system will exist. Thus, this category of entrant will cease to exist as a separate category, since everyone will, in effect, be an E-type! However, the procedures used to select the non-HSC students are illuminating. At present only six hundred applicants are vetted and about half (three hundred) are required to sit for an essay-test and a basic mathematics test. Although scoring of mathematics tests is quite straight forward (using machine marking) the essay-test is quite a deal more complex. The task is to assess some three hundred handwritten scripts, in a short time. Subject co-ordinators are used to read these scripts, and the Course Director acts as a second-reader to ensure some validity and reliability across markers. As can be imagined, since these essays are to be in English, those whose first language is not English suffer undeniable bias. After this first hurdle, those remaining in the selection pool are then required to present for an interview. All the academic staff are required to assist in conducting such interviews. It takes some ten days to interview all applicants, and as can be imagined, as time passes interviewers become more weary, and as staff are untrained (as interviewers) there is a great deal of good (or ill) fortune depending when and by whom, one is interviewed. To further complicate matters, the Freedom of Information Act means that written comments for the guidance of selectors are most circumspect, and it's with great difficulty that staff rate interviewees from 'Very Good Prospect' through to 'Poor Prospect', where the phrasing (using prospect) is meant to indicate the applicant's probability of success both academically and practically throughout their course. The last phase of this E-type processing is a consideration of the academic results for those who have just completed TOP, STC and other non-HSC year twelve courses. The result of all this is that offers are sent to some one hundred and fifty hopefuls.

Now this somewhat tortuous process involves nearly a hundred staff and some three weeks of time. The registrar is not keen, needless to say, to have to extend this process to all VCE applicants. This would mean that instead of three hundred essays, there would be nearer one thousand! (On this year's figures, the number would be nearer fifteen hundred!) Then would follow the interviews. Not all the staff are interested in conducting a thousand interviews. Clearly, some other course of action is required.

What are the other possibilities? Two spring to mind immediately. The first is to adopt an 'open-access' approach. This means that anyone who has completed year twelve, and asks for admission, be admitted. The first reaction to this suggestion is 'what nonsense!' but this idea has indeed been tried.

To see this process in action, detailed below is an American case-study. The University of the District of Columbia has an open admissions policy. This has the predictable outcome of a high student attrition rate. Thus the choice is open admissions and high attrition or, do something about the attrition rate (the Victorian institution mentioned above has an attrition rate of less than five per cent in its school of education). At UDC a comprehensive testing programme exists; it considers student achievement levels and other relevant factors. Students being assessed under this scheme lack, in general, necessary skills to be successful in UDC courses. (Many of these are heads of households who hold jobs as well as try to study).[7] To offset high attrition rates the University College of the UDC was formed to be the entry point for all new students. (As Fields points out, UDC is the last point of call for intending tertiary students – if you can't get into anywhere else, UDC must take you[8]). The open admission policy then, has led to the following placement testing and counselling plan:–

- diagnosis of academic weaknesses
- identification of instructional needs
- prescription of appropriate developmental courses
- student placement in these courses
- identification in these courses
- identification of personal and, or, academic counselling
- evaluation and recycling

Obviously a well-thought out — and thorough programme. Could such a scheme work here in Australia? The answer is logically 'yes' – but at what cost? In my experience, counselling in Australian tertiary institutions is not as detailed nor as vocationally oriented as that described by Fields. So an initial cost would be the upgrading of counselling services. What about the extra tertiary places required? There certainly would be an increase in the number of places required, but how many seems to be either unknown or unavailable. According to the Federal Opposition education spokesman, Mr. Beale, 80,000 student places would be needed (for 1989) to place all applicants. Mr. Dawkins (the Minister) maintains that a mere 20,000 places would be needed. (The difference is rather substantial; presumably the true figure lies somewhere in between!)[9].

The open admissions solution is not educationally unsound, but in Australia's current economic plight, an improbable solution! The registrar referred to above, indicated that "if they (the Government)

would fund it (more places for open admissions) then why not?'' Given that extra funds are not likely to be forthcoming, what then is the other option? Some form of selection, that can handle large numbers of applicants easily, and in the light of FOI legislation, in a defensible, objective manner. On past performances (by employers and academic institutions) Mathematics tends to be the favourite screening subject. No matter whether Mathematics is required within the course or not, it is easy to administer a Mathematics test, it can be corrected via machine, and most importantly, is believed by all to be objective and impartial. Perhaps one could argue, that this sort of screening-selection is fair. The tests may well be equitable and reliable etc. But consider the fate of an applicant for, say, an engineering course. He/she has applied for a place at RMIT, Melbourne University, Monash and Swinburne (not necessarily in that order or preference). Does he/she sit four entry tests? To do so would be absurd. Quite sensibly all these institutions have consulted one another and agreed upon a test and the applicant sits but once. So there we have it. Just like the secondary scholarship examinations! Sit once for all schools (faculties). How sensible!

