Converging Modalities for Distance Education in Professional Communication: Implications from Flexible Delivery

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INTRODUCTION The ability to offer communication education to learners at a distance through adopting flexible learning methods using converging modalities (including print materials and Web-based learning) is significant for communication educators given the explicit links between course content and rapidly evolving communications technology and telecommunications media. The content of communication subjects dealing with interpersonal relations, teamwork and organisational communication has been directly affected by how electronic communication is used in the workplace. For those working in educational institutions it is almost impossible not to teach on-campus or by distance without some form of technological content and support. In fact it has been argued that incorporating electronic technology into course design can give credibility and relevance to the study of professional communication (Craig & Carlone, 1998; Lambrecht, 1999; Stock, 1998). A major

issue for all educators is that although "students may like the flexibility offered by distance learning, there continues to be concern about the quality of those programs" (Sonner, 1999, p. 243). There may be trade-offs in learning experiences and outcomes embedded in distance learning (Beattie & James, 1997). Delivery methods in communication studies need to offer means for challenging students to manage complexity and uncertainty, to encourage critical and reflective inquiry and to examine practical applications of learning about communication.

Our analysis of recent trends in learning communication at a distance is based on findings from the literature on flexible delivery and four case studies of our own experiences of communication education in undergraduate and postgraduate courses in professional communication (Durham, Withnall, & Harris, 1998; Ticehurst & Ross-Smith, 1998) in Australia in the School of Communication and Media at the

University of Western Sydney, Nepean (UWSN) and the Faculty of Education at the University of Technology, Sydney (UTS). We explore the growing myth that the experience of teaching and learning communication in flexible modes promising asynchronous interactions and learner autonomy is essential and desirable for both learners and educators regardless of distance constraints. We note that flexible learning can incorporate a range of quite diverse indicators such as: flexibility of access; flexibility of participation; flexibility of content; flexibility of teaching and learning methods; flexibility of response; flexibility of assessment; and flexibility of resources (UTS, 1999b).

In our four case studies we aimed to develop flexible modes of learning, including distance education with a student-centred approach (Trigwell, 1999), to assist students to extend the theory and practice of communication, to demonstrate expertise in dealing appropriately with technology and people and to be prepared to use problem solving creatively and persistently in work environments. The four case studies are briefly outlined as follows:

- Subjects in the School of Communication and Media, UWS, Nepean: *Electronic Research Methods* (undergraduate) and *Visual Rhetoric* (postgraduate);
- Subjects in the Faculty of Education, UTS: *Language, Culture and Communication* (postgraduate) and *Adult Communication Management and Team Work* (postgraduate).

The forms of flexible delivery and flexible learning available in the subjects *Electronic Research Methods* and *Visual*

Rhetoric included: face to face lectures; tutorial sessions in computer laboratories; printed learning guide covering content and support material; online subject outline and assessment requirements, weekly modules and web resources; interactive relay chat (IRC); interactive web-based learning through subject web-site; e-mail class list. Students were free to utilise any or all of these available forms of learning. They were not required to attend classes at the university campus. Students who did not have home computers could use the university computers at a time of their own choice. The nature of assignments to be submitted for assessment was set by the lecturer. Students could send assignments to academic staff electronically by e-mail, to a web site or submit assignments on paper by post or at the university. Each subject is one semester in duration. For the case study on *Electronic Research Methods* in 1999 evaluations were collected from 207 students over two semesters. In 1999 *Visual Rhetoric* was completed by 16 students including students visiting from overseas.

At UTS students nominate their attendance pattern (Part-time or Full-time) and then in a separate category their preferred mode of learning that includes: Weekly; Distance; Block On-campus; Mixed; Block-off campus; Summer/winter intensive. The subjects *Language, Culture and Communication* and *Adult Communication Management and Team Work* were available as "a distance learning mode" administered by the Flexible Learning Unit in the Faculty of Education, UTS. The term "distance learning mode" referred to "a mode of learning where students are not obliged to attend on campus, although some campus activities may be offered"

(Slade, 1999a). A distance learning mode may include self-managed learning (SML) as a learning tool (not a delivery mode), while "flexible" refers to many kinds of modes (Slade, 1999a). Forms of flexible delivery and flexible learning in these two UTS communication subjects included: face to face Orientation (Saturday session); Orientation session in computer laboratories (Saturday session); three printed learning guides—Subject Profile, Subject Learning Guide, Readings —covering subject outline, content, support material and copies of suggested Readings; online listserve; e-mail; telephone. Students were free to utilise any or all of these available forms of learning. Criteria and requirements for assessment were set by the lecturer and included negotiated learning contracts. Students were asked to send assignments to academic staff on paper by post. Each subject is one semester in duration and to date approximately 30 students have participated in each of these subjects.

