The Growth of the Public Health Masters at the University of Bedfordshire

Susan Sapsed, Senior Teaching Fellow

David Mathew, Learning Technologist

University of Bedfordshire

Bedfordshire, UK

Abstract

On the eve of the tenth anniversary of a Department of Health (England) statement in 2002, stating that the use of distance learning in the delivery of health care education is driven by the students involved, we present the evolution and development of the MSc in Public Health offered by the University of Bedfordshire, which has proved the DoH's statement correct. We present, in the first part of this paper, the current situation with regards the MSc and the project to launch it into a fully online delivery; and then we backtrack to cover the evolution of the Public Health Masters online programme, from its somewhat humble beginnings in 2006, to the current situation in 2011. We chart the project's move into the overseas market, a high percentage of our market (then and now) being from the European Union and from developing African countries; in doing so we highlight some of the specific challenges that this subject has faced in a multilingual market and some of the challenges (technological, geographical, for example) that will continue to be factors of note. We explore the notion of technology cultivating a learning atmosphere of global interconnectedness, through the use of Web 2.0 and the germination of social networking, collaboration and interoperability. With this approach in mind we hope to exhibit good practice in the use of technologies as tools for learning.

Keywords:

Virtual Learning Environment (VLE), Higher Education, Distance learning, Turnitin, Blackboard, E-Learning, technology, public health, global, diversity

Introduction: The Present

By the time this paper is printed the University of Bedfordshire should have completed its move from a Mode 2 delivery for the Public Health Masters, to a Mode 3 delivery of the same. In essence this means a radical shift from a blended approach to a fully sustainable online delivery, using a range of tools and teaching and learning strategies. This project, as might be expected, has taken some time to evolve, and is regarded, even now, as an organic piece of work that can be updated, adapted and edited as the needs arise. At all times full attention is paid to the feedback of our students and our academic peers.

Preparing for the transition to Mode 3 necessitated a fresh look at the existing programme of delivery. Although by this point (2010) the Masters had been running with a blended approach of face-to-face and distance learning modules for several years (see below), it was felt that more was needed for a distance learning package than reusing the same materials. To this end we embarked on a full scale work-through and review. Despite the fact that the content had worked well in recent years for its original purpose, it was soon apparent that it would not stand up to the different (and rigorous) requirements of a distance learning course. Too much depended on what would henceforth be absent: namely a lecturer's physical delivery of the programme. In other words, what had suited one project more than adequately for a number of years required a new approach to take into account the absence of other human beings. The existing material went through an edit for consistency, layout, presentation, and to ensure that the facts were current. (The last of these considerations of course must always be borne in mind with material about public health issues.) Conscious of recent estimates that readers only absorb 25% of what is presented on screen, we made sure that the text was not too 'wordy' and that key or important statements (where appropriate) were substantiated with relevant illustrations and/or diagrams. In time we intend to include video to implement and enforce the cognitive alignment and complementariness further. We have also embarked on the learning technologies of discussion boards and wikis, and although it is probably too early to judge their inclusion into the programme a success or otherwise, we are confident about their future use as effective tools.

The message has been that distant learners expect quality interaction, both with their peers and with their tutors. For this reason alone the upgrade to the existing programme would have been seen as a good idea; but there were other factors that informed our decision-making processes – other reasons why we are moving into the exciting realm of the unknown.

Evolution of the Project

The Public Health Masters is one of a rapidly growing number of resources offered by the University of Bedfordshire that has evolved via a recognition that what used to be the 'traditional' learning experience can (and perhaps, must) be enriched and transformed through the use of technology, irrespective of the challenges that a change in approach will usually present.

The roots of the project lie in 2005, at which point the programme was under the umbrella of Health Care Professional Practice; by the end of the following year the Masters had become a programme on its own. However, this independence did not arrive without problems, and there existed some inevitable challenges and questions that had to be dealt with. In developing and launching the MSc in Public Health, for example, we assumed that students would enter with a range of existing research and evaluative skills. But in fact, between 2005 and 2006, Exploring Research Methodologies was a taught (and mandatory) unit for the simple reason that the students had severely limited knowledge in this area – limited to such an extent that it was insufficient to enable an acceptable grade in their dissertation.

