APPROACHES TO MULTIPLE ENTRY AND EXIT
POINTS FOR THE ASSOCIATE DIPLOMAS

Hugh Guthrie
Philip Loveder

ADELAIDE 1990

A project for the South Australian Government
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- members of our Advisory Committee, but in particular Maurice Byrne and Robin Ryan;
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Hugh Guthrie
Philip Loveder
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1. INTRODUCTION

This project was established to examine what approaches are being, or could be, adopted to provide appropriate multiple entry and exit points for the Associate Diplomas and Diplomas offered in the South Australian Department of Employment and TAFE. The project was to determine this by:

1. attempting to document student and graduate numbers in the current South Australian Associate Diplomas and Diplomas;

2. documenting initiatives for multiple entry and exit structures for TAFE Associate Diplomas, Diplomas, Certificates and Advanced Certificates;

3. proposing approaches for multiple entry and exit points in TAFE Associate Diplomas using selected courses as case studies; and

4. investigating and reporting the problems associated with multiple entry and exit and suggesting solutions to these problems, with a special emphasis on course structuring.

Since the initial proposal the context of TAFE level training in Australia, and South Australia specifically, has undergone transformation. The guidelines necessary to meet Australian Council of Tertiary Awards (ACTA) requirements, which were seen by many in TAFE as restricting the flexibility of course design and structure, are now less constraining since the Council has been replaced by a simple register (RATE or Register of Australian Tertiary Education). Other developments in train, including industry and award restructuring, also have an impact on the future function and nature of formal awards - such as Associate Diplomas and Diplomas offered by TAFE. There is also a shifting view within and outside TAFE which sees training as rather less a once-only front-end activity leading to a credential, and rather more as something which is frequent, recurrent and iterative - and which meets organisational and individual needs.

New curriculum developments in SA DETAFE reflect these and other relevant trends. The focus of the project therefore is to:

- report upon such developments in association with the Department;

- seek both general and specific case study data to support further development;

- help refine issues; and

- place this information in a national context.
1.1 THE CONTEXT - AN OVERVIEW

The importance of the link between the changes being brought about by the micro-economic reform of the country's economy and the role of education and training in assisting and maintaining this process of reform has been highlighted in a number of recent Commonwealth Ministerial policy documents, including: *Skills for Australia* (1987), *A Changing Workforce* (1988), *Industry Training in Australia: The need for change* (1988), *Improving Australia's Training System* (1989) and *Award Restructuring: The task ahead* (1989). In addition, the National Board of Employment, Education and Training (NBEET) has produced a discussion paper on credit transfer (NBEET 1989) and the Employment and Skills Formation Council (ESFC) of NBEET commissioned a report on the recognition of vocational training and learning (ESFC 1990). Together, these two latter reports made an important contribution to the debate on the recognition of prior training, which, itself, is an important focus of this study. Powles (1990) investigated the access issues and selection procedures for TAFE courses in high demand.

According to *TAFE 1990: Commonwealth Programs and Priorities* (1989), the award restructuring process has a number of major implications for Australia's education and training systems, including:

- new demands for training and skills development at all levels of the workforce;
- an increased emphasis on the attainment of competency in accordance with industrial standards established for training arrangements, including the apprenticeship system which has predominantly been 'time serving';
- an increase in the number of adults undergoing training to upgrade skills or to re-enter the workforce;
- more flexible, broadly-based and modular approaches to the provision of both on- and off-the-job training;
- an increased emphasis on skill use;
- the need for greater national consistency in training standards and certification arrangements among public and private providers of training;
- the need for better articulation between different types and levels of education and training and recognition of skills obtained outside the formal systems;
- improved access to training for under-represented and disadvantaged groups; and
enhancement of the labour market prospects of adults with less than adequate numeracy and English language competence (both native speakers and those from non-English speaking backgrounds).

TAFE is in the vanguard of educational and training provision, and so the impact on it is likely to be very large indeed once the industry and award restructuring processes 'out there' gain momentum.

