The philosophy of teleconferencing is unlikely to cause great controversy among distance educators. Common values of bridging, enhancement, extension, and support will be philosophically accepted. The University of Otago in Dunedin (New Zealand) and the University of the South Pacific in Suva (Fiji) are examples of institutions where the role options for teleconferencing cannot be the same because of their needs to maintain integrity with their own philosophical bases. From the onset of planning, the philosophy and context of teleconferencing must be kept in mind. The network's configuration relative to market and resources suggests and determines its possible applications. There are several roles for teleconferencing in distance education other than that of linking the teacher and the learner. One is bridging the gap between the learners themselves, and another is bridging distances for staff members. In any role, teleconferencing becomes a dynamic part of the educational infrastructure. The ethical dilemmas posed by teleconferencing must be acknowledged and answered in a way that recognizes it as a powerful structural element that should be an element of care.

(SLD)
This assigned topic, apparently simple, could be rephrased with two other titles which would be more suggestive of its actual complexity. These are:

- Bridging the Distance: extending possibilities
- Increasing the Gaps: the creation of elites.

That teleconferencing in Distance Education can do both of these things, even at the same time, needs to be a basic awareness of programme designers. For work in developing regions, this awareness is especially critical, but nowhere should it be far from the forefront of our concerns.

The dichotomy highlighted by these re-phrasings - bridging the distance/increasing the gaps - is that which can develop between 'philosophy' and 'role': where the latter, not planned carefully, fails to express the former and, despite good intention, even enacts something counter.

Relation between Philosophy and Role of Teleconferencing

The philosophy of teleconferencing, among distance educators, is probably unlikely to cause great controversy. Whatever one's own words, the values will be common - to do with bridging, enhancement, extension and support. These are philosophically simple and context-independent.

The role of teleconferencing is philosophy applied. It should differ in relation to geographical context. It will differ in relation to the fields of its endeavour: course design and delivery, support systems, administration. It will, once established, become infrastructural.

An institutional comparison may exemplify good reason for establishing only roles that are context-related. Institution A has, for its outreach purposes, a full duplex, dedicated, teleconference network. It comprises sixty-five sites, spaced according to population throughout a small, developed country. The terminals are established in cooperating institutions and equipped simply enough to be student-operated. For all of its students (approximately 1,500), the language of instruction is their own first language.

Institution A, with its philosophical commitment to bridging distance 'live' by telecommunications, can ascribe various roles to its teleconferencing.
Institution B has, for its outreach purposes, a half-duplex, dedicated network comprising nine terminal sites. It serves a geographical area 6,500 km across, 28 million sq.km in total and most of it water. Two of its eleven countries have no network link at all. One country alone (with its single terminal site) comprises one hundred populated islands; one other comprises eighty, another thirty-six. One country alone has sixty-five identifiable languages, twenty-one of which have more than one dialect. The language of instruction (for the approximately 13,000) is usually their second, for some even their third. Many students over their study years cannot visit a terminal site.

Institution B, with its philosophical commitment to bridging distance 'live' by telecommunications, has available to it a range of teleconferencing roles which are not the same as its sister institution's.

The University of Otago is the first example given; the second is the University of the South Pacific. That role-options for their teleconferencing cannot be the same is not caused by geography and economics per se, but rather by role's need, within the context of them, to maintain integrity with its own philosophical base. If this is bridging, enhancement, extension and support, designers must take care in their initial choices of teleconferencing roles throughout the system. Some issues raised in the choosing, I believe, are also ethical.

**Planning a Teleconference Facility**

One needs, from planning’s outset, to keep certain factors in mind: the location of students generally in relation to access-sites; the location of specific learning needs in relation to access-sites. Unless or until these issues are addressed, the roles of teleconferencing should not be defined. Unless or until these roles are defined, development work on instructional elements cannot proceed in a rational way. Tutor/student support systems and administrative structures depend also in their designing on this location data.

That the network’s configuration relative to market and resources will suggest, or even determine, its own possible applications provides a role-design key from the very beginning.

By way of example, at Institution A, planners in the field of course design and delivery can presume that most students have access to teleconference centres. They can presume this on the basis of planned network location in relation both to students and the type of programme offered. They could, therefore (and do), produce a teaching package in which teleconferencing is integral to course design/delivery; in which it is a necessity for on-going course mastery. It, and the print, and other support materials become inseparable elements of the teaching/learning system. Its role is, therefore, primary and one of relative power.
At Institution B, the teleconference seminar could not be (and is not) integral to design/delivery. It, and the print, and other support materials are separable elements of the teaching/learning system. Designers, presuming that a large number of students have no easy access to terminal sites, produce a package in which the teleconference seminar is non-essential for on-going course mastery. Teleconferencing's role in this context becomes secondary: an available extra for those able to reach it. For both institutions, it is network-accessibility which has determined component-relations in the teaching system, the instructional design of content and the method of delivery.

