Theorizing Audioconferencing:
An Eclectic Paradigm

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An eclectic paradigm of audioconferencing that incorporates the notion of transactional distance in flexible learning and that caters for cultural contextualization of learner, lecturer, and academic setting is developed in this paper. This paradigm includes aspects of objectivist, constructivist, and critical theory models of learning and teaching within a multiple cultural mode1 which seeks to address the logic of the academic, the mainstream, and the minority cultures. A case study based on this paradigm and involving Indigenous Australian students and their lecturers is reported. Results indicated that the students perceived audioconferences as a highly useful part of their learning, that lecturers were generally able to incorporate the cultural context factors into their subjects, and that students valued the experience of the academic culture albeit at a distance. It seems highly likely that this paradigm is appropriate for audioconferencing involving Indigenous students undertaking tertiary studies.

Cet article présente un paradigme éclectique de conférence audio qui incorpore le concept de distance transactionnelle en apprentissage flexible et qui satisfait à la contextualisation culturelle de l'apprenant, de l'enseignant et de l'environnement académique. Ce paradigme includes aspacts des modèles objectivistes, constructivistes et théorie critique de l'apprentissage ainsi que de l'enseignement avec des modèles culturels multiples qui veulent addresser la logique des cultures académiques, générales et minoritaires. Une étude de cas fondée sur ce paradigme, impliquant des étudiants Indigènes Australiens ainsi que leurs cours est décrite. Les résultats indiquent que les étudiants perçoivent les conférences audio comme étant hautement utiles dans le processus de leurs apprentissage, que les enseignants sont habituellement capables d'incorporer les facteurs de contexte culturel dans leurs sujets d'étude et que les étudiants apprécient l'expérience de la culture académique en dépit de la distance. Il semble fort probable que ce paradigme soit approprié pour la conférence audio impliquant des étudiants Indigènes qui entreprènent des études poste secondaires.

In the early 1990s there was a small flurry of interest in audioconferencing as an educational communications medium in the distance education literature. Some papers presented case studies, for instance, Burge and Howard (1990), Hiebert and Balshaw (1993), Lalande

(1995), and one relevant to this paper by Schmidt, Sullivan and Hardy (1994) because its context concerns academic and minority cultures.

Garrison (1990) presented a critical paper arguing that communication between teacher and student as well as student and student are vital, and that audioconferencing can "begin to approach the ideal educational transaction" (p. 17). He coherently argues, that without interactive cognitive transactions, the traditional distance education approach to private isolated print-based learning is unlikely to ensure adequately that the learner: (a) Challenges pre-existing values and ideas, (b) avoids indoctrination through critical discussion of lecturer-presented information, and (c) assimilates and validates knowledge gained.

Anderson and Garrison (1995) reported a study of how two instructional design models of incorporating audioconferencing into a distance education program impacted transactional issues in distance education. The Community of Learners model held frequent audioconferences, developed a virtual classroom milieu, and emphasized developing, extracting and refining understandings while the Independent Learning Support model held infrequent audioconferences that still allowed students to have valued synchronous contact with the lecturer and other students but for the purpose of troubleshooting and clarifying mostly assignment issues. Not surprisingly, their study found that the learners in the Community of Learners model perceived theirs to be a more critical community of learners than did the Independent Learning Support model. Drawing on earlier work in the area (Kirby & Boak, 1989; Stallings & Kaskowitz, 1974), Cookson and Chang (1995) offered a new model, the Multidimensional Audioconferencing Classification System (MACS), intended to serve as a principled research approach to the identification, analysis, and recording of audioconferencing instructional interactions. None of the authors attempted to develop a theory of audioconferencing.

Since 1995, even a cursory look at the literature reveals that, as a discrete topic, audioconferencing has been increasingly sidelined while the newer learning-teaching, computer transactional communication technologies, particularly the World Wide Web and E-mail, strut their stuff. Yet, the undervalued low-tech audioconference remains a focal element in world wide distance education, open learning, or flexible learning, as it is often now designated.

