developed whilst being a Students' Union Events Rep and through his involvement in the University rugby club
- Elective Courses: from the broad range of extra-curricular courses available as part of the York Award, Sam completed the following:
 - An Introduction to British Sign Language
 - The York Enterprise Scheme
 - Team Development

Each of the above elements contributed a certain number of 'points'. Sam needed to achieve 100 points before applying for the York Award. To apply for the York Award, Sam completed a substantial application form and was interviewed by a panel that consisted of an employer, an academic and a York Award representative. Throughout the application process Sam needed to demonstrate, and evidence, an analytical and reflective approach to the development of a range of skills.

The awards are granted based on the results of various assessment methods, including portfolios, application forms, interviews and presentations, and are designed to demonstrate skills development, reflective learning and an awareness of how to appeal effectively to employers. The vast majority of awards are not credit-bearing, but they do appear on the degree transcript as an award from the University.

Queen Mary offers 15 credits at academic level 6, but the award does not impact on a student's degree classification. Essex plans to introduce a Career Development module, carrying 15 credits at academic level 5, which will be separately certified. Birkbeck offers a Careers and Professional Development module with 15 CAT credits (transferable to participating institutions) at academic level 4.

The awards are overwhelmingly aimed at enhancing the employability of graduates through encouraging participation in additional activity, adding value to it and providing evidence of such engagement and skills development. Goldsmiths, University of London, for example, have recently approved the Gold Award, the aim of which is to provide recognition and reward for students' participation in extra-curricular and developmental activities and achievements which enhance skills and employability. The award will be on a points-based system which includes rewards for entrepreneurship and enterprise. Another important 'BP looks for graduates that are able to demonstrate not only academic excellence but also have proven employability skills such as team working, communication and organisational skills.

'The *Loughborough Employability Award* provides students with an excellent opportunity to evidence their skills to employers and I would encourage all Loughborough students to take up this opportunity.' UK Graduate Resourcing Manager, BP International.

The University of Surrey has embarked on a feasibility study aiming to develop an award to encourage, enable, recognize and value what students do to make their education more complete, within which employability skills will be a subset. This is building on the work of the Surrey Centre for Excellence in Professional Training and Education (SCEPTRE).

Informal programmes across other institutions share many of the same aims, but because of their volunteer focus tend to emphasise to a greater extent the benefits of community engagement, widening participation and improving the quality of life among disadvantaged groups.

As partnership working is fundamental to co-curricular activities, they not only bring broad benefits to the students participating, but also allow universities engaging in them to strengthen their own relationships with students' unions, volunteering groups and local businesses, greatly enhancing the university's role within the wider community. An example of this is the University of Reading's Modular Accreditation for Students Involved in Volunteering (MASIV) scheme, which has been running for five years. The University allows students to add five non-academic credits to their transcripts through participating in the scheme. The scheme was initiated and is run by the Students' Union, and many of the volunteering opportunities available to students are within the Union's own clubs and societies. More than 200 students participated in the scheme last year, and these volunteers helped strengthen the links between the University and the local community.

The majority of awards are at an early stage of development or implementation, having been launched in the past two or three years, with the notable exception of York and Leicester where the awards have been

running for eleven and five years respectively. Royal Holloway has been running its tutoring and mentoring scheme for eight years and its community action programme for five years. Other awards are either in their pilot/first year or due for launch in the coming academic year.

The *Leicester Award for Employability*, launched in 2004, offers accreditation for leadership and management skills acquired outside the academic curriculum and aims to add to the student experience as well as enhance employability. Eligible activity includes work experience, student committees, volunteering and participation in research groups. Participants also attend three full-day workshops with business professionals, receive training in personal development and career management and meet graduate employers. Candidates must successfully complete two written assignments comprising a reflection on skills development and prepare a presentation in order to receive the award.

The University of Leicester funds a 0.6 FTE post to co-ordinate the scheme and deliver one of the main constituent programmes of the award. Student Development staff within Corporate Services run the budget, provide administrative support and also lead on curriculum design and development and provide the majority of tutor time. Deloitte acts as patron for the Leicester Award for Employability Skills, which is also endorsed by the Institute of Leadership and Management, the largest management qualification awarding body in the UK. Other sponsors include Accenture, Enterprise Rent-A-Car and ACCA, the global body for professional accountants. Employer representatives sit on the management board and contribute to assessment, and representatives from external organisations contribute to the tutoring of participants.

The *York Award*, which has been running since 1998, is based on the premise that it is the combination of academic study, work experience and leisure interests that help to develop the broad range of skills and competencies that employers seek. As a certificated programme of transferable skills training and experiential learning, it provides a framework to help students manage an active programme of personal development and gain recognition for valuable activities that are not formally recognized through the degree programme. Students gain points for a flexible range of co-curricular activities and once 100 points have been achieved must successfully complete a graduate recruitment style application form, followed by an interview, to achieve the Award. At York, staffing is provided through one full-time management post, a 0.3 FTE (full time equivalent) careers assistant and a 0.4 FTE administrator.

Assessment, marking and chairing involves the Careers Service and Professional and Organisational Development and Departments staff. A number of employers are involved in the development, delivery and assessment stages, including the Institute of Chartered Accountants, Aviva, Deloitte, IBM, Eversheds, the Financial Services Authority, the Civil Service, PricewaterhouseCoopers and Nestle. Over seventy local employers also regularly donate their time to interview York Award applicants.

The *Bath Award* recognizes achievement in co-curricular activities, together with modules relating to employment. The Award is run from the Students' Union with help from the university Careers Service. Students must produce a portfolio based on their experiences, complete 100 hours of activity and meet standards in the key skill areas of communication, teamwork, leadership, commercial awareness and problem solving. The portfolio is then assessed by a team drawn from academics, Careers and Students' Union staff. It piloted in the 2008/09 academic year with the aim of formally recognizing extra-curricular activity, while adding to it with an employability dimension. The University supports one full-time post to manage the Award, who uses Students' Union administrative support. In addition, careers staff and academics are involved in developing the Award and assessing the portfolios students produce. Significant funding, guaranteed over three years, has been secured from Abbey Santander's Universities Global Division in order to help develop and launch The Bath Award. Santander also participates in the assessment moderation process and in its second year volunteer industrial mentors will be involved in the assessments themselves.

The *Exeter Award*, launched in 2008, is designed to enhance the employability of participants by providing official recognition and evidence of co-curricular activity and achievement. It comprises four compulsory elements: 25 hours of paid work; volunteering or musical/sporting activity; three sessions on applications, personal development and interviews; and two optional elements such as a training course or employer presentation.

To complete the award, students complete a series of reflective questions and a discussion with a careers advisor. Exeter also operates a second level of award, the Exeter Leaders Award, which students may progress onto once they have successfully completed The Exeter Award. Participants must demonstrate either leadership skills over a prolonged period or an outstanding achievement, as well as six additional elements, including skills sessions, activities related to graduate recruitment processes and a 500-word profile. Both schemes are joint activities between the Careers and Employment Service and the Students' Guild. The Exeter Award is managed by an officer as part of their work. In addition, the university has appointed a 0.75 FTE Trainer and Award Support Officer for 3 years and an additional 0.5 FTE Careers Adviser to support the Award. The Exeter Award is sponsored by a major graduate recruiter, Ernst and Young, and many more employers are also involved in the development stages and in delivering skills sessions and presentations. As part of the Exeter Leaders Award, employers conduct mock interviews with candidates. Positive implications for alumni engagement have already been noted in the first year of operation.

Eligibility

The awards are aimed first and foremost at undergraduates. At several institutions postgraduate research and/or taught students are also eligible, although undergraduates remain the focus and some institutions have or are planning to establish separate postgraduate programmes. At the University of Sussex for example, the Sussex Plus employability initiative is in the early piloting stage and is currently targeted at undergraduate students, but will be open to postgraduate taught students in 2012. There is currently a separate initiative at Sussex called Profolio for postgraduate research doctoral students. While around half of the awards are open to all undergraduates, including the longer running schemes, others have chosen to focus on particular year groups, with an equal mix between earlier and later years. There are also some more specific restrictions in some instances. For example, Queen Mary does not include medical and dentistry students as these have separate pathways more relevant to the careers they are likely to follow. York excludes one-year courses due to the award's requirement to consider development over a period of time, but whereas not everyone is eligible for the award itself, the course programme is open to all. The activities and awards are open to international students, and this builds on the specific guidance universities already offer to international students on enhancing their employability and asking their questions about working in the UK.

Demand

The level of demand for many of these awards is as yet unclear – most have been launched only recently or are in their planning stages. Many of the pilots are being conducted with selected students, ranging from small cohorts of 25 at Queen Mary to large groups of 500 at Sussex. When Exeter launched its award it experienced registrations representing 25 per cent of the student body and was required to double the number of skills sessions on offer, but as this was the first year of operation trends are difficult to identify. Of the awards that have been operational for several years, demand has steadily risen each year to around 250. The more informal activities have less precise data on participation. At the SOAS volunteering scheme, for example, between 35 and 80 students are known to have been placed each year, but this underestimates involvement since the unit acts as a brokerage service between students and organisations rather than organising placements directly.

Targets

Over half the institutions have targets for participation that are broadly in line with current practice – numerical targets of either 200-300 or 10 percent of the student population - or an aspiration to grow each year. Sussex is unusual in having a target of 1000 students in the second pilot year and for 70 percent of the student body to be engaged by 2012.

Other institutions feel it is too early to establish targets and are waiting to see the award in practice, particularly how it fits in with the competing demands on students, or are constrained in offering places by financial resources. SOAS's volunteering programme also has participation targets, which are similar to those of the formal programmes when size of institution is taken into account. Moving forward, scalability will be one of the key challenges of the schemes – can such activity remain effective and manageable if it is rolled out onto a larger scale? Targets must address both the desire to widen participation and ensure that the award remains meaningful through maintaining robust, high-quality activities and assessment processes.

Completion

Completion rates are likewise difficult to analyse given the available data and recent nature of the awards. This is exemplified by the possibility, and indeed often recommendation or requirement, that the award be completed over more than one year. At Bath, for example, 40 per cent 'graduated' within the first year, but many are expected to return to complete next year and produce a high overall completion rate. At Exeter, five per cent of registrations completed within the first year, but this is from a particularly high base and close in number to the target number of completions. In some instances, a 'completion rate' has little meaning as the course programme and activities may be undertaken by all, regardless of edibility for the award, or students apply for the award only once they have completed the activity required.

University commitment

Co-curricular activity has received strong institutional support at both a senior and wide-ranging level. The majority of institutions have established steering groups for their awards, or the wider employability and student experience frameworks of which they are a part, which include representatives from student services, teaching faculties, the students' union and graduate employers. The awards are being discussed by senior management and led or overseen at the Deputy and Pro-Vice Chancellor level. They are also able to take advantage of infrastructure support, such as access to or the bespoke development of virtual learning environments and web resources.

One of the most significant manifestations of institutional support has been the funding allocated for staffing, which is particularly important as programmes develop and are rolled-out, but also as they grow. The majority of institutions have dedicated staff time to manage the awards, totalling between 0.6 and 1.7 FTE. In many cases, administrative support is provided in addition to this, from the department managing the award or from the students' union. Specific funding streams that have supported co-curricular activity include HEFCE's Teaching Quality Enhancement Fund (TQEF), Teaching Enhancement and Student Success (TESS) allocations, and the Higher Education Active Community Fund (HEACF).

The delivery and assessment of the awards requires a further staffing contribution across institutions, including academics and other university staff. At Bath, for example, careers service staff and four academics put resources into assessing portfolios, where assessing and moderating an individual's portfolio is calculated to have taken one and a half hours during the pilot year. Delivery was estimated to have taken 163 hours of students' union, careers and other university staff's time, excluding the award co-ordinator. York estimates that marking and chairing assessments involves 250 hours of staff time across

the careers service, professional and organisational development within HR, and departments. Interviews by academic staff consume another 120 hours and course delivery takes 100 university staff hours. Delivery is a particularly crucial area in terms of maintaining student satisfaction with and commitment to the award, and a robust assessment process is important for an award to hold value to an employer. Since both of these areas, particularly assessment, consume a large number of hours per student, this has implications when scaling the awards up to cater for more participants.

The *Loughborough Employability Award*, launched in 2009, is run through the Careers Centre, which employs two staff members to manage & administer (0.8 and 0.4 FTE) supported by TQEF funding. When this funding ceases, money will be directed from HEFCE TESS funding. The award scheme has web space within the Careers Centre web pages and online resources within the University's virtual learning environment.

These developments are supported as part of the University's ongoing commitment to increasing the employability of its students. In order to demonstrate commitment to the Lancaster Award as an area for strategic focus, the university invested in part of a post in the careers service. The team developing the award is led by the Pro-Vice-Chancellor for Colleges and The Student Experience and the Director of Undergraduate Studies and members include the President of the Students' Union, Faculty Teaching Deans and senior staff from the Centre for Employability, Enterprise and Careers.

At Royal Holloway the Community Action Volunteering Programme office is located in the Students' Union building, but sits within the College's External Relations line management. At the inception of their volunteering programme, HEACF funding supported a full-time co-ordinator, a 0.2 support worker and some project funding. Two years later this was reduced and the co-ordinator role was thus condensed to 0.6 and the support role disappeared. The following year Royal Holloway decided to support the programme by re-introducing the support role and raising the co-ordinator to 0.8. HEACF

The volunteering accreditation scheme at the University of Essex is run by the Students' Union 'V team' with a part-time Community Volunteering Manager who for the past 3 yrs has been financed by TQEF money. 'Frontrunners', a paid work experience placement scheme within the university with supporting skills programme, is funded from tuition fee bursary underspend, and employs a full-time project manager to coordinate around 200 Frontrunners placements a year.

There is the expectation that staff in the departments and administrative sections involved will give their time and experience to the Frontrunner. Frontrunners must receive certain training from staff and each placement is managed by a Placement Supervisor in the area of the University in which it is based. Each Placement Supervisor monitors progress, carries out an exit interview and produces a report for the Frontrunners team.

Employer involvement

'At Ernst & Young we're committed to helping our people achieve their potential. It's how we make a difference. We are proud to sponsor The Exeter Award, which aims to enhance the career opportunities of graduates and helps them to achieve their potential both professionally and personally.' Sarah Cleal, Account & Resource Coordinator, Ernst & Young

A fundamental characteristic of the 1994 Group co-curricular awards is extensive engagement with employers, whether they be business, charities or voluntary organisations, throughout the process of development, delivery and assessment. Institutions have been particularly keen to develop this aspect of the awards in order to utilise employer resources and expertise and to enhance students' employability by

developing the skills that employers themselves value, ultimately producing graduates that will be successful in the graduate job market.

Employers have also been keen to engage with the awards and build upon the existing work they already do in partnership with careers services, particularly to support the aim of producing employable graduates for the work force, and also mindful of the benefits of increasing their own profile among these students. Lord Mandelson, Secretary of State for Business, Innovation and Skills, highlighted in July 2009 that it is the relationships between employers, universities and students which are the key to producing employable individuals.

'Only if employers and business are engaged with the awards can they truly achieve their aims, for it is these groups who are the ultimate arbiters of employability.' Lord Mandelson 'Higher education and modern life', Birkbeck University, 27 Jul 2009. See http://www.dius.gov.uk/news_and_speeches/speeches/peter-mandelson/universities.aspx

Funding

Over half of the formal schemes have secured employer sponsorship, involving private, public sector and voluntary organisations. National and international graduate employers are particularly frequent sponsors, reflecting the graduate employability focus of the schemes and popular graduate destinations. This link is emphasised on one award website, for example, where clicking on sponsors' logos leads directly to that company's recruitment pages. Most sponsors support an award in its entirety, sometimes guaranteeing funds for a specified number of years in order to promote stability and sustainability.

Lancaster University's Award is endorsed by two small and medium-sized businesses, Petrus communications, winner of the 'Best Internship Provider' for a small business in 2007, and NuBlue Web Solutions, which employs 12 students and graduates. Showing Off LTD, a marketing training and consultancy firm, also helps out with the University's Insight into Employability and Enterprise event. This two day programme, which is a compulsory part of the Lancaster Award, is led and facilitated by employers and consultants previously known to the University for their expertise in supporting employability-related learning outcomes.

The University's Centre for Employability, Enterprise and Careers provides the context in which these learning outcomes relate to career planning and recruitment processes and sign-post to sources of additional support. The University also runs other employer based events through such as the Insight into Creative and Media Courses. This was a two day event with workshops given by representatives of leading national and international media companies, such as the BBC and Lewis Global PR.

At York, which has a particularly broad and extensive list of supporters, employers fund individual courses that are relevant to them. For example, York has received £12,000 from the Financial Services Authority to develop a financial capability module within the York Award. Royal Holloway has also secured funding for specific initiatives within its volunteering programme, and has done this through local businesses rather than large graduate employers. Some sponsors provide funding to support specific activities, such as marketing, as well as contributing to the Award's delivery. Many of the awards have more than one sponsor, although there is often a 'lead' organisation. Some employers are involved with more than one scheme.

In addition to those institutions that have secured employer support for their schemes through sponsorship, several more have achieved endorsements from employers, particularly on how the activity and awards enhance employability. The employer endorsements are aimed at promoting the awards to students,

especially at the launch stage, by marketing their usefulness and indicating that the awards have the confidence of employers.

Development

Over half of all institutions have involved employers in the development of their Awards, involving recommendations on the competencies they should seek to evidence, input on aims and objectives and the breadth of the awards, sitting on the management board and developing the structure of the awards. Many more seek employer feedback in order to measure the success of the awards and feed this into the development process. Employer involvement in this stage of the awards is perceived as particularly important in terms of ensuring that they meet employers' needs, have credibility in employers' eyes and therefore can achieve their employability aims. It also helps ensure the awards are the best preparation possible for graduates entering the job market. In the early stages of the pilot phase at one institution, the employer representatives on the advisory board had sufficient confidence to suggest those in possession of the award might be shortlisted automatically. Institutions without a current employer or business sponsor have identified this as a key area for development. Many of those institutions operating informal volunteering programmes work with organisations with limited funds and therefore financial support in order to manage the schemes is difficult to obtain.

As a result of the recession, which has shrunk the profits, balance sheets and capitalisations of a diverse range of businesses, as well as increasing uncertainty for the future, strengthening this source of funding significantly in the near future will be challenging. Yet funding for skills development is crucial for students at university now, in order for them to be competitive when they join the employment market, support businesses as they resume growth and sustain a highly developed economy. Given the importance of producing employable graduates with the skills required by employers and the economy, the government should consider ways of supporting and encouraging this activity by creating incentives for organisations to become involved, such as a scheme in which government matches employers' contributions (whether these are cash or in kind).

As Durham University developed its Award, which is being piloted in 2009/10, employers with existing connections to the careers service were contacted regarding the proposed award, particularly where they were proactive in student skills development. These employers included large multinationals, charities, and businesses with local connections. Key issues that required employer input were the elements employers wished to see in an award, how to best showcase the skills employers value and how to ensure it would be valued as evidence in a graduate application. Two consultations were held in-person with representatives from nine employers, with additional input from others via email and telephone, some of whom were Durham alumni who could bring both their student and employment experience to bear. Further, employers were updated at key stages of development and their comment sought. Feedback that was incorporated into the award included the need to reflect the whole university student experience, the key competencies that should be evidenced and regarding issues of quality. Opportunities for further employer involvement, such as in assessment, were also identified and it is intended that employers will continue to contribute to further development for the award, a process which has been formalised with three employer members on the Employability and Skills Steering Group.

Delivery

Almost all awards involve employers in their delivery, most often through assisting or leading skills sessions and employer presentations. Other contributions include tutoring students, providing paid work experience and the possibility of employers 'shadowing' a cohort through the scheme. York estimates that employers contribute 120 hours to course delivery over one year. Students frequently report employer involvement at this stage – for example through delivery of skills sessions, providing an employer perspective and

networking – as the most valuable aspect of a programme. It also enables employers to ensure that content is appropriately tailored to their needs.

Assessment

Almost half of the formal awards include employer representatives on their assessment panels, allowing students to receive objective performance feedback from real employers. Many of the assessment processes also involve elements of the job application process, including interviews, presentations and application forms. York estimates that employers and alumni contribute 120 hours to assessing The York Award - an employer representative sits on each interview panel and employers are also involved in assessing individual elective courses. Employer involvement at this stage is an important quality assurance mechanism - maintaining the award's credibility in the eyes of employers – and can take the form of moderating or reviewing a sample of assessments as well as direct participation. As part of the Durham Award employers and alumni will be involved in the delivery of skills sessions and the formal assessment process. At Lancaster, key colleagues from graduate employers will be joining university staff on assessment panels for the award, which will be in the form of short interviews. It is hoped through this assessment process, used in many of the awards, students will gain a realistic expectation about the assessment process involved in securing a graduate job.

At Queen Mary, University of London, the development of the *Drapers' Skills Award* structure was overseen by the College's internal Employability Advisory Group. At the time the award was developed there were four representatives from industry on the Group providing input on the aims and objectives of the award. The event themes and content were further developed with the help of an employer who co-delivered two of the development workshops. In addition the employer offered a one-day paid work experience activity to some of the students, who also helped company run one of their corporate events.

Measuring success

Student, alumni and employer feedback is a key element of the awards' evaluation criteria. This includes formal evaluation with questionnaires, interviews and focus groups, the latter particularly at the pilot stage, and more anecdotal evidence. Feedback has thus far been overwhelmingly positive, which is borne out by the steady increase in numbers participating. Students report that the assessment process is useful practice for articulating examples of their skills to employers, that the award is an integral part of their university experience and a 'wake-up call'.

Skills providers see the awards as promoting opportunities and encouraging involvement in a wide range of activities. One assessor commented that it was 'great to see how the top students are getting the most out of their time at university'. Surrey County Council have followed up on their strong support for Royal Holloway's tutoring and mentoring scheme, where students are placed in local schools to support students who are disengaged and lack motivation, by introducing a Surrey County Council Cup for the tutor or mentor of the year.

Graduate employment

Enhancing employability is the central focus of the awards, and institutions' informal co-curricular activity, and therefore measuring the impact on graduate employment is important when gauging the success of the awards. As a result of the time taken to collect such data and the short space of time most awards have been running, it has not yet been possible to do this in most cases. York, which has been running its Award since 1998, is the exception to this and has used the Destination of Leavers in Higher Education (DLHE) survey results over the past five years to measure the impact of its Award. This suggests that 43 per cent of those graduating with The York Award have been in graduate level jobs and 36 per cent in

further study within six months, compared with 36 per cent and 32 per cent of non-York Award graduates. The numbers of York Award graduates in nongraduate jobs were around 9 per cent below the regular cohort, suggesting The York Award has a clear employability benefit. Other institutions recognize that this is a key measure to demonstrate success and have plans in place to gather employment statistics.

Another source through which success in enhancing employability can be assessed is the student perspective. At the University of East Anglia, for example, which operates an informal volunteering programme, student feedback reports that participation in the programme has aided their career progression. Programmes and Awards can help not only by demonstrating the skills sought by employers, but by providing exposure to and networking opportunities with different types of organisations, advice from real professionals and encouraging a firmer grasp of career aspirations. Queen Mary hopes to gather further information in this area by, as part of an assessment, asking students to report and reflect upon how the Award has thus far helped them to obtain part-time work, internships or other work placements.

