e-Learning for Smaller Rurally Based Businesses: A Demand-Led Challenge for Scottish Educational Institutions

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Introduction

The drives towards globalization and the impact of the information age are all around, often in confusing abundance. Yet knowledge and ideas within this new economy can only add value to goods and services if they are adequately harnessed. Within such a swirling idea-based environment, businesses will (more than ever) need to stay responsive, competitive and profitably succeed. There is a pressing need for a suitably equipped workforce, one that has or can acquire re-skilling to meet these new challenges. New paradigms supporting dynamically rich learning experiences are essential so that training can be delivered when, where and how it is required. A web-based provision might therefore be a relevant and appropriate choice for developments here, and immediately deployable to those firms most exposed to these overlying and changing economic currents. I'm thinking here especially of SMEs (Small and Medium Sized Enterprises) of less than 250 employees which in both Scotland and the rest of the UK are the predominant unit of business activity.

Nature of the Research

Much investigation and comment has already taken place with regard to the viability of online learning developments for SMEs within the context of urban settings. I was interested to discover to what extent would such a provision be applicable/viable within, say, a predominantly rural setting and one in which there was already a very considerable and well-established SME presence. The nature of rural areas certainly poses particular problems for workforce development. The agricultural and service sector jobs that normally predominate here are often characterized by a pattern of a high turnover, part-time and/or seasonal employment and act as a counter-balance against training in general. In any event, conveniently accessible training is limited, with far fewer opportunities for formalized events to be organized and delivered close at hand amongst businesses often quite widely geographically scattered and/or out-of-the-way. Adverse climatic conditions in remote rural areas may also further affect travel to urban based training institutions during winter months.

To research the viability of online training options in such a setting, I chose the administrative county of Aberdeenshire which in terms of SME related employment and turnover is amongst the most significant amongst rural areas in Scotland. Within this process, I conducted a comprehensive review of research findings, policy documents and official pronouncements that already touched on the topic (Goolnik, 2001). In addition, and by way of original research at a local level, I carried out interviews with a number of individuals who had a significant training-related involvement with such businesses and surveyed a selected cross-section of firms for their views.

Character of SME Workforce Development

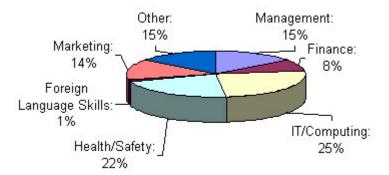
Both previously published evidence (Critical Research, 2001; Glass et al., 2002) across the UK and my own study in Aberdeenshire confirm a significant involvement amongst SMEs with workforce development. However, the leading characteristic of this provision is that it is predominantly unceremonious and delivered/sustained in-house (Johnson, 2000). In some cases, this is as a consequence of the specialized nature of the SME's business which can in turn prove to be a problem when it comes to discovering off-the-peg training options (Glass et al., 2002). A greater and more general influence – reflecting the most important driving force behind any venture undertaken by SMEs – is the desire to profitably survive (Gray and Lawless, 2000; Glass et al., 2002); and there is consequently a certain attractiveness in the more informal, tailored, bite-sized (learning object orientated) training and updating methods that address mainly immediate "life-saving" problems. As well as offering a close fit to SMEs' operational patterns in a competitive marketplace, such provision also of course reflects the firms' lack of resources in terms of limited ability to provide staff cover (Gray, 2000; Glass et al., 2002) and devote finance to acquire information and/or undertake learning on a larger scale (Critical Research, 2001). A drawback of such practices is revealed in the normal absence of well-structured procedures and a tendency to circulate experience and understanding in very haphazard and unpremeditated ways (Marchmont Observatory, 1999). It means that approaches applied more systematically elsewhere in larger businesses often fail with this type of firm to achieve a fraction of their full potential.

Naturally enough, the attitude of the owner/manager within a SME towards workforce development is a highly critical factor in decision-making about training (Hawke, 1998; Dale and Bell, 1999; Critical Research, 2001; Parker and Byrom, 2001). They will often take their cue from interests and individuals that reflect the business experience of the sector in which they operate rather the views of those outside it [i.e. universities, colleges and other training advisers/providers] (Bolden and Terry, 2000; SFEDI, 2000). Within many of these circles, there has been a good deal of negativity towards publicly inspired training initiatives and any associated provision. Such programmes have often been seen as confusing, expensive, inappropriately designed and supply-driven – guided more by non-business/political agendas (Lester, 1999; Pye, 2000).

Flexible Provision

Certain generic training opportunities offered by external providers are still however of interest to SMEs (see figure 1 below) – but only these courses are designed, delivered and supported in ways that address their real and immediate needs, preferably close at hand, and delivered in a cost-effective fashion (Gray, 2000; SFEDI, 2000; Marchmont Observatory, 2000; Goolnik, 2001).

