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**WORKING IN AUSTRALIAN HIGHER EDUCATION: THE PRESSURES
AT SMALL REGIONAL UNIVERSITIES.**

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ABSTRACT

This paper looks at the pressures under which academics in Australia are currently working, with special regard to small regional universities. Some time will be spent in explaining the situation and context of those working in the field of education at Northern Territory University as an example. In many respects small regional universities are under greater pressures than their older and larger counterparts in the major centres of population. Regional universities, however, tend to be the sole providers of educational courses over huge areas, which often gives them greater local community support.

Amongst the other pressures one sees at the smaller regional universities are the problems of retaining the educationally desirable diversity of courses in a situation where there is little opportunity for economies of scale. The greater use of technology may provide some relief from these pressures and this is currently being investigated. Here again examples will be given.

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THE AUSTRALIAN SCENE

The Australian higher education scene generally is a depressing scene of broken promises. The Howard Government was elected earlier in 1996 with a pledge that it would not reduce spending on higher education (and indicated that it would try to increase spending in the area). It is currently trying to introduce a budget through Parliament that will reduce spending by \$ 1.9 billion (roughly a 5% cut over 4 years) (Illing, 1996) (DEETYA, 1996). The cuts will be carried out in a variety of ways, that include increasing the amount that students pay in fees and reducing grants to universities. University administrations are responding by cutting staff and services. The vice -chancellors who were in (or who put themselves in) the most difficult situations resigned (three have resigned currently): unions have imposed marking bans at some universities: staff are demanding salary increases and there have been settlements of about 10% over 2 years at some universities. The standard salary scales across the country now seem about to become a feature of the past. The word "tenure" seems to have no fixed meaning. Universities are supposed to make up for any shortfall in government grants by charging full fees to Australian students and recruiting strongly in the overseas markets of Asia. Unfortunately racially intemperate remarks by Ms Pauline Hansen appear to be effectively spoiling any hopes of the "overseas students solution". In other words the general situation is gloomy and there seem to be few hopeful features on the horizon.

What does one do about such mayhem being wreaked over such a short space of time to a fairly successful higher education system, largely by government policy? How do these sudden changes effect different universities in different parts of the country?

THE DIFFERENTIAL EFFECTS OF THE CUTS

Firstly, to the best of my knowledge, no universities have escaped the cuts unscathed, but the budget statement does detail the size of the cuts to each institution. These vary quite considerably as they build in pre-existing commitments. Nicholls (1996) shows that there are considerable variations by state in the budget estimates for universities with Victoria and South Australia being hit most heavily, some states including NT being little affected with universities in Queensland seeing slight increases.

In considering the cases of metropolitan as opposed to regional universities there seems to be very little evidence that the larger metropolitan universities have had smaller cuts imposed on them by government than regional universities.

There is a mix of small cuts imposed by government leading to a general 5% loss of funding over four years. Additionally universities will have to fund a pay rise, the size of which is a matter of guess-work. In general, it does appear to be the larger, better established universities that are confronting the unions and making the larger cuts to staffing, though they are actually better able to absorb the additional costs in terms of being able to increase class sizes. They seem to have a policy using the current government cuts as an excuse to pare away areas that they believe will be less profitable in future. In the days of unequal salaries and enterprise bargaining, they may pay their differentially and such exercises could be costly: universities with some spare capital may be able to buy in expertise in a new area of research at will.

The smaller regional universities have to make savings, but their options are more limited. Their strategies might consist of some of:- not replacing staff: encouraging early retirement: not employing part-timers: reducing support staff such as maintenance workers, secretarial and library staff: reducing library facilities etc: cutting out teaching units. Generally such strategies lower the quality of courses for existing students. (A number of these strategies are taken from an article by Peter Cullen (1996) written prior to the budget cuts: it is interesting that the larger universities are in the main implementing the policies that he advocated and the smaller universities are following the strategies that he derided)

The overall effect of the changes is likely to have the effect of making higher education less equal.

SOME EXAMPLES

The current situation should be seen in terms of the Dawkins reforms that removed the binary divide. A number of universities set out on a path of colonial expansion, taking over smaller institutions with promises to staff, students and local communities that have since been breached. There has been considerable variation in this pattern but Deakin University (Figgis & Bates 1996) and University of New South Wales (Coorey 1996a) might be seen as examples.