In the first assessment for Queen Mary's Drapers' Skills Award, the student with the highest mark has the opportunity to have an article published in London Business Matters (LBM), the official magazine of the London Chamber of Commerce and Industry. LBM were pleased to have this article; the student was thrilled to see their work in print and also published a version of the article in a campus newspaper. Employers were interested in this achievement during summer job/placement interviews and asked to see the article.

Challenges

As the majority of awards are in the planning or pilot stages, the experiences from which challenges can be identified is not extensive and is skewed towards the start-up process. This will evolve as the awards become more established. Several challenging areas for delivering the awards effectively are, however, outlined below.

Completion: Several institutions have identified time constraints as an obstacle to completion, particularly in the final year of study. This includes limited student time available for this activity and the award assessment process, as well as poor time management by students. However, in conflict with this, it has also been noted that a long time period between events can demotivate students.

There are tensions inherent in the level of work and effort required. On the one hand, co-curricular awards and other activity must sit alongside the degree programme, be accessible to those with heavy timetables and enable high completion rates. On the other, it must be sufficiently demanding to actually mean something and add value to the student experience both in students' and employers' eyes, providing a supportive and encouraging framework but avoiding the charge of 'spoon-feeding'.

Logistically, timetabling to avoid conflicts with degree programmes can be problematic where students from a large number of degree disciplines are involved. This is particularly pertinent to skills sessions and other activities organised by the university, often with employer or other outside involvement that cannot be offered with multiple choices of timeslots.

Resources: Even for those institutions that have secured support from business, funding remains a key challenge and constraining factor. Resourcing dedicated staff is seen as a particularly difficult problem, as is the lack of stability in the funding streams. At one institution, even with employer sponsorship guaranteed for three years, numbers are capped and based primarily on availability of financial resources. Raising participation rates is difficult without a corresponding increase in resources to support it. This is particularly true of key activities such as assessment, where costs are relatively fixed per student and allow little

economy of scale. Any dilution of resources in this area jeopardises the very value of the award, to employers as meaningful evidence of skills and to students as an asset in the employment marketplace.

We recommend that the government should show its support for co-curricular activity by creating incentives for employers to become involved, such as a scheme in which the government matches employers' contributions (whether these are cash or in kind).

Scalability: Many of the awards are currently piloting with small numbers of students or engaging with around 10 percent of the student body. If broadening participation rates is seen as a goal, it will be important that quantity remains balanced with quality. The assessment processes in particular are often very resource-intensive and rely on a significant amount of support from within the university, alumni and employer communities. It will be necessary to ensure that these are scalable without compromising on quality assurance and that the current high levels of goodwill and support can be maintained.

In addition to a resource issue, scaling activity will potentially require a change in messages conveyed to both participants and employers. One of the marketing points of the awards for students is that an award participant will stand out from the crowd and have an edge in terms of employability. As it grows, the exclusivity and 'specialness' of the award is diluted. For employers, one of the attractions of the award is the opportunity to raise their profile among the particularly motivated and ambitious students who engage with the award. One solution that allows both for broadening engagement and retains the opportunity for exclusivity is multiple levels of award that grow in their demands and prestige as a student progresses.

Staff engagement: By their nature, the schemes involve a broad range of individuals and departments across institutions, including careers and employment services, the students' union, academic schools and professional services. Engaging and communicating with such large numbers of staff can be challenging, particularly where awards require the adoption of new technologies. In many institutions, award management or functions are spread across more than one department – sharing management and administration between the careers service and student union is not unusual – and any tension over ownership requires careful management. Effective engagement and consultation across institutions will remain important as the awards grow and develop.

Downloadable copies of the full report can be obtained on-line at:

http://www.1994group.ac.uk/documents/public/091106_BeyondTheCurriculum.pdf

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Mapping The Terrain: survey of co-curricular and extra-curricular awards

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Introduction

This study was conducted as part of a development and feasibility study undertaken by Surrey Centre for Excellence in Professional Training and Education (SCEPTRE¹) for a proposed award² to recognize and value learning gained through experiences that are additional to the academic curriculum. The trigger for the work was the publication of the University's first Student Experience Strategy in 2008, which set out a vision for a *complete education*. SCEPTRE was given the task of linking this idea to its ideas for a Life-Wide Curriculum³.

An important part of the development work undertaken by SCEPTRE was to find out how other universities were recognizing learning and personal development gained through a variety of experiences and activities whilst at university, including: part-time work, volunteering and community work, significant travel, mentoring, demonstrating leadership skills or playing a proactive role within a society or club.

'Learning is the process whereby knowledge is created through the transformation of experience'
(Kolb, 1984)

Recognizing and valuing informal learning

These rich forms of experiential learning⁴ gained in real world contexts are the foundations for many skills to be developed, enhanced and demonstrated that may not be possible with the study of a subject alone. The challenge of being able to evidence and articulate skills is one that students, universities and employers are becoming increasingly concerned with, as the role of universities in preparing students for the work force becomes a more explicit and demanding imperative.

¹ <http://sceptreserver.co.uk/sceptre/>

² The Surrey Award (A Feasibility Study) Enabling a More Complete and Integrated Education, encouraging, recognizing and valuing Life-wide learning by recognizing the learning students are gaining from experience-rich areas of their lives outside of the formal academic curriculum such as work and volunteering.

³ The term life-wide curriculum was proposed by Jackson (2008a, b) to highlight the potential for integrating learning from the combination of formal and informal learning experiences that a learner participates in during their higher education experience.

⁴ [Experiential Learning] 'a holistic integrative perspective on learning that combines experience, perception, cognition, and behaviour.' (Kolb, 1984)

'Another challenge of universities is equipping students with the softer skills required to compete and thrive in a global economy. Higher education institutions offering sandwich degrees or encouraging summer internships expose students to the world of work and help to temper their expectation and develop their soft skills.' (Manville & Rippon, 2009)

Here the need to more publicly acknowledge forms of work integrated learning seems apparent but there also seems to be a growing awareness of a need to encourage both the professional and personal development of individuals, as well rounded graduates, leaving university with more than just a degree classification, enabling them to stand out from the crowd.

'Southampton launched its Graduate Passport last month to encourage students to develop a portfolio of skills, attributes and experiences personalised to suit their needs and to fill the gaps. It is thought that this will help them stand out at a time when a quarter of a million new graduates vie each year for graduate vacancies, making a good degree essential, but not enough.' (Manville & Rippon, 2009)

Furthermore, the need to be able to adapt and respond to rapidly changing environments is likely to become increasingly important (Jackson, 2010). The now world-famous Youtube film 'Shift Happens'⁵ lucidly describes the issues and challenges of a rapidly changing world that students graduating now will encounter. There is a growing international trend in thought that the world will require people who can effectively problem-solve and use their ability to think creatively, 'who can anticipate the not-yet-known, and negotiate rapid technological, cultural, and global shifts'(AAC&U, 2009)⁶. Indeed, perhaps developing these transferable skills and being able to integrate and identify the opportunity to apply the learning gained from different real world contexts (AAC& U, 2009) may be one of the most crucial things to be potentially acquired from an education in the future. Our politicians also recognize this.

'Britain will need an education system that encourages the widespread development of generic skills of creativity which include: idea generation; creative team work, "opportunity sensing", pitching and auditioning; giving criticism and responding to it; mobilising people and resources round ideas to make them real. The national curriculum may support the acquisition of many of these skills. But an award or qualification more directly focused on creative skills may be needed.' (Parnell 2006)

One of the ways in which Government has tried to 'encourage' higher education to pay more attention to forms of student development that will equip them for the world of work is to 'push' for more explicit information about what students have learnt and can do. This work began with the Dearing review in 1997 and the subsequent introduction of the idea of Progress Files, and continued through the work of the Burgess Committee. 'There is a need to do justice to the full range of student experience by allowing a wider recognition of achievement' (Burgess, 2007)

Currently the UK is piloting a new initiative, the HEAR⁷, which is being designed with the intention to provide each student with a further report on graduation, detailing evidence of achievements above and beyond the degree classification itself. It aims to measure, record and represent these achievements and includes a section dedicated to extra-curricular activity. It is currently being piloted in 18 institutions and in particular the question of how and what is being recorded has been a fairly controversial area of interest. Whilst this policy

⁵ 'Shift Happens' by Karl Fisch can be found on YouTube

⁶ Association of American Colleges & Universities

⁷ It is proposed that... 'The HEAR will be a single document, based on, and developed from, the current academic transcript, and incorporating the European Diploma Supplement. It will contain a wider range of information than the current academic transcript and will capture more fully than now the strengths and weaknesses of the student's performance. It will also contain information about academic credit which will link directly to the national credit framework for the part of the UK in which the award is made. Core content will be common to all institutions, which will be free to add additional information as they desire' Burgess Report, 2007

alone is not necessarily the instigation for the movement of co-curricular and extra-curricular awards it is important to recognize its presence.

Mapping the terrain

A combination of internet searches and networking has identified nearly 50 universities offering co-curricular or extra-curricular awards (Figure 1). These schemes are distributed across all the institutional peer groups with proportionally more schemes being found in the top 20 research intensive Russell Group institutions and the 1994 group.

Figure 1 List of universities with an award scheme for recognizing co-curricular and extra-curricular learning.

Russell Group	1994 Group	University Alliance	Million +	UKADIA	Other
Birmingham	Bath	Lincoln	Bedfordshire	University of the Creative Arts	Aberdeen
Bristol	Durham	Liverpool John Moores	Birmingham City		Dundee
Cardiff	Exeter	Manchester Metropolitan	Central Lancashire		Edge Hill
Glasgow	Goldsmiths	Plymouth	Coventry		Heriot-Watt
Leeds	Lancaster	Salford	Derby		Hull
London School of Economics	Leicester		Northampton		Strathclyde
Manchester	Loughborough				Swansea
Newcastle	Queen Mary				Winchester?
Nottingham	Reading				Worcester
Queens Belfast	Surrey				York St Johns
Sheffield	Sussex				
Warwick	York				
Southampton					
TOTAL 13	TOTAL 12	TOTAL 5	TOTAL 6	TOTAL 1	TOTAL 10
TOTAL UNIVERSITIES WITH OR CURRENTLY DEVELOPING CO-CURRICULAR AWARDS = 47					

'The majority of 1994 group institutions offer a formal co-curricular award, or have plans to do so. The awards encompass a range of activities, including skills sessions, volunteering, work experience, sports and societies, and have a formal assessment process.' (Norton and Thomas, 2009)

Diversity of approach

With such a spontaneous growth of schemes it is not surprising that there is much diversity in approach. Schemes differ in:

- What they choose to emphasize: education / employability / leadership / transferable skills
- Their focus: personal development / professional development / employability skill
- Expectations in the level of student commitment (time involved) in order to achieve an award
- Their inclusion criteria – who is included / excluded
- Scale and level of participation
- Types of experiences that qualify for award – some are more limited than others
- Whether there are specialist routes / pathways

- How they are assessed / who by / criteria used
- The form of recognition: points / credits / certificates
- How they are organized and who organizes and coordinates them
- How they are resourced – how many participants / staff
- Extent of staff involvement: academic staff, personal tutors, central service staff
- Level and types of employer involvement – including sponsorships and endorsements
- The extent to which the scheme is an explicit part of the university's concept of Student Experience
- How schemes are presented and marketed to students
- How awards are made on completion
- Whether such awards feature in transcripts
- The degree to which the Students' Union is involved.

Conceptual underpinnings

Our research has tried to identify the key conceptual features that underlie different schemes. Whilst there is much variation and conceptual mixing, our sense is that schemes differentiate at the conceptual level in the ways that are illustrated in Figures 2 and 3. The key variables appear to be whether:

- 1) the approach emphasizes whole-person education and personal/career development or attention is focused primarily on transferable and employability skills;
- 2) the environments for learning are predominantly controlled/taught or are predominantly experiential;
- 3) assessment is primarily through reflective, self-evidencing and reporting or through a tutor assessed /competency-based assessment ;
- 4) the experiences that make up the award are predominantly extra-curricular (not designed by the institution and not linked to a programme) or co-curricular (institution-designed, linked to or outside a student's programme); and
- 5) leadership skills are seen as either implicit or explicit within the scheme. Of course most schemes contain a mix of these conceptual continua but some schemes tend to one or other sides of the conceptual diagram.

Figure 2 Conceptual variations in award schemes (Rickett 2009)

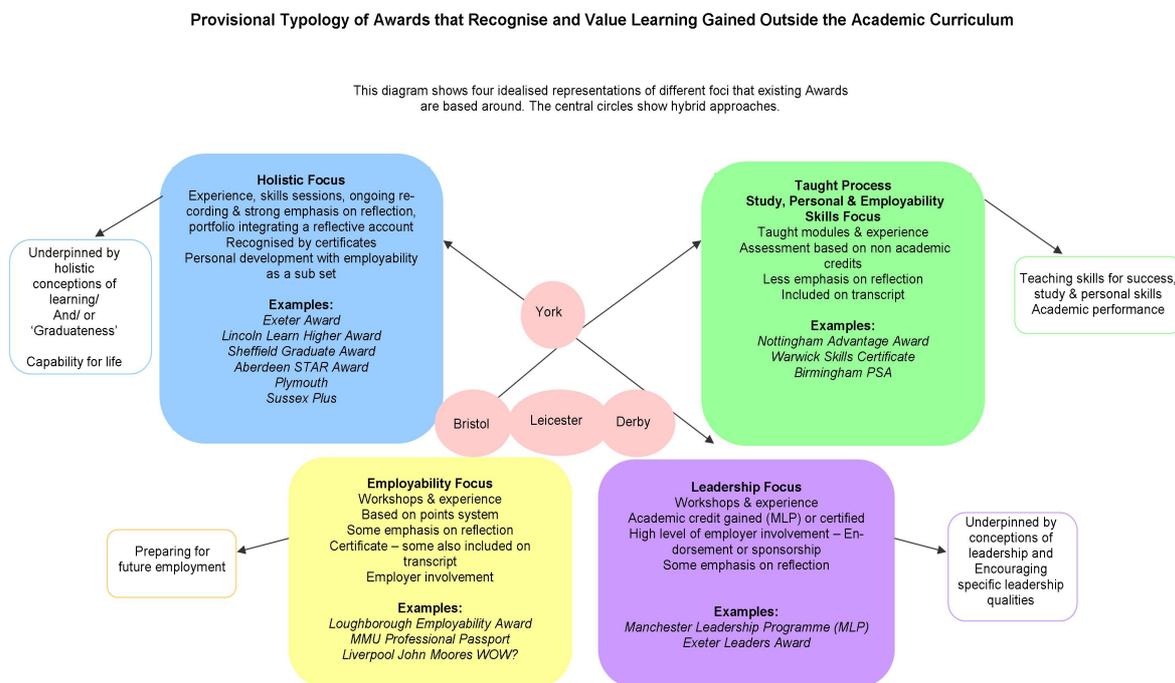


Figure 3. Conceptual variables of co-curricular and extra-curricular award schemes (Jackson 2010b)

Whole-person education <i>Career Development Learning</i>	↔	Employability & Transferable Skills
Most learning is informal and experiential : claims and assessment are mainly through reflective accounts and portfolios of achievements	↔	Learning is often through more formal taught courses and assessed processes
Learning experiences are predominantly extra-curricular (ie not designed by the institution)	↔	Learning experiences are predominantly co-curricular (ie designed by the institution)
Leadership qualities and skills implicit	↔	Explicit focus on leadership qualities/skills <i>these schemes can be highly selective</i>

Why is this happening?

This study has shown that the widespread emergent spontaneous phenomenon of co-curricular and extra-curricular awards has grown naturally, which demonstrates a perceived need at this point in time. Institutions will only invest in such developments if a) they have to because it's a Government requirement, b) there are financial incentives, or c) because it will add value to the student experience and be attractive to potential students. Only the latter reason applies to these schemes. There are likely to be a multiplicity of reasons for this rapid development; here are just a few.

Perhaps the restrictive nature of the single honours course in UK Higher Education leaves little scope for broader educational considerations, especially in research intensive universities (Jackson 2010b).

Does the drive for efficiency in institutions have a part to play? In some cases it has progressively reduced contact time between academic staff and students and we must be aware that on some courses students spend significantly more time engaged in activities *other* than studying, such as part time work. (Jackson, 2010b)

'More and more students are not just students anymore; many of their responsibilities, commitments, and communities are found off campus' (Keeling 2004)

The necessity for a large proportion of students to take on significant paid work in order to support themselves through University is a crucial factor to consider. Perhaps through award schemes like this it can be recognized that this form of work is a ready-made context to develop and demonstrate employability skills and help to enable students to articulate that it can be a valid context for learning. (Jackson, 2010b)

'The most employable graduates are those which not only possess such skills, but are able to reflect and articulate how they have developed their skills and why they are important.' (Norton and Thomas 2009)

By demonstrating a commitment to helping students become more employable these awards can be used by institutions to illustrate a concrete and positive employability strategy and perhaps those that offer such awards can claim more added value at a time when students and parents are demanding 'value for money' due to ever increasing fees.

According to many graduate recruiters they require much more than just the degree classification listed on applications; they seek out well rounded individuals who can prove from their experiences both academically and personally that they will make the best employees, with a commitment to life-long learning, and that they will be valuable assets to their organizations. Their support seen through sponsorship, endorsement and direct involvement shows how valuable they must feel these initiatives are and what a worthwhile investment.

'Employers are queuing up to endorse the initiative. The aim is to nurture globally aware and connected graduates who can thrive in this challenging economic landscape, whatever their chosen or changing career destinations. We believe that such initiatives are vital to ensure that a rump of students does not become a lost generation in the talent crush' (Manville and Rippon, 2009)

'Recognized "co-curricular" activity, run in parallel to degree programmes, is a route through which to meet employers' demand for skills obtained outside the academic curriculum and develop the employability and career prospects of graduates. It is also, crucially, an extremely effective way of enhancing the experience of students in Higher Education, whether they are undergraduate or postgraduate, from the UK or abroad, studying full-time or part-time' (Norton and Thomas, 2009)

These schemes perhaps demonstrate that by seeing the learning experience in a more holistic light, universities may be able to acknowledge that the entire campus can be viewed as a 'learning community in which student learning experiences can be mapped throughout the environment to deepen the quality of learning' (Keeling, 2004), and that there can be a beneficial 'strength in collaboration' between different areas of the institution coming together in this way. Furthermore, they enable us to '.....broaden and

deepen [our] conceptions of what a higher education means and to embrace a much richer conception of learning: one that truly embraces the real world beyond the classroom' (Jackson, 2010).

'Co-Curricular awards are a way of formally recognizing and adding value to activity taking place beyond the curriculum, building upon this with additional elements, guidance and reflective assessments, and encouraging greater participation from students in such activity. Universities increasingly making a strong strategic commitment to co-curricular activity and awards means they can enhance collaboration with students' unions, build up partnerships with businesses and strengthen their wider role within the community' (Norton and Thomas, 2009)

A final point to acknowledge is that once the leaders in a peer group adopt new practice that can be seen to have advantages others may well follow and these activities in themselves may have a positive collaborative effect on many groups, both internally strengthening relationships within institutions and between institutions through beneficial networks (Jackson 2010).

Discussion

We must recognize that as a higher education system we are only at a very early stage in understanding this phenomenon. To improve our understanding there is a need to share our practices and document them so that we are all better informed.

With developments of this scale that are occurring at such a swift pace there will undoubtedly be some issues and challenges to consider (see for example Jackson 2010a). Many of the debates relate to resourcing schemes, expanding from small pilots and quality assurance: for example, how and what skills, qualities and attributes are being assessed and by whom and how the standard of practice and judgements about standards can be assured and maintained.

This emergent spontaneous phenomenon of new awards perhaps shows that the very parameters of what it means to have a 'Higher Education' are being questioned. It 'suggests that we are witnessing a system-wide adaptation that is fundamentally about making higher education *more relevant* to the lives of learners and to recognize that there is more to learning and education than "just" studying a subject' (Jackson, 2010a). Perhaps, then in witnessing this shift from more traditional models of education to life-wide education (Barnett 2010) we are seeing the vision of a new transformative system becoming a reality with this phenomenon, and showing a positive step towards it.

'A truly transformative education repeatedly exposes students to multiple opportunities for intentional learning through the formal academic curriculum, student life, collaborative co-curricular programming, community-based, and global experiences.' Keeling, 2004

'To support today's learning outcomes, the focus of education must shift from information transfer to identity development (transformation). When the goals of education are to produce "intentional learners" who can adapt to new environments, integrate knowledge from different sources and continue learning throughout their lives' (AAC&U, 2002, p.xi).

Much good work has been done to develop and implement awards and it makes good sense to take stock of what has been learnt, establish strong practitioner networks and create opportunities for sharing practice and thinking. Through such activity we can strengthen our presence, and improve understanding of these Award schemes and the ethos of learning that underpins them.

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Life-wide Learning and a More Complete Education: student views

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Background

The University of Surrey Student Experience Strategy (July 2008) sets out a vision for a 'complete education' inspired by the belief that a higher education experience should recognize that students are engaged in learning in all aspects of their lives while they are studying at Surrey. SCEPTRe is engaged in a programme of work to help elaborate what a 'more complete education' might mean to students. SCEPTRe is developing the idea of life-wide learning (Jackson 2008) as a way of showing students that they are not only learning throughout their lives but learning simultaneously in many different parts of their lives.

To gain student views on the idea of life-wide learning, and to signal that the University valued students' efforts to develop themselves beyond what they did in their programme of study, in May 2009 SCEPTRe invited undergraduate and post-graduate students to apply for a 'Life-Wide Learning Award' by writing a short (up to 1000 word) statement about experiences through which they had learnt outside their academic programme or professional training experience.

They were also invited to provide a short summary statement about what they understood a more complete education meant. A total of sixty accounts were submitted (35 UG and 25 PG) and the winners and two runners up were selected by a small panel of judges. All student quotations and organization references have been anonymized.

Method of analysis

The accounts were analysed using Interpretative Phenomenological Analysis (IPA). The following questions were used to frame the analysis:

- What conceptions of a more complete education do students have?
- What sorts of experiences do students recognize as being sites for useful learning?
- What sorts of learning/benefits and personal/professional development are students gaining from their wider life experiences?
- Do students connect back or integrate their development/learning in the wider world to their academic development?

These questions were used as superordinate themes for the analysis. Specific themes were drawn out from the stories under each of these superordinate themes, using illustrative quotes. These were interpreted in relation to the students' experiences and the meanings these had for them.

It's about who we are

There is a strong sense in the students' stories of life-wide learning that their engagement with wider life experiences was all about who they were and who they wanted to be. By engaging in this way they grew a little more into the person they wanted to become and perhaps, through this process learnt a bit more about who they might want to be, or conversely, who they did not want to be. By seeing life as a resource for learning and personal growth as a human being and proactively choosing to engage in life in a particular way, and by achieving things through this process they grew in confidence and this affected other parts of their lives. It is clear that students, not teachers or curriculum designers, are the great integrators and sense-makers. It is students that connect the different parts of their lives and create the relevance and meaning that ultimately make them the people and professionals they become.

“There are things that we learn in formal education such as mathematics and physics but there are also things in life that we don't learn through formal education. The trials and tribulations that we go through in life provide us with a greater education. The informal education of life is the one that teaches us trust, love, compassion and understanding. Many of the important things in life we will not learn in a school but through our own experiences as an individual. A more complete education would enable us to marry life experience with our pursuit of knowledge thus providing us with the wisdom to progress to higher things”.