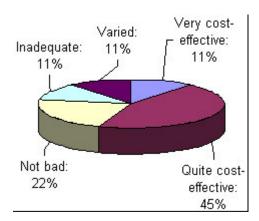
Figure 1: Training Needs as Expressed by SMEs in Survey



Furthermore, recent attempts at rationalisation of economic development services at both national and local levels in Scotland – along with the emergence of new potentially useful national bodies, policy initiatives and networks – should lead to improvements (House of Commons Trade and Industry Report, 2001; Scottish Executive, 2001). Indeed, the advancement of much more enlightened policies with regards to workforce training has received additional backing from major research and recommendations just published under the auspices of the Scottish Executive (Glass et al., 2002). Certainly, there now appears to an official appreciation of past mistakes, with a detectable willingness to engage with what is presently unfolding and adopt funding arrangements that lend encouragement to more tailored approaches (Scottish Parliamentary Enterprise and Lifelong Learning Committee, 2002).

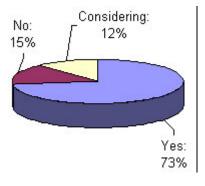
For what is clear from my study is that publicly funded educational institutions wishing to make an impact in such situations do have to start adopting strategies that are honed to flexibly connect with the world of this type of firm. [Indeed, private training providers already command a greater respect because of such a willingness to engage]. Only a limited number (19%) of the 59 businesses that I surveyed had however experienced distance education as a means of delivery. Yet (as can be seen from figure 2) just over two-thirds of those who had tried such approaches found the results to have been within "not bad" to "very cost-effective" categories.

Figure 2: Feedback from Experience of Distance Education



The emergence of the Internet has also aroused a significant amount of interest amongst the SMEs researched – with 73% already obtaining a web presence and a further 15% considering such a move (Figure 3 below).

Figure 3: Website?



As can be seen from the following chart (Figure 4), by far the greatest use of the Internet by owner/managers is for e-mail (37%), closely followed by searches (32%).

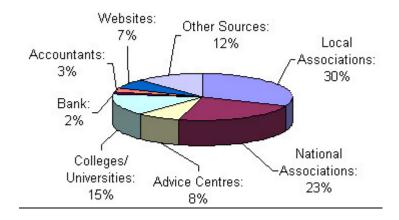
Figure 4: Internet Use



Such means serve as basic channels for learning experiences and exchanges of information.

Peer-to-peer networking has traditionally been a feature of SMEs through gatherings of Rotary Clubs, branches of local and nationally based trade associations, etc. By way of illustration, when the firms surveyed were asked about how they found out about training opportunities the results showed that they discovered the bulk of their information through such sources rather than through colleges or universities:

Figure 5: Sources of Information about Training Opportunities



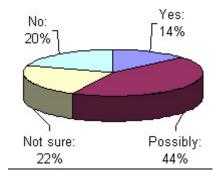
Electronic communications now offer SME managers an attractive and on-going virtual option. Indeed, such transactions are now a well-established feature of many SME occupations. They offer, on a far greater scale, the immediate yet continuing and individualized assistance that has already been observed as the overwhelmingly preferred workforce development option. However, as noted earlier, such initiatives also need sound and concerned management if they are to be truly effective! As one local training practitioner put it: "The Internet is an excellent tool for distance learning and on-line support training. However, it can only be effective if it is managed, structured and supported by qualified and competent staff, and those receiving the training have access to the right equipment and software. Personally I think it is the way forward, especially where you have rural issues." (quoted by Goolnik, 2001).

Changed Approaches from Educational Institutions

Education is seen as having a mixed record when offering training (Gray, 2000). A leading member of a SME interest group covering Aberdeenshire believed that "most of the training offered by higher education institutes was originally designed for large businesses and they have tried to modify it to suit small businesses. This hardly ever works...Few of those involved in designing the courses have ever owned or worked in a very small business and most patronize small business people. They usually have fixed courses based on what they can deliver rather than what the businesses need. Only rarely will a college modify its courses to meet customer needs." (quoted by Goolnik, 2001). Here is where private training organizations have an advantage. In this respect I quoted the view of one consultant: "The good private training providers ..are certainly more flexible – and they'll go for the business." However, practitioners from educational bodies interviewed as part of my research felt that institutional attitudes were quite definitely changing with regard their relationship with SMEs.

