Access and equity in higher education — a case study

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Introduction

Strategies designed to increase the participation in higher education by students who have not traditionally done so, have been many and varied over the past decade. This paper is a case study which outlines an attempt at the Footscray Institute of Technology, located in the Western Metropolitan Region of Melbourne, to involve students from local schools in tertiary courses at the Institute. It describes how the Institute has actively recruited potential students of mathematics and science from those pools of Year 12 students who frequently experience significant difficulty obtaining entry to higher education. At the core of this initiative is a mechanism for Institute departmental selection officers to work cooperatively with local teachers in schools where students are attempting the Schools Year 12 and Tertiary Entrance Certificate.[1] In this context, "cooperation" means that teachers and selection officers conjointly devise a secondary school curriculum which best prepares these students, who are doing non-traditional secondary courses, for future study at the Institute in applied science and technology courses. At the same time, schools and higher education institutions are working on new procedures designed to recruit students from these non-traditional courses who have the greatest potential for success. Outlined in the final section of this paper is an approach to equity initiatives which we feel provides a useful framework for their integration into the educational process, an attempt which we feel may be a key factor towards enhancing the probability of student success.

Background

Australia's young people leave school at a much lower average age than their counterparts in other OECD countries. In addition, comparatively fewer go on to higher education and those who do proceed are predominantly drawn from the middle and upper classes. Consequently, the representation of Australia's social classes in its higher education system has been dramatically unequal. Non-Catholic independent schools have been consistently over-represented at the expense of students from state high schools and, in fact, Williams (1987) has calculated that independent school students in their country enter university at nearly five times the rate of those from Government schools.

A number of explanations for this imbalance have been suggested. School retention rates in independent schools are significantly higher than in the Government schools resulting in a larger pool from which higher education students can be drawn. In addition, these students are more likely to attempt the type of subjects "consecrated" by universities for admission to tertiary courses and for further study purposes (Teese 1986). As Connell et. al. (1982) have pointed out, there is a significant factor operating at the cultural level which reinforces this trend since there is a better cultural match between middle and upper class families, their schools and universities. More generally, it is well known that Australia's rural youth and women are under-represented in higher education, and, in the latter case, particularly so in those courses which lead to entry into the socially powerful professions.

Government policy

The recent White Paper asserts that the Federal Government's goal is to strike a balance in the higher education population which more closely resembles the structure and composition of Australian society generally (*Higher Education — A Policy Statement* p.21). Moreover, the White Paper strategy, with respect to equity, includes not only growth in the system generally but also includes funded support for "coordinated strategies" including school-link programs, altered selection procedures, credit arrangements, bridging courses and curriculum innovation in higher education (White Paper, p.55). However, the task of developing strategies to address this problem of unequal access has been now made more difficult by the added realisation that there is a growing demand on the Australian education system to provide places for between 13,000 and 20,000 students who are eligible to join higher education, but for whom there are no available places. Thus, for a Government already committed to a policy of redressing the social imbalance within higher education, this added pressure to provide extra places to satisfy such a large unmet demand on the tertiary sector is throwing pressure on scarce resources and is requiring educators to develop new and innovative approaches to higher education.

Access and equity in Melbourne's West — the context

With some half a million people, the western metropolitan region of Melbourne comprises approximately 15% of the city's total population, and the region is currently growing at a rate of about 5% per annum. The major part of this growth is being experienced in the outer urban corridors of Melton, Werribee and Keilor with their high proportion of young families. Notwithstanding the fact that the region has 11% of Victorians over the age of 65 (many of these elderly people being concentrated in the inner urban west), the population of the western metropolitan region is significantly younger than that of the overall population of Melbourne, having 24.3% under the age of 14 years compared to 21.9% for the general population. Thus growing pressure upon the education system in this region in the light of these figures is already evident, but, in addition, the problem is compounded by the added complication that the region has more people who have been born overseas (34%) than Melbourne as a whole (20%), making the region hoth culturally and ethically diverse.

