

# COLLABORATION – A THREAT TO ACADEMIC AUTONOMY?

**Sandra Jones**  
School of Management  
RMIT University, Australia  
*sandra.jones@rmit.edu.au*

## **Abstract**

*Universities have historically encouraged individual academics with research expertise in a discrete area of study to undertake research and teaching in their discipline. In this process academics have had full autonomy, from the discovery of knowledge, the method used to integrate and interpret it, and the means used to convey it to students and to assess student learning.*

*In recent times pressures for change have affected universities. First, business requires graduates with broad knowledge and skill capabilities as well as discipline-based content knowledge. Second, universities are required to demonstrate quality control and improvement. Third, private expenditure has replaced a previous almost complete reliance on publicly provided university places. Finally, technological advance has made possible more flexible and innovative learning opportunities.*

*It is argued in this paper that these changes require a new culture of collaboration to supplement academic autonomy. Academics are required to collaborate across disciplines. Cross-functional collaboration is required between academic and non-academics. In so doing the paper calls for university structures and practices that support collaboration.*

## **Keywords**

*collaboration, universities, academic autonomy*

## **Introduction – The External Environment**

It is argued that the productivity of a modern corporation lies more in its intellectual and systems capabilities than its hard assets. Quinn, Anderson and Finkelstein (1996) state that the intellect of an organisation lies within the firm's human brain and includes "cognitive knowledge (know what), advanced skills (know how), systems understanding and trained intuition (know why), and self-motivated creativity (care why)" (p. 7).

Developing intellect, they go on to argue, requires a move away from traditional organisational cognitive skills training to an emphasis on developing the information literacy required by a knowledge economy. Davenport and Prusak (1998) state that Information Technology (IT) increases an organisations' ability to capture data, however it is people that make the data relevant by using their insight to reflect on, synthesise, and turn data into information, then place it in context to create knowledge. In the process of which, Checkland and Holwell (1998) argue, IT changes organisations:

It stirs things up, introduces uncertainties, gets people perceiving their world in a new way...the introduction of IT will always have implications beyond the merely technical (Checkland & Holwell, 1998; p. 7).

Indeed IT is a mix of many disciplines. Kempner (1987) argues that IT is a convergence of computing and communication. Zuboff (1988) claims it is a merging of microelectronics, computer science, telecommunications, software engineering and systems analysis, computer systems and management, with support from psychology, sociology, statistics, political science, economics, philosophy and mathematics. Boland and Hirscheim (1985) claim it is a convergence of the exact sciences (control theory, systems theory and statistics), technology (computer science and electrical engineering), and the social and behavioural sciences (management theory, sociology, psycholinguistics, economics etc.). Accordingly, the introduction of IT requires significant social and cultural changes within organisations that have been structured to separate functions and responsibilities:

The setting up of an information system is itself a social act, requiring some kind of concerted action by many different people; and the operation of the information system entails such human phenomena as attributing meaning to manipulated data and making judgements (Checkland & Holwell, 1998; p. 19).

The effect of this confluence of pressures is that organisations require employees with higher-level capabilities than the skill focus of traditional internal training. It also creates a need for adults already in work to upgrade their knowledge and skills (Blustain, Goldstein & Lozier, 1999). This places pressure on public funding of higher education to move to private self-funding. Zammit, Nanlohy and Corrigan (1999) state that:

the assumption of equal opportunity for all citizens and the reduction of unskilled or low skilled employment opportunities has led to the demand for university education to rise sharply. At the same time governments who fund universities are responding to public demands to reduce expenditure (Zammit et al., 1999; p.2).

Universities have traditionally been the major source of graduates with advanced skill, systems understanding, and intuition. The added requirement for graduates with self-motivated creativity places pressure on universities. Davenport & Prusak state:

organisations need people with the ability to extract information from those who have it, put it in a structured form, and maintain and refine it over time....[however, they argue]... Universities don't teach these skills (Davenport & Prusak, 1998; p. 129).

Srikanthan and Dalrymple (2001) refer to the spate of books critical of Higher Education that, they argue, is indicative of growing public scepticism that universities "are not preparing students adequately to face the demanding challenges of the future workplace" (Srikanthan & Dalrymple, 2001; p. 566).