These case studies are part of rapidly developing initiatives in flexible delivery at both universities. For example, in the Faculty of Education at UTS in 1997–1998 35 face to face subjects were developed for distance learning by 42 academic staff supported by educational designers, editors and desktop publishers. In 1999 there were more than 40 subjects available in eight courses (Slade, 1999b). The management system included Top Class computer software.

At UWS, a variety of Web-based packages is being used. For one of the authors, such proprietary systems have several shortcomings, that become obvious after one or two semesters of trialling such software. Problems such as rigid interfaces, and unwieldy native communication services, have led to the alternative of installing freeware and shareware software, which are easily available on the Internet. These programs include a variety of bulletin board systems, chat rooms and electronic filespace systems that allow for much-needed flexibility and innovation, which is somewhat lacking in the proprietary programs.

In summary, there are many possible combinations of the forms of flexible learning that communication educators might consider (UTS, 1999b; UWSN, 1999). In the next section we draw on these case studies to explore seven main themes for facilitating flexible modes of distance education: (1) learning style; (2) personal contact with academic staff; (3) interactivity and learning communities; (4) technical and other support; (5) computer-mediated communication and learning; (6) student problems with technology; and (7) implications for academic staff. Our focus is to identify a number of implications for professional communication education.

(1) Learning Style

The potential to use converging media for distance education in communication studies may create a new pedagogy where diverse learning styles (Honey & Mumford, 1992; Kolb, 1985) are addressed and a new relationship is formed between teacher and student. Implications are that teachers will move from setting individual assignments to collaborative projects; learning methods accommodating different learning styles will be introduced; resources for learning will be expanded and the "teacher-student hierarchy" will be broken down as "the student moves from passive receptacle to self-motivated managers of their own

learning [and] teachers move from oracle and lecturer to consultant, guide, and resource provider" (Markel, 1999, p. 208).

In the four communication subjects previously referred to in this paper, we have consistently used a variety of materials and methods in teaching to increase motivation, to add interest to the learning experience, to cater for different learning styles and to promote experiential learning of communication principles and skills. Using converging modalities in recent years has resulted in some noticeable differences in the type of interactions between students and teachers. We have noticed a trend towards more independent and personally responsible learning by students. Relationships between lecturer and student tend to be more collaborative and less hierarchical. Markel (1999) regarded the potential of distance education to break down the teacher-student hierarchy as a very tenuous claim because, ultimately, the students are graded by the teacher. In spite of the existence of this role and power differential in our communication subjects we have found that contributions to fortnightly IRC are less formal, more colloquial in terms of language used, more abbreviated in forms of language used, greater use of humour, more friendly, supportive types of chat, more self disclosure and possibly more dynamic engagement than a face to face class session. The IRC environment seemed safer, more equalising and less inhibiting than conventional meetings. IRC was an attempt to cater for different learning styles as engagement was determined by each student who could prepare in advance, think before posting a contribution, focus on applications, actively participate in a spontaneous

form of debate, follow the debate without contributing or not log on at all.

Leonard (1996b) argued that a Web based form of delivery characterised discovery learning because the hypermedia design characteristics of the Web emphasise the associative thinking patterns of an active learner. Leonard (1996a, 1996b) advocated discovery learning modes especially for postgraduate students. We have found varying degrees of lack of confidence among graduate students to set goals for self discovery learning by designing their own negotiated learning contracts as their major form of assessment. An article on guidelines for this type of discovery learning is available for our students and face to face, e-mail, fax or telephone contact with an academic adviser is provided. Nevertheless, a more structured form of assessment requiring critical annotations to produce a themed Bibliography followed by a detailed case study has been welcomed by many postgraduate distance students. Not all distance students embraced self directed learning with confidence and enthusiasm.

Lambrecht (1999) pointed out that it seems that learners with a learning orientation rather than a performance orientation do better when a problem becomes difficult and a degree of persistence is required. The ability to pursue problems that are not immediately solvable is an important attribute for communication students to possess. Indeed not all students possessed the computer literacy required to engage in flexible learning using the Web. In our case study on the undergraduate subject *Electronic Research Methods* student evaluations paradoxically indicated that only about half of the students actually

reported that flexible delivery (where on campus attendance was not required) was useful to them. One possible reason for this was the fact that students had the option of studying in traditional classrooms and computer laboratories or studying via Web-based weekly modules. In addition, almost exactly half the class rated their computer skills as "novice" at the start of the semester. The more advanced students opted to try a number of learning modes especially Web-based modules, while the more anxious students went to class every week.