This paper attempts a theory of audioconferencing in open learning. Drawing on earlier work by Henderson   we propose a flexible eclectic paradigm that incorporates: (a) A theory of transactional distance in open learning, (b) aspects of behaviorist, constructivist, and critical theory approaches to teaching and learning, and sets both within (c) a theory of multiple cultural, not multicultural, contextualization of

educational interactive communication. The paradigm draws on Vygotsky's socio-historical-cultural theory of learning, with emphasis on his notion of the Zone of Proximal Development. The paper discusses a case study of the theory in practice: audioconferencing in a cross cultural program that delivers the same on-campus Bachelor of Education degree in an off-campus mode to Australian Indigenous students in their home communities.

An Eclectic Paradigm of Audioconferencing

Transactional Distance in Open Learning

In developing the eclectic theory of audioconferencing, key concepts concerning educational transactional communication were drawn from Moore's (1980; 1983; 1989) seminal theory of distance education. Moore (1980) defined his concept of "transactional distance" as a function of "structure" and "dialogue". Structure was seen as a measure of how responsive an educational program was to learners' individual needs while dialogue was delineated as the extent to which the educator and learner were able to respond to each other. Transactional distance, then, was defined as a function of the variance in structure and dialogue as they related to each other. From this perspective, "distance" in education is determined by the level of structure and dialogue, not by geographic proximity (Moore, 1983). Saba (1988) proposed a model to represent the relationship between dialogue and structure and tested it (Saba & Shearer, 1994) to reveal that by varying the rate of these two variables, the educator or learner could control the level of transactional distance in a purposeful instructional setting, for instance, audioconferencing. Increasing the lecturer's control of the dialogue decreases learner interaction thus encouraging learner passivity, increasing the rigidity of structure through curtailing chances for student-raised concerns and, hence, widening the level of transactional distance. By increasing learner control in communication conferencing, dialogue increased and structure decreased, as did the level of transactional distance. It could-be argued that decreased transactional distance has close links with a constructivist pedagogy while increased transactional distance has more affinity with objectivist pedagogy. We contend that both increased and decreased transactional distance in the structure and dialogue levels of audioconferences have a role in an eclectic paradigm that caters for cultural contextualization of learner, lecturer, and academic setting.

Objectivist-Constructivist-Critical   Theory   Dimensions

This paper argues that open learning and the instructional design of audioconference sessions are situated in what Reeves (1997) identifies as the "eclectic-mixed methods-pragmatic paradigm." He asserts that " . . . it is the one approach most capable of handling the complexity that is the hallmark of contemporary society and technology" (Reeves, 1997). The eclectic paradigm openly caters for a combination of certain components found in objectivist and constructivist learning and teaching models and, additionally, those from a critical theory paradigm.

Jonassen, Wilson, Wang, and Grabinger (1993, p.87) succinctly describe the assumptions of objectivism: "Objectivist beliefs assume that the world . . . is structured, and that its structure can be modeled for, and acquired by, the learner . . . [M]eaning reflects reality which is external to the understander." The goal of educators is to interpret the real world, so that learners can replicate these interpretations in their thinking. In audioconferences, the learner is therefore situated in a rather passive role as the recipient of the information transmitted through a linear sequence of procedures (Jonassen & Reeves, 1996).

At the heart of constructivism is the notion that knowledge is constructed and exists in the mind of the knower. Knowledge is personally constructed within, as is maintained in Vygotskian theory, a social context within a social community that accepts the assumptions underlying that perspective (Cunningham, 1991). Thus, although reality exists independent of the knower, what is known is individually and collectively constructed from "our experiences, mental structures, and beliefs . . . There is no single reality or any objective entity" (Jonassen, 1991, p.29). Instructional design of audioconference communication, based on constructivist theory, aims to place learners in "mindful" learning situations with built-in scaffolding support so that they can construct their own interpretations of reality.

Described by Reeves (1997) as the "critical theory-neomarxist-postmodern-praxis paradigm," the critical theory paradigm is concerned with issues of control, power, and epistemology as social constructions and how these function to exclude various interests, including those of students, particularly minority students. The neutrality of instructional design and the lecturer is questioned, and, by so doing, seeks to expose the hidden curriculum underlying the cultural, gender, and class assumptions inherent in the design process of, and the designed artifact, the audioconference (Henderson, 1996).