If so, an opportunity presents itself here for such bodies, in active and sensitive negotiation, to put in place an enhanced range of key business drivers. The latter would radiate from virtual areas created for computer mediated discussions/collaborative working, knowledge management/mapping, business intelligence/data warehousing, performance/expert guides with more formalized distributed learning made available, delivered and supported in flexible, accessible and cost-effective ways. As such, on-going forums could be established and facilitated on topics of sectoral interest; with relevant knowledge and information effectively and systematically developed, stored, made accessible and shared; and relevant training units worked up in conjunction with interested firms + representative bodies and presented for wider take-up. As Mayes (2002) puts it: "It is likely that greater insight into pedagogical innovation is to be gained through focusing on the social dimension of communities of learners rather than continuing to view the learner's key relationship as being with the subject matter, or at best with a tutor." Such a move might also be pushing against an opening door. My research amongst Aberdeenshire SMEs revealed, for instance, that over a quarter of all respondents (27%) were seriously considering or looking into the Internet as a training option; with 58% feeling that it might well be convenient for their business (Figure 6 below).

Figure 6: Interest in Internet-Based Training



Further awareness raising could produce a critical mass which – especially allied with possible new funding arrangements – would then allow such options to be delivered at economically attractive rates.

Having said that, growing and sustaining a SME customer base for such initiatives will also hang on providing a trustworthy service (i.e. relevant, satisfactorily arranged and administered), with various elements in the provision being made sufficiently comfortable, accessible, well resourced and seamlessly intermixed. In particular, designs for learning should be linked to absorbing,

digestible and reusable chunks of content, easily understood navigation, competent structural organization as well as appropriate and qualitative mentoring/tutoring support. It will also need to address issues of technical induction and ongoing IT help, local computing facilities/resources and telecommunications connections.

Whether it is feasible for all staff in SMEs to study *completely* online is, I believe, another matter. Some subjects would pose problems of a practical nature for online delivery and support. In any event, my research in a rural area and that undertaken by Stokes (2001) in an urban setting underscore the view that generally speaking a desire for social contact, a certain apprehension about studying in isolation entirely by means of technology and the need to accommodate a wide range of preferred learning styles are amongst the factors that suggest a range of avenues should be made available. A "blended" approach to workforce development may well provide a cost-effective answer here – one that provides online availability, technically supported access and mentoring through their workplace or a network of local learning centers as well as periodic face-to-face meetings. (Incidentally, such learning centers are already starting to emerge across the land under the government-backed Scottish University for Industry scheme).

Conclusion

As Ihalainen (1999) comments under the heading of 'Combining Learning and Work' "Flexibility is...the key word in training. Traditional training programmes based on class-room teaching are no longer enough. Companies seek for more flexible solutions and also want that the special needs of the company can be taken into account. ...[with a] flexibility in time and place [and] a possibility to combine learning and doing business." Achieving the most effective portal and interactive environment for ongoing awareness, updating, deepest understanding and above all rewarding use by the targeted groups will however require careful planning by instructional designers, information scientists, web and content developers. Again, I would emphasise the essential need for sufficient preliminary discussions to take place with the targeted range of SMEs. Ultimately, tackling these issues proactively as key planks in the provision offered by educational institutions – as crucial elements in a continuing and wide-ranging lifelong learning and business development strategy – would seem to be the most productive way forward.

References

Bolden R. & Terry, R. (2000). Leadership Development in Small and Medium Sized Enterprises. *Centre for Leadership Studies, University of Exeter*. Retrieved May 16, 2002, from http://iet.open.ac.uk/icdl/marchmont/marchmontFTP/Leaderstudiesphase1rep.doc

Critical Research. (2001). QBO – Learning Skills Council Study, Summary Report – June 2001. *Learning and Skills Council*. Retrieved May 16, 2002, from http://www.lsc.gov.uk/news_docs/QBO.report.doc

Dale, M. & Bell, J. (1999). Informal Learning in the Workplace. *Department for Education and Employment*. Research Brief No. 134. Retrieved May 16, 2002, from http://www.dfes.gov.uk/research/data/uploadfiles/RB134.doc

Glass, A., Higgins, K. & McGregor, A. (2002). Delivering Work Based Learning. Scottish Executive Central Research Unit. Enterprise and Lifelong Learning Findings No. 5. Edinburgh: The Stationery Office. Also retrieved May 19, 2002, from http://www.scotland.gov.uk/cru/kd01/orange/dwbl-00.asp

Goolnik, G. (2001). *The Viability of Small and Medium Sized Enterprises in Rural Areas*. Unpublished Thesis for MS. Ed. (Online Teaching and Learning), California State University (Hayward).

Gray, C. (2000). Furthering Small Firm Development: Small Firms' Views On The Role of F. E. Colleges. Small Business Research Trust, Report No. 2. Milton Keynes: Small Business Research Trust, Open University Business School.

