ENHANCING UNIVERSITY SUPPORT FOR CONTINUING PROFESSIONAL DEVELOPMENT, THROUGH A PORTAL DRIVEN COLLABORATIVE LEARNING ENVIRONMENT

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Abstract: Contemporary business management is increasingly demanding and technology offers new opportunities; new customers, new markets, new areas of practice and new methods of working. Such changes demand new knowledge, new skills and most importantly, a commitment to lifelong professional learning. Subscribing to lifelong learning requires an active involvement in Continuing Professional Development (CPD). In today's knowledge intensive world, it can be argued that the only real source of sustainable competitive advantage is the ability to learn faster than the competition. Indeed, today there is a much greater expectation that professionals be both technically competent and managerially capable. Organisations are increasingly engaging in human capital reporting activities. However, it should be acknowledged that the value of knowledge transfer erodes over time. For instance, it has been suggested that knowledge gained through an undergraduate degree has an average life of four years before it requires updating. Firms that engage with CPD and efficiently tap into all relevant sources of knowledge are more likely to thrive, whilst those that can't may struggle. The widespread adoption of technology supported learning has increased the potential for widening CPD support. The availability of Virtual Learning Environments (VLE's) have proved effective for delivering formal learning opportunities, but from a pedagogical perspective these technology applications can be questioned in terms of their impact on learning outcomes and their track record in delivering informal learning support. The solution for effective delivery of CPD to managers and professionals may be to harness the power of the VLE and mesh it with physical support/mentoring within an open source based learning framework, designed to encourage collaboration and networking.

Keywords: Knowledge Transfer, Collaborative Learning, Portal, Continuing Professional Development (CPD)

Context

Continuing Professional Development (CPD) is a process by which individuals are mutually responsible for their own learning and development. Through a system of focused knowledge transfer, learners can acquire new knowledge and skills and with the aid of effective networking can share the experiences of others. The importance of the concept of continuous lifelong learning has been reflected across the professions and demonstrated through the growth of CPD. High growth businesses are increasingly attributing success to the development of their employees, and strive for competitive advantage through an improvement in their knowledge base. Indeed many SMEs are realising the impact of knowledge transfer on their abilities to manage talent in order to effectively compete in contemporary markets. The need for change and improvement has become increasingly associated with organisational learning [Lee et al., 2000].

CPD is not a new area of training. Indeed effective managers and professionals in all fields have identified the importance of new knowledge, improved skills and the development of personal qualities as being integral to good professional practice. What is new, however, is the greater importance and relevance of CPD to professional success. The Royal Institute of Chartered Surveyors [2007] emphasized the contribution of the following factors to account for the growing importance of CPD:

Competence: It has been estimated that the knowledge gained in some degree courses, particularly IT based, has an average useful lifespan of approximately four years. While this will vary according to the discipline, it does nevertheless highlight the increasing need to maintain an active interest in keeping up to date with changing technology, legislation and operational procedures. If at the same time, professionals have expectations of increased managerial responsibility, the need to acquire new skills and knowledge is even more acute.

Consumerism: The development of a more affluent consumer society has also resulted in a better informed and more sophisticated public. One consequence of this trend is that they expect a higher

duty of care and level of service from their professional advisors than in the past. Again the skills acquired during an initial training period or during higher or further education may not equip new staff for this role.

Litigation: The professions are increasingly at much high risk from claims of negligence than in the past. Professional indemnity (PI) insurance premiums have risen considerably in recent years. CPD may not totally eliminate PI claims; however, if sceptics are worried by the cost of CPD, such claims may help emphasise the potential cost of ignorance! Some evidence is also emerging that insurance companies may be willing to slightly reduce PI premiums, if a structured CPD programme is available to staff.

Standards: One of the primary roles of professional bodies is to safeguard standards of competence. CPD has a key role to play in the communication of agreed standards and in ensuring that members comply with specified procedures.

Quality Management System: The increasing emphasis on quality management systems and the ethos of continuous improvement has also increased the relevance of CPD. Training and education are key elements of quality assurance processes and of the 'Investors in People' (IIP) standard.