A more complete education

When asked to explain what a more complete education meant to them, the students produced a variety of responses. These included not only the definition and end result, but also the purpose, its potential and requirements. The majority of students indicated that their concept of a more complete education embraced a wide range of experiences within the context of the lifelong opportunities and challenges that are available to them. However, other conceptions included the integration of academic experiences with other experiences, the personal growth and the development of themselves, and having some form of connection and relationship with the wider world. The chance to make use of available opportunities and to develop intellectually and emotionally seemed to be important to many students. In terms of what a more complete education offers, students stated that it not only provides a wide range of experiences, but it also allows for the application of knowledge to other parts of their life, the chance to discover more about themselves and their aspirations, and the opportunity to develop as a whole person. The desire to value themselves as a whole person, rather than just the part that is generally valued in higher education, seems to be a recurrent theme.

Additionally, there is also the prospect of forming a connection or relationship with people who might otherwise not be encountered by limiting themselves to their higher education experience. This point was made by a number of students, illustrating the value they place on this. An important theme in students' conceptions of a more complete education was the need for the right state of mind to make the most of available opportunities, the ability to integrate other knowledge with the current activity and having a supportive network around you. Individual students also indicated other prerequisites, which included being aware of current world issues, being physically fit and being able to speak at least one other language.

In actively engaging in a more complete education, a student wrote that it would “enable us to marry life experience with our pursuit of knowledge, thus providing us with the wisdom to progress to higher things”. Therefore a student can expect to not only become a well developed person, who is prepared for their future experiences and endeavours, but also realize their own potential. However, there is also another aspect to this which is illustrated by another student: “at the end of the journey you have a home decorated with beautiful stories”. This emphasizes the pivotal role of experience in creating the memories that they value. “A more complete education to me means that I learn and develop not only to get a degree but also as a person. I think that education doesn’t just have to be about a subject that we pick, but I believe that it is about learning how to think, and to develop our ideas and communicate them with those around us. Education is all about learning, and new experiences help us to do this”.

Life-wide Learning: what experiences does it embrace?

Students identified a wide range of experiences that they felt had provided opportunities for valuable learning outside their academic programme. These in turn had in some way contributed to their personal development. Examples include attending workshops, seminars and courses that focus on certain skills and abilities. For instance, one student discussed their participation in a number of dance classes, whilst another mentioned attending public lectures. Self directed activities, such as teaching yourself a skill or learning one from a peer, were also recognized. Less formally structured and organised activities like being a member of a society’s committee, learning a new language and taking part in some charity work were also recognized. Travelling was also specified as a cultural experience, whether to Peru on an expedition, or to New York for a holiday. Other activities included exercising and playing sports. One student in particular wrote about their training schedule which was preparing them for their participation in the London 2012 Olympics, while another talked about learning and achieving at the top level of Australian football. Some students also recognized that every day life also provided experiences that were valued for their learning potential. These included the experiences of looking after themselves or another person, or moving abroad.

Motives

“It is about maximizing one’s potential, ultimately enabling the desired lifestyle and leading to personal satisfaction”. This particular student felt that in order to prepare for their future career, they needed to constantly challenge themselves and thus improve their abilities. Other students discussed their desire to be better at specific skills or academic, physical or mental activities and thus actively sought out the experiences that would enable them to improve.

The motivation for participating in particular activities, such as learning a language or playing a sport, was identified as the passion the students already had for it, their desire for self improvement within that activity or the enjoyment they believed they would get from doing it. However, further incentives came from the challenge that it would involve and the sense of achievement they would feel if or when they were successful.

One individual discussed the sense of triumph they felt after all their training they were able to win a swimming competition: this hard won achievement, gave them the drive they needed to persevere with the sport. Although financial constraints played a substantial part in the reasoning for getting a part-time job, other motives included the enjoyment of doing the work itself and the opportunity to interact with other people. Thus although the student may have begun the job with one purpose in mind, they continued to engage with it because of the other rewarding aspects which emerged through the work.

The motivations behind volunteering varied between students but included the sense of achievement the student knew they would feel after taking part and their desire to give something back to the community. One

such student stated, "I have never felt more valued as a volunteer. Knowing that you are part of a world-wide movement all aiming to help young people is very humbling and motivating". In this respect it seems that, as is this case with part-time work, although the student may begin because of one motive, they continue because of a variety of different ones.

"I have also been a member of the Guildford City Swimming Club for almost three years and I have competed in the south east region masters competitions. As I am now older than 25, I am classed in the masters' category and within that category I have won one gold and one bronze medal. The sense of achievement that you get by winning in a competition is amazing. It boosts your self-esteem and teaches you that after all the hard work there is an enjoyable victory".

The memories created are also significant: "when you start to look back after you have reached a certain point in life, all that you cherish is the lifelong memories of the environment in which you have grown up". Several students discussed experiences they had had which meant a lot to them because of the way they could reminisce over them. Thus sometimes simply having the experience is as important as being able to develop as a person through it. A further point of significance came from the selflessness of the students' acts. Several discussed activities such as voluntarily working with homeless people or children, raising money for charity and working on community projects abroad. Through being able to give something back to the community, these experiences had instilled the individuals with a sense of self-worth. One student indicated how they had not previously realized how much they were able to change someone else's life by their actions. For them, the realization of their potential to help other people was what had made the experience so significant.

"By that point I've had 59 flights, a few hours on the simulator, attended a few lectures on the ground, I had been trained on how to get myself out of every conceivable emergency and had read half a dozen books on the theory of flight. We land; he gets off the plane and tells me "are you confident with your flying?" I hesitantly nod and say that I'm ready to fly solo now. It's my 60th flight and I am terrified but happy. After the take off, I circle some hot air balloons that were slowly drifting to the north. The fact that I was alone on the glider made the experience unforgettable".

Motivation to pro-actively engage with the world

A number of different sources of motivation were given by the students as to what had encouraged their active engagement with the world beyond their academic programme. The influence of students' families was motivating in a multitude of respects. One mentioned how he had been the first member of his family to attend university and thus his self-esteem was increased by the fact his family were proud of him. Another student described how he was looking after his brother to allow him to study as well. His ability to give his brother an education was a source of pride and inspired him to undertake an active life at university.

The desire to meet other people also featured heavily as a motivating factor. Whether the intention was to make friends or purely to interact with a range of different people, this stimulated the students' enthusiasm for their activities. Self improvement was another motive of the students.

"Being an international student is quite an experience by itself. Studying at a university in a different country has contributed to shaping my multicultural personality and ability to adapt with ease to new environments and take on new challenges".

Learning and personal / professional development

Through doing their activities, students identified that they had learnt a variety of academic and non-academic skills. These were cultivated through attending workshops, undertaking placement or work experience and assisting other students in a mentoring capacity, as well as through carrying out specific skill-based activities and fulfilling a position of responsibility. These skills were considered useful in improving personal performance in those specific areas as well as for integrating into other aspects of life. One such area referred to social skills. One student in particular discussed their positive experiences of participating in some workshops run on building self esteem, while others mentioned how their attendance at a variety of social events had enabled them to interact with a mix of people they had not had much contact with previously.

On reflecting on a trip to New York, one individual stated “I learnt more about myself and the English way of life as I compared these new features and norms with those I was raised around, confirming I am really English at heart, and even though I may consider a global career one day, to live somewhere else is more than the pretty brochure, it’s a new way of life, a culture on its own”.

Thus even having a cultural experience was seen to reflect into the individual’s sense of personal growth. On the whole, although students mentioned the skill and personal development they underwent through their various activities, they placed a considerable emphasis on the things that they were able to learn about themselves. After having worked as a special constable within the police, one student expressed such a position:

“At the end of my first year at university, I was pretty down, due to as usual, feelings and emotions and all that stuff. so I was sitting at home feeling sorry for myself when I decided that I really needed to sort myself out, and push myself to do something, and that lead me to do something that I never expected, but has completely changed the person I am, the way I think, and the way I feel about myself”.

Thus their experiences were multifunctional in that they allowed the students to develop themselves and their specific abilities, as well as providing a sense of self discovery.

“With the help from the university, I got an opportunity to learn French which was conducted once a week for beginners. This opportunity brought me closer to my desire of visiting France. It not only helped me learn a different language but also the thought process that goes behind it. It made me realize that the basic traits of all human beings be it any nationality remains the same. It’s just that they express it in a different manner. The beauty of any language is the ability to express and I learn another form of expression by way of French”.

Connecting and integrating experiences into their self identity

Students were able to integrate their experiences in not only academic and career related respects, but also to their sense of development and self-worth. This incorporated their perceptions of their own abilities, the way they were able to define themselves as individuals, as well as their overall confidence and self-efficacy.

In some cases, knowledge and skills acquired outside their programme of study proved useful in the application of their studies and their work experience, as well as in helping them to realize their career aspirations. “Through this experience I began to think about letting my degree take me in a more entrepreneurial direction within food & beverages. Unless I had tried this, I never would have considered that even possible. I had opened a door of potential”.

Thus, for this student, through being able to apply the skills they had learnt to their experience of working in a restaurant, they had discovered that this is what they would like to do as a career. This theme resonated with a number of students who wrote about how they had been able to become more confident in themselves and in their own abilities through their experiences, and in this respect they were able to realize their own self potential. This in turn allowed them to modify the way they were able to define themselves. For instance, one student stated that engaging in volunteer work allows them to identify themselves as “a proactive and caring person willing to work with others to improve their opportunities”. To them, although it was important to undertake such work in the first place, it is also necessary to do so frequently in order to maintain both their sense of identity and their self-worth.

More generally, being aware of their own abilities helped the students appreciate that they were part of a bigger picture. This concept was illustrated by a number of students who had engaged in a range of community based activities and as a result had discovered the vast influence they were able to have on other people’s lives.

“My experiences as a HCA have enabled me to see ‘the other side of the coin’ in terms of priorities in nursing and the workloads of other colleagues. I will be able to apply this experience to my future development as a staff nurse and it will only enhance my future practice”.

Significance of experiences

The students gave a wide range of reasons for why their experiences had been so significant to them. These included the sense of achievement they had got, the extra knowledge they had gained and, whether it be through academia or employment, the ability to apply this knowledge. The changes that the individual had undergone also featured highly, in respect to not only the development they had undergone in their skill base, but also in their personality and self efficacy. One student in particular highlighted how they valued the experience of being a Samaritan because it had enabled them to understand and empathise with the emotions of people who are experiencing some form of distress. This has made them more tolerant of other people and their feelings, which in turn has reflected into they way they interact with people within both their personal and professional life. Thus the student had undergone changes within themselves that had enabled this new form of social practice. Other reasons for experiential significance included the interactions the students had had with other people. One stated that they had made “friends who I do not know what I would do without, as they make my student life a valuable social experience, and not just about the academic material”. However, although the students placed a high value on the friendships that had formed from these engagements, they also valued the interactions they had had with those who were like minded people or from a range of diverse backgrounds. This was illustrated by one student who felt that through interacting with a variety of international students they were all able to overcome the stereotypes they may have had about each other, which could lead to an improvement in international relationships globally.

Conclusions

The 60 students who participated in the competition were self-selecting. They could clearly relate themselves and their lives to the idea of life-wide learning and had good stories to explain how they had developed themselves through a range of experiences. Although the stories represent a biased sample they do reveal that for a proportion of the student population (both undergraduate and postgraduate) the forms of self-development are valued. The desire to value themselves as a whole person, rather than just the part that is generally valued in higher education, seems to be a recurrent theme in many accounts. By engaging in a diverse range of experiences students were also trying to achieve their potential and become a better human being – something which was also identified in the study by Barnett (2010).

'in addition to developing their knowledge and their skills, all of my interviewees were developing their dispositions and qualities as well. And in developing their dispositions and qualities, they were developing as persons. In developing their dispositions, they were developing a greater preparedness to go on, to engage with life, and to throw themselves into and to engage with strange situations. In developing their qualities, they were developing their own personas, and a way of imparting their own stamp on the activities into which they threw themselves. The totality of the student's learning experiences, we can see, is altering their being-in-the-world. This being is not fixed but is now in a process of perpetually becoming as the students engage with a continuing interplay with their environment, moving this way and that, and so unfolding in often unpredictable ways.' Barnett (2010)

Acknowledgements

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Reference

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Learning to Be Professional: Student Stories of Learning through Work

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Introduction

A life-wide curriculum is one that is designed to incorporate students' real world experiences as well as academic forms of education (Jackson 2008). For many students a higher education is intended to be the stepping stone into a good job, so being able to demonstrate a range of employability skills and professional capability (performance) in a work context would seem to be important to future success. Yet less than 7% of undergraduates include a work placement in their undergraduate experience (HESA 2009).

The University of Surrey has a long tradition of encouraging undergraduate students to include a year-long work placement in an environment that is relevant to the discipline they are studying and/or to their career aspirations. About 50% of students enrolled on an undergraduate degree participate in the year-long work placement experience. It is an important part of their life-wide learning while they are completing their degree and it is important to understand the sorts of learning and personal and professional development they are gaining through the process.

As part of its investigations into the different habitats of a life-wide curriculum SCEPTRe invited students who had just completed a year-long work placement to write a story about what learning to be professional meant to them. This paper summarizes the collective experiences of learning of twenty-eight submissions from a range of academic disciplines and professional fields. From this data corpus, a qualitative research project was completed using content analysis and grounded theory. An initial analysis yielded twenty-six broad codes, which were clustered into topical themes. Throughout this report, the themes are presented predominantly in the students' own words with minimal narrator commentary. All student quotations and organization references have been anonymized. Individual stories can be viewed at <http://learningtobeprofessional.pbwiki.com/>.

Nature of learning in the work place

Michael Eraut (2009:1) summarizes the important contexts and characteristics of learning gained in professional work environments.

'Work placements provide contexts for learning of a very different kind from those provided within universities. Not only do people learn in different ways, but they also learn different things.'

'A key feature of being a newcomer is that of not knowing what is going on around you or what precisely is expected of you. In education contexts, new students are members of large cohorts in a similar state of ignorance; but in work placement settings, the student is more likely to be the only newcomer.'

'Although the workplace appears to be primarily concerned with your capability (what you do and how you perform), it is equally important to be able to do the right thing at the right time. In practice this means that you have (1) to understand both the general context and the specific situation you are expected to deal with, (2) to decide what needs to be done by yourself and possibly also by others, and (3) to implement what you have decided, individually or as a group, through performing a series of actions. All three of these processes contribute to your perceived competence. Even if other people are making the decisions, you may still have to interpret their meaning in order to know precisely what is required.'

Learning in the work environment involves forms of knowledge that are quite different to that encountered in the classroom or library. Eraut (2009) offers a rich conception of the sorts of personal knowledge that are developed in the work environment.

'I argue (Eraut 2009:2) that personal knowledge incorporates all of the following:

- Codified knowledge in the form(s) in which the person uses it*
- Know-how in the form of skills and practices*
- Personal understandings of people and situations*
- Accumulated memories of cases and episodic events*
- Other aspects of personal expertise, practical wisdom and tacit knowledge*
- Self-knowledge, attitudes, values and emotions.'*

Finally, Eraut (2009) provides a typology of early career learning that is relevant to students involved in a significant work placement (table 1). Again the contrasts with learning in a formal institutional environment are great: the majority of learning through working is informal and involves learning from other people. Four of the entries in the left column require the presence of other people; and the other four may also involve other people.

Table 1 A Typology of early career learning (Eraut 2009)

<i>Work processes with learning as a by-product</i>	<i>Learning activities located within work or learning processes</i>	<i>Learning processes at or near the workplace</i>
Participation in group processes Working alongside others Consultation Tackling challenging tasks and roles Problem solving Trying things out Consolidating, extending and refining skills Working with clients	Asking questions Getting information Locating resource people Listening and observing Reflecting Learning from mistakes Giving and receiving feedback Use of mediating artefacts	Being supervised Being coached Being mentored Shadowing Visiting other sites Conferences Short courses Working for a qualification Independent study

Understanding the context of the work environment

Throughout their stories, returning placement students were keen to demonstrate a strong awareness of the physical and technical context of their working environments. Students described the subtle nuances of their daily work routines using highly developed terminology. This evidence suggests they have developed an acute 'insiders' understanding of their work speciality, which distinguishes them from 'outsiders' to that work context. Within this specialized context of the work environment, three key themes emerged focusing upon the organizational structure, tasks and people.

Organizational structure: "Where Do I Fit?"

Students found placements within a wide range of organizational structures, from large global enterprises to small offices of less than five employees. More than simply memorizing the organizational tree diagram, students began to internalize how their organizational structures were animated for operating on a daily basis. One student distinguished the division between strategy and tactics in his organizational structure: "Each programme would have a programme leader and a programme manager. The leader works on the strategy, observes the market and plans for the future. The manager looks after the day-to-day running of the programme and implements the marketing plays." By understanding how the management functions were specially differentiated, the student has tapped into an appreciation of the functional organizational structure.

More than only the staff structure, students reflected upon the organization of the physical environment itself. "The office itself was designed to foster an open environment and demonstrate transparency. All the walls in the building were glass so you could see exactly what everyone was doing, even your manager." The transparency of the physical environment was also reflected in the working relationships within this organization.

Tasks: "What Am I Doing Here?"

The level of responsibility students were given for tasks varied significantly. Many students anticipated and performed a certain range of mundane tasks, but most tackled them with a good attitude. One student in the media industry explained, "My other duties include taking mail to the post office, tidying of the studios and corridors, giving studio tours and talks to clients and keeping a stock check of resources (e.g. CDs, DVDs, tapes). Whilst most of these tasks seem mundane or of low responsibility, they all ensure the studios run smoothly and are presented in the best possible light." This student has identified the importance of doing even the small, simple tasks well and of presenting a well-run organization to external clients.

Other employers took advantage of the students' own educational experiences and offered special research projects. "Within my role as Project Evaluator I was asked to conduct an eleven-month research project... The main activities conducted whilst on placement include a literature review, production of a research proposal with suggested methodologies, data collection and analysis and report writing. The findings from the study were presented in the form of an evaluation report and various presentations." This student's practical experience closely mirrored her university training and provided fruitful research for her employer.

Ultimately, the students who proactively sought a wider variety of tasks came away from their placements with far broader skill sets than they may have anticipated. One student explained how he used his initiative to gain competency in a broader range of tasks, thus enabling him to experience the complete life cycle of his project: "Throughout the year I became increasingly familiar with the many standard operating procedures (SOP) the team had to adhere to for all aspects of work, development, support duties or otherwise... I completed several projects and one-off tasks, eventually experiencing all areas of the IT system development life cycle, whilst additionally attending to my other regular tasks." Although many

placements may appear to offer a limited set of tasks, students can often observe and perform novel tasks simply by asking the right people.

People: "Who are the main actors in my world of work?"

The 'people factor' was clearly one of the most critical influences upon students' working environments, both positively and negatively. Students were exposed to a wide variety of people from different roles, status levels, and cultural backgrounds. In every professional field, "Working makes you realize how important having good relationships with the people you work with is. After all, you do see them every day and getting along makes a big difference to your job satisfaction."

The best role models demonstrate how professionalism is embodied in the field. Mentors may tacitly exude internal traits of determination and commitment which have enabled them to achieve higher management levels. "I had a great mentor at my placement. She was great at her job and extremely hard working. Knowing people in a professional sphere is also a great way to become professional yourself. My personal mentor along with all my work colleagues at my placement have been great examples of what it means to be professional in a work place." This sort of knowing can only be gained through direct interaction and observation in a situation where the mentor and mentee are similarly engaged in professional work.

Students may also need to adapt to how their mentors choose to impart knowledge. One student observed how two sound engineers delegated responsibility to her differently: one preferred to handle all the technical details himself while she observed and asked questions; another engineer allowed her to run the equipment hands-on from the first day. Just as university tutors have different styles of teaching, placement supervisors may have different styles of instruction.

In the most positive capacity, people in effective working relationships contribute synergy to their teams. Networks can achieve more corporately than individually. Yet along with the power contained in people skills, students also experienced the potential of negative 'office politics.' "I was introduced to the concept of 'office politics', something that goes unmentioned at university and you cannot prepare for until you face it. Office politics is the use of power within the organization to personal gain. It's about who you know and how much they can influence situations to your favour. Knowing the right people can determine how successful you will be in achieving your personal goals." Although 'politics' may be inevitable in most workplaces, students offered simple advice: "It is wise not to mix and stir it up."

Significant experiential learning moments

Although learning may occur gradually throughout the placement, certain pivotal learning moments stood out more prominently for many students. These moments generally occurred early on during the application process and initial training period and later on during pinnacle points of challenges and achievements.

Application process

Even before their first day of work, students already gained professional experience by simply surviving the sometimes gruelling process of finding and applying for jobs.

"The application process at first was very stressful and demanding because most companies make industrial placement students go through the same application route of filling in a company form, having an interview and assessment centre, as they do for graduates. This adds to the challenge of finding a placement, because as a level 2 student, you are put through a very competitive process. I remember filling

in countless application forms, and at points wanting to give up as the whole process was seemingly difficult.”

Clearly, many students achieved significant professional learning simply by completing the application process to successfully acquire a placement contract. The ability to represent themselves and the qualities they can bring to the job in ways that are appealing to the company is an important dimension of professional communication.

Training

Upon starting their placements, some students enjoyed focused orientation and training programmes. Examples included an initial handover period with the prior intern and an hour-long orientation meeting with each individual member of their team. Some additional on the job training opportunities included conflict resolution and violence reduction courses, and ‘Mind Gym’ courses to develop soft skills. At worst though, other students received little or no formal training during orientation. In one particularly difficult placement experience, the recently redundant managers provided no handover to the incoming student who was left to absorb a great deal of responsibility. Although the ‘sink or swim’ method may be the most startling manner of learning, the gains were no less genuine: “I was put straight in at the deep end when I began and although this was quite scary to begin with, I found that it was by far the best way to learn in that situation and hence I got to grips with the different aspects of my role a lot quicker than I would have done had I been eased into the job slowly!” Hence, students should be prepared for a variety of styles of training on the job.

Challenges: “I never knew there’d be days like this...”

Most challenges which students faced in the workplace were unlike anything they had encountered during their prior education. Students learned to cope with colleagues on strike, misbehaving pupils, low staff morale and angry clients. More than one organization suffered from the threat of going into administration. Yet perhaps one of the greatest frustrations was a sense of paralysis for an individual to make significant changes in their organization: “Certainly one of the biggest problems I faced (when the company was going into administration) was that I couldn’t fix the problem myself.” This lack of personal agency in the face of a massive organizational breakdown challenged the student to make the best of a difficult situation.

Other challenges coincided with the natural ‘daily grind’ of the workplace, which students eventually learned to accept. “There are times when I have been bored and completely frustrated by long menial tasks that have no end in sight. The number of times I have stressed when I have had hundreds of pages to photocopy for an immediate deadline and someone has jammed the photocopier. However, all these issues represent realities of full time employment, which come part and parcel of experiencing to be a professional.” Ultimately students learned to cope with the routine frustrations, the pivotal challenge points, as well as the requirements of writing a substantial PTY report in the process of becoming professional.