Bates, R: The Faculty of Education at Deakin of course was the largest Faculty in the University, following the amalgamations of the early '90s. That meant that we had a student population in the Faculty of some 5,000, 2,900 full-time equivalent students. We now have 1600 full-time equivalent students, and instead of 300 academic staff, we now have 80 and we'll be reducing that to 60 in the near future. (Figgis & Bates 1996)

Universities have sometimes acted very much in the way of large businesses, stripping the assets from the wide spread institutions that they were supposed to protect. Many of those who worked in such institutions have already lost their

jobs. The outposts of empire of these spider-like universities are being targeted and left as mere shells to protect the main campuses. The new rounds of cuts are hitting educational faculties particularly severely. For example at the University of Adelaide:

Figgis ...But we'll start with the cuts. The University of Adelaide announced ten positions would go from its Education Department, which only had 15 positions to begin with. Not surprisingly, Robert Brown, the Head of Education in Adelaide, found it a stressful moment..... The University's decided now that the Department should be cut to seven in the end, not to five. To get there, voluntary redundancy offers have gone out to all the academic staff, but not to the Professors.
(Figgis & Brown 1996)

As stated above the Faculty of Education at Deakin University has been reduced from 300 staff over a number of campuses to 80 staff and now further reductions to a staff of 60 are demanded. Newcastle University will lose 200 staff (Coorey 1996b). Probably to UK listeners, this catalogue of misfortune and political ineptitude is all too familiar! Australia has probably been headed along the same path for some years, but is now increasing its speed along the road that puts private interest over public interest and economic arguments far above educational arguments.

EDUCATION FACULTIES

All faculties are under pressure, with different faculties, schools, departments or individual staff being targeted at different institutions. Nonetheless, it does seem that education faculties will be bearing a higher than average proportion of the cuts. One wonders why this is? Predicted shortfalls of teachers for Australia are 400 in 1997 and 4700 by the year 2000 (Preston, 1996). In the areas of secondary mathematics and science these shortfalls will be particularly severe. In statements by all State, Territory, and Federal Ministers of Education (Various, 1996) in the December issue of *Education Alternatives*, none appear to mention the problems of future teacher shortage, yet they are presiding over the carnage of numerous education faculties, which could supply the teachers the system will require.

The question I hope to answer is how can education faculties in small regional universities survive! I am not sure that there are easy answers.

NORTHERN TERRITORY & NORTHERN TERRITORY UNIVERSITY (NTU)

The Northern Territory is distinguished from all other Australian states and territories by its huge area and low population base. The land area of the Northern Territory is 1,346,200 square kilometres. The population (1991 census) was 175,891 people of whom 78,401 were resident in Darwin. 22.7 % of the

population is Aboriginal/Torres Strait Islander. 26.4 % of the population is under 15 and one in every five people was born overseas. 67% of the population are urban residents (7 main towns). In 1991 only 72% of potential Aboriginal and Torres Strait Islander students were enrolled in primary and secondary schools. 20% of Aboriginal and Torres Strait Islander students aged 16-17 were in school compared with 55% for the remainder of the population. (Harrison, 1993).

Some features of note within the university are:

(i) The university is small and isolated. A line drawn diagonally across Australia between Perth and Cairns leaves NTU as the only Australian university north of that line.

(ii) It has higher education as well as certificate and diploma students, who would in other states usually be part of a separate VET (TAFE) sector.

(iii) The university structure has recently changed so as to integrate the higher education and the VET sector to a greater extent.

(iv) For the past two years, the Education Faculty and the University as a whole both seem to have slowly decreasing student numbers. Since university grants, depend largely on student numbers, the future resource base of the University and the Education Faculty, looks far from secure.

(v) The main difference between NTU and other universities in Australia is that most staff at NTU teach across a broader range of units to smaller numbers of students than might be usual elsewhere.

THE FACULTY OF EDUCATION AT NTU

I work in a fairly typical, though small, Australian university in a Faculty of Education, now one of eight faculties. Within this faculty there are two schools: I teach in the School of Teaching and Educational Studies that runs primary and secondary teacher education courses. I am a senior lecturer in this school delivering units on science education at primary and secondary levels and a general educational issues unit to secondary student teachers.

