

Tony Clear

Faculty of Commerce  
Auckland Institute of Technology,  
Private Bag 92006, Auckland 1020, New Zealand  
Tony.Clear@ait.ac.nz



It has been rather cynically suggested that the “real function of education is to sort and certify people; imparting skills and knowledge is not really that important.” [1] With the advent of cyber-learning models of education, perhaps this perspective has to be taken more seriously. In the ability to certify may lie the only true competitive advantage of the university.

At the ITiCSE conference in Cracow, Herbert Grosch proposed a scenario that future University administrators seeking to cut costs of educational delivery would look to online delivery models, with large corporate providers providing outsourcing services. This would enable them to cut expensive faculty and offer more “education” to more students at lower cost. Such a scenario seems sadly plausible given the rise of managerialism in educational delivery, with its accompanying beliefs such as: the value of capital investment as a substitute for labour-intensive activity, a spirit of technological determinism and fad-driven educational managers in search of the silver bullet. The cost efficiency advantages of cyber-learning are taken as gospel, in spite of evidence that this is not a less costly mode of education, although for restricted product training, cost efficiency may be more valid. In the managerialist model, education is viewed as a business, wherein providers seek to expand market share, where the product-consumer model redominates, and the student-as-customer becomes an article of faith. Ironically in the New Zealand context, where the privatisation, contestability and freemarket models have been dogmatic articles of faith for the last decade and a half, our Government has concerns now about “proliferation of substandard tertiary institutions.” [2]

However, large international vendors are now promoting their own globally recognised accreditation and

certification schemes. Vendors such as Microsoft, Lotus, Oracle have their qualifications such as Microsoft Certified Professional (MCP), Microsoft Certified Systems Engineer (MCSE), Lotus Certified Professional (LCP), and ORACLE Certified Professional (OCP). (Note the MCSE designation in Texas is now problematic.) These schemes represent globally recognised, specific and job related qualifications in which the vendors now possess the ability to certify. Will these qualifications replace degrees as means of indicating the work readiness of graduates? Will they represent a cheaper investment for students as increasingly meal-ticket motivated education consumers? Or will they simply misrepresent graduates’ abilities in the same way as did the paper-CNEs, where a plumber with a mid-life crisis who took a twelve thousand dollar, four-week course, and passed an examination, deemed himself a Novell Certified Engineer, without any practical exposure to the industry. For employers it became a case of caveat emptor.

A survey of members at a New Zealand Computer Society monthly breakfast last year suggested the following situation. One question relating to the importance of staff with formal qualifications attaining vendor certification indicated a general preference for acquisition of these “top-up” skills as a post experience qualification, after a year or more on the job. [3] A question relating to the importance of staff without formal qualifications attaining vendor certification, indicated a general preference for acquisition of the broader skills provided by a formal programme of study, than for the more specific skills afforded by a vendor certification. [3] This of course raises the old question of the distinction between education and training. As a teacher in a vocational education institution with an applied learning approach, I tend towards the views of Dewey that theory and

application should not be divorced one from the other. Indeed, effective professional education requires this balance. However, balance is the key word. If education and product training are to be confounded, then we may as well leave it to the corporates. They even have a commercially driven model with in-built incentives for life-long learning. The short half-life of the vendor certification means that continual re-certification is required. Does anyone today want a VB 2.0 Microsoft Certified Professional?

In the wholly commercial model of education, the traditional university will not win. “Most corporate universities are staffed with only a skeleton of instructors and administrators.” [4] They have the ability to bring in “Hired Guns” to teach courses and sessions aligned with the corporately mandated strategy of the institution. These organisations have lower overheads because they have no research overhead to carry and costly library and other infrastructure costs. But with their industrial product delivery model they lack the individual expert model of teaching that the traditional university espouses through its notions of academic freedom. They also lack for instance, the critic and conscience of society dimension that New Zealand universities have as a legally defining characteristic.

Does the reason for the confusion about online learning and its future lie in these differing perceptions of education. On the one hand there is the commercial industrial product model of cranking out repeated, standardised, pre-packaged items of product for sale. On the other hand the academic model of the expert researcher engaged in a process of inquiry and knowledge discovery with students, where the product and indeed the process may change each time as new insights are gained and old ideas discarded. Yet given the predilection of the university for the lecture mode of delivery, it is easy to see how the

commercial model of standard product delivery largely biased towards information transmission could be misinterpreted as education. Placing this online is then simply a change of modes of information transmission with some greater convenience factor built in for students. But mere information availability, which is often the online version of information transmission, is not education. With the growth of libraries and literacy levels in modern society it has generally been possible for students to read and know and learn whatever they wanted. But certification seems still to be required, as certain forms of knowledge and learning are not valued in our society. For instance in my previous column, I noted the commonly mandated requirement for Ph.D. certification, in the transition from practitioner to academic educator and researcher.