Thus this study tended to confirm that novices unfamiliar with the specific subject content and computers prefer to attend face to face methods (lectures and tutorials) where a hands on approach guided by an instructor can be used. A handful of students found unrestricted choice and lack of monitoring of student attendance to be detrimental: "I really didn't like this flexible learning idea. The fact that attendance was made optional made it a little too easy to fall behind at times". Although the flexible menu catered for different learning styles there was potential for some students to fail to complete the subject because they depended on external monitoring, lacked time management skills and were not used to methods of learning that gave students a degree of autonomy. Pressures of the requirements of other subjects and other responsibilities tended to take precedence so that flexible modes of distance learning were in fact not utilised. For the subject *Electronic Research Methods* this applied to 10–15% of students. In terms of learning style, for some students flexible delivery incorporating distance modes was an asset and for others it was discounted and even proved to be a distinct liability.

Overall, it is our experience that learning style also has much to do with employment context and familial responsibilities. Whilst we would agree that individual learning styles are important considerations, these styles are changed when you introduce the stresses of modern day living replete with long hours of work and unremitting parenting. Flexible distance learning perfectly suits these situations in many cases.

(2) Personal Contact with Academic Staff

Opportunities for personal contact with academic staff are highly valued by students and the quality of academic instruction is said to be one of the most important factors for student selection of a university (Phillips, 1998). Students tend to judge expressive, warm and involved instructors as being enthusiastic, well-organised and knowledgeable (Frymier, 1995; Guerrero & Miller, 1998; Nussbaum, 1992; Smithson, 1998; Wanzer & McCroskey, 1998). Responsiveness from academic staff in the form of timely and appropriate feedback is very important to students.

Over 80% of students in the *Electronic Research Methods* subject reported that face to face contact with staff was beneficial to their progress. This figure may be biased because of the technical nature of this subject such as using the Internet, authoring Web pages and using esoteric software. Postgraduate students at UTS were satisfied to resolve issues with staff by telephone and, more importantly, by e-mail. It is our finding that the more technical the subject matter the more that staff will be valued.

(3) Interactivity and Learning Communities

Our communication subjects have provided electronic and face to face opportunities and structures for interactivity and creation of learning communities. IRC and access to an e-mail listserve are two examples. At UTS students are encouraged to enrol in a register of Learning Partnerships administered by the Coordinator of the Flexible Delivery Unit. An Orientation Day held in the Faculty of Education at UTS in February 1999 attracted 140 distance students, although few attended who were enrolled in communication subjects by distance.

We note that considerable technical and administrative support has been required to provide the variety of interactivity to form learning communities (as a whole group or a number of paired partnerships) at both our universities. We also have found along with other colleagues that a significant number of distance students prefer to complete the subject on their own. While some students enjoy the opportunities for interactivity, others do not. We have not required students to engage in these interactive modes as part of the assessment for our subjects. Neither have we monitored the amount of interactivity and engagement/contributions by individual students.

A culture where academic staff and students regularly use web-based conferencing is still developing in our universities. We are aware of the limits of access to web-based conferencing for many students who may have Internet facilities at work but are unable to use these for private study. As one colleague remarked: "It is one thing for students to have an e-mail address and access to the internet either at work or via a friend, it is another to be able to use these for private study at times of their choosing" (UTS, 1999a).

One further note on interactivity is concerned with providing regular interaction between staff and student via combinations of communication media. We have consistently offered timely interaction returning marked assignments usually within a week and replying to e-mails on the same day or within one to two days. It is quite common for students to thank us for these "prompt replies" and for the personal attention they receive. We do note, however, the following comment by an academic on the pitfalls of quicker, easier and even cheaper communication: "It is advised to not send assessment feedback the same day an assignment is received [by email]. Students have complained that the lecturer has not given sufficient time to assess something they have been working on for several weeks" (UTS, 1999a).

(4) Technical and Other Support

There is unanimous agreement in the literature that flexible distance learning initiatives are only feasible given adequate technical and other support (Alexander, 1997; Atkinson, 1999; Cashion, 1998; Lynott, 1998; Rice, 1998; Scott, 1996; Thompson, Winterfield, & Flanders, 1998). When software or hardware is not installed, or if software is not configured properly, then students and academics alike will become frustrated and disgruntled, devaluing the whole exercise. In our universities teaching and learning workshops have been conducted attended by both academic and technical and administrative staff to collaborate on interaction strategies to support learning

at a distance. Needs analyses have been undertaken by academics to identify concerns of other academics using one to one interviews. Updates on technical innovations and system changes are given regularly to all staff by e-mail. Gradually staff are becoming familiar with current technological language and the potential of electronic communication media for teaching and learning strategies. Design advice and documentation support, for example given by the Flexible Learning Unit in the Faculty of Education at UTS, were vital for the translation of teaching and learning materials into a print form suitable for distance learners.