Competitiveness: The highly competitive nature of modern business is a key driver for the need for continuous development of an Organisation's human resource. Whether in the private or public sector, the competitive market edge must be partly or totally focused on client care/service quality and technological innovation. Both demand a high investment in developing people skills, if they are to be effective.

What is CPD?

Continuing Professional Development (CPD) is a continuous process of personal development, to improve the capability and realise the full potential of professionals and managers at work. It is undertaken by acquiring and developing a wide range of knowledge, skills and experience, which are not normally obtained through initial training or routine work, and which develop and maintain competency to practice [RICS, 2007]. There is a growing importance placed upon all practitioners to improve professional competency through a systematic process of continuing professional development. New technology, changing working practices, legislative changes, and emergence of new industries/professions underpin the need for constant updating of knowledge and skills in order to maintain professional competence.

CPD can be defined as" the systematic maintenance, improvement and broadening of knowledge and the development of personal qualities necessary for the education of professional and technical duties throughout the practitioner's working life" [CPD Certification Service, 2007]. A further definition of CPD is "a combination of approaches, ideas and techniques that will help you manage your own learning and growth" [CIPD, 2006]. It can, therefore, be considered as a way of a developing capability that links learning directly to practice. The use of effective domains of reflection and action are cornerstones of effective CPD, and increasingly web technology is being used to support effective Organisational mentoring and networking.

Research undertaken by Income Data Services [1999] highlighted CPD as a major intervention that managers could make into their own development. The key differentiators from other forms of training are that the learner is in control and manages their own learning agenda from a holistic perspective (acknowledging work life balance). The process is not dependent upon employer support and e-learning provision allows managers to learn on a "Martini" basis - any time any place, anywhere. Indeed the convergence of technology platforms and the advent of smart phones provide greater opportunities for managers to learn "on the go" through short power sessions taken when time allows. The increasing demand for such provision places greater emphasis on the development of dynamic Portals, Virtual Learning Environments (VLEs) and increased collaboration between educators and training providers. The outcome of an effective system is the systematic maintenance, improvement and broadening of a firm's knowledge and skills base.

The challenge for VLE's is to provide mechanisms that allow learners to set realistic learning targets based upon their aspirations, and to build in reflective processes to measure the effectiveness of learning support. This is a cornerstone of effective CPD provision and has often been overlooked in

the design of VLE's. This is particularly important for delivering effective knowledge transfer to smaller businesses. Although SMEs have a key role in learning and training system there are a number of problems associated with engaging them in the national skills agenda. Among the problems identified are low levels of off-the-job training by SMEs, in comparison with larger organisations; lack of internal capacity (and sometimes motivation) to provide learning opportunities for their staff; and a disturbingly high proportion of owner managers who had low or no qualifications [National Skills Task Force, 2000a; DfEE, 2000].

CPD is not restricted to formal off site training courses, seminars or workshops and increasingly the relevance of other modes of learning is recognised by professional bodies. These may include distance and open learning, including CBT (computer based training); CAL (computer assisted learning); action-learning and self-managed learning; structured reading; authorship of technical papers; membership of committees within nominated professional institutions; and part time teaching commitments.

For all these activities it is possible to specify a time limit for their execution and many professional bodies use the accrual of hours of input as a measure of CPD currency (35-70 hours being the norm). To some extent this demeans the credibility of this valuable knowledge transfer mechanism, since it assumes a discrete portfolio of learning activities with defined start and end points. The real value of CPD, however, is its ability to embrace the continuous nature of professional learning. Whilst not normally formally included within the regulation structure for CPD in many professional bodies, the informal continuous learning process which takes place within organisations at large is a critical success factor, and contributes to the development of significant repositories of tacit knowledge.

In order for effective knowledge transfer to be achieved through CPD it is important that an organisational process exists for business planning and individual targets are set in the context of key performance indicators. The existence of a business plan and its use in all aspects of organisational development is a key measure of a firm's capability [Harris, 2006]. In addition a procedure should be established for setting individual objectives and reviewing these objectives (performance review/appraisal scheme). Finally, managers should be encouraged to adopt a Personal Development Plan (PDP) for recording and planning their knowledge development.