But wait, to increase our applicant's chances of success, his/her (private?) school is teaching him/her a course designed to ensure selection success. Teaching to the test!

Soon everyone is doing it. The VCE has been bypassed because all schools teach the entry test. Shades of last century – the Matriculation examination has returned. This scenario is not as farfetched as one might think. The aforementioned registrar, although horrified at the suggestion, did agree that there would be no way of stopping such an occurrence once it had started. In fact he argued that with the Government's 'push' to reduce the number of tertiary institutions, it would be easier for the 'few' remaining to get together and bring the Matriculation back into existence.

Would the Government allow this second possibility? In my opinion yes. An open admissions policy would cost millions and traditionally Governments hate spending money, even in good times, so what chance now? It may be that there is an increase in the number of places in business or 'high-tech' courses, but this is useless to those hundreds of applicants who are interested in zoology or Biblical archaeology! On the other hand, an objective, fair, etc. etc. etc. test, sat for just once, has great appeal. Special provisions can be made for 'needy' cases (single mothers, Aborigines, Western suburbs and so on) to ensure that electorates are not too disaffected.

Or is this too cynical? Perhaps, but history does have a way of vindicating cynics more than romantics. Are there any other futures? Yes of course there must be. An expansion

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of the TAFE area, where certification can occur. If the pundits are correct and service industries are to employ half the population (serving the American and Japanese tourists) then the need for tertiary training will lessen. No-one needs an MA to wait on table or make motel beds. Certainly our service personnel will need to be educated – but the type of education could be totally different to our present notions. For example, languages may be of fundamental importance and these may well be learnt in primary and secondary school, not at a tertiary level at all. On the job training may cater for specific needs of particular service areas (the history of an area for a tour guide for example). It would be possible then, to defensibly forecast an Australia where tertiary selection was not required, because applicants were fewer than available places.

Perhaps the long term key to tertiary selection is, in a sense, like the UDC open admissions policy, where there are sufficient, well-qualified counsellors in the schools, who are provided with up-to-date information, who can advise students about

possible career choices and paths and who can assist the public in general to come to understand that a tertiary course is not necessarily the best, or only, way to success. Status must be given to a broader range of occupations than it now is. Parents and their children need to come to grips with ideas of quality of life and not just the 'good job' syndrome.

This is a long-term view; immediate concerns for 1990 and beyond are more pressing, but if we don't think in such a longer term, then we will always be reacting to the 'market', whereas it would be far better for us in the tertiary sector to be pro-active and 'setting the pace'. The problem won't go away; something must be done, but which alternative will it be? Free, open access? Fees which limit the number of applicants? An entry exam? A change in the notion of what is a 'good job'? Or . . .?

References

1. Dircks, Ruth. Equal Opportunity, *The Australian Listener*, ABC, Sydney, 1988, p.44

2. Gasking D.A.T. Examinations and the Aims of Education, 1948, MUP Melbourne
3. Minister of Education (Victoria). *Ministerial Paper Number 6: Papers on Educational Issues and Strategies – 6: Assessment and Reporting*, 1986, Government Printer, Melbourne
4. Board of Teacher Education Queensland *Secondary Schooling and the Workplace*, BTE, Toowong, 1980, p.6
5. Minister for Employment, Education and Training, *Higher Education: A Policy Statement*, AGPS, Canberra, 1988, p.5
6. Minister for Employment, Education and Training, *Attachment A*, 1988, xeroxed, 1988, p.19
7. Fields, Ewaugh Finney. 'A Study of Deficiencies in Basic Mathematics Skills Which Hinder Successful Persistence in a Higher Education Open Admissions Setting', paper presented at the The Eleventh Annual Conference of the Mathematics Education Research Group of Australasia, Deakin University, 1988
8. Fields, E.F. *personal communication*, 1988
9. Australian Associated Press *The Australian Politicians' sums just don't add up*, Feb 14, 1989, p.37

The importance of a comprehensive advising system in improving student retention and graduation rates

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Introduction

Recent studies in South Australia[1] and Western Australia[2] have shown that approximately one third of all students fail to graduate, with the largest drop-out occurring by the end of the first year of higher education. In the same studies a majority of students indicated that they did not know much about their university and college courses, while a significant number of students stated that their university course was not what they had expected. This paper discusses recent research on student retention and suggests a number of steps which might be taken by tertiary institutions to help alleviate the tragic loss of so many candidates.