Achievements

From overcoming the depths of challenges, students rose to the heights of significant achievements. One of the most clearly evident achievements was advancing from menial routine tasks into progressive levels of responsibility in their workload. One student proactively volunteered to cover additional tasks when a colleague was on maternity leave. Another student was granted the responsibility to manage a new café as a reward for improved levels of dedication and professionalism. A common factor among these accounts of increased responsibility was the heightened need for personal management skills – whether it was managing time, priorities, resources, task lists or projects.

Yet, not all students welcomed the volume of increased responsibilities they were given. One student explained, "Dropped into the deep end once again, I was sent off alone with a camera to various locations across the country... At this point I was beginning to feel increasingly frustrated with (my company) for giving me perhaps too much responsibility for the little experience I had... I was delegated jobs that were indeed out of my league, simply because I was the only person who was available to undertake them." Unfortunately, in some organizations, placement students may have been the only staff available to fill the miscellaneous void of 'all other tasks as required,' even if they were not always well suited to the ability level.

However, most students could identify significant personal achievements gained from their placement experiences. Students described feelings of internal satisfaction, such as feeling good about contributions to a learning support team or feeling honoured and proud to lobby for a climate change bill. These internal achievements had powerful impacts: "I could never have imagined that the feeling of doing my job well would be so rewarding. It may sound cliché, but it's the truth." Other students received more tangible rewards. A chemistry student presented her research project results at an international conference and anticipates it will be published within the year. Other achievements included: being credited as a performer and assistant engineer on several recorded albums; attending a three-day VIP cruise for a successful marketing project; and winning a company leadership award. These high achievements marked milestones in the process of becoming a professional.

Connections to life outside the workplace

Placement students were encouraged to reflect on their life experiences outside of the professional workplace. SCEPTRE believes that any worthwhile learning endeavour must engage not only with a depth of subject-specific knowledge, but also with a breadth of potentially physical, emotional, or cultural links across a life-wide curriculum. Hence, students' accounts revealed themes centred on interests outside of work, cultural immersion, and emotional experiences.

Interests outside of work:

"What do I do with the rest of my life?"

Students may be accustomed to maintaining personal interests outside of university, but how do they balance these interests while working in a full-time job? One student found that the demands of long working hours in the media industry left very little space for anything outside of work. Yet other innovative students found productive uses for their newly acquired free time, including taking courses in first aid, foreign languages, driving, knitting, and creative writing. One student on her placement abroad described adventures of travel, skiing, skydiving, surfing, and sailing. Yet others viewed their placement as an opportunity to maximize their social lives with new colleagues and friends. At best, an active social life with colleagues over meals and sporting events away from work was beneficial for building team camaraderie. Yet at worst, one manager confronted a student about his misguided priority on climbing the social ladder, which detracted from his work tasks and professionalism – something which he later strived to correct.

Cultural immersion: "It's a strange world out there."

Arguably, all students encountered the cultural immersion of adjusting to a new organizational culture, but some students encountered culture shock at a more personal level while choosing to live abroad. Three students described their cultural transitions in their placements abroad in New Zealand, Finland or France. One student working at a hotel in New Zealand experienced a double sense of culture shock, by acclimatizing to both the organizational culture of the hospitality industry and the foreign culture of New

Zealand, but eventually found the experience was the best year of her life. Another student in Finland gradually transitioned from a state of culture shock into building appreciation for her host culture: "Culture shock soon turned into fondness after I learned just how organized and efficient Finland is. I became more culturally aware of the small differences between Finland and England and so learned to adopt some of the Finnish customs in order to respect their culture."

Culture shock was not necessarily limited to students moving to foreign countries, as several students adjusted to the cultural immersion of moving to new locations across the UK. For some, this was the first occasion to move into a flat on their own away from home or university residency. "Much like I had swapped (my hometown) for Surrey at the beginning of my university career, placement saw me county-hopping again this time to (a new location) and moving to a small, picturesque town far removed from the bustling streets of Guildford. However, in this sense the move to university itself had proved I was already capable of making this kind of change in my life, whilst also making something successful and positive out of it."

Emotional experiences

Often, the emotional experience of learning can be under-acknowledged (particularly in the classroom) but nonetheless significant toward life-wide development. Students invariably described a rollercoaster of emotions throughout the placement process. From the initial stages of searching for a placement, students experienced an overwhelming number of options and doubts over personal abilities or panic over potential inadequacy which later proved to be unfounded. One student working in a prison learned to transform his feelings of fear and intimidation into a sense of calm confidence under pressure. Others summed up a range of emotions: "The year spent at (my company) was enjoyable, challenging, stressful, fascinating, exciting, a great opportunity and a steep learning curve."

At best, students described their pinnacle emotions as feelings of pride, confidence, and independence or feelings of satisfaction and belonging to a team. Yet others found the emotional challenges of the work environment far more strenuous than any prior educational setting. One student chose to make the best of an emotionally difficult situation: "Working life is hard but you have to actively take steps to allow yourself to take away the positive from a situation and treat it as a learning curve. Over my thirteen months on my placement, I had never been so consistently *miserable* in my life, but if that had not happened I would not have become thicker skinned, increased my tolerance level and equipped myself with such a massive amount of knowledge and skills."

Learning to be professional

How students articulate what it means to be professional

The placement experience enabled students to articulate what the concept of becoming a professional embodied. At the most foundational level, being professional was described as developing the correct "appearance, punctuality and attitude to work." One student found that a finely tuned sense of professional etiquette was manifested through all the small details of how to address clients and when to speak up or keep quiet. Another mark of becoming professional was negotiating what degree of formality was appropriate: "A skill that I had to learn very quickly was assessing how to interact with different clients and gauge the appropriate balance of informality to professionalism."

For other students, learning to be professional was gained through interactions with colleagues in the workplace. "The work environment was essential to me becoming professional. It is the mirroring of your co-workers and their professional manner in the work place that is the educational tool in this vital experience." Professionalism was enhanced not only by mirroring mentors in the field, but also by conveying this trait to

fellow colleagues. One student improved his own sense of professionalism by mentoring a younger work experience student: "A few times I had to remind him that he was in a professional environment and that understanding how to behave professionally would benefit him in the future."

Putting university training into practice:

"Using what I learned from all those 9am lectures."

Many students agreed that part of becoming professional was the ability to transfer theoretical knowledge from the classroom into real-world practical application. A psychology student utilized techniques taught in research methods and statistics courses, while a business student witnessed SWOT and cost-benefit lessons from organizational behaviour come into practice. Students also found that concepts from university lessons had more significant consequences when applied in the workplace: "Although I had studied project management at University and produced a number of theoretical documents in regards to coordinating projects and events, I had not had many opportunities to put my knowledge into practice. A unique factor about placement is that you get to experience the realities of working in the professional environment; if things did not go to plan then there would be genuine consequences." Evidently, classroom lessons carried more weight when applied in a real-world context.

Maximizing personal agency

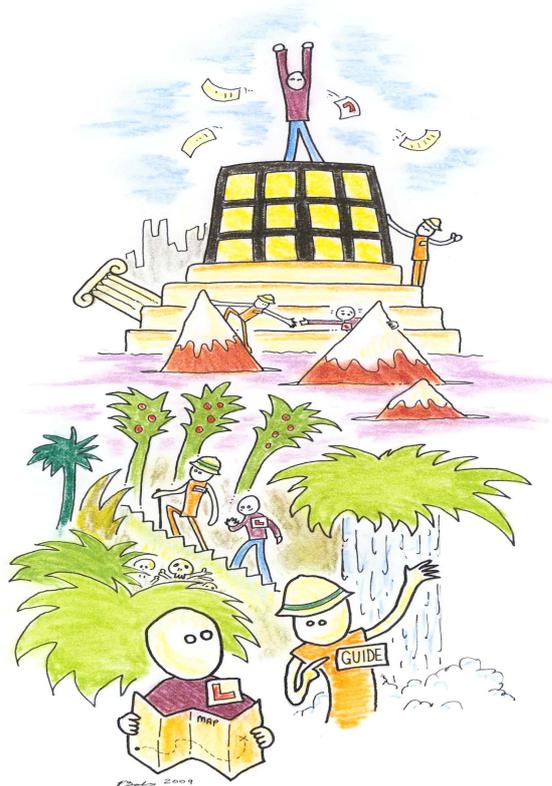
Ultimately students can develop a strong sense of personal agency through the process of learning to be professional. Agency can be developed by realizing an individual's potential power or proactively taking control of one's actions. One student working as a lobbyist for a climate change bill found new opportunities for taking initiative locally, relying on increased confidence, and putting ideas into action. Another student proactively took advantage of every opportunity possible for joining as many free courses offered by his company. A media student maximized her agency by proactively anticipating the needs of her workplace: "When I was not needed on a session, I used my initiative to find things to do, for example creating a standard session sheet for logging signal paths. I always tried to anticipate what was needed so that when I was asked to do something, I could say that it was already done."

One way of developing personal agency may be to cultivate both creativity and technical precision. Students who find themselves ambidextrous in both left-brain and right-brain thinking may enjoy greater professional advancement opportunities. One student in the media industry relied on both creativity and technical expertise in recording sessions as she combined her musical background and sound engineering skills. Another student wrestled with the balance between technical and creative career paths: "I would not change anything from my year but it has allowed me to see that the IT industry is not one I could now see myself developing a career within... I hope to set up my own company incorporating a business built on creativity."

Finally, students also displayed agency in the professional environment by developing transferable skills in communication and personal management. These so-called 'soft skills' are essential to being successful and they are best developed through interaction with colleagues, clients and customers in the work process. Students gained a variety of communication skills including verbal and nonverbal; face-to-face, phone or email; formal written reports and public speaking presentations. For many, the opportunity to gain confidence in communication was a huge achievement: "I had to give a 20-minute presentation in an auditorium in front of around 40 people including professors and researchers from outside the university. I have never been a good public speaker so of course I was nervous at first, but I am much more confident now and no longer have a fear of speaking in public." Another critical transferable skill was learning to personally manage priorities, including time, tasks, projects, and resources. One student found that meeting deadlines and completing target tasks had clear implications. If tasks were not completed on time, other

aspects of the work environment could not function properly: “To make sure that I had everything done I drew up spreadsheets and tick lists to break up my week and keep on track of what had to be done and when. My time management improved.” All of these transferable skills demonstrate that students can develop their own sense of personal agency and a repertoire of communication and self-management strategies for engaging effectively in the professional environment.

Figure 1 Learning to be a professional cartoon by Patrick Saunders



Discussion

In order to students to gain insights into the professional work environment they need to actively participate in it. The stories provide insights into the complex learning and achievements that are gained through these forms of experience – forms of learning that cannot be gained within a classroom context and forms of learning which are particularly relevant to students’ lives after they complete their studies. By engaging in a work placement opportunity afforded to them by their programme they are extending their personal curriculum beyond the classroom into the real world and embracing the idea of life-wide learning. Students who do not have this opportunity, or who decline to take such an opportunity if it is available, can also gain valuable work experience through vacation internships or part-time work. All of these environments enable students to make their own educational experience more complete by engaging in learning and performing practices that are relevant to the world of work.

The year-long work placement experience takes students out of the classroom and immerses them in a challenging, social, real-world, professional environment where text book learning is replaced by other forms of learning that are embedded in the experience of working, and learning is a by-product of work. The Professional Training Year experience is the first major transition for many students from university life into the professional world of work and it is therefore an important formative experience. Most of the stories contain within the sense of a significant journey. In many cases the experience appears to have been immersive (Campbell 2010, Jackson and Campbell 2010).

'...immersion is a state of being which can have both negative consequences – being overwhelmed, engulfed, submerged or stretched, and positive consequences – being deeply absorbed or engaged in a situation or problem that results in mastery of a complex and demanding situation. Being immersed in a challenging experience might be very uncomfortable but it is particularly favourable for the development of insights, confidence and capabilities for learning to live and work with complexity: a central theme of SCEPTRe's pedagogic work.' (Jackson and Campbell 2010)

What is clear from the stories is that the professional work environment requires a learning orientation towards *learning to be* and *learning to become* the person that job or role requires, rather than the orientation students encounter within a university environment which is much more towards *learning about* the subject and how to perform to meet academic requirements.

The learning and personal/professional development and enhanced confidence gained through the placement experience is complex but consistent with Michael Eraut's (2009:1) summary.

'Although the workplace appears to be primarily concerned with your capability (what you do and how you perform), it is equally important to be able to do the right thing at the right time. In practice this means that you have (1) to understand both the general context and the specific situation you are expected to deal with, (2) to decide what needs to be done by yourself and possibly also by others, and (3) to implement what you have decided, individually or as a group, through performing a series of actions. All three of these processes contribute to your perceived competence.'

The placement experience also offered valuable insight toward future career paths - regardless of whether that meant reaffirming a prior career desire or completely changing in a new direction. Both were completely valid outcomes. For students who reaffirmed their intended career, the placement experience helped to clarify the next steps to take professionally: "From initially feeling very apprehensive and unsure about my placement and my career choice, at the end I am now much more excited and focused about the future... I now have a greater understanding of how to progress to the next stage of my life. For me this professional work placement has been integral in introducing an area of the dance industry for which I am now passionate and intent to succeed in".

Some students received job offers to return upon completion of their degrees. Other students gained valuable early insight to completely change their previous career goals. "I was adamant before my placement year that I wanted to work in the media. However, after experiencing four months of working for a production company, I have changed my mind completely. I found the industry highly stressful and the hours were extremely long. I could see how the job completely takes over your life".

Even though some students may choose to change vocational direction, the skills and insights gained from the placement experience were still valuable for background knowledge or for pointing toward new aspirations.

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Student Perspectives on Immersive Experiences

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Introduction

The Surrey Centre for Excellence in Professional Training and Education is conducting a programme of research and idea development linked to the concept of life-wide learning: a holistic view of learning and learners' engagement in learning that embraces the whole of a student's life while they are studying in higher education (Jackson 2008). Immersive experiences are a particular type of experience that we encounter from time to time in our lives. They are intense, all consuming and often stressful to the point of being distressing. But coping and surviving such experiences is a manifestation of resilience (see Hall 2010).

In January 2008 SCEPTRE invited students to submit stories to a competition that was framed around the idea of 'immersion'. In the email invitation some prompts were given to provide guidance on the sorts of things SCEPTRE was hoping to elicit from a story, such as why it was immersive, what immersion meant to the student and what effect the experience had on the student. Whilst the stories were very diverse in nature, and covered a vast range of contexts and experiences, the use of Interpretative Phenomenological Analysis (IPA) identified very clear themes, all of which were present in almost all accounts. This short account summarizes the themes that appeared to be common across the stories. Individual stories can be accessed from the immersive experience wiki <http://immersiveexperience.pbworks.com/>.

What was surprising from the accounts was that, despite the huge variety in situations, the underlying themes, emotions, changes and experiences of the participants were very similar. This demonstrates the consistencies across immersive experiences and shows that there are key features that make an experience immersive. Some accounts involved very negative experiences that were forced upon the individuals, whereas others were positive challenges that participants elected to enter into. In many cases a new physical environment was entered, perhaps suggesting that this physical change can facilitate mental change. Also, many of the participants, although clearly helping or serving others, felt they were the primary beneficiary in the situation because of the huge benefit they got from the experience:

"...this ultimately makes the trainee the primary beneficiary in this arrangement"

The variety in the stories demonstrates the wide contexts that immersive experiences can occur in, and the time periods these experiences can prolong for. That is, some lasted a short time, during a vacation, and for others it was over a period of years in the context of work of study.

Some were essentially solitary enterprises and experiences, such as choice of a PhD, or illness of close family and friends. They are self-constructed and personal, whether a chosen form of engagement or an enforced form of engagement. In these cases, however, there was still strong evidence of support and engagement of others, and also the presence of others going through the same or similar experiences simultaneously.

Some were work situations, with immersion as a co-created social enterprise. Also in these cases, some participants had elected to engage in this context, such as in a work placement, and in other cases the situation was created and enforced by external circumstances.

Many experiences are likely to contain a mix of these contexts, but in terms of Higher Education, the focus should be on co-created immersive experiences, and looking at ways to incorporate these, based on the emergent themes described below of the nature of an immersive experience, into the Higher Education experience.

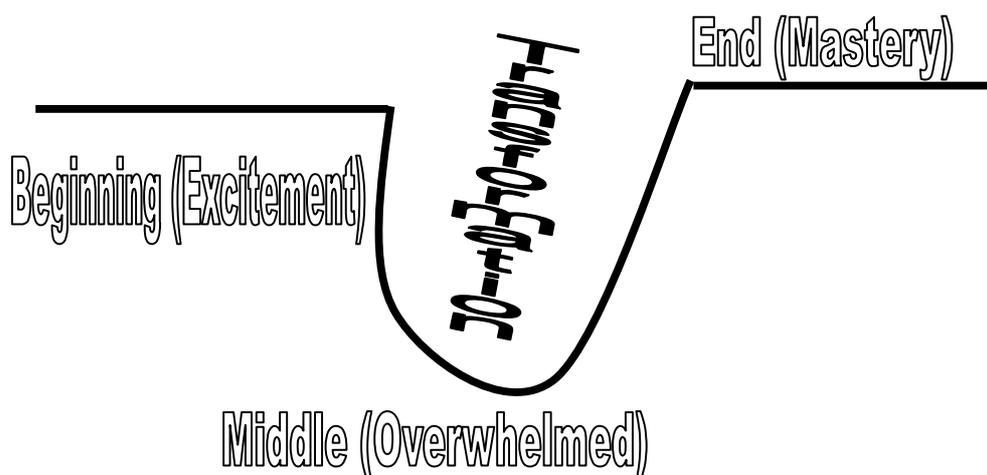
Sense of journey – beginning (excitement), middle (overwhelmed), end (mastery)

This sense of journey is the overall superordinate theme to emerge from the accounts. This journey is a feature in many of the themes and sub themes, as it appears this journey underpins transformation, change or learning that is associated with immersive experience:

*“...similar to the process in which a caterpillar becomes a butterfly”
“It is a transforming process”*

Most stories describe a staged process (Figure 1): the initial part of the experience, is often viewed with excitement and anticipation. The middle stage often involves feelings of being overwhelmed and questioning the choices and experience, and the end stage involves the individual as accepting and embracing the experience, having gained control. Individuals recognized that if the experience continued it would continue to be immersive but they felt they had control and had learnt strategies to cope with the challenges of the experience.

Figure 1 Representation of the sense of journey through an immersive experience



In most cases, this staged process began with positive feelings, which then progressed to very negative feelings, and finally continued into the final stage where participants felt more deeply positive than initially, with a much greater understanding and appreciation of what was going on.

Another feature of the staged-process was that of coping and strategies. Most stories inferred that students felt they had the necessary knowledge, cognitive and affective skills at the beginning of the experience to cope with it. It is evident that this stage progressed to the next stage of students feeling they had 'hit a barrier', and did not have the necessary skills/knowledge or strategies to handle the situation (*"My intellect and understanding are shaken to timidness with all this strangeness"*). They had not appreciated how difficult or lonely it would be. This realization forced the students to then change, adapt and acquire new strategies and knowledge in order to cope with their experience. This change pushed them into the final stage, which showed students with more developed strategies and awareness, taking them into the stage of mastery or enough experience and change to feel a sense of control:

"So here I was now, suddenly able, having once been commanded by inability"

Emotions– emotional suppression; fear, happiness

A strong subtheme that emerged from the stories was that of the role of emotions, and more specifically emotions serving the role of motivation. Many emotions were expressed, including fear, happiness, excitement, shame, unhappiness. What was apparent is during an immersive experience, very strong, almost overwhelming, emotions are experienced. These strong emotions, in many cases, compelled the participant to change or to re-evaluate, either to attain or maintain a positive emotion.

It is clear emotions play a very important and central role in an immersive experience, and it is this experience of strong emotions that leaves such an impact and makes the experience so valuable and memorable. It is apparent that any experience that elicits strong emotions makes it very personal and can motivate the person to change. Therefore it can be inferred that experience involving strong emotions leads to life-long change and therefore learning: emotions serve the role of changing a person.

Another interesting feature of some stories was that participants had to suppress emotions (*"On the other hand, you have to be calm and collected"*). In most cases this was necessary in order to maintain an external representation of oneself, and so as not to fall apart during the experience. This awareness of and ability to manage emotions seems important in an immersive experience, and this form of control, that is suppression, is perhaps the pre-cursor to the participant gaining control over the situation as a whole. It is possible this first emotional suppression/control is the internal indication to the person they need to change in some way to cope with the situation, to 're-balance' the strong emotions, so the emotions become a signal and then a motivation for change:

"What kept me persevering was my passion"

"I've never felt so proud of myself"

"The choice...came from a desire"

"I was surprised, but very happy about it. This spurred me on to do different events"

"...a new level of responsibility. This responsibility motivated me to make the café as good as I can...I felt a high level of enjoyment"

"now the tears gushed forth from his eyes"

"every emotion"

"after months of emotional entanglement, I found myself so caught up"

"creating waves of emotion inside you".

Emotions also emerged as a point of change, with participants becoming more expert in handling their emotions as a result of the experience:

“could make myself more emotionally available”

“I’ve learnt to cry, to feel pain...it’s essential to talk to people about them’

Choice

Choice emerged as a strong subtheme in all stories. In many cases this was choice to engage with the experience, but in all cases it was also a choice to remain in the situation and choice of what to do in order to cope with the situation. This choice really involves the will to do; that is the will to act in an immersive way. Many participants were aware of how challenging the situation could be, and in some cases this informed the choice to engage with it. However, it needs to be noted that in most cases, what people expected the challenges to be often turned out *not* to be the most difficult parts of the experiences. It is possible to assume, therefore, that a certain type of person chooses to engage in immersive experiences, and that people have a choice of whether to remain in them and what to do with the experience (*“I must continue”; “I could have kept within my comfort zone of knowledge and ability but in broadening the remit the engagement became greater”*). This can be linked to the presentation of situational status, in terms of conceptions of being heroic, or the need to challenge oneself and, rather than fail, develop strategies to overcome difficulties.

“I elected”

“I either had to tackle...or walk away...”

”But I was confident in my choice”

“I wanted to run, get out of her life because it hurt too much. I didn’t want to face it anymore. But I stayed”.

“There is a choice whether or not to tackle the wall and I guess the decision depends on how important it is to achieve the new level of expertise”

Presentation of situational status – justifies difficulties experienced/validation of self

Several stories related the environment they were entering into with reference to status, such as *‘one of the leading’*, or *‘sending its best and brightest into places where angels feared to tread’*. This is interpreted as the need to justify the difficulties experienced by that person as valid, showing the context or environment as exceptional. It could also be a need for the participant in order to understand why it was such a challenging experience and to validate them in terms of their ability, therefore ensuring it was the situation as opposed to the person leading to the difficulties experienced. This links to the above point of conceptions of being heroic, and demonstrates the type of person to immerse themselves is the type of person that chooses, or has the will, to enter or remain in a situation they recognize will be challenging.

Balance/Imbalance

Balance was a feature of many of the stories. Many participants experienced great imbalance in terms of their immersive context and other facets of their lives. Most said whilst they were immersed other areas of their life were ignored, and they did not reach understanding and control until they had reinstated a more balanced lifestyle. It would seem that any immersive situation will entail a period of the situation becoming all-consuming, but it is important for this not to be sustained for the learning to occur. This is another expression of journey in immersive experiences. The person involved needs to journey from balance to

imbalance, but to recognize the learning must continue until balance is regained. The motivation to regain balance drives the person to change or learn:

“Other parts of my life went neglected”

“sealed off from the outside world....re-emerges with a new awareness, bringing an additional layer of colour to their world view”

“But saturation...can lead to imbalances in life”

Support from others – often strangers become supporters

A central subtheme across all accounts was the role of others as offering support, guidance and in many cases a feeling that without others the participant would not have survived the experience. In some cases this was indirect support, where participants observed others, and were humbled, inspired or admired the resilience of others which led the participant to be determined to change in order to cope with the experience:

“My Uncle and Aunt were pillars of strength too. The strength, help and support I received from my family, my amazing family, was invaluable”.