The Importance of formal learning support

Simply performing an existing role efficiently is not sufficient for CPD purposes. However, what could be considered effective CPD is the production of a structured learning plan which leads to improved performance in the application of a new skill or utilisation of new knowledge in a specific area. This plan may, or may not, involve formal 'training', e.g. conventional CPD events such as seminars, training sessions or short courses. However, it could, also, include the provision of evidence, based on managerial experience. In order to be acceptable as evidence for CPD purposes practitioners would be required to provide details of improved performance measured against a structured learning contract. The concept of a learning contract is used in many educational and training circumstances to help people clarify the nature of the changes which they wish to implement and to record improvements in capabilities as a result of learning interventions [CPD Certification Service, 2007].

A learning contract requires managers to address five issues:

- What previous knowledge/skills/experience has been developed that is relevant to the CPD?
- What is the learner's current position/strengths/ weaknesses in relation to the identified CPD need?
- What are the proposed targets/outcomes in relation to the development of skills and knowledge?
- What is the learning plan/strategy and what programme of activities will be followed?
- What evidence will be produced for the purpose of reflection and to illustrate improved performance?

Formal learning support from Further and Higher Education Institutes will continue to play a crucial role in the transfer of knowledge to individuals and organisations. However, there is evidence to suggest that employers are increasingly demanding work focused learning that is delivered to them in a flexible manner. The growth and complexity of businesses, the demands from clients/customers and

the pace of change all demand that managers possess a wider range of skills than in the past but paradoxically increased demands on their time prohibits many managers from engaging with conventional University products and delivery platforms. Key to the business growth and improved capability is the ability for firms to demonstrate enhanced managerial and leadership skills in addition to specialist technical/professional knowledge. Whilst there is evidence that Universities and Colleges are aware of these business development needs, many are missing the opportunity to fully engage with the agenda and are failing to provide innovative and flexible ways of providing learning interventions.

Over 200 hundred managers were interviewed for this research, which established a demand for practical business support focused on the direct needs of contemporary businesses; flexible/seminar based input; technology supported learning; increased collaboration between learning providers; and the provision of mentors. In order to meet these perceived business requirements, Universities/Colleges will have to rise to the challenge and ensure that their provision is fit for purpose and is delivered through innovative delivery platforms. They must also emphasise to managers that education does not finish upon leaving university and encourage the concepts of lifelong learning, not only to better equip managers with knowledge and skills, but to encourage them to be more innovative and entrepreneurial.

It is acknowledged that people differ significantly in their learning preferences. Furthermore, a large proportion of effective learning takes place within the working environment but is not always recognised as being of relevance. Managers learn by doing, which includes their successes and mistakes. SMEs in particular, contain significant repositories of tacit knowledge, which managers have acquired over time. In future, a further challenge of educators will be to develop codified systems and structures which will support the transfer of tacit knowledge into explicit knowledge, which can then be embedded into the processes of businesses and enhance their overall capability. Intranets and extranets provide opportunities for organisations to codify and promulgate knowledge internally. However, from an external perspective, shared portals/VLEs offer opportunities for learning providers to collaborate in order to maximise the effectiveness of learning interventions. This provides a positive way of matching the effective delivery of CPD provision with the constraints that limit the opportunities for contemporary businesses to engage with the learning agenda.

Craig and Jutla [2001] suggested that one of the more useful mechanisms for transferring marketing knowledge and innovation to the SME sector is through distribution channels such as university business schools and associated networks. These provide pertinent e-business development skills at very low cost to SMEs. Furthermore, enablers such as knowledge management applications will play a key role in the content delivery. Therefore, the University may be perfectly positioned to take on an enabling role in a collaborative delivery of CPD provision. However, the basic structure of Universities and the provision of their services have not changed dramatically over recent years. Technology has enhanced learning support and it increasingly engages with overseas markets. However, the modes of learning delivery and the processes for designing products and monitoring quality remain traditional in their approach. The process is highly production orientated, and lacks flexibility / customer focus. This structure impedes progress in capitalising on CPD opportunities. Furthermore, once graduates depart, there is very little ongoing contact between them and the University.