The gap between secondary student expectations and higher education reality: lessons from South Australia and Western Australia

Recently, Power, Robertson and Baker of

the National Institute of Labour Studies Inc, Flinders University conducted a (CTEC sponsored) survey of first year students in several tertiary education institutions. The results are reported in the Commonwealth Tertiary Education Commission publication *Success in Higher Education*. The study examines the adequacy of student preparation for tertiary study, problems of access and selection, and factors influencing the success of students during their first year of higher education. The survey of 7281 students from five SA educational institutions entering higher education in South Australia in 1985 found that over 60% of students stated they did not know much about their university and college courses with a significant number stating that the course was not what they expected.[3] This lack of counselling often resulted in low commitment and eventual withdrawal from the course. Also a lack of assumed background knowledge was reported as a major problem for up to half of the students. Finally, the added maturity and cultural capital of older students provided by work and life experiences provided older

matriculants with an advantage which was reflected in higher performance by these students.[4] This suggests that the greatest advising problem lies with the younger students just out of secondary school.

As to student selection, the SA study reported that school performance was a reliable predictor of success for science-based courses, and to a lesser degree in others.[5] School performance, however, became less valid as a predictor as years went by.[6] Overall females and older students performed better than males and school leavers in most courses and institutions. While current assessment and selection schemes were found to be generally effective for screening out most students who could not cope with higher education, their value in selecting among qualified applicants, where there are quotas, was found to be exaggerated.[7]

One of the most disturbing findings of the study was that approximately one in three students entering first year in a higher education institution either withdraws or fails.[8] Moreover the failure and withdrawal

rates were variable and the figures in some institutions were unacceptably high.[9] While students from disadvantaged backgrounds are being encouraged to participate in higher education, all too often they are most at risk of withdrawal or failure.[10] Finally, the most important variables distinguishing those who continue to second year from those who do not are course commitment and academic preparation.[11]

In their evaluation of teaching and special support programmes, the majority of students in the SA study were satisfied with their teachers and services.[12] The most successful students made the greatest use of key academic services (course materials, lectures, tutorials, library). Students most at risk were the least satisfied and made the least use of support services designed to assist them. Given the defects of the existing educational structures, the identified problems encountered by first year students and staff are likely to worsen.[13]

Similar figures come from another 1987 Report by Anderson and Clapin[14] of the University of Western Australia. The report followed the academic progress of 1434 undergraduate part-time students. As in the South Australian study, the drop-out rate in the first year was significant (29.5%).[15] The study also recorded the students' academic progress at the end of a seven year period.

The low graduation rate of part-time students must be a matter of concern to the University. Of the group studied, 74% had not graduated and were no longer enrolled at the end of the seven year period.

The number of those who may re-enrol at a later date and eventually graduate is not likely to be very high.[16]

The SA and WA reports suggest that absent significant changes in tertiary institutions, especially in the area of providing advice and consultation, a large percentage of those students who will take up the thousands of additional places to be made available in 1989 will further exacerbate the problems outlined above. Many of these candidates will be marginal students who will likely not survive their first year without significant assistance and major changes in the structure of tertiary institutions generally, and specifically in the teaching of first year subjects.

What needs to be done to prevent the high drop-out rate, especially of first year students

It is beyond the scope of a short paper exhaustively to analyse what needs to be done to prevent such a high drop-out rate of students. Moreover, it is clear that much more research is needed to probe further the reasons for such a high failure rate.

However, *Success in Higher Education* makes several recommendations which

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should be of interest to all tertiary and secondary education teachers, and especially teachers of first year tertiary subjects. The report highlights the need to:

● make expectations clearer to students by use of handouts, instruction booklets, clear comments on the blackboard at lectures and tutorials, and the use of simple and clear language, especially for courses with significant numbers of ESL students;

● gather more knowledge of student background;

● restructure the tutorial system which is presently hampered by low pay and little training in education;

● provide study leave for course co-ordinators to enable them to enhance the quality of teaching and content of courses;

● develop national courses of excellence in the major first year subjects;

● make available more teaching support services, including better computer facilities, more tutorials for ESL students;

● provide more non-academic services like clubs and societies which provide much needed peer support;

● offer more and better student counselling; and

● provide better assistance for students suffering financial problems.[17]

While this paper focuses on the role of an advising system in student retention, it must be noted that the scope of the above recommendations indicates that better counselling is only one aspect of a multifaceted problem which will require a fundamental re-examination of the role of tertiary education and its relationship to other institutions in society.