Gray, C., & Lawless, N. (2000). Innovations in the distance development of SME management. *European Journal of Open and Distance Learning*, April 2000. Retrieved May 16, 2002, from http://www1.nks.no/eurodl/shoen/Gray.html

Hawke, G. (1998). Factors influencing active learning in small enterprises. *Research Centre for Vocational Education and Training (RCVET), University of Technology, Sydney*. Working Paper 00.13. Retrieved May 16, 2002, from http://www.uts.edu.au/fac/edu/rcvet/working%20papers/0013%20Hawke.pdf

House of Commons Trade and Industry Committee. (2001). *Thirteenth Report (Section II, Structures*). Norwich: The Stationery Office. Also retrieved May 16, 2002, from http://www.parliament.the-stationery-office.co.uk/pa/cm200001/cmselect/cmtrdind/513/51305.htm

Ihalainen, T. (1999). Creating virtual learning environment for SMEs. *Paper presented at ENABLE99 conference, Espoo, Finland, June 1999.* Retrieved May 16, 2002, from http://www.enable.evitech.fi/enable99/papers/ihalainen/ihalainen.html

Johnson, S. (2000). Small to Medium Enterprises (Section 1 of "Skill Foresight and related issues for the Pharmaceutical Sector", edited by Irving, I.) *Pharmaceutical Industry National Training Organisation*. Retrieved May 16, 2002, from http://www.abpi.org.uk/education/NTO/NTO_Documents/pdfs/SkillForesightchapter1SME.PDF

Lester, S. (1999). Strategic learner-managed learning in small firms (Part 2, Owner-managers and learning). *The International Centre for Learner Managed Learning (ICLML)*. Middlesex University. Retrieved May 16, 2002, from http://www.lle.mdx.ac.uk/ICLML/seminars/lester/slsem2.htm

Marchmont Observatory. (1999). Understanding SME Learning: The challenges for UfI. *Report of Joint Marchmont/SME Cluster Group Workshop*, December 1999. Retrieved May 16, 2002, from http://iet.open.ac.uk/icdl/marchmont/marchmontFTP/understandingsmerep1999.doc

Marchmont Observatory. (2000). Funding for Learning. *Report of Marchmont Workshop, Aston University, June 2000*. Retrieved May 16, 2002, from http://iet.open.ac.uk/icdl/marchmont/marchmontFTP/fundingreport.doc

Mayes, T. (2002). Pedagogy, Lifelong Learning and ICT. *e-JIST* (*e-Journal of Instructional Science and Technology*), 5(1). Retrieved May 16, 2002, from http://www.usq.edu.au/electpub/e-jist/docs/html2002/mayes.html

Parker, C. & Byrom, J. (2001). Towards a healthy high street: Training the independent retailer. *Manchester Metropolitan University Towards a Healthy High Street Project*. Summary retrieved May 16, 2002, from http://discus.open.ac.uk/goodprac/mm/result.ihtml?docid=468

More detailed report: "Clarification of Priority Training Needs" retrieved May 16, 2002, from

http://www.man-bus.mmu.ac.uk/esf/reports/reprt001.htm

Pye, J. & Marchmont Observatory. (2000). Promoting Workplace Learning with ICT: Modes and Models for Organisational Change. *Paper presented at the European Conference on Educational Research, Edinburgh, Scotland, September 2000*. Retrieved May 16, 2002, from http://www.Leeds.ac.uk/educol/documents/00001611.htm

Scottish Executive. (2001). *Local Economic Forums: National Guidelines - Contents*. Scottish Executive Enterprise and Lifelong Learning Department. Retrieved May 16, 2002, from http://www.scotland.gov.uk/enterprise/localeconomicforums/lefguidelines-00.asp

Scottish Parliamentary Enterprise and Lifelong Learning Committee. (2002). *Interim Report on the Lifelong Learning Inquiry (Section 10, Learning in the Workplace)*. [NB particularly paragraphs 231, 255 and 302]. SP Paper 550. Retrieved May 16, 2002, from http://www.scottish.parliament.uk/official_report/cttee/enter-02/elr02-02-03.htm

SFEDI. (2000). The Impact of Training on Small Firms with DfEE Workplace Learning and Centre for Enterprise. *Small Firms Enterprise Development Initiative*. Retrieved May 16, 2002, from http://www.sfedi.co.uk/Research-partnerships1.htm

Stokes, A. (2001). Using telementoring to deliver training to SMEs: a pilot study. *Education* + *Training*, 43(6), 317-324.

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Back to Journal of Distance Learning Administration Contents