With increasing internationalisation of markets and convergence of communication and information technologies, the current structure creates a potential weakness for Universities. Furthermore it will stifles their engagement with contemporary CPD related markets. To be effective this production-based orientation will need to evolve into one where the University positions itself as *a knowledge and learning network*. It has been suggested that the University of the future will no longer be a place but will consist of multiple, interconnected locations around the world. Individuals will no longer “go to Uni”. They will join a community, for lifelong learning and networking. This transformation effectively changes the production-based model towards a much more customer orientated one, focusing on regular learning top-ups and networking. This model will also require flexibility in terms of its academic staff. The concept of knowledge professionals or practitioner academics linked into a learning network will mean that staff may need to be positioned in overseas delivery locations or in international research clusters. Increasing collaboration with overseas institutions will increase the attractiveness of multi-location staffing.

The transition from a physical place of learning to a lifelong learning network will inevitably create tensions and challenges. Increasingly, the traditional physical on campus provision will be an entry point for learners into the learning network. However, to offer a genuine lifelong proposition, the University will have to work hard to keep its alumni in the network once they leave the physical campus, and to sustain that network by providing its members with the information, contacts, interactions, knowledge and learning that they need. Portals (and associated technologies) will provide a key facilitating role but to be effective the University will need to build a powerful infrastructure to transfer knowledge to an international community of lifelong learners.

It is clear that in the future the University's role in knowledge management and transfer could be pivotal for the development of capability within regional businesses, particularly SMEs. It is, however, important to recognise diversity in terms of SMEs behaviour and attitudes towards knowledge acquisition. The different mental models of individual firms must be considered, together with their personal understanding of knowledge management processes [Sparrow, 2000]. Furthermore, the potential for collaboration between SMEs to improve capability and knowledge transfer is significant [Shelton, 2001]. Frey [2002] reported success in establishing Knowledge Management systems in SMEs, that encouraged information sharing. Knowledge transfer through collaboration is highly effective for nurturing innovation. Therefore, there will be benefits for the University taking a pro-active position regarding collaboration in its widest context.

Methodology

The research underpinning this paper adopted an action orientated approach and is part of a longitudinal study designed to determine the effectiveness of current CPD support, and to recommend a framework to improve learning provision The views of 200 business managers were obtained for the project through in-depth personal interviews, qualitative focus group interviews and mail based questionnaires. The subsequent analysis of these interviews was used as a foundation for the establishing an effective framework for CPD support within The University of Wolverhampton. The longitudinal research identified preferences of managers/professionals for CPD provision and these underpin the design of a platform to support the delivery of learning opportunities. It is envisaged that a web enabled portal will form the nucleus of this effective CPD support delivered through The University of Wolverhampton.

Research Findings

Of the 200 respondents interviewed 40% had previously worked with a West Midlands based University, 22% with the University of Wolverhampton. In relation to the services that respondents would prefer, 45% requested employer led work focused learning. 65% requested the provision of seminar and networking events. It is interesting to note that overall 73% of managers supported the provision of CPD for their workforce. Consultancy services and direct business assists were requested by 18% of respondents but 68% were favourable towards the provision of mentors for their businesses. As could be expected applied research was indicated as a useful service by fewer respondents (16%). However there was some confusion expressed by respondents as to the differentiation between practical applied research and "blue sky research". The provision of incubator or start up space for businesses was seen as important by 5% of respondents. The opportunity to engage students in businesses on a short term basis was perceived by 58% of respondents to be a cost effective method of receiving support.

The range of subject interest varied but the most popular areas were I.T.(58% expressed a keen interest in developing their employees skills in this area); Business Management (48%); Marketing (48%) Law (43%); and Environmental (28%).