Faced with pressure to expand the capabilities of graduates, rely more upon private self-funding public, and provide for a more diverse educational community, universities have had to reconsider both what educational opportunities they offer, but how they are offered. Students now demand greater flexibility through 'virtual' educational opportunities; a more student-centred approach that recognises capabilities developed through experience, and emphasis upon the global factors affecting business (Nunan, 1999). University response is discussed in the next section.

## University Response

The Deputy Vice-Chancellor of the Queensland University of Technology, Professor Coaldrake, has argued for many years the need for universities to provide a different service for students - "students want professional training and acquisition of a credential which will assist their chances of career advancement" (Coaldrake & Stedman, 1999; p. 3). The Business/Higher Education Round Table in 1999 stated that university graduates need to be able to act upon knowledge itself as the outcome of their intellectual endeavour in addition to having mastery of the knowledge within a particular disciplinary domain (Business/Education Round Table News, 1999). Recently the Vice Chancellor of RMIT, Professor Dunkin, stated that knowledge is not just about teaching students about accumulated knowledge; "it can be about engaging them in a process" (Dunkin, 2000; p. 8). Consequently, she argued, universities need to:

redefine their role within the society and change their approach to teaching - instead of being creators, custodians and disseminators of knowledge they become part of a network of players contributing to problems often identified by external organisations or communities (Dunkin, 2000; p. 8).

Recognition of the need for change has led universities to design opportunities for life-long education and to redesign courses with a cross-discipline graduate capability focus. Reid (2000) cites University of South Australia Graduate Qualities statement that aims to graduate students who:

- can operate effectively with and upon a body of knowledge of sufficient depth to begin professional practice
- are prepared for life-long learning in pursuit of personal development and excellence in professional practice
- are effective problem solvers, capable of applying logical, critical, and creative thinking to a range of problems
- can work both autonomously and collaboratively as a professional
- are committed to ethical action and social responsibility as a professional and citizen
- communicate effectively in professional practice and as a member of the community
- demonstrate international perspectives as a professional and as a citizen (Reid, 2000; p. 6).

The strategies being developed by universities require academics, previously employed to teach students detailed discipline content, to design educational experiences that are student-centred, interdisciplinary, and focussed on developing graduates with knowledge and skill capabilities. Duderstadt (1998) claims that:

although the primary mission of the university – the creation, preservation, integration, transmission, and application of knowledge — is not changing, the particular realization of each of these roles is changing dramatically. So, too, is the nature of the higher education enterprise as it evolves into a global knowledge industry (Duderstadt, 1998; p. 1)

Academics are asked to recognise the new ‘knowledge culture’, or how the hardware and software is used by staff and students, the new net language, and the new processes through which knowledge is created, shared and exchanged (Reid, 2000; p. 5). As Privateer (1999) states, universities need to develop a knowledge management strategy underpinned by technology:

“...a set of common, multidisciplinary learning outcomes for students at a given institution [which] can spearhead a strategically guided approach to technology-mediated instruction” (Privateer, 1999; p. 65).

This new knowledge management strategy must include how best to use the net to improve flexible delivery, quality, and access. As early as 1994 Laurillard discussed how computers could be used to model real world activities and create interactive opportunities for students, and to support a two-way dialogue between teacher and students through teleconferencing. In this way she described computers as being able to “provide students with a simulated environment with which to interact [and] to simulate the real world and to link students to various audio and visual data bases” (Laurillard, 1994; p. 20). In 1999 Hannah claimed that use of the net had expanded to around 36.7 million current hosts, 223 million possible hosts, and 4.3 billion future hosts (Hannah, 1999; p. 2-3). Gerrard (2001) explains how technology ‘the third generation’ of distance education, enables communication between students that eradicates the disadvantage of ‘social distance’, which Nipper (1987) had identified as a major disadvantage, by enabling students to share ideas, knowledge, and experience. She explains how at the Open University in the United Kingdom “academics work together in teams to design and develop course material” (cited in Gerrard, 2001; p. 579).

It is this question of how to encourage academics to give up their autonomy and move to a more collaborative model without losing the advantages of a ‘collegial’ to a ‘managerial’ approach (Marginson & Considine, 2000), that is the subject of this paper. Indeed a recent RMIT submission to the ‘Senate Inquiry into the capacity of public universities to meet Australia’s higher education needs’ recognised that multiple pressures on university staff produce concern that academics are “losing authority to students on the one hand and to managers on another” (RMIT, 2001; p. 5). The

next section explores a collaborative cross-discipline and cross-functional model that aims to both create collaboration and protect academic autonomy.