Multiple Cultural Paradigm

Any instructional design paradigm, including that of academic audioconferences, is grounded in a cultural context. Far from having to bring it into the matrix, cultural contextuality is always a variable. The many dimensions of audioconferences are social constructs and have meaning because of the selective academic traditions in which they are situated. This is further refined when different ethnic/racial subjectivities, ideologies, and pedagogies are considered. Multicultural education is the most accepted model to incorporate society's multiple realities. However, it has generally been implemented within a narrow framework because it adopts a reductionist approach that diminishes the issues to one of inclusion of various elements of the minorities' cultures, particularly aspects that do not structurally impinge on those of the dominant group, and sees this as rectifying educational injustices (Henderson, 1996). On the other hand, a multiple cultural model strives for a coherent partnership among three cultural logics: those of the academic, mainstream, and student (or minority) cultures.

First, a multiple cultural model needs overtly to incorporate the specific requirements of mainstream academic culture. These are expressed through the content to be taught, types of assessment, written and oral genres, research methodologies, and culturally-specific ways of promoting cognitive development within an academic environment. Second, as academic culture is embedded in an institutional culture that is rooted in society's dominant culture, aspects and values of these differently scaled macro cultures, including systemic issues to do with power, control, and disadvantage, need to be included in the instructional design and delivery of audioconferences. Third, it is also necessary that instructional design and delivery incorporate the students' (or minority's) culture, knowledge, and preferred ways of thinking and doing in a manner that goes beyond tokenism. In this way, the multiple cultural model does not merely encourage, but stipulates, the integration of shared value systems.

What we immediately think of when the word "culture" is mentioned is ethnicity. So, a multiple cultural model relevant for the Inuit would include tertiary academic culture, the culture of the institution embedded in society's wider economic and political culture, and the culture of the Inuit. However, a multiple cultural model has validity for students of various (sub)cultural backgrounds. For instance, a business multiple cultural model would involve the corporate culture of the company, the wider economic-political culture that includes global influences, and the shop-floor culture of the factory worker; or a school multiple cultural

model would incorporate the academic school culture, the school's institutional culture set within the culture of an educational system anchored in society's mainstream culture, and the popular youth culture of the students.

Multiple (academic, mainstream, and minority) cultural contextuality affects the dialogue-structure parameters of transactional distance as well as the objectivist-constructivist-critical theory components in an eclectic theory of audioconferencing

Vygotsky's Theory of Learning

In Vygotsky's theory of cognitive development, knowledge acquisition is essentially and inescapably a socio-political-cultural process. The accumulated achievements (language, ways of thinking and doing, etc.) of particular cultural groups mold the intellectual development of the individual. For instance, for Australia's two Indigenous student groups, Aborigines and Torres Strait Islanders, social activity within their Indigenous cultures ensures cognitive development in culturally appropriate ways. As university students, their thinking is simultaneously mediated by the different accumulated achievements of Anglo-Australian academic culture. Thus, thinking has its basis in social activity that becomes internalized. It follows then that guided social interactions serve a cognitive function which occurs in the Zone of Proximal Development (ZPD) which, simplistically, is the difference between what a learner can do independently and what can be accomplished cognitively with guided support from more knowledgeable others (Gallimore & Tharp, 1990). According to Cole (1985, p. 155), the ZPD should be   as "the structure of joint activity in any context where there are participants who exercise differential responsibility by virtue of differential expertise." This, of course, is one of the ingredients of academic audioconferencing as is directing the process of moving the learner from assisted performance to greater self-assisted and self-regulatory competence. Audioconferencing as a scaffolding tool within the ZPD and the lecturer or other students as the more knowledgeable mediator fit comfortably within Vygotskian theory.

Drawing on multiple theories, the eclectic paradigm allows triangulation of complex phenomena in order to design and implement more effective educational interactive communication in open learning. Variability and flexibility are obvious instructional design features of audioconferencing based on transactional distance in an eclectic paradigm that aims to provide students with interactive learning experiences that

incorporate various ways of learning and teaching, reflect society's multiple cultural realities and, hence, promote equity of learning outcomes. Transactional education communication is thereby centered such that the instructional design and delivery of audioconferences positions student groups and individuals in their ZPD, not as objects but as subjects, that is, as active participants who are given and take responsibility as receivers, agents, transmitters, and actors in the cultural contextualized   learning paradigm.