With more than 8000 establishments employing a total workforce in excess of 116,000 people in commercial services (38%), manufacturing (35%), public and community services (24%) and agriculture and mining (1%), the western metropolitan region continues to be the heartland of Melbourne's working class population. Educationally, the region is largely dependent on the State system. There are many thousands of secondary school students in the Government educational system in the western metropolitan region, whilst independent non-Catholic education is provided through only three schools. In addition, progressive education systems in which Year 12 subjects are not externally assessed (and therefore not "consecrated" by universities) are more prevalent in the western region than in other areas of Melbourne.

The principal higher education provider for this region is Footscray Institute of Technology which caters for 5000 students in engineering, applied science, business studies, hospitality and tourism, physical education and recreation, health, humanities and teacher education. However, providing places at FIT for western suburban applicants has become more difficult as people from other areas of Melbourne, Victoria and overseas seek admission to increasingly popular courses. As an indication of the Government's recognition of these factors which are working against access to tertiary education by students from the western metropolitan region, there has been some support from both Federal and State authorities for the development of innovative strategies to redress past enrolment imbalance. Nearly $300,000 has been provided to various areas of the Institute over the last five years to encourage the development of access and equity strategies.

Access and equity in Melbourne's West — the case study

Over the last eighteen months, the Footscray Institute of Technology has been conducting a major student recruitment and selection exercise in an effort to increase the participation in science and technology courses by students from this region of Melbourne. In its initial phase, the project aimed to identify all the STC students in the western region who are studying mathematics and science courses. Having identified over 600 of these students, the project officers set about the task of making the staff involved with these students, and the students themselves, aware of FIT's applied science programs, with the stated objective of admitting a sub-quota of STC students into technology and science courses at the tertiary level. Upon analysis, it was found that STC students predominantly studied business or commercial mathematics, computing and human science, with a few instances of physical science.

Groups of STC teachers and selection officers from technology and science courses at FIT then met to analyse the content of the STC courses and to decide upon their suitability as prerequisite study for FIT courses. Naturally enough, there were gaps between what the students were to do in Year 12 and what they needed to manage certain forms of applied science and technology courses at the tertiary level. For example, an absence of calculus at Year 12 clearly precluded a student from admission to the Department of Mathematics. Notwithstanding these problems, the teachers and selection officers continued to work together to modify STC curricular so that, whilst not ignoring the interests of students, they came more into line with FIT requirements. Students were carefully apprised of the details of the FIT programs and familiarised with them over a substantial period of time. Interested students were further nurtured into detailed considerations of studying applied science at FIT through a series of "spring schools" conducted by applied science staff.

By late 1988, as students in the Victorian Year 12 population were declaring their preferences for higher education institutions, 158 of the originally identified 600 students has placed FIT on their preference lists. When lectures commenced in 1989, there were 41 local STC students enrolled in first year courses at FIT, 6 in engineering, 8 in nursing, 5 in physical education and recreation, 9 in computing, 12 in teacher education and 1 in physics. As the year began to settle down, some of these students sought a transfer to alternative departments, for example from physical education to teacher education, or from physics to computing, suggesting that even with the increased career guidance given to these students, there is still some added work to be done to assist them to adequately focus their career intentions.

With the assistance of funding from both Federal and State Government for initiatives to increase participation and equity in higher education, FIT has developed a unit within its Educational Development Department, the charter of which is to assist staff to consider adopting highly personalised approaches to teaching and to encourage students to exploit their self-directed learning skills. At the same time it provides much needed assistance for students to develop skills in language, basic science, mathematics, examination strategies, and the organisation of study time.

The integration of access and equity initiatives into tertiary education

Fensham (1988) has suggested that a major obstacle confronting those seeking to provide access to higher education for those traditionally denied it is to avoid the marginalisation of the students admitted under special selection circumstances. Those working with equity programs at FIT over the last four years have addressed this issue and have sought to integrate the equity initiatives into the mainstream of FIT's academic endeavour. In this process, we began with a wider consideration of what factors effect the general educational process. Drawing on Schwab (1973), four irreducible component parts, (or "commonplaces" as Schwab calls them), the learner, the teacher, the curriculum, and the educational setting itself, have been considered in this effort to integrate the equity initiatives in the mainstream of FIT's academic program. Indeed, we concur with Schwab that each of the "commonplaces" must be carefully conceptualised and defined and a place for each established before any program can be considered to be balanced.