Although the faculty has filled very few vacant positions in the past five years, the faculty is now said to be overstaffed. There are 35 staff and it is said that there is only room for 27 staff in two years time. The policy is to earn additional revenue in conjunction with voluntary retirement packages provided by the university.

The actual way that this could be done has been the subject of a Faculty retreat and a number decisions were made.

GENERAL REDUCTIONS IN SPENDING

(i) Instead of workloads being measured in hours they would be measured in eftsus (equivalent full time student units), which is said to distribute the workloads more evenly.

(ii) Increasing efficiencies

- a. eliminating low enrolment units or modules
- b. eliminate duplication between schools/ across faculties
- c. reducing electives
- d. where necessary using cross institutional enrolments
- e. using course materials from elsewhere
- f. offering units less frequently
- g. reducing reliance on part-time staff.
- h. reducing student attrition
- i. reduce expenditure on consumables.

(iii) voluntary early retirement scheme

(iv) not filling vacancies

GENERAL INCREASES IN REVENUE

(i) increasing student intake

(ii) increasing the numbers of overseas students

(iii) winning more research grants

(iv) increasing publications

(v) obtain more consultancies

(vi) running profitable short courses

(vi) becoming a virtual faculty. More flexible delivery of courses

The above suggestions are from a wide variety of publicly available documents available within the faculty. Some of them are, at least, partially contradictory and all demand dedication, professionalism and trust of an order that may or may not be forthcoming. All increase the pressures on faculty members. However it is only the item "becoming a virtual faculty" that I wish to explore in depth firstly on the grounds that it has been less widely canvassed than some of the other options and secondly that I used CMC to deliver one of my units last semester.

COMPUTER MEDIATED COMMUNICATION (CMC)

I have been responsible for the teaching of a secondary teacher education unit called Educational issues (EDN 482) for the past seven years and recently after completing a course on CMC I changed the way I taught this unit to make

delivery more flexible. CMC would be only one of many ways by which the courses might be made more flexible.

Computer Mediated Communication (CMC) is said to be "one of the most recent technological systems to be adopted for use in distance education" (Weghuis et al, 1995). They also describe CMC as

The process by which people create, exchange and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages. It typically includes computer conferencing, electronic mail, and electronic bulletin boards.

(Weghuis et al, 1995)

Palme, 1995 discusses the social and psychological factors which might make people choose to use CMC systems. CMC systems are said to "support status, self-esteem, confidence, competence, communion, comradeship, give inspiration and be an outlet for generosity". Palme (1993) also looks at the legal and ethical aspects of CMC.

There are some fairly extravagant claims for CMC, such as that by Kahle (undated) that it "dramatically alters the relationships between teachers, students, and educational institutions", for the OET course (Anon, 1996) that it "liberates both learners and teachers from the time and place" or by December et al (1994) in the outline of their course on CMC that it is "possibly the most important technological innovation of the latter half of the 20th century"

There may be all sorts of reasons for giving new teachers in training some practice in computing. CMC may indeed give such practice, but I feel its justification lies in the realm of philosophy and in what teachers believe about the way students learn.

Aims in introducing CMC vary : McComb (1994) states that her aim was "to help awaken students' capacities for questioning the world in which they live". My aim in introducing CMC was to give my students the opportunity to increase the quality of the discussion that relates to issues in education.

What theoretical basis might there be for any of the hopes/ assertions previously made? Probably any such basis will be meagre as the variety of possible methodologies is large. Thus the research gives large numbers of case studies (this itself indicates to me that CMC is a "young field"). For example Ahern and Repman (1994) review the earlier literature and agree with earlier researchers that CMC is as effective as on site education. Koehn (1994) also reviews research findings.