For another thing, the final student numbers for the year 2006-2007 were not as high as had been expected; it quickly became clear that there had been a much greater number of *enquires* about the course than had been applications to enrol. In order to learn why this might have been so, a brief audit was undertaken by means of a short and friendly questionnaire. Of the 120 students who had enquired, it came to light that 22 had been accepted at other Universities. This left 88 potential students who had gone on to do something other than study with the University of Bedfordshire; and these 88 became the target market for our audit and were sent the questionnaire.

Gratifyingly, every one of the 88 questionnaires arrived back, 13 from the UK, 10 from the EU and 65 from elsewhere (the majority of this third category being from developing countries). The results were interesting and somewhat unexpected. The demographics of postgraduate students had either changed or was in the process of changing. Among the group a large number were mature students, with slightly more females, who might need to juggle family responsibilities with a return to study. (The ratio of women to men being slightly higher in the women's favour was of interest, especially in the light of Leonard's (1994) suggestion that one third of women find a lack of support when they return to education. This was – and surely remains – a serious issue to consider when designing *any* sort of HE programme.) Neither qualification, type of work, nor the course fee itself a primary reason for not pursuing the application. The obstacle cited was the University-stipulated 80% attendance requirement: students were not willing to sign up when it was unlikely or impossible that they would be able to attend for the minimum hours.

A distance learning course grew out of the subsequent discussions; and the question that we bore in mind was as follows: Is human interaction essential or will technology and the virtual environment suffice? We were aware that Kevern and Webb (2004) had identified that some mature students lack coping strategies and support systems for effectively managing both the workload of a taught course and their domestic role, which added further support for the need to develop and offer a flexible and family-friendly system of studying. One way of doing this was by using blended learning within a Virtual Learning Environment (VLE) – this approach augmented by the added bonus of introducing diversity into delivery. A VLE offers a student access to his/her learning resources at a convenient time – but only if the technological infrastructures are in place, a matter that must never be taken for granted, especially when considering educational delivery in developing countries.

Right from the very beginning, then, we were aware that there were Big Questions to address. Not least was the thorny issue of how to avoid what we knew had to be avoided, i.e. a learning resource consisting of simple reading exercises, with nothing to enrich the experience. And then there was to take on board the fundamental recognition that health education is fraught with ethical, sometimes controversial, frequently complex issues that might benefit from intellectual interaction and face-to-face debate. On the other hand, we had the affirmations of (*inter alia*) Gibbs (2000), who suggests that subjects have been brought alive by distance learners in the way they use the new technology. Gibbs also posits the thought that even the process of communication between lecturer and student can be improved by distance learning: the teacher takes a more considered time before responding, rather than make a comment that in other contexts might be regarded as cursory. In other words, the lecturer feels that the student should be self-empowered to take charge of his/her own learning at Masters level. Both Boud (2000) and Yorke (2003) have argued that one of the key purposes of Higher Education is to facilitate the autonomy of learners.

Whether this was an achievable goal remained to be seen.

Challenges, 1: Prefatory Matters

'Traditional' modes of learning (Palloff and Pratt (2001) argue) might not be suitable to prepare students for the autonomy and interdependence needed to engage with a virtual learning environment to their best advantage. Although the world of technology-enhanced learning has developed considerably in the decade since this judgement was made (one of the reasons for this paper in the first place), it is worth reflecting on such comments, and of course on what we might learn from them. After all, when discussing the growth of a distance learning programme, we must elaborate on more than the requisite technology as a changing agent: the learners themselves are changing agents, making a move into (possibly) unknown territory. How would we ensure that the learners would be engaged without yearning for human contact? Or could we assume that given the geographical isolation in which many of our learners enrolled, they would be accustomed to the challenges peculiar to distance learning, or at least ready to adjust to them?

Our guess that many distance learners would require, in lieu of immediate peer support, considerable support on the part of the lecturer proved correct. (This prediction of 'neediness' was one of the reasons why we charged the same fee as if they had been face-to-face learners.) As it has transpired, those learners who seem to have thought the ramifications of distance learning through thoroughly have been fine, but a tiny minority who have never studied this way have found, and continue to find, certain aspects of the delivery and the expectations made of them difficult; and these are the learners who require a great deal of support.

