

Flexible learning:

Some issues for support staff

Abstract:

The move to providing flexible delivery of university subjects and courses urged by government policy raises a number of issues for support staff. Whatever "flexible learning" might mean, there are hardware, software, training and attitudinal issues which are central to the work of support staff. This paper will address some of the issues for students and staff, related to equity and access, information literacy and online communication, and the impact this has on the work of support staff, through reflection on practical experience as an "expert" learner. Traditionally support staff have had to cope with the demands of on-campus academics and students using technology, but will now have to assist staff with developing course materials, and provide for off-campus students the same level of information and support as they do for students on campus. This has implications for traditional ways of delivery including workshops as well as more complex development of online documentation providing advice and pathways to resources. Increasingly, the role of support staff is changing from a purely technical one to that of a partnership with academic staff in developing new ways of working.

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What does "flexible learning" mean? Common perceptions

"Learning anywhere, anytime, anyhow", "Learning whatever you want", "Learning at your own pace in your own style", "Learning in different ways"; these are the kinds of responses support staff at universities will give you when they are asked to define what "Flexible Learning" means, and they see an inextricable link with the use of Web-based delivery of courses. (These are paraphrased responses given at a workshop on this topic in Christchurch, NZ, in December 1999, at the South Pacific User Support Conference, which was attended by technical computer staff, software support staff and librarians.) Notions about the need for recognition of and catering for different learning styles is nothing new to educators, neither is the application of information technologies in educational settings. What is new is the climate in which the use of technology in learning is being mandated.

The economic climate

For many academic colleagues where I work, the term "Flexible Learning" is loaded, and is far more to do with the use of technology in the interests of cost effectiveness for the organization than it is to do with making learning more accessible to students. The West Report (1998), the final report to the Australian Department of

Employment, Education, Training and Youth Affairs (DEETYA), reviewing higher education and financing policy, certainly encourages universities to provide "learning anywhere, anytime, anyhow", but there is clearly an imperative for the tertiary sector to respond to economic forces which drive their ability to survive in a competitive market place. In an article which looks carefully at the way in which policy documents effect new realities, Nicoll (1998) indicates the economic rather than educational imperative which has solidified the meaning of the term "Flexible Learning" to be quite specifically to do with the delivery of courses online. It is this imperative which has influenced the thinking of a number of my colleagues, and which produces a climate of scepticism about the use of information and communication technologies in tertiary education.

The economic arguments clearly presented in national policy documents colour local interpretation at the institutional level, and many academics are sceptical about what the move to "flexible learning" is all about. The policy documents, and other discussion papers, at Monash University (1998, 1999) stress the benefits for students in terms of greater access to education opportunities, and speak of improved quality of learning, but these documents fail to convince because of the context in which they are written and the mandatory nature of the changes to course delivery which departments are being urged to outline. It is only six years since Monash University provided networked PCs on all (full-

time) academics' desks. For the first six months, training was provided in the use of basic applications such as wordprocessing and the use of electronic mail. From that time on, it was left to departments and individual academics to ensure further professional development in the use of emerging technologies and applications.

The networked environment: how comfortable is it?

In my department, there has been ongoing support and training (the nature of which has been described elsewhere; Fitzgerald, Winter & Yammouni 1996, 1998), but the upskilling of a large group of people is a complex matter, and has to do with previous skills and experience, the changes in operating systems and software packages, the speed at which electronic information and communication has exploded, and most importantly, the need academics see for particular skills to be acquired, and the speed with which they can apply them in real situations. We have moved a long way from Windows 3.11, Word 2 and Mozaic, and everyone has moved - but often with difficulty, too often without seeing any reason for change other than the relentless drive of software development companies.

Given all of this, to suggest to academics that they have to deliver courses "using the new technologies", it should come as no surprise that there is great resistance. Already sceptical about the reasons for the change, already frustrated too often by the technology, people who have dealt with their students face-to-face for a long time, and loved it, are going to be hard to convince of the benefits to their students and themselves of a radically new way of working.

One of the academics with whom I work supervises a number of rural research students, and while he will not be compelled by institutional pressure to adopt new technologies in his teaching, other circumstances, such as distance, may persuade him to do so. In an interview I conducted with him two years ago, he commented that he found the combination of email and the digital resources of the university library to be invaluable; responding to problems quickly and directing students to the sources they needed (via URLs posted into email replies, for example) was the only way he used the Internet to his teaching. Since then, however, he has explored the potential of new applications which can make his teaching and research more efficient.