## **A Capability-Drive Collaborative Model for Flexible Educational Design**

Collaboration for educational design can occur in a number of forms. Lines (1997) discussed two forms of collaboration. First, there is collaboration as ‘respectful and informed co-operation between disciplines’. This form of collaboration recognises the difficulty for any professional to be adequately expert in all relevant domains. Collaboration starts with identification of the desired product and assembles a team based on “an assessment of the particular knowledge and skills each member possesses, for the purpose of creating and realising a design. It has no necessary existence outside this purpose” (Lines, 1997; p. 66). Second, there is collaboration as ‘a relationship’. This form of collaboration exists as a relationship in which broad ranging conversation occurs between the participants that may lead to work, however there is no predetermined outcome established for the production of work:

work is something that is generated between two or more people, that could not exist outside the framework of the conversation as is a result of the relationship (Lines, 1997; p. 66).

Either of these forms of collaboration could be appropriate for the purpose specified. However, given that there are pre-determined ‘products’ for universities, it is more likely that cross-discipline co-operation through collaborative teams is more relevant, at least in the short term. This form of collaboration is discussed in the literature dealing with new relationships between learner and teacher in education (Collis, 1993; Ceratto & Belisle, 1995), but there are fewer writings on collaboration between the designers in the development of such education. It is this latter that concerns this paper.

Laurillard argued that teachers may not have the skills to adapt to a new role as a “facilitator of knowledge preparing, supervising and de-briefing the multimedia assisted learning and providing students with interactive access to large text and audio-based learning” (Laurillard, 1994; p. 21). Indeed from his experience in developing educational delivery through the internet Hannah (1997) claimed that a standard requirement for online educational delivery is new forms of expertise in “electronic inquiry and discourse” (p. 1). Similarly Smith (1997) argued that the teacher has to have the skills to use the multimedia “it falls upon the teacher to constantly recreate the instructional process and offer a variety of choices” (p. 36). Rice and Ryan (1999) argue that on-line delivery cannot be limited to simply the transfer of traditional teaching material to a computer-based learning format, rather it requires new design formats. Finally, in recognising that learners may also not have the skills to use the online educational process effectively, it has been recognised that teachers will need skills to guide the learner in the use of this new teaching medium:

the learner ...cannot be expected to set appropriate goals, or plot a reasonable path, they will under-specify the problem, be distracted by irrelevancies, be unsure how to evaluate the information they find, over generalise from instances, remain unaware of incompleteness, fail to recognise inconsistencies....there is every opportunity to fail to meet the objective (Laurillard, 1994; p. 24).

Collings separated the knowledge and skills required for teaching or ‘real work’ from that required for ‘articulation’ or “the work involved in negotiating the development and use of information technology infrastructure and designing and organising new ways of teaching” (Collings, 1999; p. 5). To address the range of knowledge and skills required Kandlbinger argued for a multi-disciplined teams consisting of “some combination of graphic designers, computer programmers, video makers, animators and content experts” (Kandlbinger, 1999; p. 2). In discussing the practice of distance education at the Open University in the United Kingdom, Gerrard (2001) outlines the team process used to design and design and develop course material:

All decisions on the structure of the course and module content are collegiate. These academics are assisted by media producers, educational technologists, designers, editors and administrators, but the actual academic development is entirely in the hands of academics (Gerrard, 2001, p. 579).

Accordingly, collaboration between those designing, preparing and delivering online educational offerings is required to ensure that all forms of expertise are included.

### **The Collaborative Model in Action**

An example of collaborative design, preparation and delivery of an online course occurred in 2001 in the Faculty of Business at RMIT University. The collaboration involved is illustrated in Figure 1. The process had a number of collaborative steps, although these could also be simultaneous. First, (A) the academic (discipline 1) responsible for the delivery of a course in negotiation, mediation, and advocacy skills decided that a fictional case study company she had developed as the basis for a mock negotiation could be enhanced as a 'real-life' experience for students by placing information about the company for students to access online through the RMIT Distributed Learning System (DLS).

In collaboration with the Manager of the Faculty Education Media Unit (EMU), a graphic designer and a HTML programmer, a company website, atypical of existing company websites, was designed (B). From an instructional design point of view, this provided the advantage of presenting information in a way that demanded a pro-active student-centred approach to accessing the information. This was translated into a site map by a web-authoring expert into Hypertext Markup Language (HTML). The Manager of EMU also designed a graphic interface for the company website.