“I was blown back by his positive attitude. It gave me strength.”

In other cases the supportive role of others was much more direct and explicit. Also, in many cases participants only gained objectivity and reflection, or new strategies, from engaging with other people, so support is emotional but also leads to change.

It can be assumed that the role of other people in facilitating support, reflection and change in an individual immersed in an experience is incredibly important in the individual learning from the experience:

“She also told me that when something’s wrong, you should put your energy into changing it, rather than letting it get you down”

“...and found myself greeted by a mentor”

“The only silver lining in these clouds of ambiguity was his Assistant”

“his perspective on life left me hungry”

“Mr Hawkes’ question...triggered off a change in me...the mere fact that Mr.Hawkes was willing to teach it to me was enough encouragement...it showed he believed I was capable” “...Laura also taught me the most important things I will ever learn about life. Laura was 9 years old.”

“I was able to evaluate and integrate different teachers styles to form a style of my very own”

Comparison

Comparison emerged as a theme with various subthemes.

To Others

A feature of many stories demonstrated the participants’ need to compare themselves to others. This was occasionally in a judgemental way, but in many instances this was in terms of self-deprecation:

“Who all seemed to be taking it in their stride”

“They would talk about their good relationships with their host families, and I envied them.”

“Bianca was lovely...highlighted our differences.”

In other instances, comparing themselves to how others in similar situations were coping motivated the participants to change or to persevere with the experience. This links strongly to the theme of support from others, in terms of this comparison leading to motivation to act or change demonstrates how other people were indirectly supportive, without knowing the impact they had:

"It was seeing the people around me that understood these things, who seemed much the same as me, that gave me hope"

"Observations I made...in which different teachers taught...left me with an extremely rich perspective".

To Familiar

Another subtheme of comparison that arose was the need for participants to compare the unfamiliar to the familiar. (All stories described experiences that were unfamiliar in some way and to varying degrees. It seems an immersive experience has to contain unfamiliar features that need new learning or acceptance). Participants were compelled to compare unfamiliar things, for example behaviours, customs, cultures, feelings etc, to familiar ones. It seems this comparison is necessary for someone undergoing an immersive experience, in part to help understand it, but I think more strongly in order to try to ground oneself and regain control by focussing on something familiar or trying to contextualise the unfamiliar into the familiar.

This can also be viewed in terms, again, of an expression of journey; from the familiar, to the unfamiliar, then using comparisons coming to terms with the unfamiliar until it becomes more natural:

"I could not help but compare the quality and the cost to English public transport"

"She had to learn to accept the differences between what she was working on now...and everything that had come before"

"After that, I thought, I'll never worry about a work or university presentation again"

"The experience made me appreciate how good my home country of Ireland is"

"I wanted things to be the way they were"

Loss of identity, and role change

Many participants' accounts gave rise to a feeling of loss of identity and role change. This was sometimes very apparent through use of a uniform ("*where I changed into more suitable garb*") or becoming a minority group, but also in terms of questioning oneself and beliefs, or through language barriers and going from a position of 'expert' to 'novice':

"My identity as a student was no longer prominent in defining my contribution. I was an individual working in firm"

"My poor Spanish was constantly a barrier between what I was, and what I wanted to be"

It can be assumed that this loss of identity is a feature of immersion, as it leads to the overwhelming feelings and the strong emotions. Through this loss of identity, or role change, a different identity emerges. This new identity forces learning and change, and the recognition of this identity is part of the feeling of transformation. Here is seen another journey, resulting in integration of the old roles and new roles into a more rounded person or identity:

"returning to a world where I am surrounded by the paradox of everything yet nothing being the same"

"It would be for personal reasons, for self identification"

"While I was the mental health professional with little experience, they were all experts by experience...I also learned to position myself not as the expert, but as a facilitator"

Perspective change

A strong feature of all stories was the perspective changes that occurred, often driven by strong emotions:

"I loved this piece and mastering one bar gave me so much satisfaction. I was keen and patient...always imagining the finishing result to block out the temptation of giving up when obstacles appeared"

In order to counteract the negative and to remove dissonance, participants changed perspective or re-evaluated the outlook of the situation:

"Despite the basic facilities, I came to like the Nile Beach Camp...Ignoring the stained concrete floor...I looked forward to my cold showers morning and evening"

This in some instances, also worked to re-frame things in a more negative perspective:

"When at home...he enjoyed rains...this time he perceived rains to be something afflictive, distressing and calamitous"

"somehow everyday existence replaced excitement"

This cognitive reappraisal or perspective change often gave rise to the changes in the person and the learning. It is these perspective changes that allow the person to develop richer understanding and greater cognitive strategies as a result of an immersive experience. Often this cognitive reappraisal also took the form of the focus away from what they didn't know/couldn't do, to what they had accomplished and achieved:

"So it is, I thought, and then I started to reconsider my strategy"

"I realized I had been focussing purely on what was left to do, rather than taking stock of what I had been able to accomplish"

"The immersion I had been through changed my perception...it is not something to shy away from for fear of being overwhelmed"

"fresh perspectives being considered"

"Or to put a more positive spin on it, a year of extreme challenges and opportunities"

"Learning that the Xhosa of South Africa train people who hear voices to become healers suggested there could be positive explanations and responses to experiences that seem so far removed from Westernised medical conceptualisations"

'She also told me that when something's wrong, you should put your energy into changing it, rather than letting it get you down"

Paradox – creates dissonance, and therefore a need to change

Paradox was another superordinate theme to emerge in the analysis. Some of the paradoxes are listed below, but the most notable thing to infer is that these paradoxes to arise from immersive experiences create dissonance, and therefore change and learning within the individual occurs in order to reduce this dissonance.

External v internal presentation

Many participants expressed the pressure they felt between having to present themselves positively externally whilst internally feeling negative about themselves or the situation. This also links with how participants perceived themselves internally, and through the experience had to perceive themselves differently, as those externally saw them:

“feigning control till I believed it also”

“And suddenly I am not a short man but tall...my accent isn't refined it's awkward”

“and I didn't tell them because I felt guilty that I wasn't relishing every moment”

Small difference v big challenge

Many participants, after re-evaluation and reflection, displayed the focus shift from making a big difference that was impossible due to the barriers, to a focus on making a small difference or working effectively in a small area. This shift in focus allows participants to gain control over the immersion and sustain themselves through the rest of the experience:

“I needed to stop worrying about what I was supposed to be doing, and just try to put as much of myself into what I was doing”

“you don't have to go thousands of miles away to make a difference”

Expected/unexpected

Many accounts showed the difference in what people expected compared to what the realities were:

“He did not expect such grim and unpleasant news”

“These concerns proved to be unfounded”

“To want something so much and to then realize that is nothing like you expected was painfully difficult”

This extended to the learning, the high points or the challenges, which were very unexpected. Participants often found the most valuable parts of the experience to be the parts they had not even considered previously, which participants became aware of through reflection. This displays that a nature of immersion is that the nature of the experience can only be fully fathomed following the experience:

“I was not ready for...”

“But looking back now, the most valuable things I learned were those I had not expected to”

“I discovered that I held assumptions I had not been conscious of”

Positive v negative

A sub-theme emerged of the positive compared to the negative. Parts of the experiences were either described very positively or very negatively, and this polarization is perhaps a necessary feature of an immersive experience. This strong feeling of extremes makes the experience memorable and probably is another drive for learning to occur. There was also paradox between positive and negative emotions emerging in many of the stories:

"Awash with excitement and fear"

"although I let the excitement and pride of the future achievement fill me in, a certain anxiety kept bugging me"

"I've never had so many consecutive emotional highs and lows"

Academic v 'real world'

Several participants, through the immersive experience, became aware of the tension between academic, book/classroom based learning and practice-based learning. This seemed to begin as a tension in the stories, but then developed into a combining of the two, reducing the tension and improving the person's coping abilities. All stories acknowledged that the learning that occurred because of the experience was life-long learning, that was transferable to other, unrelated situations, but that also combined things that had been previously learnt. This demonstrates the nature of learning for life and the sort of experiences that can give rise to this type of learning:

"a skill academic research could not have aided me in...the interaction between my practical learning and my theoretical knowledge of psychology began to occur"

"his suggestions were more of a bookish nature, he thought. He felt that the proffers they came up with were more practical"

"He now practically knew that theory and practice were two separate entities, but not detached from each other".

Contextual awareness

Many of the experiences demonstrated the participants achieving greater contextual awareness and comparing what they experienced to the wider context. In some instances this was in relation to the environment or culture and why it had arisen (such as history) (*"Perhaps it's the deep-seated reverence for samurai culture...or some sense of alienation after the World Wars...Whatever the social fuel..."*). For others this was the contextual awareness of their emotions, their learning or their ability to transfer skills. (*"I have most certainly adapted it to many different aspects of life"; "Learning to learn from them was crucial...I hope will serve me well throughout my career"*)

Change – leave behind, take on new, integrate:

"There were a number of changes"

All experiences saw changes in the participants. These changes were driven by a necessity in order to survive the situation. This change is an essential outcome of an immersive experience it would seem, and is part of what makes something immersive:

"I found myself etching my path in a skewed manner, still heading in the same direction, yet at a different angle entirely".

In many instances there was a feeling of uncertainty about how to integrate the 'new person' back into an old situation. Here are some of the features of the change theme:

- Adjustment/accluration/institutionalised/indoctrinated
- Creativity

- Reflection, often with others allowing space for objectivity – *“depth of patience and self-reflection that I’d never really exercised before”*
- Learning – new strategies driven by need to learn
- Need to Survive – *“do or die mentality”*; *“protective function had overridden my mind”*
- Seek information

Failure/embarrassment/humiliation

“But he had to speak, so he started with whatever expressions came to him first”
“...sometimes feeling there was no way we were going to stay afloat. But capsize we could not”.

The change and learning appears to be driven by creativity also; participants feeling as though they do not have the skills or knowledge have to be creative in the way they handle the situation, struggle through it, devise strategies to succeed in that situation and ultimately emerge out of the other side. This demonstrates the flexibility and adaptability of human nature:

“My creativity began to exert itself”
“I came to the decision that in turn for me evaluations of the students, I would ask the students to evaluate my performance...I received performance recommendations and more. The students appeared genuinely appreciative of the reciprocal offer.it created a wonderfully positive atmosphere”

Self-belief/self-reliance

The subtheme of self-belief emerged, which in most instances began as a lack of self-belief, developing, often by support from others and reflection, into a recognition of one’s ability. This demonstrates that immersive experiences can lead to independence and confidence, and again shows the sense of journey in the transformation process of an immersive experience:

“The uncertainty of ever getting through it has been replaced with determination and a trust in my ability”
“...no longer held back by the thought that my lack of work experience...would detract from my ability to make worthwhile contributions”
“You just trust that you will manage, that you will succeed, that you will achieve...in confidence”
“this gave me the confidence”
“I started feeling confident and comfortable in the classroom”

Loneliness

Most participants felt lonely at some stage of the experience:

“He felt himself cut off from the world”
“I was often lonely”
“Life felt transient, monotonous, lonely”

unexpected, and often more along the lines of social and emotional development than practical skills development. This implies these facets of a person are highly valued and perhaps are more important in terms of life-long and generalizable knowledge, than concrete, context-specific knowledge. When an emotional reaction is experienced, the experience becomes personal and therefore personally relevant and important. This is something that should therefore be considered when incorporating immersive, experiential learning into higher education, a context often regarded as purely practical, concrete knowledge based.

This social importance is also demonstrated by the need for other people in these experiences; either directly or indirectly supporting the individual. In some cases through observation, new strategies are learnt from others, in other cases the presence of others encourages individuals to re-evaluate the situation and change perspectives. The role of other people is important in providing objectivity and the ability to step-back reflect.

Participants displayed reflection and new levels of awareness after the experience, and recognized the changes and new identities they had taken on, often having to integrate their 'old self' with their 'new self' when returning to a previously familiar situation.

Overall, the themes and subthemes demonstrate a personal journey that leads to the transformation of the person through the immersive experience. Often the person has chosen to enter this situation, or at least elects to remain in it, to learn to cope and survive it, and possibly master it and transform themselves to become the person who has dealt with this set of circumstances. This evidence of will and choice suggests it is a certain type of person that is open to immersive experience and this is also something to consider if aiming to incorporate this type of learning into higher education.

Figure 3 A personal journey of transformation (Drawing by Patrick Saunders)



All the accounts written by students show how they emerge from this journey of transformation as richer, more rounded individuals, all recognizing the impact the experience had not only on them at that particular moment in time, but how the experience will impact on the rest of their lives.

Recognizing and valuing learning gained through immersive experience

The strength of the life-wide learning concept is that it can embrace the sorts of transformative learning and change that are recorded in the stories students submitted for the competition. While it would not be ethical for a university to create situations in which a student was stressed and challenged in such a profound way, students themselves, by their own choice, enter into such experiences whether voluntarily or by the circumstances they find themselves in. It would not be unethical for a university to recognize the personal learning gained through such an experience. By having the means to recognize such learning, through a reflective story telling process for example, the University would be valuing forms of learning that actually shape a person and determine who they are. It would honour an individual's process of becoming.

Hall (2010) explores the idea of a curriculum for resilience and argues that a life-wide curriculum offers more possibility of helping learners recognize and develop their agency to be resilient in a disruptive world. Immersive situations are sites of profound personal disruption in which individuals find themselves in unfamiliar situations without the knowledge, skill, experience to deal with it. A curriculum for resilience must incorporate opportunity for immersive uncontrolled experiences.

Reflective note

I found this analysis of very personal stories an immersive experience in itself and I feel very privileged to have had the opportunity to read these accounts. The richness, personal nature and emotions evident in the accounts made this an incredibly immersive experience for me, and the volume and depth of the data meant I had to submerge myself in it. Reading these accounts, some of which I have had very similar experiences to, made me think differently about things that have happened to me, or helped me to reflect on events I had not previously realized as giving me so much learning. It was interesting to read similar situations to things I have experienced and compare differences and similarities to how I experienced those events. I found the process exhausting and uncomfortable at times, as it forced me to think about myself and some accounts were personalised to me. Through this process of analysis I have reflected on various things and experiences I have had, and have learnt things and developed new perspectives. At times I found it very difficult to continue and had to step back from it for a while, and then return at another time. It has been an incredibly valuable process for me and one I have really enjoyed.

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Immersive Experience Wiki

<http://immersiveexperience.pbworks.com/>

Assessing performance and capability in the work place: Focusing on essential skills and knowledge in student work placements

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Summary

The determination of performance standards and assessment practices in regard to student work placements is an essential and important task. Inappropriate, inadequate, or excessively complex assessment tasks can influence levels of student engagement and the quality of learning outcomes. Critical to determining appropriate standards and assessment tasks is an understanding and knowledge of key elements of the learning environment and the extent to which opportunities are provided for students to engage in critical reflection and judgement of their own performance in the contexts of the work environment. This paper focuses on the development of essential skills and knowledge (capabilities) that provide evidence of learning in work placements by describing an approach taken in the science and technology disciplines. Assessment matrices are presented to illustrate a method of assessment for use within the context of the learning environment centred on work placements in science and technology. This study contributes to the debate on the meaning of professional capability, performance standards and assessment practices in work placement programs by providing evidence of an approach that can be adapted by other programs to achieve similar benefits. The approach may also be valuable to other learning contexts where capability and performance are being judged in situations that are outside a controlled teaching and learning environment i.e. in other life-wide learning contexts.

Background

The Australian Learning and Teaching Council (ALTC) is currently focused on developing discipline standards in the lead up to a new regulatory environment in higher education and the introduction of a Tertiary Education Quality Standards (ATEQS) framework. This important move and the implications it has for assessment practices in particular in work-based learning is timely. In order to achieve improved learning outcomes, assessment practices and standards must align with the learning opportunities offered. Constructivist learning theory emphasises the need for an alignment between the objectives of a learning environment and the assessment of student performance. That is, constructive alignment represents a “framework to guide decision-making [...], in deriving curriculum objectives in terms of performances that represent a suitably high cognitive level” and how to best assess student performance. The learning objectives are used to “systematically align the teaching methods and the assessment” (Biggs 1996, p347).

Aligning learning objectives and assessing student performance in work placements is not easy but it is essential that appropriate performance standards, measuring the capabilities and assessment practices, are established in the context of this unique learning environment. Work placements are an integral part of a real world and life-wide curriculum (Jackson, 2008) that have the potential to enhance students' employability skills and professional development. Preparing future practitioners requires a focus on active learning and includes the development of critical thinking and problem-solving skills. It also requires education institutions to strategically respond to changing and emerging student, industry, and market requirements and the factors that drive student learning, satisfaction, and persistence.

Failure to recognise broad and deep pathways for student academic success when engaged in work placements will impede attainment of desired learning outcomes and aspirations. In order for students to

develop their full potential they must be afforded (Billett, 2009) a range of opportunities through appropriate curricula and learning experiences. This paper considers the context for assessment matrices used to enhance and validate workplace learning specific to the science and technology disciplines. The discussion provides a systematic review of the appropriateness of existing performance standards and assessment practices in regard to workplace learning in the disciplines of science and technology. Feedback was obtained from 800 participants in industries around South-East Queensland and higher education institutions involved in an existing work placement program. This workplace program, namely Co-operative Education for Enterprise Development (CEED), is managed by the private company Corporation Technologies Pty Ltd. More details about this program are available on the web (www.corptech.com.au) and in publications by Sahama, Yarlagadda, Oloyede, and Willett. (2008) and Sahama, Oloyede, and Yarlagadda, (2006) respectively. Approximately 10 years worth of data including student feedback from three different universities and formal and informal industry partner feedback indicates that inappropriate, inadequate, or excessively complex performance standards and assessment practices continue to influence the quality and prospects of learning outcomes. A new approach is proposed, informed by feedback from stakeholders, with standards and methods of assessment based on key elements of a learning-centred environment.

Complex and ontological learning environments

Rapid changes in technology and in national and world economies have increased demands on employees to become knowledgeable workers and problem solvers, keeping pace with relentless market change (NIST, 2006). These changes demand a task driven approach and tangible outcomes by professionals who are able to apply effective techniques and tools to these tasks. Effectively managing these changes requires partnerships between academia and industry. A partnership based on a shared understanding of, not only curriculum content, but also the context of teaching and knowledge of the measures and quality of skills, is required to meet industry requirements. This complex, ontological rate of change is forcing all stakeholders to re-visit and re-evaluate the types of knowledge, skills, abilities and traits previously accepted, and in particular, to understand the nature of those attributes which are required for the workforce of today and into the future.

Sustainable partnerships between academia, industry and learning communities are key to preparing students adequately for work placements; for identifying required skill sets; and for exchanging knowledge between stakeholders of ever growing innovations in science and technology (Sahama, et al., 2008). This partnership requires shared responsibility and consistent reflective practice that leads to innovation in curriculum design, pedagogy and assessment (Lambert, 2002). Eraut (2009, p 1) notes that:

practical work in science, engineering and vocational education involves learning knowledge that has been shown to work, but cannot be fully described in a book; and cultural knowledge that has not been codified, plays a key role in most work-based practices and activities. — Figure 1 illustrates higher order interactions between individuals, team and organisational levels which are a systematic collection of key aspects when capabilities are being measured.

In contrast to traditional classroom teaching environments, workplace learning opens up options for students to *voice their intention* regarding the practices they are about to undertake. A well managed work placement program is the precursor to producing work ready graduates and bridging skills shortages in most industries, more specifically in science and technology disciplines (Sahama et al, 2008). Work placement experiences have the potential to enhance graduate capabilities and improve graduate employability (Blackwell et al. 2000, Patrick et al. 2009). These opportunities generate a *voice of design* for students (where students are going through several iterations of experiences in the work place environment prior to formal learning, Figure 1) who are experimenting with different learning environments. Successful work placements require shared

responsibility and accountability on the part of all stakeholders who agree that outcomes include positive experiences and tangible deliverables. This involves balancing the *voice of experience* with the *voice of intent* and *voice of design* described below. Figure 2 depicts a balanced learning model that integrates the key attributes of the *voice of intent*, *voice of design* and *voice of experience* and activities associated with a learning-centred environment. It illustrates the workflow from a student-centred learning environment to a learning-centred environment (e.g. work place).

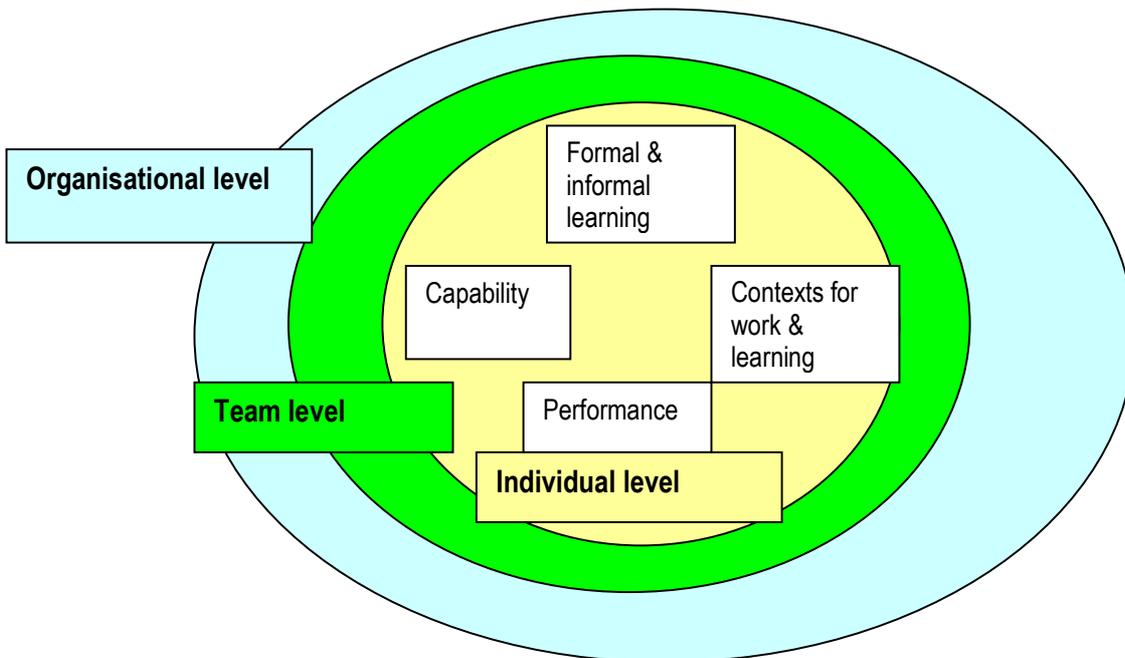


Figure 1 Key aspects of workplace learning [Source: Eraut 2009, p 3]

In comparison Figure 1, which depicts the key aspects of a workplace learning model, describes the knowledge and learning of teams and organisations as well as that of individuals. Eraut (2009) showed that knowledge and learning can both be examined by individual activities and social implications. Furthermore, Eraut (2009, p 1) points out that individual perspectives on knowledge and learning enable us to explore both differences in what and how people learn, and differences in how they interpret what they learn. This is a concept analogous to the particle and wave theories of light where the learning is driven by social construction of knowledge and cultural practices and products that provide knowledge resources for learning (Eraut, 2009). This is practically captured in our learning model depicted in Figure 2.