The findings of the research concurred with research by Clark [2003] who found that respondents from a raft of industries were enthusiastic towards the concept of technology driven collaborative learning and employee development. E-tutored collaborative learning with active moderation and intervention by a mentor or tutor was perceived to be the preferred route to learning, whilst threaded discussion forums, a less mediated form of collaboration scored lower. This confirms the importance of expert intervention in the delivery framework. Virtual classrooms were perceived to have only moderate benefits to SMEs, confirming the notion that simply putting a classroom online is not

leading the way of future collaborative learning. Email ranked highly as an effective form of knowledge transfer and by volume alone is the single most important method of getting knowledge from one person to another. However, it is so embedded in everyday business practices that it is often not regarded as a form of online learning [Clark, 2003].

The delivery platform for CPD support was an important issue for respondents. The traditional part time provision of 1 afternoon and 1 evening was only considered acceptable by 13% of respondents. 55% favoured flexible seminar based delivery methods (breakfast or evening), 32% block sessions or Weekend. Sunday was considered to be a preferred study day to Saturday by 66% of respondents. 89% of those interviewed welcomed the addition of technology supported learning to streamline their studies and minimise the impact on their time. Work based delivery of learning was preferred by 27% but a mix of training delivered at the University and in the workplace would be preferred by 83% of those interviewed.

It is interesting to note that 92% of respondents claimed that they would be more likely to engage in learning that was relevant to their industry. Furthermore, the quality of learning and the credibility/experience of academics/trainers was considered important by 93% of respondents.

The concept of a learning element to the portal, which would also provide materials (such as research papers, transcripts of seminars etc) was discussed and 68% of respondents suggested they would use and support this type of learning network subject to access costs. The primary benefit of a portal driven network from the professional/managers perspective was the opportunity to receive updates on funded assistance/ CPD seminar opportunities (92% who said they would use the portal placed this benefit first); to access materials and practical learning objects relevant to their specific needs/capability gaps (76%). Other key requirements were the potential to network with universities/colleges and their students (74%). Interestingly, several managers stated a preference for an independent portal that meshed the services of a number of universities/colleges, rather than them being locked into one institution. Furthermore, 65% of managers reported that they would welcome the opportunity to buy downloadable support products from the portal that had been produced by academics or consultants/advisors.

The provision of diagnostic tools as a pre-cursor to a learning contract was considered to be a value added element by 72% of respondents. Several managers suggested that although they were aware of the need to engage with CPD, they were unsure of where to allocate or how to prioritise resources. It was suggested that the use of an effective suite of diagnostics prior to the development of a learning contract and then following learning interventions, would develop an effective relationship between the University and Organisations and would enable a long term programme of support to be implemented. It would also provide a useful evaluation opportunity in order to monitor the effectiveness of learning interventions. Research suggests that the true effectiveness of external support is difficult to measure and is ever changing [Sparrow, 1999]. It is also quite a task to measure its impact on growth accurately [Summon, 1997]. So far, consultancy from government-led schemes has received some bad press and it remains unclear which type of help is most effective in improving the marketing capabilities of SMEs. There appears to be a gap between what SMEs really need and what is currently on offer to them. The use of diagnostics linked to key performance indicators would address this issue.

The opportunity to network academics with professionals such as industry practitioners/consultants was considered to be an effective aspect of the provision (90% ranking it as important). Such collaboration is conceivably important since there is evidence that academics often lack the experience to provide adequate advice to practitioners, as substantial knowledge about the context in which the concepts and theories are to be applied is often required [Ottesen, Gronhaug 2004]. Furthermore, there is an issue that frequently owner/managers perceive academics as people who lack industry practical experience and who are incapable of making a meaningful contribution outside the academic environment [Latham, Latham 2003].

Using a Portal driven VLE to enhance CPD Provision

A Virtual Learning Environment (VLE) can be defined as “a collection of integrated tools enabling the management of online learning, providing a delivery mechanism, participant tracking, assessment and

access to resources." These integrated tools may be one product (e.g. Blackboard/WebCT) or an integrated set of individual, perhaps open source tools [Jisc Infonet, 2007].

Virtual Learning Environments can represent a more successful learning environment and have proven to be motivating contexts for learning. In these virtual environments the learning experience can be flexible, more accessible and inclusive. Not only are these environments often a more economically viable option, but they also allow specialist tuition and knowledge to transcend geographical boundaries.