The Auckland Institute of Technology model for quality in education is based upon the whole student experience, and quality education is regarded as a transformative experience. In such a model, dialogue is an inherent part of the learning process, and rather than so-called customers, students must be fully engaged active participants in their own learning process. In trying to reflect this in our online learning courses we have adopted multi-modal approaches, which require both activity and interactivity on the part of students. We have used a combination of web pages for content and guidelines. We provide interactive quizzes for students - to give immediate feedback on progress—and email contact with lecturers. We also use a listserv for course-related communications and a café-style listserv enabling social support for course participants. We supplement these activities by electronically submitted assignments marked by lecturers in the

traditional manner.

An interesting observation from our first online distance course was that students who, after working together and communicating online, chose to meet face-to-face in their local towns in New Zealand. When the Auckland group arranged to meet, our lecturer was faced with the dilemma of whether to go along too - but declined. He reasoned that he had been unable to attend sessions in the other towns, he had not been specifically invited, and this was basically a student-directed learning activity. In fact the listserv became so active, that at the end of the course over the summer break we kept it going on student demand. Once we closed it down, the by now ex-students went on to set up their own!! We have subsequently established a further listserv called "grads" for graduates of the online courses. At times this becomes an extremely active list and a huge diversity of topics is discussed. These experiences very powerfully demonstrate the concept of education as an intensely social activity, which involves dialogue. Students engage in education to meet social as well as learning needs. The cyber experience is merely the introduction to the closer encounter.

New developments in the technology of the web, which support this social dimension, will play a role too. At Ed-Media '99 in Seattle I attended a tutorial on XML (Extensible Markup Language). [5] It is claimed that XML may potentially transform the web by bringing the ability for more content-based programming and automation. But maybe its ability to do so is based upon a more significant feature. The present web technology based upon HTML really operates at a syntactic level only. XML brings a semantic layer to the web, because through XML socially negotiated meaning structures may be embedded in the web and then manipulated programmatically. Through the

codification and agreement of higher level meaning structures at a social level expressed in XML standards, enhanced information management becomes possible. Different groups are now developing their own standards at an increasing rate. [6] For instance chemists have developed a Chemical Markup Language (CML) for their specific domain. For the educational domain likewise, XML may bring an extension of online learning possibilities, with markup languages applicable to educational subdomains being progressively agreed. For instance, MathML [7] (Mathematical Markup Language) and the IMS Metadata specification (a broader online education standards initiative) already exist in draft versions. [8]

But more generally, if we build it, will they come? In one analysis of whom chose to study online, it was found that it was more favoured by older female students and less by younger male students. [9] So the suitability and popularity of online learning for beginning and undergraduate students appears likely to be lower. Online pastoral care, motivation and classroom management, are issues that have not really been addressed. The wider role of the University as a place for students to meet, to be supported in their growth and to socialise is an important dimension, especially for younger students. Alternatively, for busy adults with family and working lives to manage, the flexibility of online learning may prove a boon.

In conclusion, online learning has many dimensions, and its future will be significant in changing the face of traditional University education. However, where it is strong and where it is weak, where it is additive and where substitutive - these are questions still to be answered.

## References

1. Myer and Rowan cited in Perrow C. (1986), *Complex Organizations*, 3rd Edition (New York, McGraw-Hill), pp. 266
2. Laugesen R. (1999), National rethinks tertiary policy, *Sunday Star-Times*, August 1, C2
3. Young A., Senadheera L. Clear A., (1999), Knowledge Skills and Abilities demanded of graduates in the new learning environment, *Proceedings of the NACCQ Conference 1999* pp. 301 - 308, NACCQ Hamilton
4. Moore T., (1997), The Corporate University: Transforming Management Education, *Accounting Horizons*, 11;1 pp. 77-85
5. <http://www.weft.co.uk/library/xml/course/fulltext.html>
6. <http://www.oasis-open.org/cover/siteIndex.html>,
7. <http://www.w3.org/1999/07/REC-MathML-19990707/>
8. [http://www.imsproject.org/work\\_public/meta-data\\_did188.html](http://www.imsproject.org/work_public/meta-data_did188.html)
9. Dewstow R. McSporrn M., Young S., (1999) Who Wants to Learn OnLine? *Proceedings of 4th Annual SIGCSE/SIGCUE Conference on Innovation and Technology in Computer Science Education*, ITiCSE '99, p. 207