This learning model illustrates activities associated with the learning-centred environment and includes the workflow from a student-centred learning environment to a learning-centred environment (e.g. workplace). Furthermore, the model in Figure 1 represents a higher level of learning experiences, compared with that illustrated in Figure 2. This is a significant phenomenon to understand because higher order interactions between these two models are aiming for the same goals i.e: reflective practices as a measure of capabilities.

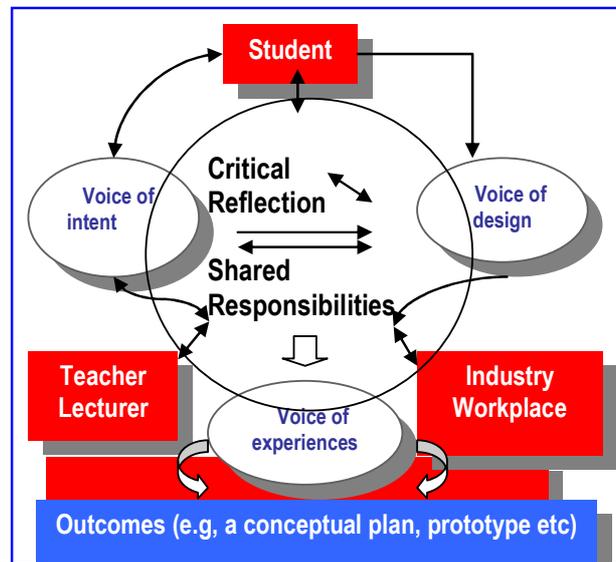


Figure 2: From student-centred to learning-centred work place learning

This model is integrated with the key attributes introduced above, regarding the *voice of intent* (students as learners are subjected to several iterations of exposures and stages namely on their intention), *voice of design* (understanding the work place ethos and the learning environment opposed to the class room) and *voice of experience* (goals and expected outcomes of the parties involved i.e industry, the University and students themselves). In comparison, the key aspects of the workplace learning model in Figure 1 describes the knowledge and learning of teams and organisations as well as that of individuals. There is a significant overlap between the models - both promote team and individual approaches to learning that encourage students to reflect on their personal knowledge and capabilities; and interpret and understand the ideas implicit in their actions and reactions. This is particularly important in science and technology workplaces where outcomes are task-driven yielding products and/or processes and focussed on measuring capabilities and competencies. The next section considers desired capabilities and competencies in science and technology disciplines; Cooperative Learning Design (CLD) as a way of encouraging team work; and the importance of reflective practice in supporting learning

Developing essential skills and knowledge in science and technology

Johnson et al (1991) and Cohen (1994) highlight the capabilities and competencies that provide a positive interdependence and individual accountability in a student-centred learning environment. These capabilities and competencies include:

- learning to learn (*learning to work and working to learn*)
- interpersonal skills (e.g. listening, working with others, writing, articulation, and critical reflection)
- communication (reporting, debriefing, defining expectation and presentation)
- personal management (intention and reflection),
- adaptability (defined expectation, transition from the classroom to work bench)
- group (team) effectiveness (informal learning)
- teamwork (working in groups)

- understanding the influence of work culture and the culture of working (informal learning)

According to Johnson, Johnson and Stanne (2000) these capabilities and competencies usually include tasks structured to accommodate positive interdependence, individual accountability, the use of socially acceptable communication skills, face to face interaction, and processing of group skills within teams of learners. For graduates to thrive, not just survive, in the turbulent science and technology industry it is essential that they develop the skill sets required. This requires a learner-centred approach implemented in collaboration with academia and industry. Table 1 represents what is expected by the different stakeholders (e.g., Individuals, Teams and Organisations) on the learning outcomes and skill development in a learning-centred design. Based on the improved learning environment (Figure 2) over the last decade it is a positive establishment that such learning-centred design was accepted by industries and academia. The industry and student synergistically shared such responsibilities in order to meet expected outcomes of the set goals. This proved such model is sustainable and a workable solution. This is a situation where all the parties achieved a win-win-win situation by balancing the outcome to be delivered on time with a practicable learning model for the science and technology discipline. This scenario was captured in Figure 2 for further illustrations with a brief workflow. In this scenario, students as learners undergo several iterations of exposures and stages, namely their intention (voice of intent), understanding the work place ethos and the learning environment (voice of design) and goals and expected outcomes of the parties involved (voice of experiences). These are the stages that the transitions of students as a learner should experience from individual levels to team and organisational levels (overlap between Figure 1 and 2 respectively) to facilitate desired outcomes.

	Voice of Intent	Voice of Design	Voice of Experience	Shared responsibility	Outcome/Deliverables ¹
Team/Individual/Organisation	✓	✓	✓	✓	✓✓
Workplace Culture	✓	✓	✓		✓✓
Mandatory/Optional		✓	✓	✓	✓✓
Shared responsibility			✓		✓✓
Time Management	✓	✓	✓	✓	✓✓
Critical Thinking		✓	✓	✓	✓✓
Communication	✓	✓	✓	✓	✓✓
Presentation	✓	✓	✓	✓	✓✓
Critical Reflection		✓	✓	✓	✓✓
Reporting		✓	✓	✓	✓✓
Supervision			✓	✓	✓✓
Mentoring		✓	✓	✓	✓✓
Accreditation			✓	✓	✓✓
Employability	✓	✓	✓	✓	✓✓

Table 1: Correlation between learning expectations in a learning-centred design

¹In the Science and Technology discipline work placement outcomes are comprised of conceptual plans, and product or prototype development hence the term outcomes and deliverables is used interchangeably.

Working in teams is identified as an important way to develop appropriate and timely capabilities and competencies in the science and technology disciplines. Cooperative Learning Design (CLD) is one approach used to supporting students. CLD has been defined as: *students working together in a group small enough that everyone can participate on a collective task that has been clearly assigned. Moreover, students are expected to carry out their task without direct and immediate supervision of the instructor* (Cohen, 1994, p 3).

CLD is characterised by procedures such as communicating a common goal to group members, offering rewards to participants for accomplishing their group's goal, assigning roles to individuals within each group, and holding group members accountable for their individual performance (Springer, Stanne, & Donovan,

1999). A number of studies report on the success of CLD compared to other forms of instruction including increased student self-esteem (less dependent and more responsible), improved interpersonal relationships, and better academic results (Johnson et al 1991; Ryan et al 2000; Slavin, 1983). A meta-analysis of studies done with undergraduate students in science, mathematics, engineering, and allied health technology showed that students who learned in groups demonstrated greater achievement than students who were exposed to instruction without group learning (Springer, Stanne, & Donovan, 1999). Rossetti and Nembhard (1998) conclude that the use of CLD in the class room improves thinking and problem-solving skills and makes students academically stronger through interaction and communication involving the process of academic inquiry. They claim that the ability to actively identify, formulate, and solve problems essential to a successful career (engineering) has been met through CLD. A more recent study on using CLD in computer science courses indicates students who participate in CLD performed substantially better on the final examination than those who did not engage with CLD (Beck et al 2005).

Critical reflection is the process of analysing, reconsidering and questioning experiences within a broad context. It involves the unearthing of deeper assumptions and identifying previously unquestioned cultural norms (Fook and Askeland , 2007; Mezirow, 2000). Reflection in and on action is an integral part of experimentation, and in learning-centred work, placements should capture both individual and organisational level reflection on the learning experiences. In the workflow model depicted in Figure 2 critical reflection is embedded with voice of intent, voice of design, and voice of experience. That is, it is a shared responsibility and should be measured against expected outcomes on the basis of what is taught and the knowledge gained by individuals and/or team levels under a given set of protocols, procedures and processes as part of a learner-centered learning environment. Table 2 maps the correlation between capabilities in a life-wide learning scenario with the attributes of a learning-centered environment. This learning environment is what Eraut (2009, p14) described as “*is considerable debate about the extent to which such knowledge can be made explicit or represented in textual form; but the evidence suggests that its amenability to codification has been greatly exaggerated (Eraut 2000)*”.

Benefits and expected outcomes	Purpose and Expectations ²		
	Students	Industry	University
Objectives	60	56	78
Expectation	89	65	90
Intention	50	67	78
Learning needs	76	54	75
Learning experiences	55	45	65
Factors effecting	77	45	54
Economic benefit	90	56	67
Professional benefits	90	45	78
Academic benefits	89	56	90
Social benefit	45	78	89
Performances/Progress	56	71	90
Improvement	72	89	90
Positive Experiences	34	56	90
Negative Experiences	78	45	23
Learning Support	90	56	70
Life experiences	95	75	76
Feedback	100	75	80

Table 2: Purpose and expectations of social construction of knowledge and of contexts of the learner involved (67% of industry placement components included in the sample (n=56) selected. Values in the columns are percentages of qualitative ranking of the standardised and moderated responses).

The results indicate the attributes generated in Tables 1 and 2 respectively could be augmented and established an assessment matrix which should be a trajectory to measure the outcomes.

Assessment matrix

To achieve the goals of work place learning experiences, constructive alignment between instruction, learning and assessment is necessary, yet evaluating the outcomes of workplace learning remains a challenge. This is partly because the learning-centred context is not adequately understood. There are significant environmental variables to consider when developing assessment matrices and assessment standards for work place learning. For example, seven categories of work placements based on requirements including overall purpose, professional accreditation requirements, and levels of assessment are identified in Table 3.

Categories	Requirements and purpose	Type of the training	Level of assessment
Cat-1	mandatory for professional accreditation	work placement (not classroom type project)	required
Cat-2	mandatory only part of the course	work placement or classroom type project	required
Cat-3	mandatory only part of the course	classroom type projects	required
Cat-4	mandatory only part of the course	classroom type projects	required but varies
Cat-5	elective or optional for professional accreditation	work placement (not classroom type project)	required
Cat-6	elective or optional part of the course	work placement or classroom type project	required
Cat-7	elective or optional part of the course	classroom type project	required but varies

Table 3: Categories (Cat-1 ~ Cat-7) of work placements based on requirements, type and level of assessment

These categories help define the purpose of the work placement and the level of assessment required. The categories are used in the assessment matrix (Table 4) to illustrate essential elements required for effective assessment practices in learning-centred work placement programs. The matrices are based on the student learning journey depicted in Figures 1 and 2 respectively. In addition, the categories are mapped into the matrices in order to establish a meaningful and measurable outcome by including weighted degrees of importance (this is represented using plus signs (+) and tick (✓) marks). More +s and ✓s are better for quality outcome which categorised with some constraints. In this approach the context of the learning environment is defined, and engagement of learning and teaching communities centred on work placements are identified with CLD and critical reflection identified as significant approaches in achieving quality outcomes through work placement programs. Table 4 establishes the process of the learning, assessment method and feedback mechanism by mapping the categories described in Table 3. More plus signs (+) indicate the degree of the importance and their utilisation while more tick (✓) marks demonstrate the requirements of the elements for evaluation and assessment purposes. This is the building block of the proposed assessment matrices which can be adapted for other disciplines.

The proposed assessment matrix (Table 4) illustrates an approach to assessment for use within the context of the learning-centred work placements in science and technology but could be adapted by other disciplines to achieve similar benefits. The degrees of importance and their usability are presented in plus signs (+) and tick

(✓) marks where it is useful when the assessment method is designed for a given industry placement at the time.

	Cat-1	Cat-2	Cat-3	Cat-4	Cat-5	Cat-6	Cat-7
Induction & Preparatory Processes							
Group tutorials	+	++	+	+	++	+	+
Individual counselling	+	++					
Interview with workplace supervisor	+			++		++	
Material embedded in curriculum (preceding units)	+	+	+	+	+	++	++
Assessment methods							
Attendance	✓	✓	✓	✓	✓	✓	✓
Reflective journal		✓		✓		✓	✓
Criterion list supplied by university		✓		✓		✓	
Project marked by university	✓		✓		✓		
Project marked by workplace	✓		✓		✓		
Oral seminar	✓		✓	✓	✓		
Debrief – individual, group, class		✓		✓			
Feedback methods (mechanisms)							
Survey of students	✓	✓	✓	✓	✓	✓	✓
Debrief – individual, group, class	✓	✓	✓	✓	✓	✓	✓
Interactive bulletin board		✓		✓		✓	✓
Response to journal entries		✓		✓		✓	✓
Inclusion of workplace issues in following/other units		✓		✓		✓	✓
Formative feedback and critical evaluation	✓	✓✓	✓✓	✓✓	✓	✓✓	✓

Table 4 Assessment matrix for learning-centred work-placements

Conclusion

The matrix contributes to the debate on performance standards and assessment practices in work placement programs by providing evidence of an approach that takes into account the *voice of intent*, *voice of design* and *voice of experience* which play a key role in work place learning. This culture requires support and encouragement. Attributes from Tables 1 and 2 establish the basis for categories of workplace requirements. There could also have been differing teaching styles between the two models (Figures 1 and 2), however the learning experiences from those models warrants that the categories of work placements based on requirements, type and level of assessment (Table 3) selected were aligning the purpose of feedback and assessments of the industry based learning. The matrix produced was a conceptual development of the last decade's feedback from both industries and students hence an enhanced practical experiment on a selected discipline would be useful. In order to implement the proposed assessment matrix for learning-centred work-placements it is advisable to utilise a statistical experiment design approach for validation and sensitivity analysis. This is a challenge that requires the academic community to collaborate widely. This learning environment presents a solid and sustainable partnership of the students, industry, and academia, that has been established by Sahama et al's., (2010) earlier study. However further experimentation of the use of the concept would be useful to support other higher education disciplines and their standards.

Acknowledgment

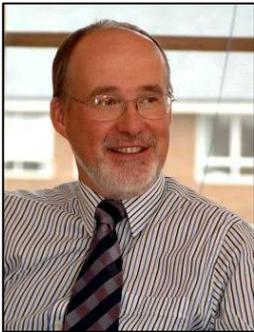
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Life-wide learning and a more complete education: an employer's perspective

Graham Nicholson, Executive Managing Director of Tony Gee and Partners LLP



Graham Nicholson is the Executive Managing Director of Tony Gee and Partners and is Chairman of the Executive Board responsible for the strategic development and growth of the business. Although a large proportion of his time is spent managing Tony Gee and Partners he remains closely associated with the technical side of the business.

Graham has been responsible for the detailed design of a variety of bridge and other structures in the UK and South East Asia and despite his current responsibilities for the development of Tony Gee and Partners he keeps a “hands on” approach to design. He started his career working for a contractor and quickly realised the need for better design. At Tony Gee and Partners he has assisted contractors with their temporary works requirements to build bridges designed by others. He has been responsible for the design in the UK of the Dornoch Firth Bridge, Ceiriog Viaduct, A20 Roundhill Viaducts and in Hong Kong many of the bridges comprising Rambler Channel Route 9 together with many Airport Rail Link viaducts. Other designs of note include Waterloo International Terminal and the foundation and river protection works for the London Eye. He is a currently Vice Chairman and Treasurer of ACE (Association for Consultancy and Engineering) and is a member of the ACE Board.

Introduction

In this short paper I set out how important the evaluation of life wide learning is to our business when recruiting and in particular how we recruit new graduates. Recruiting is a time consuming and expensive activity for employers and therefore we need to ensure that we go about the task in an efficient and effective way. The success of our business is dependent on having people with the right skills, competencies and attitudes.

Tony Gee and Partners LLP is a civil structural engineering consultancy practice employing over 200 permanent staff. We provide technical design services to the construction industry worldwide. Our clients include major contracting organisations, government agencies and private companies.

Our value is primarily in our people and as such they are the central focus for our business. We invest in developing their skills throughout their employment such that we can provide our clients with the support they need to meet their own requirements. We also expect our employees to take responsibility for and manage their own development as a professional so any habits of self- development developed at university, are of benefit to the individual when they join our company. We link our under graduate and Graduate training to professional Institutions ensuring they have the widest possible knowledge bank in order to achieve their development goals.

For over 15 years we have invested in sponsoring students through their university degree. Despite the recent difficult economic climate we are continuing to invest. Currently, we have over 35 students being sponsored at a number of UK universities. As part of the agreement with the student they receive financial

support from us, but also importantly we employ them in our business during their summer vacation for a minimum of eight weeks. The majority also spend a full year on placement with us usually in the third year of their degree course.

This method of student development is not particularly new, (sandwich degree courses have been on offer for decades and summer internships are also popular) however what has changed is the expectations of employers as to the competencies that graduates will possess on entering employment. Employers expect graduates to be technically trained but that alone is not sufficient in a world where technical and business practices change at an alarming rate. Therefore employers are looking for people who can work collaboratively in a team and who can not only adapt to changing conditions but who positively manage and can drive change for the benefit of the employer. To do this people need to be aware of and recognise what they need to know and know how to go about finding out what they need to know. They need to be aware of and learn new techniques, including new technical skills, new legislation and revised best business practice. They may also need to unlearn things that are no longer appropriate. Overall, we need people who are prepared to learn and who know how to learn in order to add value to the companies capacity to solve the problems and challenges we encounter.

As a consequence of our changing working practices we are motivated to employ staff who can demonstrate an ability to manage themselves and the people around them. The skills learned whilst at university have traditionally focussed on the technical side. These are vitally important and as an employer we want to see the core modules of the degree courses continue to focus on ensuring students understand fundamental engineering principles. However, we also look for students who can demonstrate more than just technical competence who are willing to continue to learn to add value to our business.

How does an employer decide which graduate to employ?

So, taking technical competence as a given, how does an employer decide which graduate to employ? Traditionally the choice may have been made based on academic results and some form of interview process. Larger companies may have a series of interviews, or for the SME's (Small Medium Enterprises) a one or two hour interview with a student may be the norm. Information contained within *Curriculum Vitae* is limited and the employer has little to evaluate. The CV may contain a summary of interests but until the interview there is little to differentiate one student from another. Our approach of developing relationships with universities has enabled us to see the students early in their development and to influence both the university and the student in how that student develops. We involve them (both the university and the student), through placement work in the business so that they can see how important it is to be able to work with other people in a pressured business environment. The student needs to be able to motivate themselves, at times they need to lead and manage others, and they need to be able to interpret and make good decisions about what is being required of them by the business and its managers. These attributes are difficult to fully define and different employers will have different requirements. We encourage the universities to help develop students for this difficult transition from the academic learning environment to that of being employed and we would see encouragement being given to students to see their whole lives as opportunities for personal and professional development as being useful.

What we are finding is that the students who succeed in our business are those that have more than just the technical skills. As an organisation we have a reputation within our industry for innovation. We have recently been quoted in *New Civil Engineer* as "*technical maestros who can sort out any complex construction challenge*". The process of solving challenges requires people with the ability to think differently about the problem and then persuade others that the different solution really will work. The element of persuading others is often the most difficult part of the process. We look for people who have ideas, who can demonstrate that the concepts can work, and who can articulate and convince others that

the solutions are the right ones. That is not to say that every solution has to be innovative and indeed must not be as clients are looking for pragmatic approaches to their problems. Students who have been actively involved in clubs and societies and who have taken a leadership role are in a stronger position to demonstrate to us that they have the abilities to persuade others to take a particular course of action but it is only in real work situations that we can judge whether someone has these attributes.



I've described above the technical skills and innovative thinking and behaviours that are important for our business. The other important aspect to successful employment relates to attitude. This is perhaps the hardest attribute of a student to describe. Different employers will be looking for different things. Most employers, however, will be seeking committed and hard working members of their teams with the ability to work successfully with others. These qualities can be demonstrated by students during their undergraduate studies and during their placements. They are often manifest in their life-wide learning. Examples may be where students have been heavily involved in student societies, university sports clubs and involvement in charity or fundraising work. An employer will see such activities as an important demonstration that a student has developed attributes which will benefit the employer's business. Most employers will be looking for staff with ambition to succeed and progress their careers. However, care must be taken to not over emphasise ambition as such a key quality must be linked to ability and a willingness to gain the necessary experience and personal development to achieve goals.

A further point that employers must consider during the recruitment process is whether an individual has the ability to develop. In our experience this can be one of the hardest elements to assess. A person's requirements can change as their circumstances change around them and whilst some graduates start out fiercely ambitious the experience of taking responsibility and the total commitment required sometimes reduces their competitive desire. The opposite is also true where some people start out with little ambition but then realise the opportunities that lie in front of them and they then progress to a high level in an organisation. The point here is that, as employers, we must continually reassess each person's aims and ambitions. The principal also applies to students during their studies where some do better academically and others are best at the "softer" skills. The way a person has tried to develop themselves and prepare themselves for their future careers while they have been at university, can provide important clues to what sort of employee he or she will be. So anything a university can do to encourage students to take responsibility for developing themselves by recognising their commitment to self-development will be of benefit to both students and employers. We also value the ability and willingness of individuals to reflect critically on their own performance in order to learn from things that have not gone as well as expected. This self-critical attitude is a strong motivational force and a valuable resource for learning that is very important to future success. Universities can do much to lay the foundations of good habits of reflection.

Whatever the student's abilities there is a need to encourage learning of new and varied skills at all levels, and in all contexts and situations. The idea of a more complete education that is being explored in this conference, in which students themselves are actively involved in making their own education more complete, and universities recognise and value this through awards that are additional to their subject degree, seems to be highly relevant for a modern world. In a world where the pace of change is ever increasing, employers are looking for people who can demonstrate that they can cope with and manage successfully change for the benefit of their business. Encouraging students to show how they have been involved in change in different aspects of their lives while they are studying at university can only be of value to them when they try to demonstrate their qualities to a future employer.

As a company do we embrace the idea of life-wide learning ourselves?



As a business we embrace the concept of continuous learning to help our team to develop not just their business, technical and “soft” skills but also to engage in activities over and above their day to day roles. We have internal systems for continuous development and an open culture allowing the sharing of ideas not just on the vital technical aspects of our business but also for individual development. All at Tony Gee are encouraged to participate in charitable activities for our chosen charity RedR which assists in the rebuilding of communities and infrastructure in times of disaster and conflict. We undertake a variety of activities ranging from quiz nights, and sponsored mufti days to

major fundraising events such as the Three Peaks Challenge.

We also support wholeheartedly the Engineers without Borders programme allowing time for graduates to develop their cultural knowledge and make a difference in countries where they really need the help. Most recently one of our graduates spent six months in Northern Ecuador working on two projects; the first to supply clean water to isolated rural communities where there is a high infant mortality rate and the second on a school building project.



Apart from the obvious sense of achievement attached to charitable work the value in reiterating moral and social responsibility is palpable.

Conclusion

In an increasingly competitive recruitment market, employers will always look for more. The perspectives I have shared show that it is not enough to be well qualified technically. Beyond the degree, we are looking for all sorts of qualities, behaviours and attitudes that defy simple competency-based assessment. They are much more to do with how people combine their abilities and knowledge to react to complex situations or to create a new opportunity from a situation that no one else could see. Such things are not easy to demonstrate through formal education – the conditions and tasks for assessment often do not permit this. But a person’s wider life contains many opportunities for demonstrating who they really are and how they contribute in situations where the only motivation is their own. That is why we really value the idea of life-wide learning.