A Case Study of an Eclectic Theory of Audioconferencing

The   Context

The paper highlights relevant aspects of transactional audioconferencing in a specific open learning Bachelor of Education program, the Remote Area Teacher Education Program (RATEP). The program is offered by James Cook University in Townsville, Queensland, Australia (Figure 1), to non-urban Aborigines and Torres Strait Islanders, Australia's two Indigenous groups, all of whom have or-third language.

Students through RATEP are awarded one year's credit towards the four year Bachelor of Education degree or a two year Diploma in Teaching from the Far Northern Institute of Technical and Further Education, Cairns, Australia. Currently, there are 43 university students enrolled through RATEP across the three years of the degree program.

The RATEP program offers the same on-campus degree to fifteen to thirty Indigenous students in any year's intake, but utilizes interactive multimedia computer courseware, audioconferencing, facsimile, electronic mail, print materials, and an on-site tutor at each site. The location of each RATEP center is usually at the local school in small remote Indigenous communities with populations ranging from 300 to 1500 people, few of whom are transitory non-Indigenous people (see Figure 1). A typical center consists of one classroom which houses the audioconference phone and conference table, a power-Macintosh computer per four students, a modem, a printer, a facsimile machine, a photocopier, video equipment, as well as the students' and tutor's study desks. The tutors are trained teachers who are employed at each site to assist the students in all aspects of their studies. RATEP lecturers are those who teach the same courses with the same types of assessment in the on-campus Bachelor of Education.

Most Aboriginal and Torres Strait Islander university level affirmative action education programs in the past have been typified by high withdrawal and failure rates. RATEP has consistently achieved an unprecedented graduation rate averaging 85% in its eight years of operation, arguably better than any other similar national or international program (York, 1997). RATEP mode students graduate as fully qualified teachers, with the same degree as on-campus students, certified to teach anywhere throughout Australia. Since 1992, RATEP has graduated 57 qualified Indigenous teachers, one with honors; four have become elementary school Principals. This number comprises over twenty-five percent of Queensland's Indigenous teachers.
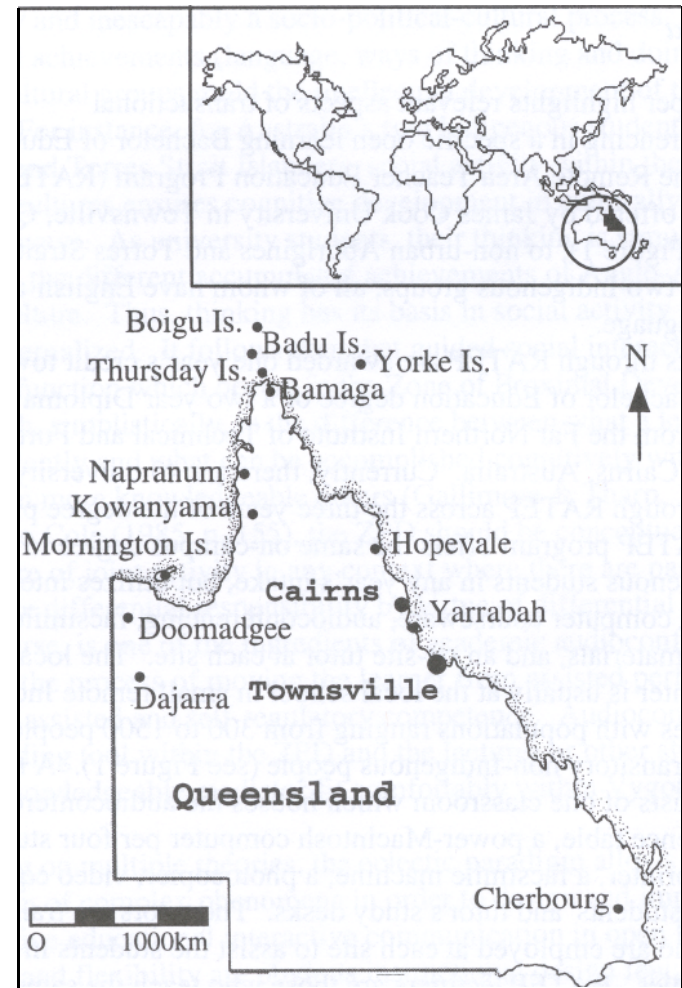

Figure 1. RATEP sites.