To begin with, learners were told that they would need an internet connection and that we worked with Word 7 as a first-choice package. It was not deemed sensible to insist on any more ambitious technological requirements: although in recent years the technological infrastructure worldwide has been augmented in general to support distance learning, it is certainly not the case everywhere. Furthermore, in some parts of the world, the cost of bandwidth is still prohibitive, and cost alone (irrespective of technical possibilities) is a limiting factor, reducing the chances for video streaming, for example. With these thoughts in mind, we have had to consider a course that can be delivered on multiple platforms. Regardless of our dream of a course with synchronous components and an all-singing-all-dancing interface (for example), the realities of our global working environment have imposed certain inevitable compromises. Asynchronous material is developed to meet learners' demands, whatever the time zones are their origins, and whatever access to telecommunications is the case. The important factor is an effective communication infrastructure. After all, the geographical remoteness of a learner might or might not be relevant to the student's progress (it depends on the learner); but when we add in matters such as local economic conditions, or an environment in which the cost of supporting an infrastructure is overwhelming, then it might be that the development of technology is all-but impossible without additional sources of funds. Such matters might be beyond the control (or even prediction) of any programme developer.

Something similar might be said of staffing issues. By now it should come as no revelation that face-to-face teaching and distance teaching are different disciplines, needing different approaches and different skills sets; that while there are key shared outcomes between the two, it by no means follows that a member of staff proficient at one will automatically be proficient at the other. Nor is the efficient *training* of staff who are proficient in one discipline into exponents of the second discipline is a dead certainty. Far from it; in fact, the transference between the two skills sets might not be possible at all; and it is more than likely (unless you are

lucky!) that any staff available will (at first) lack adequate professional training in the development and deployment of distance learning.

And yet, is there a choice? You have a distance learning programme to develop (possibly against some sort of operational or strategic deadline). Not only the learners, but also the lecturers (and for that matter, the team administrators) would benefit from dependable access to quality educational resources in order to provide basic learning experiences, as well as to continuing professional development for the improvement of the education systems that they put in place.

Language skills were also noted, and remain noted throughout the programme with every iteration that it goes through. With a programme that can be delivered anywhere in the world, it will come as no surprise that some learners enrol with limited English (although only once since 2005 has a learner discontinued Public Health for reasons of poor English alone).

These were among some of the prefatory matters that went into the planning of the delivery; but then there are some challenges that with all the will in the world one cannot predict. The Public Health Masters has had its fair share of these too.

Challenges, 2: The Unpredictable

Of course the most unpredictable component of any dynamic is the human being. A piece of technology might well let us down, but in general it will work or it will not work. A human being on a distance learning course is infinitely more unpredictable. The very term 'distance learner' could be seen as a gross oversimplification, based on ideals...but perhaps this is a topic for a separate paper. In short, we might say that human beings will not be predicted; and understanding the culture of students – how they have been educated to date, what constitutes their learning preferences – will only get us so far, and no further.

The learners demand a good deal of attention. They are prepared to wait their turn (in general), but it is not true to assume that a distance learner will necessarily work methodically through the material with which he/she has been presented. We have found so far that learners from India, Pakistan and Africa in particular are driven to be A-grade students; and there even persists an incorrect notion that if an overall percentage does not exceed 50% then the qualification cannot be considered a Masters. This latter idea would find sympathy with many academics (here and abroad), but the fact of the matter remains that what might be regarded in some circles as an admirable trait – a drive to succeed – is not in and of itself a universally positive thing. A student who passed with 46% has taken the matter to the Board of Governors and an Ombudsman, irrespective of the fact that she averaged Cs and Ds throughout the course: one example of the relentless cultural pressures under which some of our learners toil.

Given the prevalence of HIV and Aids in some of the countries where we have students on the Public Health Masters, we might have imagined these conditions to be important considerations. Not so: a total of eight learners admitted upfront that they were HIV Positive, but did not ask for any concessions or changes or anything: the information was a courtesy only. Far harder to 'confess', on the other hand (or so it would seem), has been the issue of dyslexia. A failure to divulge such an issue (or in fact any issue that might directly impede the learning process) can raise problems. To compare two case studies with similar origins: Student A (a European female) had dyslexia, which she revealed in advance of the course starting. She was offered the appropriate support. Student B (a European female) had dyslexia, which she did *not* reveal in advance of the course starting. It was some distance into the course before the troubles began, and the very best that might come out of such a scenario is the imposition of a £400 test for dyslexia, which the student has to pay for. The lesson to be learned is to be aware of the possibility of learning impediments; to know as much background as possible.