In November 1999 the print-based materials for the postgraduate subject *Language, Culture and Communication* (Saunders & Dryden, 1998) were reviewed by an independent consultant according to the following criteria:

- clear statements of learning/ objectives outcomes;
- structure of learning units supported by introduction and summary;
- the effective integration and focusing of reading tasks;
- the use of a variety of activities and feedback to support different learning styles and self assessment;
- the use of effective typographic layout and devices to enhance accessibility and functionality (Slade, 1999c).

The authors were able to take advantage of the specific support provided by the Flexible Delivery Unit to produce print-based materials evaluated to be of high quality that "could be used as exemplars or models to guide the development of other SML materials" (Macmullen, 1999, cited in Slade, 1999c, p. 1). This

degree of quality was facilitated by the level of design, policy, procedural and processing support provided to the academic writers.

While students appreciated adequate technical and administrative support such as receiving information and resources in a timely fashion, flexible forms of distance learning were also supported by a range of other factors. DeSanctis and Sheppard (1999) found that the executives taking their business administration course were successful if they were able to gain support from superiors and subordinates at work for allocating some time for coursework, if the family was supportive, if they developed a team of other students to rely on for needed help, and if they could establish a pattern of time dedicated to doing coursework. For example the communication subjects at UTS are supported by procedures for forming optional learning partnerships as part of the services of the Flexible Delivery Unit.

Studies have shown that student learning in distance modes is supported when networks allowed for both real-time and asynchronous exchange, when a clear procedure for document exchange is provided, when assessment requirements are explicit and when the technology has convenient student access (Lopez & Nagelhout, 1995, cited in Hilton & Kameda, 1999). In addition, Duin and Archee (1996) concluded that students felt safer using e-mail than talking in person and were more willing to take linguistic chances over the Internet than when speaking or writing. This was important for their multicultural courses in communication where students communicated with peers across cultures to achieve

learning outcomes. Graduate students in the subject *Visual Rhetoric* at UWS experienced real-time and asynchronous communication, designated student access to technology on campus and from home computers and clear procedures for document exchange. These support features helped to build a collaborative learning environment where individual and group work flourished assisted by multi media and extensive web-based resources. The lecturer added to the subject web site weekly in response to student learning needs. The intention was to engage the group in a dynamic form of web-based learning rather than offering students a static web site set up in its entirety at the commencement of the subject to facilitate self paced learning. Learning outcomes related to professional communication such as problem solving, teamwork, resource location and sharing, creativity and innovation in work produced were enhanced by these kinds of technical and other support.

(5) Computer-Mediated Communication and Learning

The literature contains reports of numerous advantages in using computer-mediated communication (CMC) in instruction (Gregor & Cuskelly, 1994; Shedletsky, 1995; Wilson & Whitelock, 1997; Witmer, 1998). In terms of CMC we make a distinction between real-time applications such as computer chat and desktop videoconferencing, and asynchronous e-mail and bulletin boards. The use of these modalities is not clearly understood in the literature. The assumption has been that all communication mediated by computers is the same, more or less. It is worth noting that at both of our institutions, student use of IRC is actively discouraged as a distraction to real work

– a time-wasting activity. Whilst every student has a right to electronic mail access, the opposite is enforced for electronic chatting over the Internet. Similarly every reference to the word "chat" is denied by one of our university's Web proxy servers deeming this mode of CMC as unworthy of even perusal by students. In contrast, Archee (1993, 1994) found that if given the choice many students will choose real-time conferencing over asynchronous exchanges for brain-storming and decision making tasks, reserving e-mail and bulletin boards for information and document exchange. In 1999 the popularity of the fortnightly IRC scheduled for two hours at a designated time in the subject *Visual Rhetoric* at UWS was evident. The immediacy of real-time "chat" closely resembles the interaction and outcomes of real discussions and is a valuable alternative of all flexible distance learning courses.