The case study draws on relevant research (Lang, 1993; Macindoe & Henderson, 1991; Henderson & Putt, 1993; Putt & Henderson, 1997; York, 1997) involving 93 students who enrolled in undergraduate teacher education through RATEP at James Cook University between 1990 and 1997; there was no intake in 1991. (The figure, 93, includes two intakes of students who have not graduated and are, therefore, not part of the 83% graduation rate calculation,)

Audioconferencing in RATEP

RATEP adopts an eclectic paradigm (Henderson, 1996) but those involved continue to refine audioconferencing as an educational tool (Putt & Henderson, 1997). RATEP's   intensive audioconference schedule is an integral part of coursework in all but three courses, with audioconferences occurring usually weekly, sometimes fortnightly, for 30 to 60 minutes duration with approximately 10 students from different sites per teleconference.

In terms of transactional distance, nearly all the audioconferences in the Bachelor of Education courses through RATEP nurture Anderson's and Garrison's (1995) Community of Learners model, with high interactive communication and "low structure", the latter being defined in Moore's (1980) terms as the high ability of the lecturers' to meet the needs of the students. Thus, audioconferences are mainly used as either tutorials to previous e-mailed agendas, student-led seminars, problem-solving discussions, or other group activities commonly undertaken in face-to-face sessions on campus. They also allow for guest speaker input. One course may combine a number of these strategies over the 15-week semester. This would imply that the design and conduct of such audioconferences would comfortably fulfil1 relevant requirements within Vygotsky's learning theory and the students' ZPDs, the multiple cultural model, and the overall eclectic paradigm. That is so, but it would be incorrect to assume only a constructivist pedagogy. Rather, there is a deliberate inclusion of instructivist (behaviorist) and constructivist strategies; in doing so, we argue that this ensures that the audioconference has a decidedly low structure as it definitely meets the needs of the students.

Students are adamant that they need to be engaged in the audioconference (Putt & Henderson, 1997). For them, "engagement" is not, initially at least, mainly a matter of interactive discussion. Rather, engagement consistently means involvement in preparation for the audioconference by taking responsibility for designated participatory roles. This has many elements of teacher-directed instructivist pedagogy.

It parallels certain Indigenous current-traditional ways of doing. (The term, "current-traditional," has been coined to emphasize the fact that cultural ways of learning are not static.) Small groups and individuals are given responsibility for tasks, such as orchestrating the dancing or corroboree, preparing the vegetables, digging the pit for the cup-murri, and so on for special cultural events. The students appreciate this approach to their academic learning, which is seen as having parallel seriousness. Hence, in a study by Putt and Henderson (1997), students awarded the lowest rank to audioconferences without prior agendas. For students, "there's nothing more tedious/boring [sic] than ad lib audioconferences. A well prepared audioconference is the only way." The highest ranking was given to present problems and questions, particularly those that designated the students at each RATEP center to be especially responsible for clarifying and promoting discussion about their specified problems and questions (a) collectively and (b) increasingly individually as students became more comfortable in the audioconference academic milieu. Student-led seminars were also seen as empowering by the students. As each took turns at being joint seminar leader, they were perceived as the "experts" on the topic, and were given and took ownership of the learning activity as they allocated tasks to their peers at other sites.

The granting of ownership responsibility also connected with their current-traditional ways of perceiving credibility. This meant that unstructured discussion with other students was ranked fairly low by students as a preferred way of conducting audioconferences (Henderson & Putt, 1997). Students explained that they feel that working with peers is initially "distracting . . . [We] don't have the patience to listen to someone who doesn't know" (Henderson & Putt, 1993, p. 229). In current-traditional learning, the learner approaches the person who possesses the relevant knowledge and who will give precise information devoid of extraneous or doubtful content. This explains why structured audioconferences with lecturers and student-led seminars were given high ranking in students' perceptions of the contribution to their understanding.