Australia's young people leave school at a much lower average age than their counterparts in other OECD countries.

Prevalent concepts of the learner

An analysis of attempted Participation and Equity schemes[2] leaves one with the impression that programs are geared towards learners who are, in some supposedly important ways, deficit. Bridging courses, ESL offerings, tutorial schemes and similar projects proposed as models for participation and equity efforts seem to imply a need to develop "treatment" procedures to enable participants to engage in the academic mainstream of higher education. Such a view suggests that these students will ideally emerge from the institution at some later date with an equivalent qualification to that of the non-disadvantaged student who did not require to be "treated" by the equity scheme.

According to this scenario, it might be suggested that the role of Participation and Equity initiatives is, simply, to turn our "disadvantaged geese" into "middle class swans", the initiative acting as some sort of social midwife during this resurgam. The genesis of this type of approach is probably linked to the concern of some for "maintenance of traditional standards". The implied concept of "disadvantage" certainly seems to have its roots in uncritical and stereotypic notions of "ability" and student suitability for higher education. These notions also seem to imply an acceptance (again usually uncritical) of aggregate scores as a means for admitting people into higher education.

Another view of the student

As the above case study suggests, those working in the Participation and Equity schemes at FIT adopt a different perspective on the learners entering higher education through "disadvantaged" or "special" admissions schemes. In our view, suitability and ability are not thought of in terms of Anderson scores. Rather, the learner is viewed as a person with considerable "potential", and more often than not, with unique skills upon which they are able to draw.

In this view, student potential is maximised by arranging a better fit between the students secondary school course and proposed higher education courses. And importantly, it is further promoted by restructuring the higher education curriculum, approaches to teaching in higher education and the broader milieu of higher education in

which the teaching and learning occurs. Such a restructuring, albeit in a modest way, is a function of the academic study skills unit at FIT.

Comments and observations

The case study of the access and equity initiatives at FIT suggests that "student potential" is a more than useful concept for selection officers to develop, and that educational engagement during tertiary education must be a more flexible process, involving the remaining three commonplaces of education which must contribute to the total educational experience of the student. Clearly, equally important to the overall educational process are the teacher, the curriculum, and finally the milieu in which the learning is to occur. Given that these three irreducible factors share central importance with the learner in the educational process, we believe that it is imperative that we consider initiatives which will contribute to a balanced educational experience for the student. We are being encouraged by the Federal Government to alter the socio-economic profile of the student population in tertiary education in order that participation by hitherto underrepresented groups is increased. What we are asserting is that for us to meet this goal in a socially desirable way, there must be four integrated types of initiative mounted. Unless each of the commonplaces are significantly affected by the Participation and Equity ideals, there will be a continual mismatch between the learner and the process, with the inevitable result of an unsatisfactory "participation profile".

In our view, one of the critical steps which must be taken to balance such initiatives is the production of at least a modest re-education program for the lecturing staff at our institutions, in order that the style and presentation of their teaching be modified to enable "disadvantaged" students more personal access to their skills, ideas and aptitudes which comprise the fundamentals of higher education. If we reflect on the significant change in our policies regarding the admission of students in the light of equity pressures during the last few years, it is somewhat unfair, perhaps, that we are now requiring of lecturers, who were initially employed to lecture to a certain (assumed) audience, to now involve themselves with students with whom they have little in common. For example, we believe that the admission of students who have significantly different styles of learning and a different conceptual apparatus to mainstream students, contributes to the attitudinal mismatch which is currently observed between lecturers and students. We might suggest that the advent of these problems was not only due to the pressure from equity programs, but arises also from a more fundamental change in the nature of our student popula-

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tions. Nevertheless, it is plain that we need to grapple with these problems in a concerted and forthright fashion.