Once the website was designed and placed in the DLS, collaboration between the academic and the IT projects officer, the Faculty copyright expert, and the Faculty resource librarian, occurred to hyperlink students to resource material required in preparation for the negotiation (C).

The next stage of the collaboration occurred on a lengthier and more continuous bases between the academic and the IT Projects Officer with the aim of using the DLS system to enable students to meet in virtual groups (D). The academic also required the system to be set up so that she could provide regular updates of information, such as newsletters from the company, notes of meetings of managers and union data sheets, each of which would add to the 'real world' nature of the exercise. The lecturer provided all of the documentation in Microsoft Word format and the IT projects officer converted all documents into Acrobat PDF format and uploaded it to the appropriate area for student access.

Further collaboration is currently developing with academics from other disciplines (E) to discuss cross-discipline interchange between students (specifically accountancy and human resource management students) through this mock case study.

This model worked effectively to deliver the experiential opportunity desired by the academic. Feedback from the students was positive, and there are currently discussions within the collaborative team as to how to improve the experience in the future.

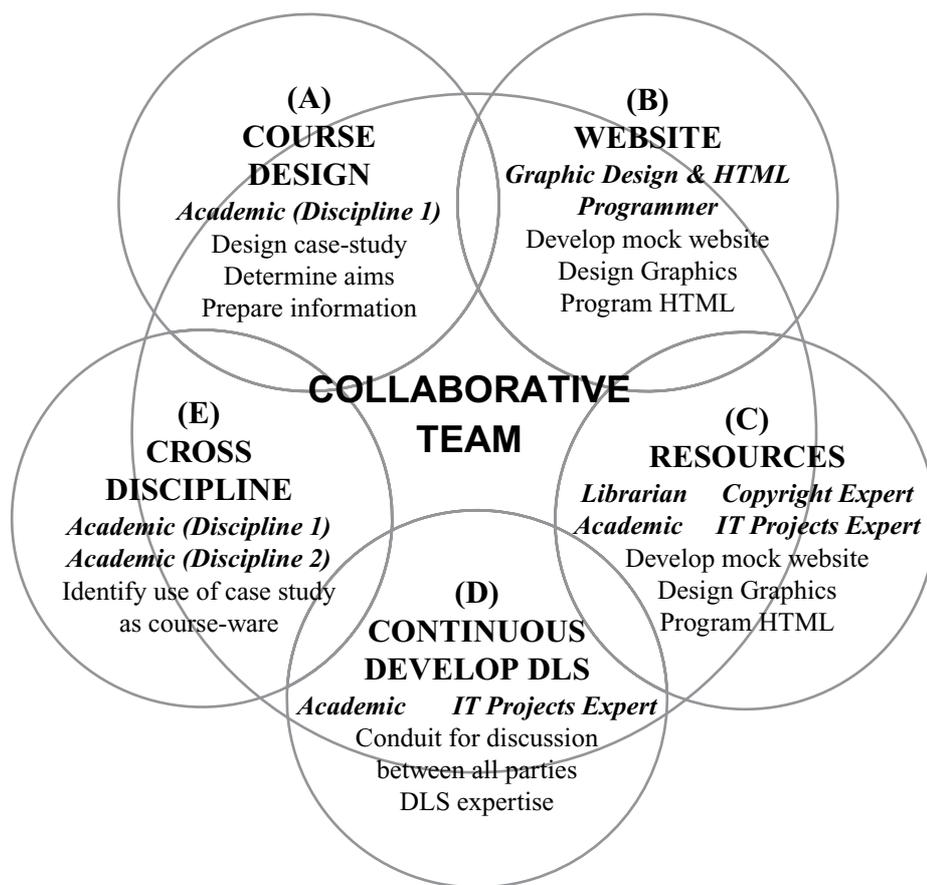


Figure 1: Cross-functional and cross-discipline collaborative model for online design and preparation

This model addresses some of the concerns about loss of autonomy that tends to discourage academics from adopting a cross-discipline and cross-functional collaborative approach. First, the academic retains control over the determination of the aims and objectives of the educational delivery. Second, the collaborative team enables continuous discussion and thus decreases the fear of the academic that the educational process may become technologically rather than people driven (similar to the socio-technical debate that has occurred in industry for many years) (Emery, 1978). Third, the collaborative team enables continuous discussion within the team about what other professional knowledge is required and to what extent that knowledge (e.g. legalities) may limit the educational design. Fourth, the collaborative team process enables academics to explore cross-discipline opportunities to extend student capabilities.