Researchers -- Burge and Howard (1990) who conducted a Canadian national survey of tertiary distance education students and Schmidt, Sullivan, and Hardy (1994) who taught algebra to migrant students via audioconferencing -- found that the students perceived they were not adversely affected by the absence of visual cues in audioconferencing. Our research (Henderson & Putt, 1993; Putt & Henderson, 1997; also see Lang, 1993; York, 1997) supports this. Indeed, although it is often argued in the literature that Indigenous people's preference is for face-to-face teaching or its equivalent, videoconferencing, we maintain that

audioconferencing is cognizant of Indigenous preferred ways of learning as well as those promoted in academic contexts. For example, the audioconference seminar combines Indigenous oral teaching and learning strengths with the language, analysis, and questioning requirements of academic education genre. Students comment that audioconferencing allows them to manipulate the cultural context too. For instance, the lecturer's and other community site students' nonverbals that would be perceived as negative, particularly the latter's teasing nonverbals, cannot be seen and therefore cannot damage the speaker's self esteem. In order to help prevent shaming themselves in public, students also turn off the microphone to allow private discussion between those at one site before giving an answer. This quickly diminishes, as the students become familiar with the lecturer.

Instructional designers need to be aware of possible mismatches between the academic and minority cultures and implement strategies that do not blame and disadvantage the student. For instance, questioning and justifying the validity of statements and analysis are endemic to academic discourse but are generally unacceptable in Australian Indigenous current-traditional ways of learning and teaching. Other Western teaching strategies are also at loggerheads with certain current-traditional Indigenous pedagogy: any child or adult has the right not to demonstrate their mastery when asked but has the responsibility to do so at a self-selected time when they feel that they have mastered the task. Thus in one scenario, evaluation of Indigenous students who are having difficulty with justification questions or do not answer questions when called upon, can categorize the learners as deficient and remedial and, consequently, the lecturer could design audioconferences that are consistently lecturer-dominated and totally objectivist. In another scenario based within a multiple cultural academic context, it is understood that Indigenous acceptance of the rationale for questioning and interrogating the knower (the White lecturer and other students) and providing evidence based on objective research (rather than tradition and the authority of the elders) will need a cognitive apprenticeship approach (Henderson, Patching, & Putt, 1994a, 1994b).

Hence, constructivist scaffolding support within the students' ZPDs has been embedded in the audioconference. For instance, to assist students to articulate their thinking in academic genres, most lecturers include metacognitive activities as well as taking on the challenge to model this type of reasoning. Lecturers coach and model questioning techniques by, for instance, asking one student a question, redirecting their answer for another student to amplify, and redirecting once more for another to critique the answers. Research (Henderson, Patching, & Putt,

1994a, 1994b; Putt & Henderson, 1997) has shown that students studying through RATEP have developed an enthusiasm for replication of cognitive activities appropriate to a particular socio-cultural learning environment.

One factor that helps promote this acceptance is that students perceive " . . . lecturers learn from the students about traditional matters and cultural protocol" (Van Tiggelen, 1996). Students thereby share the multiple cultural process of teaching and learning. Audioconferences become a two-way exchange empowering the student and the lecturer.

The RATEP experience allows lecturers to rethink their pedagogy to cater for academic requirements, the students, and the new, at least to them, delivery techniques: "This RATEP alternative technology has gotten me to think much more explicitly about my own pedagogical processes to translate the knowledge in my course" (cited in Lang, 1993, p. 86). Such experiences continue to have a flow through effect. Many lecturers admit to refining their skills as face-to-face teachers. By having to redesign their subjects to take account of audioconferencing and the other delivery modes, lecturers have improved the structure of on-campus versions of their RATEP subjects and other subjects they teach.