Accepting that we need to balance the four commonplaces in an ideal equity scheme, we must also admit that in many courses we are continuing to offer unchanged curriculum, in a traditional milieu, to a vastly changed student profile. Without wishing to draw too many (male-centred) parallels, VFL football is currently undergoing a fairly traumatic navel gazing exercise in the face of falling participation by paying fans, and even the most culturally pure tradition, test cricket, has dressed its heroes in coloured pyjamas in response to a new population. No one, however, would claim that the Sydney Swans and West Coast Eagles are not a major force in the VFL, nor that the test teams of today have not been imbued with increased impetus from one-day matches. Therefore, we believe that those who are committed to Participation and Equity principles might take heart at these examples of successful outcomes in traditional areas which have been achieved by radical solutions.

Our problem, simply stated, has been how to admit a significant number of non-traditional students into our tertiary education institutions, assure them of a meaningful education, and give them the possibility of a successful professional career. After only a few years experience with accelerated Participation and Equity initiatives, it is clear that the answer is not to put them into a traditional syllabus, with its concomitant traditional lecturing methods, carried out in an environment which assumes certain (non-specified) learning behaviours, then live in the earnest hope that they are resilient enough to succeed against all odds.

In an ideal situation, what would be needed is a reworking of the entire educational process, producing a program which:

- meets community and market place expectations for graduates;
- is capable of accepting students from non-traditional backgrounds in accordance with Government policies;
- does not disadvantage the traditional population of tertiary students; and
- integrates the teaching staff with the new educational process.

Clearly, this ideal option will not be open to us, so we are forced to look at a gradual interpolation of these ideals into the existing system. We require a careful orchestration and sensitive overview of the development of changes to the four commonplaces on our tertiary campuses, providing balance to the programs and assuring that as relatively few as possible disjunctions occur in the experiences of the students.

The above case study illustrates, in our view, some encouraging steps taken in this process and gives us cause for optimism regarding the implementation possibilities of the Government's policy on access and equity in higher education. However, it also signals some warnings about how the policy could inadvertently marginalise "disadvantaged" groups admitted to higher education. In the case study on innovative recruitment and selection processes discussed here, we have worked with the student in the area of career guidance in both the school context and at the Institute during the "spring schools". We have attempted to raise the sensitivity of the Institute teaching staff to the special needs of these students at the departmental selection officer level and also during the "spring school" sessions, and we have facilitated discussion regarding the flexibility and possible innovations to curricula at both the secondary and tertiary level by arranging discussion between staff of schools and of departments of the Institute. Finally, we have attempted to modify the milieu in which the students begin their tertiary education by developing suitable induction devices and providing special support programs in the academic skills area.

On the positive side, the case study has illustrated for us the type of recruitment and selection processes which have new potential. We believe that if higher education institutions work closely with their local schools, more personalised and protracted procedures which will facilitate students entry into tertiary education can be devised. Whilst it can be argued that such an undertaking could be uneconomic and inordinately labour intensive when adopted on a large scale, we suggest that such arguments are not appropriate in a context where relatively few access students are the subject of recruitment exercises. Also, the introduction of such approaches has significant spin-off. The process of linking higher education institutions with the local schools, particularly with recruitment in mind, produces an environment in which teachers, parents and the wider community become better informed about, and become more interested in, the area of higher education generally. Clearly, the whole level of debate about selection processes is raised considerahly by this approach both in the school setting and in the Institute providing higher education.

It should be noted, however, that in this case study, we found that support for innovative selection procedures is not uniform across our institute. Those responsible for implementing access and equity policy

should guard against situations in which "equity" students find it difficult to gain access to high-demand courses, since if the composition of the higher education system is to reflect the population as a whole, balanced admission to the total range of courses for "equity" students is implied.

Notes

1. STC stands for Schools Year 12 and Tertiary Entrance Certificate, an acronym referring to a group of schools in Victoria who, at the Year 12 level, offer a non-competitively assessed curriculum, the assessments for which are presented in literal form.
2. Many examples of initiatives which focus upon the learner are reported in the CTEC discussion paper "Initiatives in Advanced Education to Increase Participation and Equity", prepared by the Advanced Education Council Working Party on Course Related Matters, February 1986.