(6) Student Problems with Technology

In the subject *Electronic Research Methods* at UWS undergraduate communication students were specifically taught how to prepare a home page and computer literacy was not a requirement for the subject. Novices generally reported that learning about electronic research methods was difficult either on campus or by distance. Student evaluations showed that many students did not develop computer literacy easily. For example, 8% reported "Advanced" computer competence at the beginning as opposed to 20% at end of subject. Their struggles are a signal that course designers should not expect that students these days are comfortable and oriented to computer-based learning and that online deliveries will facilitate flexible

learning for most students or enable students to learn at a distance. We found indications that, even after successful completion of a subject such as *Electronic Research Methods*, many students are not confident or comfortable about using online forms of learning.

A question that we have seldom seen asked is whether or not contemporary forms of flexible distance learning are wholly acceptable in terms of the culture of the participant. Scollon and Scollon (1994, 1995) highlight religion and culture as significant factors for determining a student's acceptability of student-centred, flexible distance learning. In many cultures institutional learning is a didactic exercise whereby the teacher-student relationship is almost wholly one-way communication. In many Asian, Eastern European, and Islamic countries the teacher is totally responsible for student learning. The recognition of questions and feedback is not a universal educational precept. When international students enrol in our courses are we in fact forcing Western values, albeit educationally sound ones, upon them? We also recognise with Sheridan and Simons (1998) that a web site can be "technically brilliant and culturally-incompetent". When courses in distance education cross cultural boundaries and are mediated by technology the possibilities for misunderstanding increase dramatically (Saunders & Archee, 1999).

(7) Implications for Academic Staff

Reactions of academic staff to distance learning initiatives reported in the literature have been enthusiastic as well as cautious. Educators have admitted that many distance learning options will not suit academic staff and that significant staff development and

additional technical and administrative resources and systems may be necessary before some options are feasible. The roles of academic staff as facilitators of learning in more collaborative modes may be new and uncomfortable to staff (Aitken, 1995). Leonard (1996b) reported responding to more than 40 e-mail messages daily as well as increased telephone calls to distance students. Asynchronous methods of learning mean that students may contact academic staff over 24 hours day and night including weekends. Expectations of immediate feedback may need to be negotiated between learners and academic staff. At UTS in the Faculty of Education distance learning study guides deal explicitly with communication expectations from the staff and students' points of view.

Educators have assessed the time and effort required for developing course materials for flexible distance learning as excessive and under resourced. These efforts add to an academic workload and not necessarily to appropriate rewards and recognition, including protection of intellectual property, hence the caution expressed by some educators.

The current widespread bureaucratic optimism for flexible learning/delivery and distance education tends to discount any notions of staff/student training (Thompson et al., 1998), data management infrastructures, or recurrent technological costs. Distance education may be much less cost effective if these extra costs are factored into the equation. Academic staff will be asked to contribute more, not less, time in order to implement flexible distance delivery. Our role as communication educators has been to provide distance education that is not inappropriate or alienating and that includes sound

pedagogy including options for face to face interaction and fitting use of converging modalities.

CONCLUDING REMARKS What is the scope and feasibility of using flexible distance learning and delivery to educate professional communicators in the areas of applied communication and communication management? While distance education offers advantages of access to courses and self management of learning a purely correspondence mode is likely to limit the learning experience of students studying professional communication. The potential of electronic media to offer a variety of types of interaction with other people is valuable for communication students, both technologically and interpersonally. Print-based learning materials sent to distance students or posted on the Internet need to be carefully designed to take account of different learning styles, to provide clear statements of learning objectives and outcomes, to integrate and focus reading and action learning tasks, to suggest a variety of learning activities, to give constructive feedback, to facilitate self assessment and to enhance accessibility and functionality through effective typographical layout.

At present we have found that it is unrealistic to expect that students will be able to master communication technology used in applied communication areas such as journalism by following web sites as self directed learners. Similarly, the development of communication management strategies for listening, participating in teams, managing meetings, negotiating with colleagues and clients and working in complex organisations requires reflection on engaging in human interaction in

real time and place. While knowledge of communication theory can be learnt from published works, internalisation of applied communication skills and mindful communication, responses benefit from testing ideas and skills in consultation with other people and participating in experiential methods of learning (see Mohan, McGregor, Saunders, & Archee, 1997; Saunders, 1997a, 1997b, 1998).

Ultimately flexible distance learning for professional communication might consist of combinations of patterns of delivery of content and opportunities for practice that respect the personal learning goals of adults and accommodate diverse cultures, lifestyles and responsibilities. Our experiences as communication educators endorse the potential of converging modalities including electronic forms of communication to continue to provide significant assistance to future initiatives in distance learning in professional communication. The patterns of distance learning and flexible delivery chosen for communication education will all require dedicated technical and administrative support for everyone involved in the learning process.

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