Government policy documents

It is too easy to dismiss the difficulty many people, staff and students, have with a networked computer environment. The West Report (1998) mentions the concerns expressed by academics and students about the nature of interpersonal communication in relation to academic discourse; also, their concern not only about the greater cost of delivery using the new technologies but also the disadvantages for people who

are not familiar with computers, especially "older people". The reviewers, however, "are convinced that technologies offer significant opportunities... to enhance quality, accessibility and cost effectiveness", and go on to exemplify this in a list outlining various instances of improved communication, interactivity, simulation, student feedback, reduced travel time and "varying ways in which material is presented, and learning structured, to accommodate different learning styles" (DEETYA, 1998, 59-60). This is well and good, but it begs the question of how disadvantages, "especially for older people", will be overcome. Donald Norman (1998) would go further and argue that it's not just older people, or even those unfamiliar with computers who will have trouble, but indeed computer users of all ages since, as the technology changes, we have constantly to adapt. The question of cost is subsumed in statements about economies of scale and delivery to a much greater number of students. It is not clear that the quality of learning is necessarily enhanced by technologies. A two year study evaluating the contribution of information technology projects in Australian universities (competitive research and development projects funded by the Committee for the Advancement of University Teaching in 1994 and 1995) to student learning outcomes found that only in one third of cases was there any such improvement reported. The majority were able to report merely advances in student attitudes (Alexander, 1999).

Real costs: the people involved

The cost is in the production and delivery of the courses, and the infrastructure in place, which comes back to the individual academics themselves; most of whom are familiar with computers as sophisticated typewriters and fast deliverers of mail. Few have had the opportunity to move much beyond the electronic presentation of lecture notes (using PowerPoint, for example, rather than overhead transparencies) or using the Web for finding appropriate information. They are used to dealing with their students in large or small groups where speech (and writing) is the means by which ideas are presented and discussed. Designing their courses in new ways will depend not only on training, and a great deal of it, but also on teamwork. This change is more profound than it appears, as it challenges notions of ownership. Also, as the criteria used for promotion have traditionally concentrated on individual achievement, and building collegial teams, especially involving non-academic staff, it is going to be problematic.

The scope of this paper does not allow consideration of many aspects of web-based delivery, such as the use of web conferencing to enable teacher to teacher and teacher to student communication. Lockyer, et al (1999) and Foley and Schuck (1998) both provide detailed Australian studies of the efficacy of such tools in their teaching. The whole question of what flexible

learning might mean beyond off-campus web-based delivery of courses is not under discussion here. What is being considered are the implications for what many academics believe web-based delivery to be - "putting work up on the web."

A personal journey

The trainer as learner

My experience over the last ten years has been in training others in the use of new technologies for bibliographic searching and management, and information literacy generally (Fitzgerald, Winter & Yammouni, 1996, 1998, Winter 1994, 1996). In the last twelve months, I have been wrestling with the use of these same technologies, but as a writer, as a provider of information, and I have found it a salutary experience. This medium is very different from the print-based medium I'm used to, and I found I couldn't simply adapt what I'd previously done to a new mode of delivery. In early 1999, I was involved in a team preparing for the delivery of a coursework doctorate online. What I was faced with was providing the same level of support that I have traditionally provided in person, and support which gave the same level of client satisfaction. So I started to write and immediately ran into the first obstacle. What program should I use? Could I teach myself? Who had time to help me if I couldn't?

Dealing with a new medium: old skills are not directly transferable

The software I had access to was *Netscape* or *Word*. Using some notes prepared for a workshop by a colleague, I started using *Word*, but found it less simple than I anticipated. (I always find this with *Word*; writing is easy - it's always the layout that takes the time and tangles me up.) So, I opted for *Netscape* which I found straightforward (and, of course, free). Design was a real problem. I had a lot of information to provide about a large number of links to different sites within and beyond the university bibliographic network. What I ended up using was a table; this page [HREF1] isn't going to win any design awards, but users find it very effective, simple and clear - "I feel very confident that I can find what I need" was the comment from one student who

seeks a lot of help, and who started her research when she had trouble with the concept of a URL. So, I achieved some of my aim in terms of student feedback, but I am unhappy with the design. This is a visual medium, and I'm no graphic artist. I am still very aware that I have a long way to go in terms of providing help online to the same extent that I do in person. I know from the workshops I have run and the individual help I have given over the years that researchers commonly use electronic bibliographic searching tools inefficiently, and spend far too long, and experience too much frustration, finding the sources they want. This is confirmed by a revealing study carried out into the use by researchers of the ERIC database (Hertzberg & Rudner, 1999). My simple table is very useful for finding the right tools, and it is starting to go into the next step of helping people interrogate the databases effectively, something I spend a great deal of time on with students.