INSTITUTIONAL AWARD SCHEMES

University of Derby Award Programme – recognising students' extracurricular experiences and employer engagement

Asia Alder, Career Development Centre, University of Derby

Introduction

Increasingly employers are demanding more than just a degree from their employees, even for first graduate positions. With this in mind, the Career Development Centre at the University of Derby developed the University of Derby Award Programme (for Employability, Leadership and Management). The Award supports and promotes to students the value of extracurricular activities and helps them to maximise the opportunity these activities provide in developing the employability skills sought by employers. The Award recognises the activities students engage in outside of the formal curriculum.

The aims of the Award are to encourage and support students to:

- Engage in activities that enhance employability, leadership and management
- Raise awareness of wider employment opportunities and career choices
- Identify and articulate achievements, skills and personal attributes gained through experience outside the formal curriculum
- Recognise the contribution students can make to the local community and the wider society through employment and active citizenship

The Award is extracurricular and does not carry any credits. During developmental stages it became apparent that in order to keep the Award distinct from the formal curriculum appropriate language, distinguishing the Award, needed to be developed. This also helped avoid the potential student perception that the Award was yet another module for them to undertake.

Initially the Award began every November and finished in May. As the Award grew in popularity a second cohort was introduced to start in March 2010 and finishing in January 2011. Both cohorts graduate at the Awards Ceremony in May. Students have the possibility of extending the time to suit their circumstances, although they are encouraged to finish within one year. Each cohort recruits over fifty students. The recruitment of over fifty students twice a year is very labour intensive. Hence, for easier management registration to the Award is open throughout the year and students can apply at any time. This helps spread out the recruitment process outside of the two enrolment dates (November/ March). The Award finishes in May when students receive certificates during the Career Development Centre's Awards Ceremony attended by project providers, mentors and family members.

Taking part in the Award involves students undertaking a leadership and management project of a minimum of seventy hours, attending a series of workshops based around the key themes of the Award (leadership, management and employability), attending a careers guidance session with a careers adviser, meeting with a mentor and providing evidence: a reflective portfolio and a presentation to a panel of employers.

To achieve the Derby Award students need to fulfil the Award's assessment criteria which include writing a reflective portfolio and presenting their experiences to a panel of employers. The evidence was created to give students an opportunity to practice graduate skills sought by employers such as writing business reports and making presentations. The portfolio takes form of a business report and includes information on the students' leadership and management experiences within their project, their career choices and opportunities and reflections on their future personal development. The presentation is based on the

leadership and management aspect of the project. The aim of the presentation is to give students an opportunity to present to a panel of employers, as it is likely to be the case when they apply for graduate roles, and gain feedback on their presentations skills.

Mentors

Each Derby Award student is allocated a mentor. Mentors do not teach leadership and management, but guide and support students towards meeting the evidence outcomes and criteria of the Derby Award. Students are guided and supported through their project and also in the development of the evidence portfolio and presentation. Currently mentors are University of Derby staff members – Careers Advisers and other members of support services in the University. The role of a mentor is voluntary. Some members of staff choose to become mentors as an opportunity to further advance their own professional skills.

The ILM

The Derby Award is a Programme endorsed by the Institute of Leadership and Management (ILM). This means that the Award was designed by the University and endorsed by the ILM and is not one of the ILM provided qualifications. Upon registration with the Institute Derby Award students receive ILM student membership for one year, giving them access to password protected resources and other benefits. This includes access to books through the ILM online library catalogue and loan system, use of free e-books and e-journals service which contains titles on leadership, learning, negotiation and access to the latest leadership and management insights and analysis through Edge online, ILM's exclusive e-magazine and Newsroom. The ILM was chosen because it was felt that an external endorsement would add value to the Award, but also because the ILM is the largest qualification awarding and professional membership body in Europe for management and leadership vocational qualifications.

The cost of individual student registration is £65. To date the university has provided fully sponsored places for all students. As the number of students undertaking the Award grows more sustainable ways of financing the ILM registration are being considered. Although certain university departments and possibly external sponsors may wish to continue funding students' registration with the ILM not all student places will be funded in the future. This leaves students an option to pay for their own registration with the ILM at a cost of £65 or undertaking the Award for free without the ILM endorsement/ certificate.

Student engagement

Student interest in the Award has been growing since the initial recruitment in November 2007. Since the first cohort of students completed the Award the word of mouth has been a very powerful tool in recruitment of new students. As the Award has never had any criticism from students or any dissatisfied participants students share their positive experiences with their friends who also wish to apply for the Award. Other forms of promotion, such as direct email, talks during lectures and subject specific recruitment days and Freshers' Fair, have also been successful in recruiting students to the Award. With time the Award becomes recognised by students as a valuable addition to their studies. In 2009 the Derby Award was included in a new University wide initiative SkillBuilder, which identifies a range of activities available to students at the University which can enhance their employability skills and experiences (www.derby.ac.uk/skillbuilder).

The popularity of the Award is linked to the ongoing work by the Career Development Centre staff and other University departments in raising awareness of employability skills and demands of the graduate employers. Students are encouraged to use their time at the University to build their skills and gain valuable experience

required by employers. The Award appeals to students who already engage in extracurricular activities, which the Award recognises, and helps students articulate skills and attributes gained through those activities. It also appeals to students who do not take part in any activities as it gives them an opportunity to do so.

The Award is very popular with international and EU students who make up a quarter to a third of all students registered in each cohort. Those students tell us that the Award gives them an opportunity to gain experience and learn to understand the British system of employment. Non home students also use the Award to improve their English language skills.

In 2008 the International Centre for Guidance Studies (iCeGS) at the University of Derby undertook research on the first cohort of the Derby Award students (Hutchinson and Dyke, 2008). The results are summarised in Figure 1. Hutchinson and Dyke (2008) stated that the majority of students said that they chose to take part in the Award to increase their ability to articulate achievements, skills and personal attributes gained outside of the formal curriculum. This finding was of particular interest as according to some authors, such as Leggott & Stapleford (2004), students are often unaware of their own skills, which is a significant weakness when it comes to self promotion and career management. Other two reasons students registered for the Award were to engage in activities that enhance employability, leadership and management and to raise awareness of wider employment opportunities and career choices.

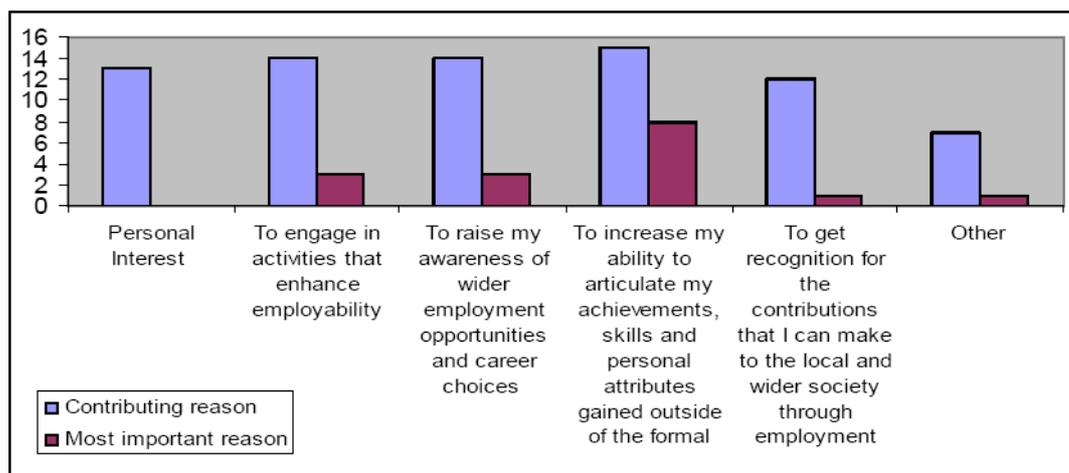


Figure 1 Reasons students engage in the Derby Award

The research compared the experience of leadership, management and employability awareness between students who did and did not engage in the Award. The three main findings were that 1) Students who had taken part in the Award had a greater understanding of commercial awareness and were more readily able to articulate practical examples 2) Confidence levels were noted by students taking part in the Award as being raised through their participation 3) For students who had not taken part in the Award, their perceptions of the PDP process involved in their degree programme was that it was good, however, students who also engaged with the PDP process through the Award were less likely to rate their experience of PDP via their programme favourably. Here it could be argued that the quality of provision and engagement that students received as part of the Award served to highlight the shortcomings of their degree programme.

According to applications and interview notes the main reasons students undertake the Award are linked to their future employability and include the wish to gain experience (real life as opposed to theoretical knowledge), improve skills (communication, presentation, teamwork, leadership, management, project

management), boost confidence and self-esteem, improve their CV, boost their career prospects, get recognition, broaden knowledge and awareness. Engagement in the Award leads to further success, for example:

'After winning student volunteer of the year, Paula from Cancer Research UK, who provided my Derby Award project, nominated me for the V-legend and V-inspired award, I've just heard that I'm a regional winner for the V-inspired award and get to go to the O2 arena!!! I'm also still in the running for the National V-Legend award!!!

It's fantastic news, and I just wanted to thank you both for your support and encouragement over the past couple of years, and it's the work with the Derby Award that really started it all rolling!' David Reeves, 2nd year Joint Honours student

The Award is open to all higher education students at the University of Derby. To date the majority of students registered on the Award were undergraduate students, with postgraduate student accounting for 15-20% of the cohort.

The range of study programmes from which students originate varies from one cohort to another. In the first year the majority of students, seven in total, came from the law and criminology programme. In the second year the Award was most popular with students from the business (5), creative expressive therapies (3) and finance and accounting (3) programmes, with only two law students. The two recent cohorts in the current academic year attracted students from visual media (13) and creative expressive therapies (11). The high intake of students from the two courses can be attributed to the promotional work by the course programme leader, who actively encouraged students to take the opportunity of the Award.

Through undertaking the Award some students have reassessed their academic path and with help and guidance from Careers staff were able to transfer to other programmes of study.

'I was at the point of leaving the university when I went to the careers centre and an adviser suggested that they take part in the Derby Award, gain a qualification while I decided what I wanted to do in the future'

'Originally I was enrolled on a BA in Craft but I decided to change to events management because of the interview that they had for the Award'

Feedback from Award graduates shows the impact the Award has on students' success and provides information on how the Award is received by employers. For example, an Illustration for Animation student included her Derby Award project work in her portfolio, which was presented at an interview to a potential employer. The employer was very impressed with the quality of work and offered the student a summer job within graphic design. The student attributed her success to her Derby Award project.

Students also report that the Award is a talking point during an interview as employers want to find out what it is and what is involved in its process. Employers are keen to source candidates whose knowledge and experiences reach outside of the formal curriculum and favour interview responses which are competency based. This is an ideal opportunity for the candidate to talk about their Derby Award experiences, the leadership and management skills they developed in a real life project, their achievements and successes outside of the curriculum.

As of 2009 the Award has also been offered to Onetoone clients, who are unemployed graduates or professionals at risk of redundancy (www.derby.ac.uk/onetoone). The Award is an opportunity to update or refresh professional skills.

Employer engagement projects/ panels

Employers have been an integral part of the Award since its development stages. At first an organisation which had a working relationship with the university was approached to work as a consultant for the Award. The aim of the partnership was to establish the best practice to incorporate the Award project into existing structures of students' placements and voluntary opportunities. Once a suitable structure was agreed existing contacts within the voluntary, public and private sectors were explored to launch the Award and promote it to employers. As the Award was delivered by the volunteering team the majority of contacts and projects opportunities initially came from the voluntary and public sector. The Derby Award projects brought a change to the existing regular voluntary opportunities previously offered by the organisations. In the past students used to volunteer in general voluntary roles, which rarely offered an opportunity to evidence leadership and management skills. The project required for the Award needs to have an element of leadership and management. That means to undertake a project which has a beginning and an end and which allows a student to use leadership and management skills, such as organising, negotiating, planning, time management, to name but a few. This change to voluntary roles sought by students was communicated to the organisations and suitable project options emerged. Organisations provided a wide variety of project roles, which required skilled knowledge, for example, in marketing, IT, event planning, finance, business or human resource management. It gave students an opportunity to gain practical, working knowledge of the areas they were studying or had an interest developing their careers in. In return students delivered projects in highly skilled roles, which would normally have to be purchased by organisations at a high cost:

'Stuart has brought a specialism into the organisation that none of the current team members have. It has also allowed the organisation to work on creating a quality end product as we would not have had this much time to input into this project ourselves' Parminder Lloyla, RAMS Play for Success

'Without Greg's contribution we would not have been able to undertake the Letting Agents Campaign. Greg took an active role in the collection of survey information for the campaign run by Citizens Advice (CitA); he also collated the data and wrote a report to help improve our local housing information' Amanda Leadbeater, Citizens Advice Bureau, Derby

Organisations have seized the opportunity to work with highly skilled volunteers and benefit from a wide variety of skills available at the university. This has strengthened the relationship the University has with the local community. As more organisations benefit from working with Derby Award students new organisations contact the university to offer projects.

Some students choose to find their own projects by exploring their existing contacts and networks. A number of students negotiated their own projects within existing paid or voluntary roles. To date a number of students have used their existing businesses or started a new business as a project for the Award.

Employers have also been approached to provide their expertise in watching students' final presentations, which take place at the end of the Award and form a part of the evidence criteria. The employer panels consist of three employers who view students' presentations, ask questions and give written feedback.

The Award gives students an opportunity to gain valuable experience, understand what their strengths and areas of improvement are, it is an opportunity to network a chance to understand what roles they may or may not enjoy to work in the future. Such contact and exposure to employers has resulted in some students gaining employment as a result of their Derby Award project. This confirms the findings of the recent Futuretrack Survey (2009) which concluded that *employers and students alike see employment during HE as providing a useful chance to gain skills and experience that will be useful when the student enters the*

labour force, as well as providing students with the opportunity to clarify what kind of employment is most appropriate for them (Purcell et al 2009: xiii).

Overview

Name:	University of Derby Award Programme (for Employability, Leadership and Management)	
Website:	www.derby.ac.uk/uda	
Start:	2007	
Staff:	Award Leader (Project Coordinator) 0.6; Senior Administrative Assistant 0.7 (term time); voluntary student mentors	
Workshop delivery:	Leadership and management external consultant, career advisers	
Endorsement:	The Institute of Leadership and Management (ILM)	
Developed and delivered:	Career Development Centre	
Student Recruitment:	Ongoing (November and March start)	
Cost:	£65 (to cover the ILM registration), free without the registration; sponsored ILM places are available	
Eligibility:	All HE students (undergraduate and postgraduate)	
Applying:	Application form and CV, interview	
Evidence:	Leadership and Management Project (minimum 70 hours) Attendance at workshops Consultation with a Careers Adviser Presentation to an employer panel Reflective portfolio	
Grading:	Pass or fail	
Input:	Mentoring	5 hours
	Project	70 hours
	Workshops	20 hours
	Research and preparation	20 hours
	<i>Total</i>	<i>115 hours</i>

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The Salford Student Life Award

Donna Berwick, Student Life Directorate, University of Salford

Introduction

The Salford Student Life Award was developed in response to a cross university review of PDP activities. The review and the subsequent report showed that there was variable staff and student engagement in the PDP process. A number of issues were identified including time, and recognition from staff and a lack of incentive, unless it was linked to assessment, from students. In summary, feedback suggested that there were no real benefits for either party. The report outlined recommendations to address the issues of inconsistency which included the development of an extra curricular award to encourage students to engage with the PDP process as part of a recognised achievement Award.

'In order to address the needs of a large and diverse student body all of whom should have the opportunity to engage in PDP it is recommended that an active programme of extra-curricular personal development and employability skills is created. The activities will encompass a broad range of skills development and recognise experience gained outside of the core programme of study as well as some work completed within it. Comprising areas of the Student Life Directorate (Business and Enterprise, Employability, Study Skills) with a focus on reflection and planning, the programme would be open to all students. (UoS:2009)

University of Salford context

With its four faculties, twelve schools, thirteen research institutes and nearly 20,000 students, the university has established a successful global presence. A significant number of students from [China](#), [India](#), [Pakistan](#), [Cyprus](#), [Greece](#), [Nigeria](#), the [Irish Republic](#) and [Malaysia](#) come to study at Salford.

In respect of 'life-wide learning' (Jackson 2008) the strategies developed recently at Salford reflect the needs of the student demographic and the fact that the university has the highest number of access students in the country.

"Education for capability: to provide opportunities for all our students to achieve their potential and develop the knowledge, skills, confidence and adaptability that will enable them to succeed in the labour market, as lifelong learners and as global citizens."(UoS:06)

Many University of Salford students come from non traditional backgrounds including many who come from families and communities whose members have not been to University before. Some 70% of students live at the parental home and commute to the University on a daily basis. 11% of the student population has a declared disability, a high proportion of which have specific learning difficulties or mental health issues. The student demographic has been a significant factor in the development of the Award programme ensuring that students from non-traditional backgrounds are able to access and achieve it as easily as those students who traditionally enter higher education.

Student Life Directorate

Established in Spring 2008 the Student Life Directorate aims to become an exemplar of student support across the UK HE sector. The belief is that :

'If a student is going to succeed and thrive at Salford, engaging with the general life of the University is as important as engaging with their academic programme. Student Life gives students the opportunity to complement their academic learning with a programme of personal growth and support including advice and guidance, work and career development opportunities and life and well-being skills'. (UoS:10)

The Student Life Directorate is responsible for the non-academic aspects of support for the student journey. This includes providing advice, guidance and support to University of Salford students on a wide variety of subjects relating to money, welfare problems, health and personal issues, visas and immigration, careers and study skills. The directorate is made up of two Units:

- Careers and Employability (C & E)
- Student Advice and Wellbeing (SAW)

The Skills and Recognition Team who co-ordinate the Student Life Award are situated within Careers and Employability. It is therefore well placed to utilize the range of service provision offered in order to deliver a comprehensive programme of activities for students around Employment, Enterprise, Career, Academic and Personal Development. Two key strands from the strategy (UoS:10) reflect this:

- promoting active engagement through enterprise, volunteering, community based work experience, underpinned by the Salford Student Life Award
- fostering recognition that all aspects of the student experience are a potential asset to a students employability

Student Life Award

The Salford Student Life Award is a non-credit bearing achievement award designed to enhance curricula and extra curricula activities related to employability, enterprise and personal development. The Salford Student Life Award is flexible, allowing students involved in existing PDP, enterprise and employability programmes as well as volunteering, mentoring, student ambassador involvement and workplace activities to be recognised and validated by the Student Life Directorate. The Award is open to all students including MA, PGT and PGR students.

The Award is made up of **three Prescriptive elements** (Figure 1).

Figure 1 prescriptive elements of the Salford Student Life Award

Award Induction and Planning Session	This is where students register for the Award. They must attend this session before they do any of the other elements.
CV and Job Search	A 2 hour session followed by a self-directed task can be taken at any time over the Award year
Active Engagement Presentation	The presentations are the final part of the Award tasks and will take place at the end of the Award year

Over the duration of the Award programme students must complete the *Supporting* and *Active Engagement* activities shown in Figure 2. Active engagement is defined in terms of the amount of time spent and contribution made to the activities undertaken.

Figure 2 Supporting and active engagement activities

	BRONZE	SILVER	GOLD
Supporting Activities Attend skills development sessions and reflect on personal/professional improvements	2 sessions	3 sessions	5 sessions
Active Engagement Making a contribution to the wider community at the University of Salford	20 - 29 hours	30 – 44 hours	45 – 60 hours

The Compulsory Elements and the Supporting and Active Engagement Activities are verified internally through the completion of the tasks set for each element. Verification criteria specified for each element at a particular level must be achieved.

Award aims

The aims of the Award are:

- to promote the gaining of work-related skills for successful future employment
- to encourage the development of generic enterprise and employability skills
- to encourage students to participate fully in a wide range of extra-curricula activities as well as their academic work
- to enhance curricula and extra-curricula activities related to employability, enterprise and personal development.
- to raise the profile and calibre of our graduates into prepared and engaged global citizens
- to recognise and reward involvement in volunteering, mentoring, student ambassador and workplace activities.

The Award must be completed within one calendar year of the start date. Students may take the Fast Track Award within a shorter time frame if they so choose. Workshops and skills development sessions will be held throughout the year on different days and times to provide students with a suitable time slot. Attendance for the Active Engagement element will be by negotiation between the organiser and the student involved. The Active Engagement Presentations will also be scheduled at different times to suit the availability of the student's involved.

In order to accommodate the variety of full academic studies programme requirements there will be three entry points per year (Figure 3). The chart below outlines how each cohort of students will have the opportunity to take part in the Award programme either by Fast Track or Full Year.

Figure 3 Start and completion dates

	Start Date	End Date (Fast Track)	End Date (Full Year)
Cohort 1	Nov 2009	March 2010	Nov 2010
Cohort 2	Jan 2010	Nov 2010	Jan 2011
Cohort 3	March 2010	Nov 2010	March 2011

Award outcomes

By the end of the Award programme the student will have:

- Reflected on own performance and identified ways to develop skills.
- Created a Personal Development Plan (PDP)
- Written a CV and covering letter or application form, which maps to a targeted job specification.
- Identified the key elements to include in a CV and covering letter
- Established own personal priorities in relation to career planning.
- Become aware of the difference between *gaining* skills and *demonstrating* skills to employers
- Delivered a seminar presentation on the skills developed through active engagement
- Received feedback on verbal communication skills
- Concrete evidence to support job applications and to demonstrate employability at interview
- Taken ownership of aspects of their own personal and professional development

Conclusion

Like PDP, the Salford Student Life Award is about process not product. The aim is to give students the opportunity to engage with the process by developing a sense of ownership, from planning and designing their own learning journey to presenting and evaluating the experience. Having explored, they gain an understanding of the landscape which gives them the confidence and ability to plan for new ventures in the future. More importantly it gives them concrete experiences to use when articulating their skills to potential employers.

As this is the first year of the SSLA it is not yet possible to analyse its impact on student employability. However a questionnaire evaluating the programme so far generated the following comments which illustrate the concepts discussed in the SCEPTRe conference background paper (Jackson:2010)

"I would like to take the opportunity of thanking you for designing the Salford Student Life Award programme. It is a very important tool because it teaches us how to quantify the present stage we are at and helps us channel our energy in the right way in order to achieve the next level". Award Student

"Having experienced the process on the day I believe this is invaluable to those students who have the desire and is a true dress rehearsal for the real thing – all credit to those that put in the effort". Robert Maccabe, Business Link Northwest: Presentation Panel Judge

The SSLA is designed to equip Salford students with the tools to realise their career potential. For most students, it is achievable but nevertheless requires commitment, effort and a positive attitude, qualities which go towards the 'professionalism' employers are looking for and which are also carried with the student throughout their life.

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Warwick Advantage and Global Advantage Awards- formal recognition for extra-curricular engagement

Anne Wilson, Warwick Advantage Manager University of Warwick

Introduction

The current economic climate has seen a reduction in the number of graduate job opportunities. Graduate recruiters increasingly state, and universities are increasingly recognizing that a good degree on its own is not enough to secure graduate employment. Future Fit (CBI, 2009) highlights the role HE institutions, employers and government can play in giving students the best possible opportunities to build, refine and articulate their employability skills. Beyond academic achievement recruiters increasingly look for evidence of student skills development, motivation and potential through extra-curricular participation. These are the kinds of activity which, if students are able to express themselves effectively will help students to stand out in applications and at interview. Critical to this success is the opportunity to reflect on and articulate their learning. With this in mind, the Warwick Advantage Award and Advantage Global Awards offer formal University recognition for students' extra-curricular achievements thus enhancing their graduate employability.