The need for more counselling and guidance

As mentioned above, the South Australian study emphasised the need for more student counselling and advice. The Western Australian study did not focus on solutions, but it, too, reinforced the need for more counselling and guidance and special provisions for part-time students:

The fact that much of the drop-out rate occurs during or immediately after the first calendar year of enrolment suggests that some students have unrealistic ideas about coping with part-time study. Furthermore, the University does not make any special

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provision for part-time students tending to regard them as full-time students who attend classes after 4.15pm, or earlier if they have day release. There is, for instance no summer term, which if used for intensive work might provide a better basis for study.[18]

One of the most common complaints from undergraduates enrolled in tertiary institutions is that they feel a sense of being anonymous — a number in a system which does not typically respond to them personally.[19] Also, faculty members, pressured by the 'publish or perish' syndrome are forced to expend most of their energies on research. The problem, however, is not that research is unimportant, but the higher education attitude which says that research is the only thing which is important. Teaching, less more advising, students tends not to be a highly valued activity and few tertiary education departments have a successful advising system. However, if Government plans to increase the number of graduates are to succeed, considerable attention and resources must be given to establishing adequate advising systems in higher education departments generally. Regrettably, recent Government proclamations emphasise the availability of more tertiary places, but fail to address adequately the real and significant problems which must be solved if these additional places are to result in more graduates.

Principles underlying a successful advising system

The actual form an advising system should take obviously must vary to meet the particular needs and characteristics of the students, department and university or other tertiary institution which it must serve. However a number of general principles which form the basis of any successful system may be stated.

Advising is more than career preparation

A successful advising system is not narrowly focused on career advising and career preparation, but:

should sensitively cater to the needs of students during those tempestuous undergraduate years, when they need help and direction in both personal and professional development . . .

With regard to institutional needs, an effective advising system should ensure that students are complying with the expectations of the faculty, the department and the university. Such an advising system should be sensitive to possible discordance between student goals and curriculum goals and sound the alarm to the department if and when these goals differ markedly.[20]

The above quote also makes it clear that tertiary institutions must give much greater recognition to the educational and vocational developmental stages of tertiary students,

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both in the designing of curricula and programmes and also in the provision of consultation services.[21]

Removing attitudinal and structural barriers

An effective advising system must also overcome significant administrative and attitudinal barriers.[22] For example, Kremer[23] discusses three obstacles to improving academic consultation. One obstacle is that faculty members are unlikely to know the techniques necessary for students to improve academic performance. Studies of techniques to improve students' academic performance suggest that two of the most valuable strategies for using faculty-student consultations are to give the student a good study method and to get the student to monitor his or her study time so that feedback regarding study techniques is available.[24] Unfortunately, at the tertiary level of education, there exists the assumption, contrary to evidence, that subject matter competence magically equates to teaching competence. And, as the majority of tertiary level teachers will have little or no teaching training, they are unlikely to have the counselling expertise which is needed to adequately help students.[25]

The second obstacle cited by Kremer[26] and referred to in the SA study, is the barrier created by large classes. Because the neediest students are the least likely to seek help, it is important that tertiary level teachers enhance their teaching effectiveness by making sure that students understand what they have to do, building more rewards into the system, demonstrating that they actually listen to students, and simply taking the time and effort to be more responsive to their student audience, and so on.[27]

The third obstacle to improving academic consultation is that the system itself needs to be redesigned to facilitate consultation. Lecturers and tutors need to be given the time and incentive to learn more about consulting skills. Also, the university promotion system and other structures must value the time required to develop and administer an effective counselling programme. For example, study leave could be recognised for developing innovative ways to provide better counselling to students.

The need for more information

A *sine qua non* of any advising system is adequate information. Tertiary institutions should know more about their students and utilise that knowledge to develop learning profiles which will enable them to better adapt to the students' particular needs. Tertiary institutions should also know more about their past students. From such a data base of information one could give better career guidance to present students. Also the wealth of valuable feedback from such a system would better enable tertiary institutions to serve the industries and other areas in which their graduates are now employed.

Such information might also better enable tertiary institutions to fill the much commented upon gap between research and practice which pervades much professional training.