Bipolar disorder, if untreated, would fall into this category. A female student with bipolar disorder proved problematic in the sense that she refused to have the condition treated. The symptomatology was such that this student suffered an all-but total erosion to her inhibitions. Her emails were sexually frank and unambiguous; she made inappropriate comments to staff and to her peers, sometimes sending in excess of twenty emails in one day. The behaviour led to two students being driven away from the course with depression, and several group activities had to be abandoned and reconvened at a later date... It surely qualifies as irony, the fact that in her country this very same student practiced as a GP!

But let us conclude with something a little more positive.

A Student's Final Word...

Perhaps it is not conventional to finish a paper with a note of good wishes from a previous learner; but in the spirit of anniversary and celebration with which we began, we felt it might be nice to show how a learner in one of the more difficult-to-reach regions has been affected by the Public Health Masters. The student writes (all but verbatim):

Hello good people. I just thought of you in the new season. I saw on Sky and BBC News that it was a snowy Xmas and new year. I gather things are almost back to normal now. I hope you are doing well in the New Year. I am fine here, still on leave but getting back to work next week. Bu the way, did I tell you I moved from the nursing school to the Ministry of Health? I joined the ministry in August last year, ARV Programme. It's interesting because we deal with the National ARV program's policy development, we ensure its roll out and monitor its progress and all [of this] we do based on evidence. There are lots of research issues and [I] am even engaged in some research project, still at proposal level though. I am enjoying the job so far.

Wishing a prosperous year all the way!

Summary

By allocating significant resources in order to design strong, engaging distance learning services to meet both the collective and individual needs of our students in different parts of the world, the University of Bedfordshire has grasped the nettle of providing quality education in health care, with the barrier of geographical distance on its way to being overridden once and for all.

References and Bibliography:

Beckwith, P. (2006) The Pedagogy of Blended Learning and its Development within the Diploma of Higher Education (Operating Department Practice) Pathway. *Journal of Operating Department Practice*. 3 (2) pp:12-15.

Beckwith, P. & Sapsed, S. (2007) Can distance learning become an affective mode of delivery? *E-Leader, Prague*. Available at <u>http://www.g-casa.com/PDF/Beckwith%20Sapsed.pdf</u>

Boud, D. (2000) 'Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education* 22(2), pp: 151-167.

Campbell, C.A. (2001) Distance – learning in the health professions: on the verge of collapse or poised to soar? *Journal of Allied Health* 30 (1), pp 30-34.

Cifuentes, L., Murphy, K., Segur, R., & Kodali, S. (1997). Design Considerations for Computer Conferences. Journal of Research on Computing in Education, 30(2), 177-201.

Department of Health (2002) Delivering 21st Century IT Support in the NHS: A National Strategic Programme, Department of Health. London, HMSO.

Department of Health (2000). The NHS Plan: A Plan for investment, A Plan for reform, Department of Health. London, HMSO

Donnelly, R. O'Rourke, K. C. (2007) What now? Evaluation e-learning CPD practice in Irish third –level education, *Journal of Further and Higher Education*, Vol.31, No1, pp:31-40.

Douglas, J., Earle, S., Handsley, S., Lloyd, E. & Spurr, S. (2006) *A reader in Promoting Public Health*, London, Sage Publications.

Fisher, M. (2003) Online Collaborative Learning: Relating Theory to Practice. *Journal Of Educational Technology Systems*, Vol 31(3) 2003, pp.227-249.

Grandis, S. Long, G. Glasper A. & Jackson, P. (2003) *Foundation Studies for Nursing*. Basingstoke, Palgrave Macmillian.

Glen, S. (2005) E-learning in nursing education: Lessons learnt? Nurse Education Today, Elsevier. 25(6): pp 415-7.