The future of VLE's will have innovative and exciting possibilities. New networks and www2 will allow more learning opportunities beyond those currently offered by the Web, but careful planning and innovation will be necessary to ensure that the potential for the scope of delivery is achieved. It is important to consider scalability and mobility so that learning can take place in the most appropriate context. The increasing conversion of PDA platforms through smart phones such as Blackberry devices will demand increasingly innovative delivery mechanisms. The portal, which constitutes the hub of a VLE must be designed to ensure such scalability and multi-directional communication flow. Open source software is increasingly being used to create flexible learning portals. Open source is a set of principles and practices that promote access to the design and production of goods and knowledge. The term is most commonly applied to the source code of software that is available to the general public with relaxed or non-existent intellectual property restrictions. This allows users to create software content through incremental individual effort or through collaboration [Wikipedia, 2007].

Currently, one of the main disadvantages of VLE's is the lack of face-to-face personal interaction and social contact, which traditional educational contexts provide. Only when learning environments, and those involved within them, are fully responsive to the needs of students will optimal levels of progress take place. For most students this will involve a judicious blend of both traditional and virtual learning environments [Galloway, et al, 2002]. Key to the future success of VLE's will be the design of intelligent portals that can seamlessly connect individuals, groups, and knowledge repositories so that their networked members can take advantage of relevant information (offered both online and by personal delivery), across a range of business and educational disciplines to help them learn more efficiently and develop their capabilities.

It is important that a collaborative learning portal aggregates, organises, and searches information so that users can find relevant information and support quickly. Personalisation of portal content and layout, and audience targeting must be considered in order to enable information to be published to the right groups of individuals and members at the right time. A secure, scaleable, Enterprise-class portal should be designed to integrate into the Microsoft Windows and Office environment and so have relevance to both managers/professionals and post-graduate students and academics. The main advantages of a portal's capability is its ability to aggregate information and present it the right people at the right time; search capability; quickly retrieve learning information; and to consider document management capability; and security.

Conclusion

The development of a portal to support the delivery of CPD enhances a University's provision. However, it must be designed so as to offer a blended learning approach to CPD, fusing online and offline learning support through an innovative framework. This would address important issues identified by Hung [2001] that when accessing a virtual learning environment there may still be a need for learners to work together. Web-based learning environments should capitalise on social, communicative, and collaborative dimensions, allowing mediated discourse. They should be portable as far as possible so that they can be used in the proper context. Furthermore, scalability will be crucial, since future developments in virtual learning environments will embrace wireless and portable devices. The benefit of PDA's and other portable devices will allow learners to collaborate and share solutions, thus fully acting out the learner's CPD roles of reflector and peer-tutor [Hung, 2001].

Feedback received for this research has established the potential of the *Collaborative Learning Environment* for versatile CPD support. Key strengths of a portal driven approach are the wider stakeholder benefits for networking, both within and between academic institutions and businesses. It is important, therefore, that the structure is designed to embrace the potential of technology to

transform institutional processes from a collaborative perspective (taking account of the lifelong learning agenda), rather than that adopted by many university owned VLE's, which simply replicate existing systems and traditional ways of working. To be effective, the design, must achieve a scalable flexible solution that can adapt to meet the changing demands for effective CPD provision. This structure must effectively encourage and facilitate collaboration/networking, which is a key success factor for contemporary businesses.

The PricewaterhouseCoopers West Midlands Business Survey [2000] discussed the strategic importance of an increase in industrial diversification, innovation, business productivity improvements and business renewal. The recommendation was that substantial investment in capital, skills/training and infrastructure be made in order to achieve parity in productivity and competitiveness. However, SMEs tend to be restricted in their ability to acquire knowledge as they have a more mechanistic view and lack systematic mechanisms for embodying and sharing knowledge. Furthermore the perceived benefits of knowledge acquisition tend to be targeted towards the market rather than the benefits of internal effectiveness [McAdam, Reid 2001]. Key to the University's successful engagement with the CPD market will, therefore be its ability to offer an innovative and flexibly delivered package of support, that unlocks these issues and encourages Organisations to engage with the lifelong learning agenda in a positive, enthusiastic and coordinated manner.

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