Of course, not all academics are committed to the eclectic paradigm. Three out of the 26 lecturers maintain an objectivist Independent Learners Support model (Anderson & Garrison, 1995) for the duration of their course, holding infrequent lecturer-dominated audioconferences that have a high transactional distance structure with little dialogue (Saba & Shearer, 1994). Their purpose is mainly to give explanations of the assessment and answer consequent student queries. The lecturers hold a model of the distance learner as isolated from, and independent of, the lecturer, and take little account of the students' cultural ways of learning and doing or, for that matter, academic learning and teaching styles that tap constructivist pedagogies within the student's ZPD. Students acknowledge the value of the information presented in such audioconferences but constantly query a pedagogy and commitment that they perceive as "short-changing" them (Henderson & Putt, 1997).

The critical theory parameter of the eclectic paradigm is presented most easily through the content of the courses, for example, in "Contemporary Australian Society" and "Curriculum: Aboriginal and Torres Strait Islander Issues". Students are also quick to critique the conduct of audioconferences, initially, as condoned in current-traditional practices, with the tutors as a go-between to broker for them. As they continue their studies, they adopt greater direct negotiation with the lecturers. As well, students engage in lobbying when the institutional economic rationalists decide on cost-cutting measures that threaten the

continuance of the Community of Learners model of audioconferencing in RATEP.

Another critical theory strategy is deconstructing the audioconference. Unfortunately, few too lecturers pose the following sorts of questions: What effect on meaning has the structure of the content and conduct of the audioconference? What aspects of institutional and societal political and economic reality and whose knowledge has the audioconference amplified, simplified, reduced, or ignored? Are multiple perspectives presented? Is each perspective as valid as the other is? What values are embedded in the audioconference? In what ways have you, the students, appropriated the audioconference to suit your learning style? From many of the examples given in this paper, it is clear that the students have been cognizant of how they - and some of the lecturers - have considered and reflected on at least some of these questions. By asking students such questions, lecturers are providing students with analytic tools to deconstruct the audioconference "text" and its conduct, and self-question the way in which they, as students, use audioconferencing as a learning and reflective tool.

Audioconferences are given firm approval by RATEP students who consistently list them among the two most satisfying aspects of their program; the interactive multimedia computer courseware is given top billing by most students (Macindoe & Henderson, 1991; Lang, 1993; Putt Henderson, 1997; York, 1997). Audioconferencing will not disappear. It provides regular experiences that cannot be obtained, currently, as effectively via e-mail, the WWW, or desktop camera systems: for instance, synchronous verbal contact with lecturers and other students; hearing the lecturer, a native English speaker's intonation and pausing pattern, particularly when using academic genres; and becoming comfortable and versatile with the Western tradition of posing and answering questions, particularly "why" questions and those calling for justification in a verbal synchronous situation as will be required of them as professional teachers; and taking and giving public critique of their interpretations and understandings as well as those of other students and their lecturers.

Conclusion

It is apparent from this case study that the eclectic paradigm of audioconferencing has been successful in the design and delivery of meaningful learning experiences to Indigenous Australian students studying through the off-campus RATEP mode. The paradigm has

allowed seemingly disparate cultural and pedagogical elements to be brought together coherently and cogently through audioconferencing.

While the lecturers did not always find it easy to move outside their traditional pedagogical parameters in developing their subjects for optimal learning, an understanding of, and commitment to, the multiple cultural model was evident. Taking account of the students' culture in the design and delivery of audioconferencing flags to the students that their knowledge and ways of thinking and doing are legitimate and relevant in contemporary tertiary education. Students appreciate that their current-traditional pedagogies are being incorporated in the conduct of their audioconferences, and have demonstrated that these can then be used as places from which to branch into mastering academic genres and valuing and implementing other pedagogic and philosophical approaches to learning and teaching.

Both lecturers and students were empowered as they shared the cross cultural process of teaching and learning. Students now have high expectations of lecturers and are vocal critics of unsatisfactory audioconferences. The challenge for lecturers in RATEP is to continue to develop their skills at designing and implementing different types of audioconferences for different learning purposes and not to see deconstruction of the audioconference as controversial. The goal is to implement, during audioconferencing in any one subject and over the duration of the semester, examples of objectivist, constructivist, and critical theory pedagogical approaches as well as those that affirm Indigenous, and promote Western academic, ways of learning and teaching.

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