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Tertiary Selection – access or process?

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The members of any society who dominate successfully its culture, technology and mores have the power to alter, or maintain, that society through its educational system. This system begins at birth with the informal family (or parental) education and continues into the formal systematic years of schooling. By manipulating those who enter and succeed during these formal years, those who seek to dominate do so. Free, secular and compulsory schooling, as we have it in Victoria, would appear to negate such efforts, but when we come to the vital tertiary entrance phase, it becomes quite apparent that selection has already begun – albeit without the knowledge of those heing selected (perhaps culled would be a better term?). For example, Government school students are doing less well in getting into tertiary institutions in Victoria[1]. Obviously one's selection of school at the secondary level is part of the 'control' exercised by those who are dominant.

However the more vital issue is the tertiary entrance selection process. For years some form of public examination has been regarded as the test of the 'good' school or student[2]. As a direct consequence of this, the examination exerts an influence upon the curriculum which makes reform, to either large or small degrees, difficult indeed. In *Victoria, Ministerial Paper Number 6* (Supporting Document Number 6, Assessment and Reporting)[3] argues for descriptive assessments, tailored through teacher-student negotiation to suit the needs of the student. Similarly in Queensland, the Board of Teacher Education in its report on the "Secondary Schooling and the World of Work" conference, proposed that 'schools should not teach for specific job skills but should look to developing . . . the complete person'[4]. How does this square with tertiary selection?

Another pressure upon current selection schemes is the Government insistence upon increased student retention rates at the Year Twelve level. These rates have come from approximately thirty per cent in 1971, to nearly fifty-five per cent in 1987. It would be quite unreasonable to expect these extra Year Twelve students not to opt for tertiary entry. As this group grows, can we select on the same basis as in previous years? Will the student population allow it?

Turning the problem around, what effects does the style of tertiary entrance mechanism have on the institutions for whom it has been ostensibly designed to serve? Apparently the effects of tertiary selection are promising to he quite threatening. Let me explain. In the past, students have been selected and passed through the tertiary system largely unaffected by Government decisions (with the exception of matters dealing with fees of course!). However a new mood of government intervention is with us. The 'White paper' leaves us with no doubt about that:

> *"Institutions will be asked to specify . . . measures of performance . . . future general funding allocation will have a direct regard to . . . achieving agreed equity goals".*

or published (newspaper) supporting statements[5] regarding "completion rates" as "indicators of institutional performance"

If your funding is dependent upon student completions[6], what effect does this have upon selection procedures? Or does the institution make such changes within its courses to ensure "good" (in Ministerial terms) completion rates, and thereby funding? If one assumes that academics can resist such pressures, then the bureaucratic arm (i.e. registrars and their colleagues) of the tertiary institutions must be the ones to take the brunt of all such pressures. A further pressure upon selecting authorities, in Victoria at least, is the introduction of the Victorian Certificate of Education (VCE) wherein the notorious TE, or Anderson, score will have little place.

Those who are in opposition to the VCE-type proposals usually cite the (mythical) validity of external examinations. (Correlations between HSC score and first year university success is not good.[1] This, then, is the situation facing us in Victoria as we enter the 1990s. How do we select? Do we select? Can we satisfy all our masters, social and political? To answer these questions, I should like to look at the situation in one Victorian institution (where, after talking to the registrar, one senses near-panic as time is running out). The registrar for this particular school currently oversees a fairly typical situation, where a mixture of N-type (Normal-type entry through HSC scores and the Victorian Tertiary Admissions Committee (VTAC)) and E-type (Exceptional entry through VTAC and individual offers to STC, TOP, and Mature-age etc applicants). In this current year, about half the entry cohort will be of each type. Thus, about a hundred and twenty entrants will have been selected hy their academic score (Anderson score) and the same number via other processes.

The N-type entry we shall ignore, since it is assumed that under the VCE, no standardized, externally validated examination