**Teleconferencing’s Several Roles**

There are roles for teleconferencing in Distance Education other than that of linking the teacher and the learner. Another is bridging the gap between the learners themselves, enabling peer support within the local attending group and also across distances between the sites. These benefits are both social and pedagogical. Adult students not infrequently learn much from one another, and teleconferencing by its nature creates their meeting. For an institution wishing to exploit and enhance this role, there are design implications and opportunities.

Students gathered at terminal sites can engage in local activity, be assigned and assessed in work not possible for individuals. The design of course materials can include, therefore, not only teaching strategies for the individual student, but also for students in small local groups.

To ignore - by not designing for - the local group's dynamic (which a teleconference schedule establishes and abets) not only wastes opportunity for constructive learning; it also can court destruction of the overall session's objectives. Teleconferences always run on a double dynamic: one local and private, the other plenary and public. The former can be more powerful (where the teacher is not present) and needs to be accommodated for both positive and negative reasons.

This role for teleconferencing of providing for student groups also raises the earlier issue of network accessibility. One must not, for example, at the USP, plan sessional activity which counts for final grading. Should one even, in fairness, impart essential skills? Again, the extent to which teleconferencing's role is integral must guide the choices made by designers and writers. This guiding principle must be applied also to the other possible roles of study skills assistance, and student counselling outside of the main programme.

Other than linking teacher and learner, and learners as peers, teleconferencing can usefully bridge distance for staff members. Meeting on a regular schedule for administrative purposes provides a vital bridge in decentralized operations, not only for the transfer of information but also for support of distant staff. This same support is positive for regional course tutors, meeting regularly with one another and
on-campus teachers. Again one must remember staff in centres not connected, and plan active measures to address their disadvantages.

Increasingly, both teachers and the D.E. profession are consolidating yet a new role for teleconferencing: this lies in the field of multi-point teaching. A role for teleconferencing in the development of team teaching proceeds simply, in causal terms, from technical capacity: that through the stages of planning, teaching and assessment, one can draw on the resources of distant colleagues and institutions. The effects of this capacity can be infinitely creative: enhanced content, shared workload, institutional co-operation in the interest of meeting needs beyond solo providers' resources. By enabling, technically, new distance teaching relationships, teleconferencing's role in the teaching system is both ends and means.

In each or any combination of these roles, teleconferencing becomes part of the educational infrastructure. Its impact within this structure is dynamic and can be complex. Two analogies come to mind, both domestic and simple.

Whenever my children would ask me the meaning of a word, the answer initially given would always be the same: the meaning of a word is its use in the sentence. The other analogy could be that of a new child in the family. It not only increases a group, perhaps from four to five; it also will introduce eight new relationships; it will also alter the valency of the twelve already existing.

For example, if fully integrated into course design/delivery, teleconferencing will augment the teaching package, and it will change component-relationships. It can facilitate team teaching from various locations; enable learning/assessment strategies designed for group involvement. It can facilitate the resolution of immediate content-problems, counter morale and performance impairment caused by isolation. It may be applied remedially and to project supervision. It can also raise ethical, potentially serious issues related to sessional sound-recordings (their copying, selling, replaying), to copyright generally and undeclared auditors. It will also define the potential student market, enhancing opportunities for some, excluding others completely from them.

If ascribed a structural role in counselling and/or administration, teleconferencing augments the support system and changes component-relationships. It can counter attrition, speed the flow of information, alter procedural schedules and even shift responsibilities.

One could ask, from these examples, where then lies deep dilemma, in pedagogical, philosophical or even ethical terms? From Institution B, some answers to the question might usefully be re-issued as other questions:
Ethical Dilemmas

How does one sustain/encourage students and teachers in teleconferences which, by course design and structure, have been defined as non-essential?

If teleconferencing is not integral but regularly provided, should physically remote students pay standard tuition fees?

If the contract made with one's isolated student is that the print is all she needs for a fair chance of succeeding, then what are the ethics of adding technology, in various forms, to sites far beyond her?

Does one aggravate and entrench her disadvantage structurally by raising the performance of her peers with network access - by counselling, group learning and regular contact schedules?

If Distance Education in some of its most effective packages can come by way of integrated design, should one choose not to produce them for reasons of equity? Should one choose not to improve and increase activity because its effect one knows, will be exclusive?

The answers to questions like these must be owned by the designers among us.

Conclusion

Any infrastructure for Distance Education is valid only to the extent that it facilitates and supports. It should do so both for staff and the students in their care. If it does not, then over time it can become destructive - of morale and confidence and optimum performance.

High quality teleconferencing is a powerful structural element. If we perceive it, plan roles for it, as simply a useful vehicle, we not only risk accidents on the lookout for a location; we might also predetermine the place and the casualties. However, if, beyond this delivery function, we also perceive its creativity - its power to make, or effect change in, connective relations - teleconferencing can maintain integrity with its philosophical base by not drifting into roles that are dichotomous.

For the most and even the least sentimental among us, teleconferencing's ultimate role is as an element of care. In all fields of endeavour - course design and delivery, student/staff support systems, administration - it can provide this in positive and various ways. Our choice, however, of which ways this will be determines - and thus reveals - the real object of our care.