Context

In 2007, a review of Personal Development Planning (PDP) at Warwick concluded that few students were engaged in reflecting on their development across their whole university experience. This led to an institutional rethink about the way more students might be encouraged to reflect on their learning. A new student-facing website, Warwick Advantage, was the result. A range of students and academic staff were consulted in its design and development. Through the website students are encouraged to make the most of their time at Warwick by engaging in extra-curricular activities in order to maximise their graduate employability. Careers Consultants find that many students struggle to translate and articulate the skills they develop through both their academic subject disciplines and extra-curricular activities despite having an impressive range of experiences and skills they have developed. Therefore a range of resources aimed at developing students' self-awareness were created, enabling them to reflect on who they are, what's important to them, their skills, attributes, personality preferences, achievements and motivations. Students are then significantly better placed to make use of the careers website resources in order to explore their career ideas.

The website was designed to provide accessible, easy to use resources available in a variety of media and in a variety of ways. The resources can be used independently by students or with support from Careers staff or embedded into group learning activities. www.go.warwick.ac.uk/services/advantage

Students consulted as part of the website's development were particularly keen on some formal recognition for their learning. As a result, the Warwick Advantage Award evolved from the website. The students had hoped for additional CAT points but this would not have been a practical option given the level of resource required to develop a formal academic process of accreditation. However it was agreed that formal recognition for the considerable energy and time invested in extra-curricular activity was certainly a worthwhile pursuit.

By exploring possible ways forward, and engaging in discussions with other universities who had already established award systems and structures, eventually an approach which was acceptable to both parties and which suited the Warwick context was agreed.

Another significant aspect which informed our approach at Warwick is that for the majority of courses at Warwick employability skills are not integrated within the curriculum, and few students formally engage in either an Intercalated Year or other formal work placement. So for many students their extra-curricular engagement is all the more important in helping to differentiate their experiences. Whilst recent reports (UKCES 2009 *The Employability Challenge*) emphasise the importance of placing employability at the heart of the curriculum, we have not taken this formalised approach.

Considerations

Given the issue over the resourcing requirements for an accredited award which would need to be managed within existing staffing levels, we needed to explore options which, although not leading to academic credit, were nonetheless sufficiently demanding and robust as well as worthwhile to the student.

A campus-based university, Warwick has a particularly strong culture of extra-curricular activities. There are over 200 clubs and societies, opportunities for campus-based part time work, volunteering, major campus-based events such as One World Week and undergraduate research opportunities. It was felt that students likely to be eligible for an award would have already been involved for considerable amounts of time in the activities themselves and so any process, whilst it should be rigorous, should not be so demanding that few students were willing to apply.

It was also felt that the evidence students could draw on for the awards should be very much down to the individual, so that as long as students had undertaken their experiences whilst a Warwick student, these could incorporate activities undertaken in vacation time, organised by themselves and not necessarily provided directly through the university. Individuals should be free to develop the capabilities they feel important (Walker 2005).

We also wanted students to reflect not simply the skills they had developed but to reflect more broadly, on their employability as 'a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations.' (Yorke, 2006). Having engaged early on with the student body over both the website and the award it seemed a logical step to design the award in partnership with the Students' Union. This partnership has informed every stage of the process, from the design, marketing and promotion, IT systems, assessment, awards celebration event and evaluation. This partnership has been a highly effective collaboration with much support from Sabbatical Officers in promoting the award to the student body, in particular to clubs and societies.

Process

Having agreed that an award was a good idea in principle, permission was then sought for university endorsement. The Academic Office granted permission for use of Warwick certificate paper for printing certificates. The Vice Chancellor and Pro Vice Chancellor agreed to be signatories, alongside the Students' Union.

Knowing that employer endorsement would have an impact on the credibility of the award we approached IBM, who had been keen advocates of the Warwick Advantage website. They agreed to sponsor the award which helped contribute to the costs of the Awards ceremony.

Timing of the process was a further issue for consideration. The awards are currently promoted from December through to the end of the spring term and the awards ceremony held in early May before the majority of exams. This makes it more difficult for Masters Students to have sufficient evidence to apply for the award so we have created an opportunity for this group of students to apply between September and December for a Main award.

Key graduate recruiters were made aware of the award through mail shots and presentations made to Warwick Recruiters' Club members.

Award outline

2 levels of award were agreed- Main and Gold. The Main award would be for a minimum of a term's involvement, with the Gold Award requiring at least a year. For both awards students would be required to reflect on each of 4 areas which were left deliberately context-free to encourage a wide range of activities to be included:

- Involvement, Inclusion and Interaction
- Team work or team leadership
- Community
- Project or event management

Students were required to submit an online application form and encouraged to keep a copy in case they wished to draw on any of their evidence for applications and CVs. They were asked to outline what they had achieved in each section and then reflect on how the experience had contributed to their personal development. A series of additional prompts encouraged in-depth reflection.

For the Gold Award, students were required to produce an A1 poster, outlining their achievements visually. Gold award winners were then required to present their posters to visiting dignitaries at the awards celebration event. Gold winners were asked to provide details of a referee, each of which was followed up. All submissions were assessed by both the Students' Union Societies Sabbatical Officer and the Warwick Advantage Co-ordinator.

The Award was launched in December 2008 and the first Awards ceremony was held in May 2009. 130 students were successful in receiving an award, 19 of whom achieved a Gold award.

A number of last year's Gold Award winners are featured in video clips on the Warwick Advantage website www.go.warwick.ac.uk/advantage/award/2009/ along with photographs and a list of winners.

Feedback from the event was very positive, with students appreciating both the formal recognition by the Vice Chancellor who presented the awards and the interest of the visiting academics, recruiters and other key university staff. Significantly, several students commented on the value of the process of completing the application form. Whilst a number had initially found it a little daunting, once they began to reflect on their achievements, they were able to appreciate how, through reflection, they had personally developed.

The quality of submissions was extremely high overall and the range of extra-curricular experiences used to evidence entries was wide-ranging. Main award submissions focused more on breadth of experience and students often drew on a range of activities. These incorporated positions of responsibility within clubs and societies, volunteering, work experience, Student Staff Liaison Committee roles and fundraising for charities. Gold Award winners offered evidence of longer term commitments, such as the student who had progressed over several years from an American football team member to coach, then manager and eventually to president and who had helped to expand membership and sponsorship extensively during his

time with the team. Another student had set up her own IT design company and worked as an e learning adviser for the university.

Evaluation

A number of Award winners agreed to be followed up as we wanted to capture the impact of the Award on their employability. Several students were featured in local press articles which were co-ordinated by the Press Office and a number commented on the value of the award as a talking point at interview and to boost confidence in what they felt they had to offer. These comments typify the positive endorsement from students.

"I just wanted to let you know that my Warwick Advantage award has helped me with a job interview I had this summer. The reflective process involved made me more spontaneous when answering questions about what I felt I could bring to the job". Psychology graduate, Main Award

"I recently attended for interview at a prestigious London teaching hospital. The panel asked lots of challenging questions and, at the end, the Chairman - who had been leafing through my CV - leaned forward to ask why I was awarded the Warwick Advantage Gold Award. This was a great opening for me to start talking about everything I wanted to get across from my CV. Something must have worked because the panel offered me my first choice of job!" Medical student, Gold Award

The new Global Advantage Award

This year, following the success of the first awards, we have launched a new Global award. The underpinning of Warwick's Teaching and Learning strategy identify preparation of students for the challenges of active citizenship, leadership and sustainable employment in the global economy. As an international university, Warwick aims to foster the inter-cultural competence and employability of all students both international as well as UK. In a Student Careers and Skills survey in 2009, 90% of students expressed an intention to work globally at some point in their career. Around 17% of Warwick's undergraduate students are from overseas. In a recent survey of 220 students 20.5% had participated in some form of global experience (educational programmes, volunteering, or work experience) and 39% had participated in or helped to organise some aspect of social activity. Reid.S (2010).

A Global award will enable those students who have actively engaged in the development of their intercultural capabilities to receive formal recognition for their efforts.

The Global award arose in part from a collaborative project with King's College London, which sought to explore the development of the undergraduate curriculum. The project focused on 4 strands which included one on the Globally-oriented curriculum. The outcomes of the project will be published later this year.

www.go.warwick.ac.uk/services/quality/categories/enhancement_funding/kingswarwick/

At Warwick we had previously collaborated with Global People and the University's Centre for Applied Linguistics (CAL) to develop a set of Graduate Global Capabilities for the Warwick Advantage website in order to encourage students to consider how they might develop their intercultural awareness and understanding. In a recent survey conducted by Student Careers and Skills, respondents suggested that 90% of Warwick students intend to work globally at some stage in their career. A global award could encourage students to articulate the personal development they had undergone as a result of engaging with different cultures- whether in the UK or overseas. It would also respond to the increasing interest of larger global recruiters in evidencing cross cultural sensitivity when they seek to appoint graduates into global positions. Gilleard, C, (2010) Graduate Employability conference speech. The global skills race, Playfoot,

J. and Hall, R. (2009) means that it is increasingly important for employees to have 'the right attitude, a willingness to learn and an understanding of how to conduct themselves in the workplace.'

CAL and Global People were leading on the Global theme of the project and we therefore worked alongside them to explore how the Graduate Capabilities might inform the Global Award.

The new award invites students who have developed their intercultural awareness through their time at Warwick (whether in term time or vacation time) to produce evidence of and reflection on their relevant extra-curricular involvement. Students are required to evidence against 4 headings:

- Involvement
- Openness
- Communication
- Personal growth

A series of prompts provides more detailed definitions of each of the competencies and guides the applicant to consider a series of competency-style questions followed by a personal reflection.

The Award is also available at 2 levels- Main and Gold, with similar levels of engagement, so that Gold submissions should reflect greater depth through longer-term involvement. Gold winners similarly present their posters at the Awards ceremony but in addition will be required to attend an interview with a panel including the SU, University staff and Deloitte, the Global award sponsor.

Considerations going forward

As the Awards continue to attract interest from students, employers and academic staff, we are mindful of the advent of the Higher Education Achievement Report (HEAR), originally proposed in the Burgess Report (2007) and what may be included in the extra-curricular achievements section. We may need to consider whether we incorporate references into the Main awards and also consider whether we do need to restrict the number of applications in order to manage the process by amending criteria. The Gold Awards, by the nature of what is required of students are likely to self-limit. We have so far produced guidelines on the quality expected though we have not imposed a word limit. We may however review this in order to make the process of assessment easier.

The timing currently means that Masters Students apply later in the year. It may be necessary to review the award process and move to either a year-round or termly cycle, perhaps holding a smaller event for the Gold Award winners. These decisions will depend on departmental resource allocations which are currently unclear.

We will continue to track award winners in order to capture the impact and make use of winners' profiles within university marketing literature and websites. We plan to engage a wider range of recruiters in supporting both awards. Within the Global award we hope to develop work placement opportunities within global organizations as an incentive for Gold award winners.

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Rationale for the Development of an Employability Award at the University of Worcester

Rose Watson, Employability Development Officer, University of Worcester

Introduction

This paper examines the rationale behind, and the development, of the 'Worcester Award', an employability award based at the University of Worcester. Whilst acknowledging the value of the embedding of employability skills within the formal curriculum, the benefits of extra-curricular activity are examined and it is argued that there is a case for the development of a wide range of activities to support the development of employability in students. The case for an employability award scheme is presented, and the Worcester Award scheme is outlined.

Background

In addressing the issue of how to develop employability skills in students, many universities are moving towards models of embedding employability skills throughout the curriculum (Harvey, Locke and Morey 2002). Yorke and Knight (2006) have demonstrated through their USEM model that alignment of the whole curriculum can enhance a student's employability. It is accepted that student will recognize and value assessed activity within their curriculum, and therefore many universities, including the University of Worcester, have developed strategies to deliver employability across the whole curriculum. However, it is also recognized that any understanding of students must include an understanding of their total experience and that the whole higher education environment and beyond can contribute towards a student's learning (Harvey et al 1992, Pascarella and Terenzini 1991). Although it is important to acknowledge the value that students place on assessed curricula-based activity, consideration should also be given to the wider context in which a student is operating. This can include part time work, work placements, volunteering, individual's interests, and clubs and societies, all of which could be both on and off campus. By placing such emphasis on the embedding of employability skills across the curriculum, universities may be missing the opportunity to draw on the rich experience of learning which occurs outside the curriculum and can contribute towards a student's.

The contribution of work based learning to future employability has been well established. For example, Knight and Yorke (2004) and Little and Harvey (2006) demonstrate that work based learning positively impacts on student employability. A period of work experience is aligned closely to the possession of many skills essential for success at work, with students who have undertaken work based learning often reporting increased levels of confidence and enhanced motivation to study. Almost all recent employer surveys (e.g. CBI 2008, CIHE 2008, DIUS 2008) emphasise the importance of this type of learning, commenting particularly on the development of skills and knowledge such as communication, problem solving and commercial awareness. The benefits of work placements can extend beyond this, and HEFCE (2009) have shown that students who have undertaken work placement not only improve their employability but can also gain higher levels of degree classification.

Part-time work can have a significant impact upon future employability. Muldoon (2009), in a recent study of the impact of part time and voluntary work undertaken by students working towards an institutional extra-curricular award, found that both students and employers perceived positive effects of work, although for slightly different reasons. Students were more likely to perceive the benefits of work related skills, whereas employers were more likely to value the personal skills developed through part time or voluntary work. With at least 50% of undergraduate students estimated to be working part time in term time and greater numbers during vacations, students should be helped to recognize the value of this in relation to their employability.

In addition to learning from work, the benefits of learning from extra curricula engagement such as volunteering, clubs and societies, or more community based activity can be considerable. Astin and Sax in their study of U.S. freshmen found that engagement in community service activities had a positive impact on academic development, life skills development, and a sense of civic responsibility. In a recent British study, Stuart et al (2008) found that participation of extra curricula activities (ECAs) can have an impact on the development of confidence and effective communication skills for young students and on developing social contacts for mature students. They suggest that by supporting ECAs, universities may be able to improve students' future job prospects, increase their satisfaction with the higher education experience and develop an enhanced sense of belonging to the institution.

Strong benefits can be associated with ECAs, but it is important to recognize that motivations for engaging with ECAs varied across student groups and institution type. Younger and middle class students were more likely to be involved with their Students Union and older students more likely to engage in home based or work based activities, with students from post 92 institutions more likely to engage in career related activities. These findings were reflected by Holdsworth's study of volunteering in universities, where she also found that students from higher ranking universities were more likely to engage in volunteering activities (Holdsworth 2010).

We know that the notion of 'social capital' (Bourdieu 1984) can have a substantial impact on an individual's ability not just to access and progress through university (Bowl 2002) but also to access the employment market beyond university (Brown and Hesketh 2004). Stuart et al (2008) have clearly indicated the benefits of the development of social networks and confidence, and yet it appears that students from higher tariff institutions are more likely to take part in activities which promote these. This raises the question of whether universities can or should be encouraging a wider range of students to engage in ECAs, to help them develop their skills, networks, social contacts and confidence.

Therefore, there is a strong case for the recognition of both work experience and extra curricula engagement in the development of employability in students, but it is also important to provide opportunities for reflection on and evaluation of the learning experiences that have already taken place. Houghton and Bagley (2000), have suggested that undergraduates do not always know how to draw out the relevance of, or make connections between, different contexts and without this a student is unlikely to be able to assess how far they have come in developing their employability and what they may need to do in order to develop it further. [Moon \(2004\)](#) has suggested that reflection is a key graduate skill that can contribute towards employability.

Even where a student has successfully reflected on the experiences, skills and attributes developed in different contexts, it is often a further challenge to be able to express these effectively in writing or at an interview to a future employer. Students often find self promotion difficult; a recent internal survey of student's perception of their employability suggested that 45% of students lacked confidence in promoting themselves to future employers.

Therefore, in approaching the development of employability in students, there is a case for the recognition of a wide range of experiences and activities across and beyond the curriculum, including work related experience, skills development and self promotion. Muldoon's (2009) research into student's participation in employability award schemes suggests that the institutional support and recognition of the work they were doing positively influenced how they felt about that activity, and as a result felt more motivated by the award. Thus it could be argued that institutional recognition of a wide range of employability enhancing activities, in the form of an employability award, would encourage students not just to take part in a range of activities but also to recognize the value of these.

University of Worcester context

The University of Worcester is a rapidly expanding post 1992 institution with a strong commitment to widening participation. Approximately 74% of its students were mature on entry, with 8% declaring disabilities. On leaving the university, 80% stayed in the West Midlands and 74% entered jobs related to the public sector, which can be accounted for partly by the strong profile of professional education and health courses offered, but also by the prevalence of public sector employment within the region. Although a large number of students will be entering work related to teaching or nursing, there are still a substantial number on less vocational programmes, and so any approach to employability has to consider the range of courses and the diversity of the students.

The university has an Employability, Enterprise and Community Engagement strategy which tasks individual institutes with the delivery of employability skills through the curriculum, and individual institutes can develop their approach to employability in accordance to their own particular needs and contexts. This approach can capture employability activities across the curriculum, but what about the rich learning opportunities outside the curriculum which can contribute towards employability?

The University of Worcester, like many universities, offers a wide range of activities to students across the campus, including talks and events offered by the Careers Service and Enterprise unit, clubs, societies and activities related to the Students Union, the opportunity to participate in schools liaison and course representation, not to mention voluntary and paid work opportunities both on and off campus. Many of these are offered as extra curricula activities, but a number will appear within the curriculum, such as enterprise or employability modules, work placements, or sessions offered within the curriculum by the careers service. However, there is concern that the activities are not being seen by student as relevant or important in the development of their employability. A Student Employability survey conducted in the summer of 2009 indicated that although students valued the range of employability enhancing activities across the campus, they often did not take advantage of these. At the same time, students did not perceive the value of the extra-curricular activities, or the possible contribution of these to their future employability, although they did value those activities which were embedded within the curriculum.

An institutional award scheme would offer recognition to a range of activities and encourage students to take part in more, reflecting on their experiences and learning to articulate what they had learned. It was important that the scheme encouraged work experience, skills development and the effective marketing of self. The university was also keen to promote community engagement, and a further category of 'contribution to local, national or global society' was introduced. The impending introduction of the HEAR (Higher Education Achievement Record), with the requirement to verify a wide range of activities and achievements provided an additional impetus. The University of Worcester's employability award thus draws on students' learning gained in the wider context: work experience, personal and leisure interests and participation in clubs and activities as well as the academic curriculum.

Worcester Award

The development of the Worcester award was led by a steering group of representatives from the Senior Management team, with a working group with representation from the Students Union, Careers Service, Widening Participation, Business Partnerships Office, International Office, and academic departments.

6 guiding principles were identified:

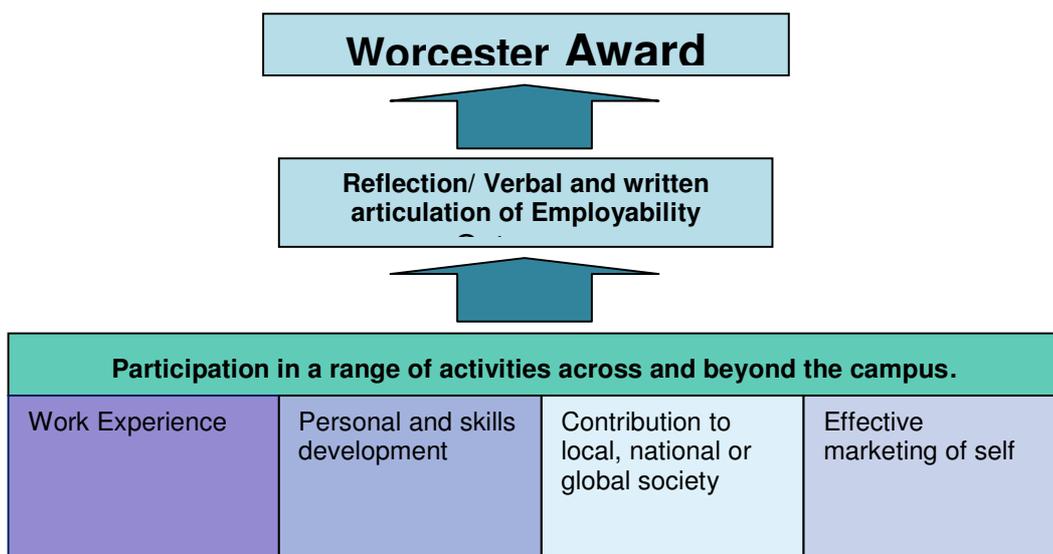
- All activities should encourage the development of skills, qualities, attributes and experiences which will support the student's employability/ progression beyond university and as a global citizen.
- The award should be regarded as challenging by students and employers

- In order to achieve the award, students must be able to reflect upon the activity in relation to their employability/progression, and must be able to articulate this to others.
- The framework should allow access and equality of opportunity to all students seeking to achieve the award
- The framework should encompass employability related activities which fall both inside and outside the assessed curriculum.
- The award should be recognized by the university but sit outside the academic framework.

It was important that all students, whether full or part time, on vocational or non vocational programmes should be able to participate in the award. It was argued that some students may be advantaged in their access to the award by the offerings or aspects of their curriculum. For example, programmes may offer work placements or careers and enterprise activity as part of the curriculum, whereas other students would have to earn credits towards the award in activities entirely outside the curriculum. Despite this, it was decided that credits could be earned from curriculum based activity could encourage students to recognize and value the employability elements within their curriculum, or to seek these out outside the curriculum.

The model below illustrates how students would participate in activities from four groups: work experience, personal and skills development, contribution to local national or global society, and effective marketing of self. Achievement of the award would require not just attendance at these activities but also the demonstration of reflection and articulation of employability skills developed. Assessment will be based on a written submission and a formal interview where students will be asked to draw out the links of the activity to employability by demonstrating:

- An understanding of the workplace and requirements of the world of work drawing on their own experiences.
- Skills or attributes they have developed whilst in higher education and be able to describe how these would be useful in a wider context – local, national or international.
- Effective citizenship by making a contribution to the local, national and global economy.
- Promotion of skills attributes and experiences to others.



Worcester Award pilot project

The scheme is currently at the pilot stage in the academic year 2009/210. A total of 27 students will aim to complete the award by May 2010 and, from this an evaluation will consider the impact of the scheme on perceived employability and involvement with the university. If successful the scheme will be rolled out to a wider group of students in September 2010.

Conclusions

This paper has set out the rationale for the development of The Worcester Award, an employability award based at the University of Worcester. It argues that there are considerable benefits of activities such as work placements, part time work, and extra-curricular engagement, and these can contribute towards the employability of students, with opportunities for reflection and the transfer of learning across contexts. Given that students learn to place greater value on activities which have greater institutional support, a university award can help a student to consider and value activities offered across and beyond the curriculum. The paper outlines the development of the award scheme at the University of Worcester, which is currently being piloted with a small group of students. Further research into this scheme will offer useful insights into the students' perceptions of the award and their perception of its impact on their future employability.

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