However, the collaborative team process does not address academic concerns of what recognition there will be for their discipline-based research and teaching knowledge and skills if the educational process becomes totally capability based. To address this question it is necessary to ensure that university practices and procedures support a collaborative model. Most important is the practice of rewards and recognition. Universities must reconsider their reward and recognition practices, particularly their recruitment and promotion system, that recognise individual discipline-based research and teaching innovations, and replace it with a process that recognises the knowledge and skills required for collaboration. Promotion based on individual discipline-based research output, awards based on individual 'teaching excellence', must be changed.

Furthermore universities must recognise the time and cost involved in designing and delivering innovative on-line teaching initiatives. RMIT provides an example of how funds have been provided to encourage the development of on-line courseware for use across disciplines. Jones and Creese, (2001) presented two case studies in which a collaboration approach to developing on-line innovations was funded by the university. However such funding is generally short lived and sporadic and there is little recognition of the time taken for collaborative teams to function effectively in the initial design phase or in on-going maintenance of the online initiative, including the increased student interaction.

## Conclusion

In order to provide graduates with the knowledge and skill capabilities to know-what, know-how, and know-why, required by knowledge-creating organisations, universities need to adopt more collaborative academic and administrative models with the aim of designing and developing innovative on-line knowledge-creating opportunities. This paper has presented a collaborative model that addresses some of the concerns about the future role of academics in the educational design process required for online delivery. It is clear that the collaborative model requires that academics retain their responsibility for the educational process. What the collaborative model enables is continuous dialogue, discussion and explanation, with technology supporting the educational aims set by the academic. However, this paper also recognises that such a collaborative model, although necessary as a means to designing and preparing innovative educational outcomes, is not sufficient to encourage adoption of this model. Universities must replace individual reward and recognition practices with recognition and reward for the individual's contribution to the collaborative process. Further, universities must provide sufficient finance to design and develop on-line innovations and make provision for the time required to design, develop and maintain on-line initiatives.

## References

- Blustain, H., Goldstein, P. & Lozier, G. (1999). Assessing the new competitive landscape. In R. Katz (Ed.) *Dancing with the devil: Information technology and the new competition in higher education*, (pp.52-80). , San Francisco, Jossey-Bass.
- Boland, R., & Hirschheim, R. (1985). Introduction. *Wiley and Son Information Systems Series (Vol. 1)*, Chichester: John Wiley & Sons.
- Business/Higher Education Round Table (2000) *News*, 5 June.
- Cerratto, T., & Belisle, C. (1995). Learner centred approach in CSCL environments. In *Putting the Learner First: Learner-Centred Approaches to Open and Distance Learning*, Proceedings of Cambridge International Conference. Cambridge: UK.
- Checkland, P., & Holwell, S. (1998). *Information, systems and information systems*. Chichester: John Wiley & Sons.
- Coaldrake, P., & Stedman, L. (1998). *On the brink: Australia's Universities confronting their future*. St Lucia: University of Queensland.
- Coaldrake, P., & Stedman, L. (1999). Academic work in the twenty-first century. *Occasional Paper Series 99H*, Higher Education Division, Department of Education, Training and Youth Affairs, Canberra, Commonwealth of Australia.
- Collings, P. (1999, July). *Sustaining academics' agency in determining work practices in information technology-mediated teaching and learning*. Paper presented at HERDSA. Melbourne, Australia.
- Collis, B. (1993, May). *Collaborative learning and work in an internetworked context: Research issues and perspectives*. Paper presented at IFIP Working Congerence for Working Group 3.3: Lessons From Learning. Theme B, Archamps, France.
- Davenport, T., & Prusak, L. (1997). *Information ecology*. Oxford: Oxford University.
- Duderstadt, J. (1998) The future of the University in an age of knowledge. *Journal of Asynchronous Learning Networks*, 1 (2). [Online]. Available: [www.aln.org/alnweb/journal/jaln\\_Vollissue2.htm](http://www.aln.org/alnweb/journal/jaln_Vollissue2.htm) [24 September 2001].
- Dunkin, R. (2000). National innovation and the role of Universities. *RMIT submission to National Innovation Summit*, Melbourne.