In my view Laurillard in her recent book (Laurillard, 1993, pp.167-171) puts CMC in perspective in that she sees CMC as one of a variety of ways of

delivering courses in higher education. Sally Brown in her review of the Laurillard book is that:

"Teacher educators will find much food for thought in this well-researched and strongly argued text, which provides a sound but not uncritical overview of the educational technologies currently available to us". (Brown, 1994)

Teacher educators are well provided with examples of CMC (though CMC appears under a variety of different names). A recent article in our regional teacher education journal looks at student teachers using computers on teaching practice (Albion, 1996). A variety of other examples on teacher education include these articles (Harrington and Quinn-Leering, 1994: McGee and Boyd 1995: Harris 1995: Fox, 1996: Gillingham et al, 1996). Many teacher educators nowadays hold views that come under a general philosophical heading of "constructivist" and the literature generally supports this stance (Spiro et al, 1991).

IN PRACTICE

In practice, events were slower than might have been hoped. Students did not take to the new media, like ducks to water. Speed at completing the assignments was very variable. Three weeks into the unit, one student had nearly finished all assignments, whereas several other students had only just started. After four weeks, about half the class has finished assignment 2 but from comments I knew that the technology was still causing difficulty. As Lawley (1996) says:

Although CMC is clearly shaped in some ways by its participants, the character and level of that interaction is significantly affected by the interfaces between the user and the computer system.

Lawley (1996)

What was the difficulty? One, as indicated earlier was certainly the communication package "Elm". Staff at NTU have Eudora as their mailing software. Although it may have its faults, it is easy to use and is user friendly. Students at NTU have, as their mailing software, a system called Elm: it has the advantage that it is free and will be compatible with the UNIX system, which is the technological path that NTU hopes to go down. It has the disadvantage that it is user unfriendly and difficult to use. However over the whole unit students became more familiar with it.

Such an unfriendly interface is bound to influence the character of the discussion (as indicated in the quotation above (Lawley, 1996). I have had "banda"/ Elm installed on my computer to try to see what difficulties the students are having. To assist the students, I passed on to them the URL of the site where detailed instructions for Elm (Taylor 1987a) (Taylor 1987b) are

given, but the real solution is to have a friendlier system on which students may learn.

Will CMC help learning in my issues unit? It will certainly help students develop new skills, that they will need in schools in the near future, but this unit is more about attitudes and skills rather than a body of content knowledge and it attempts to model ways in which students may choose to teach. Through practice students should improve their skills at marshalling arguments for and against particular issues: they should also practice traditional research and essay-writing skills, though they should be familiar with these already: they should gradually rely more on the use of the WWW in teaching and researching and become familiar with search engines. I have found that others, who are comparatively new to the task feel that they have had success, so in spite of doubts, I remain optimistic.

By the end of the course even students who had never used a computer when researching for assignments before had mastered skills that allowed them to quickly gather information and produce meaningful papers on issues in international media.

(Jordanova, 1996?)

My worst fear was that the difficulties of using the technology would mask the skills and attitude changes that I had hoped to see.

COMMENTARY

Does putting units online reduce the staff inputs, making units more economic to run? In general my experience with 17 students in a mixture of f2f and CMC indicated that some there would be little to gain in economies of scale. If numbers were a lot bigger then the group would be divided into two or more tutorial groups. There would be little to gain and the research appears to back this view.

Wells (1995, pp. 5-6) gives a figure of 25 students for CMC classes. Her concern is ensuring a critical mass of 'active' students. She states that research suggests 10% of a CMC group may provide 50% of the messages and also that up to 25% of the class can be "lurkers". Wells mentions a number of strategies to ensure that more people are active and thus allow smaller class sizes. The strategies that I have chosen provide the incentive to take part in CMC, but I expect that many students will take a minimalist position which is to do just enough to pass the course.

Pincas (1995a: 1995b) has also written about the most effective group size and the level of group participation in CMC. In comparing the papers of Wells and Pincas, it is my impression that Pincas feels that the smaller groups (she mentions a group size of 11) are more effective. The literature is thus divided on

the best group size, but if small group sizes were essential, then most institutions would see CMC as being too costly to be practicable.

There is a converse of this: if lecturers who teach specialisms with insufficient students to be economic, could make their units almost wholly online with little f2f contact, they might achieve a wide range of choice for students without the costs associated with f2f teaching. There might be savings where units have small enrolments. With CMC and other distance education techniques, I believe it may be possible to continue teaching units with small numbers of students.

It is thus possible delivery may help reduce unit costs, though there is a danger that staff will find themselves teaching the same groups within the same unit in different ways.

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