Not just content, but design

I attempted to move on from my table. At a series of workshops later in 1999, I was shown how to use *FrontPage*. Many aspects of this program appeal to me; I like hierarchical tree structures; I like being able to see how the web will work, how the pages relate to each other (something I found very frustrating using *Word* or *Netscape*). After my first workshop, I was sure I could forge ahead, because I could imagine how to provide a great deal of information in a much better way than my former written guides. It is, of course, the perfect medium for providing help in using online resources. Paradoxically, it is a most frustrating medium, because it's not a textual medium so much as a visual one. I found it easy to create the web, and put lots of links to all sorts of wonderfully useful sites. Then I drew to a ghastly halt; not writer's block - I could write plenty, but too much writing is inappropriate - I hate reading on a computer screen, and I know a lot of other people who do, too. Designer's block - what was to hold the links together? How was I to indicate why the links I provided were useful without using too much text? What should the individual pages look like? How much should be on each page? How many should there be? Were there too many clicks before the users got to the place they wanted to go? How would this web link to other webs? Was it simple enough for anyone using any platform or browser? Was I going to be able to ensure this using this particular software? The more I tried to write - no, design - this site, the harder it got.

The depth of my ignorance of design elements was revealed by a librarian with a background in graphic design in a wonderfully entertaining conference presentation which focused on the basic elements which aid the reader, such as layout which works with the eye's natural movement, fonts which allow comfortable reading on the screen, appropriate ways to emphasise and link information (Johnson, 1999).

Access must be a prime consideration

The question of the web's accessibility on any platform is fundamental. Equal opportunity of access to education is not a politically correct policy that sits in a document (or even legislation) somewhere, it must be assured in everything we do, and that includes making sure that all our students can read what we provide online. We cannot assume particular experience or computer configuration; we need to be aware of what our students actually use. In creating the Virtual Librarian website [HREF2] for the Monash University Library, serious consideration was given to base level access, and the website was designed with this in mind (Groonewegan & Foote, 1998).

Support issues**Training has to contend with academic workload**

The FrontPage workshop series I attended was very carefully planned, and provided elements very important for empowering learning. I was in a group of peers with common concerns; the content of each session was focused, and dealt with in a real context with a real purpose; there was plenty of opportunity to acquire specific skills - learning the software, scanning, using digital cameras, capturing screen images, and so on - and there was opportunity between each workshop to work on our own personal projects and come back to the next workshop with questions. For busy academics, there was a considerable time commitment - several hours every week for the workshops themselves, and some hours between the sessions to work on the site. In every way, I applaud the work of the people who ran the workshops. But at the time of writing this paper, my website has been put on hold. The time between the workshops was difficult to find, and without the situation of working in the group pushing me on, other more urgent work has intruded.

I have, however, managed to work with my closest colleagues developing a different site, that of the faculty's Library & Media Resources centre [HREF3]. As a group we deal with different aspects of development; while we all contribute to the overall content and the way we want the site to work, especially with regard to navigation. Our technical librarian is the webmaster, the teacher librarian updates the links to teaching resources, and I work on the research related resources.

Training and development are the same thing: workshops are not enough

My reflection on my own experience has given me greater insight into the problems faced by people who think they are being told they have to provide entire courses using this medium. However true

these perceptions may be, and whatever form "using this new medium" may take, my point is that training alone, however good it is, is not sufficient. In the past, teachers have commonly worked in teams to plan courses together, to discuss how best to enhance student learning. What is different now for most academics is a new design element to do with the medium itself, and the need for the team to include those who know this medium, who can help in the production of effective web-based learning environments.

We need new working groups

The issues for support staff, then, become far more complex than ensuring that the software is loaded on academics' machines and that the network is operating smoothly. Academic staff are going to need a great deal of assistance well beyond technical help and initial training in how to use the software. Academic and technical staff are going to have to work in ongoing teams, and are going to have to work very closely together, respecting each others' skills and experience. It's not appropriate for technical staff to do all the web design for the academic staff, because writers should have control over their own intellectual property. Equally, academic staff cannot be expected to be able to design a web. They can certainly be expected to provide the content and ensure that it is always current.

This has enormous implications for faculty budgets. Comments which airily dismiss these costs as being offset by huge increases in the number of students to whom a course can be delivered show a blatant misunderstanding of the nitty-gritty of what is involved. After fifteen years of steady decline in tertiary funding in Australia (Karmel, 1999), at a time of severe economic constraint, university departments have to use the resources they have on hand now - the staff they can afford to employ. Even teachers who are experienced writers and course designers, and who are well-motivated, are not going to be able to do this work without a strong, long-term, full-time team of support staff to work with them.

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HYPERTEXT REFERENCES:

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HREF 2

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