- Emery, F. (1978). *The emergence of new Paradigms of work*, ANU Centre for Continuing Education, Canberra.
- Gerrard, C. (2001). Promoting excellence in distance education—A TQM led approach. In K. Ho & M. Donnelly (Eds.) *Integrated Management* (pp. 578-583). Proceedings of the 6<sup>th</sup> International Conference on ISO 9000 and TQM. HKBU: Paisley Business School.
- Hannah, R. (1997). An academic perspective of the evolving of internet and employment relations. In J. Bacon-Shone & F. Castro (Eds.), *Proceedings of the Third Annual World Web Symposium*. (pp. 106-120).
- Hannah R. (1999). *The fuzzy boundaries and benefits of cyberspace*. [Online]. Available: <http://www.mtsu.edu/~rlhannah/LBCspeech99.html> [7 June 2000].
- Jones, S. & Creese, L. (2001). *E-education: Creating partnerships for learning*. [Online]. Available: <http://ultibase.rmit.edu.au/Articles/aug01/jones1.htm> [10 August 2001]
- Kandlbinger, P. (1999, July) *Valuing collaboration in design for the World Wide Web: A creative team approach*. Paper presented at HERDSA, Melbourne, Australia.
- Kempner, T. (1987). *The Penguin management handbook*. Chichester: John Wiley & Sons.
- Laurillard, D.M. (1994). Multimedia and the Changing Experience of the Learner. In M. Ryan (Ed.) *Proceedings: Asia Pacific Information Technology in Training and Education Conference and Exhibition (APITITE)(Vol.1)*. (pp. 19-25). Brisbane: APITITE.
- Lines, R. (1997). Emergent paradigms in design education. In *EPDE Conference Proceedings*. (pp. 65-69).
- Marginson, S. & Considine, M. (2000). *The enterprise University—Power, governance and reinvention in Australia*, Cambridge: Cambridge University Press.
- Nunan, T. (1999). Predicting new territories and structures—Distance education in the new millennium, *Predicting New Territories and Structures – Distance Education in the New Millennium*, Deakin University, ODLAA 99 Biennial Forum.
- Privateer, P. (1999). Academic technology and the future of higher education, *Journal of Higher Education*, 70 (1), 64-66.
- Quinn, J., Anderson, P. & Finkelstein, S. (1996). Leveraging intellect. *Academy of Management Executive*, 10 (3), 7-26.
- Reid, A. (2000). *The Web, knowledge management and Universities*. Paper presented at Ausweb 2K *Sixth Annual World Wide Conference*. [Online]. Available: <http://ausweb.scu.edu.au/aw2k/papers/reid/paper.html> [27<sup>th</sup> May 2001].
- Rice, J. & Ryan, N. (1999, February). World Wide Web based teaching in industrial relations: Potential, pitfalls and challenges for the future. In *Proceedings of Annual Conference: Association of Industrial Relations Academics of Australia and New Zealand*. Adelaide, Australia.
- RMIT (2001) *Submission to the Senate Employment, Workplace Relations, Small Business and Education References Committee of Inquiry into the Capacity of Public Universities to meet Australia's Higher Education Needs*, Canberra, May.
- Smith, K. (1997). Preparing faculty for instructional technology: From education to development to creative independence. *Cause and Effect*, 20 (3), 36-37.
- Srikanthan, G., & Dalrymple, J. (2001). A fresh approach to a model for quality in Higher Education. In *Integrated Management*. (pp. 566-572). *Proceedings of the 6<sup>th</sup> International Conference on ISO 9000 and TQM*. HKB: Paisley Business School.
- Zammit, K., Nanlohy, P., & Corrigan, G. (1999). *Integrated On-Line Learning*. [Online]. Available: <http://ultibase.rmit.edu.au/Articles/aug99/zammit1.htm> [26 March 2001].
- Zuboff, S. (1988). *In the Age of the Smart Machines*. Chichester: John Wiley & Sons.

Copyright © 2001 Sandra Jones.

The authors assign to ASCILITE and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ASCILITE to publish this document in full on the World Wide Web (prime sites and mirrors) and in printed form within the ASCILITE 2001 conference proceedings. Any other usage is prohibited without the express permission of the authors.