Gibbs, W. J. (2000) Distance-learning and opportunities and challenges for libraries. *Electronic Collection Management* 25 (2), pp. 115-135. Page 8

Hart, M., & Friesner, T. (2004) Plagiarism and poor academic practice – a threat to the extension of elearning in higher education *Electronic Journal on e-Learning* 2(1) February pp:89-96 [online] available at: [accessed 18th February 2007]

Holmes, B., Tangney, B., Fitzgibbon, a., Savage, T. & Mehan, S. (2001) Communal Constructivism: Students Constructing Learning for Themselves As Well As In Others. In: Price, J. Wills, D., Davis, N. E. and Willis, J. (Eds) Proceedings Of The 12th International Conference Of The Society For Information Technology And Teacher Education (SITE 2001), pp. 3114-3119, Orlando.

Issenberg, S. Mc Gaghie, W. Petrusa, D. & Scalese, R. (2005) Features and uses of High-fidelity medical simulation and that lead to effective learning; BEME systematic review. *Medical Teaching*, Vol27, No.1, 2005, pp:10-28.

Kevern, J. Webb, C. (2004) Mature women's experiences in pre registration nurse education. *Journal of Advanced Nursing* 45 (3), pp: 297-306.

Kirkley, S. & Kirkley, J. (2005) Creating next generation blending learning environment using mixed reality, video games and simulation. *TechTrends: link research and practice to improving learning*, Vol49,No13, pp:42-53

Leask, M. & Younie, S. (2001) Communal Constructivist Theory: Information and Communications Technology Pedagogy and Internationalisation of the Curriculum, *Journal of Information Technology for Teacher Education*, Vol. 10, Nos 1&2, 2001.

Leonard, M, (1994) Transforming the household: Mature women students and access to higher education. In Davis, S., Lubelska, C., Quinn, J. (Eds.) Chancing the subject: Women in HE. Taylor and Frances, London.

Leung, W. C. (2002) Competency based medical training: review. *British Medical Journal.* 28; 325(7366): pp:693–696. Marsh-Norton, A. (2007) *The Future of END Education and Professional Development*, Conference Alpha e-learning Development, Kerrille, Texas, USA.

Macdonald, J. (2006) Blended Learning and Online Tutoring A Good Practice Guide Gower Publishing Limited, Hampshire. Masie, E. (Ed). (1998). Trends # 62 [online]. Available at http://www.masie.com/masie/default.cfm?page=techlearntrends=62&page=trendsdisplay [accessed 5th November 2005].

McHale, J, & Fox, M. (2007) Health Care Law, London, Thompson, Sweet and Maxwell.

McFerrin, K. (1999) Incidental Learning In Higher Education Asynchronous Online Distance Education Course. Proceedings of the Society for Information Technology & Teacher Education International.

Moore, M. (2007) How can I be an effective distance educator? : Key note address AST Instructors Forum, San Antonio, Texas 12th February 2007.

Palloff, R.M. and Pratt, K. (2001) *Lessons from the Cyberspace Classroom – The Realities of Online Teaching*. San Francisco, Ca: Jossey-Bass.

Pencheon, D. Melzer, D. Muir Gray, C. (Eds). (2007) Oxford Handbook of Public Health, Oxford, Blackwell Press.

Poole, D. M. (2000) Students Participation in A Discussion – Orientated Online Course: A Case Study, *Journal of Research on Computing In Education*, 33, pp. 162-177.

Resta, P. (2007) How can I be an effective distance educator?: Key note address AST Instructors Forum, San Antonio, Texas 12th February 2007.

Rhodes, R., Francis, L. & Silvers, A. (2007) Medical Ethics, London, Blackwell.

Rovai, A.P. (2002) Sense of Community, Perceived Cognitive Learning, And Persistence In Asynchronous Learning Networks. *Internet and Higher Education*. 5 (2002) pp.319-332.

Sapsed, S., Leggetter, S. & Pike, D. (2008) Developing a distance learning programme for the Public Health Masters - University of Bedfordshire. *E-leader Krakow*. Available at http://www.g-casa.com/PDF/Krakow%202008/krakow%20papers%20pdf/paper%20database%20krakow/Sapsed.pdf

Solman, M. (2001) *The e-learning revolution: from proposition to action*, London, Chartered Institute of personnel and Development.

Stephenson, J. (2001) *Teaching and learning online – pedagogies for new technologies*, (Eds) London, Kogan Page.

Yorke, M. (2003) Formative assessment in higher education: moves towards theory and the enhancement of pedagogic practice. *Higher Education*. 45: pp:477-501.