Better communication and coordination

This should occur on several levels. First there needs to be more communication and coordination of efforts between tertiary and secondary educational institutions. Secondly, as the Government initiatives stress, much more coordination and communication should also occur between industry and tertiary institutions. Thirdly, tertiary institutions must also communicate better with their own students. Student handbooks and orientations need to be more helpful. Tertiary education structures need to be in place which give students a sense of belonging. Finally, given the fact that a majority of students are still living at home, much more could be done to communicate with parents. Many parents would like to help their children, but do not know how and/or do not feel wanted or welcomed by tertiary institutions. Given the recent work by Coleman and Hoffer[32] stressing the importance of family relationships to academic success, tertiary institutions should take advantage of the significant influence of social capital in the academic success of students.

Conclusion

If the Government's plans to increase the number of graduates in higher education are to be successful there must be much more attention given to increasing the retention rate of students. Otherwise, adding 20,000 students, many of whom are likely to be marginal candidates, to a system which is already failing to cope with existing numbers will only worsen the problem. A major factor in increasing student retention rates is the establishment of advising systems which take into account the developmental and academic needs of the students as well as career counselling. While recognising the need for advising systems to meet the special needs of a particular institution, this article has outlined a number of important features which should be a part of any advising system.

References

1. C. Power, F. Robertson and M. Baker, *Success in Higher Education*, Australian Government Printing Office, Canberra, 1987.
2. A.W. Anderson and H.F. Clapin, *The Academic Progress of Undergraduate Students Who Entered the University of Western Australia in the Years 1977-1981 as Part-time Students*, The University of WA Research Unit, Perth, 1987.
3. *Success in Higher Education*, op cit, p.56.
4. ibid., pp24-25.
5. ibid., Chapter 2.
6. ibid.
7. ibid.
8. ibid., pp41-42.
9. ibid., Chapter 3.
10. ibid., p.37.
11. ibid., p.39-40.
12. ibid., Chapter 4.
13. ibid.
14. A.W. Anderson and H.F. Clapin, *The Academic Progress of Undergraduate Students Who Entered the University of Western Australia in the Years 1977-1981 as Part-Time Students*, The University of WA Research Unit, 1987.
15. ibid.
16. ibid., p.17.
17. *Success in Higher Education*, op cit, Chapters 4 and 5.
18. Anderson and Clapin, op cit, pp.43-44.
19. W.F. Heiney, "Practising what you preach": A plan for helping college freshmen psychology majors to get off to a good start', *Teaching of Psychology*, no 4, 1977, pp.73-76; R.P. Halgin and L.F. Halgin, 'An advising system for a large psychology department'. In M.E. Ware and R.J. Millard (eds) *Handbook on Student Development: Advising Career Development and Field Placement*, Lawrence Erlbaum, New Jersey, 1987.
20. ibid. Halgin and Halgin, p.8.
21. R.W. Titley and B.S. Titley, 'Academic advising: The neglected dimension in designs for undergraduate education', In Ware and Millard, op cit, pp.3-7.
22. S.A. Cahn, *Saints and Scamps: Ethics in Academia*, Rowan and Littlefield, New Jersey, 1986.
23. J.F. Kremer, 'Three obstacles to improving academic consultation,' in Ware and Millard, op cit, pp.11-13.
24. R.E. Glassgow and G.M. Rosen, 'Behavioral bibliotherapy: A review of self-help behavior therapy manuals', *Psychological Bulletin, 85*, 1978, pp.1-23; A.M. Groveman, C.S. Richards, and R.B. Caple, 'Literature review, treatment manuals, and bibliography for study skills counselling and behavioral self-control approaches to improving study behavior', *JSAS Catalogue of Selected Documents in Psychology, 5*, 1975, pp.342-343.
25. L.M. Becker, 'Report on reports: What they say about teaching at the college level', *College Teaching 35*, 4, pp.147-150.
26. Kremer, op cit.
27. D. Boud, *Developing Student Autonomy in Learning* (Second Edition), Kogan Page, London and Nichols Publishing Company, New York, 1988.
28. S.A. Griggs *Counselling Students Through Their Individual Learning Styles*, ERIC Counselling and Personal Services Clearinghouse, Michigan, 1984.
29. J.W. Keef, *Profiling & Utilizing Learning Style*, National Association of Secondary School Principals, Reston, Virginia, 1988.
30. A.W. Astin, *Preventing Students from Dropping Out*, Jossey-Bass, San Francisco, 1975.
31. D.A. Schon, *Educating the Reflective Practitioner*, Jossey-Bass, San Franciseo, 1987.
32. J.R. Coleman and T. Hoffer, *Public and Private High Schools: The Impact of Communities*, Basic Books, New York, 1987.