Of particular relevance to the present study are initiatives concerned with:

- the availability of timely, consistent and accurate statistics to describe program activities in order to meet management information needs and enhance the management capacities of TAFE colleges;
- the growth in demand for initial courses, especially those providing an increasing breadth or depth of skill;
- improved productivity in TAFE (including improved student selection procedures, reduced attrition rates and the use of alternative and, possibly, more cost-effective delivery processes);
- the recognition of prior learning so that TAFE students, and particularly adults, are not penalised by having to repeat unnecessarily, work experience (or re-learn skills) gained elsewhere. This recognition process is concerned with credit transfer arrangements between schools and TAFE on the one hand, and higher education and TAFE on the other. Nevertheless, it is also concerned with skills and knowledge gained at work and other places through formal or informal training, as well as an individual's life experience; and
- the access and equity issues which underlie all of the above points.

As such, the initiatives and priorities proposed by the Commonwealth for 1990 are a logical extension of those outlined in the equivalent document in 1988 (TAFE 1989: Commonwealth Programs and Priorities 1988).

Moreover, the underlying concern of this study was that TAFE statistics indicated high attrition, and retention levels were therefore relatively low in Associate Diploma courses. The high attrition rates were attributed by those outside TAFE to poor productivity; the lore within TAFE suggests that many of those withdrawing had achieved their objectives and should be regarded as a 'success' even although they had not completed a course leading to a formal accredited award.
In addition some students undoubtedly enrol in formal TAFE awards to obtain the skills they need simply because:

- if students enrol in such courses tuition fees are not charged; but
- if students enrol in anything else fees must be paid.

Therefore, they enrolled in a formal course and withdrew afterward to avoid paying the fees (and may even have been encouraged to do so by well-meaning TAFE staff). The current enquiry in this area chaired by Ivan Deveson may, of course, change this scenario markedly.

The (then) Department of TAFE in South Australia set out its corporate objectives and strategic priorities for 1989-91 in a document circulated in March 1989. The core objectives were:

- to provide for the education, training and re-training of people to enter and transfer across a wide and changing range of occupations;
- to provide skill development in the areas identified as keys to the future prosperity of the State.

In discharging its commitment to key South Australian industries and occupations the Department will:

- structure and target curricula and services to facilitate access by disadvantaged individuals, groups, and communities throughout the State;
- ensure a quality curriculum of contemporary relevance through course design and delivery in close association with industry, commerce, and local communities;
- develop an organisational culture and practices, including accountability measures, to maximise educational output and the achievement of management priorities.

(Corporate Objectives and Strategic Priorities Document, 1988)

Complementary corporate objectives are:

- To open study and career pathways to potential and present TAFE students by ensuring articulation between TAFE courses at the various levels, between schooling and TAFE, and between TAFE and higher education.
To be entrepreneurial in the acquisition and application of business enterprises and other flexible and adaptive approaches geared to enhancing and enlarging TAFE provisions; to apply the 'intellectual property' of TAFE both nationally and internationally consistent with State social and economic objectives.

(Corporate Objectives and Strategic Priorities Document, 1988)

The resource agreements between DETAFE in South Australia and the Commonwealth broadly reflect the priorities identified at both the State and Federal levels and which have been reported above.

1.2 THE CONTEXT - THE SPECIFICS

The present study is concerned with major aspects of Commonwealth and State priorities which may be summarised as:

- the numbers of enrolments and graduates from TAFE Associate Diplomas and Diplomas, the attrition rates, and the points where that attrition occurs and the reasons for it;

- the structures of the South Australian Department of Employment and TAFE's present Associate Diplomas and Diplomas, and the ways in which they are being restructured, or have potential to be restructured, to provide points at which many could enter and exit, and to meet their personal (and their organisation's) needs;

- credit transfer arrangements into and out of TAFE awards - specifically Associate Diplomas and Diplomas. Such arrangements represent an extension of the student selection policy which has been trialled and is presently being implemented throughout the South Australian TAFE system; and

- finally, the issues of access and equity, which underlie the considerations of all of the above issues and which must be borne in mind throughout this study.

This report specifically aims to:

1. describe, briefly, the processes used to undertake the study; and

2. address each of the issues outlined above in turn and to report upon:

2.1 graduate numbers and non-completion rates in a range of Associate Diplomas and Diplomas;

2.2 initiatives and approaches to the provision of multiple entry and exit points already in place in DETAFE in South Australia and elsewhere;
2.3 case studies of the Associate Diploma in Accounting and the Diploma in Business (Hospitality Management) with a view to illuminating issues which arise;

2.4 the issues which are presently being addressed by SA DETAFE, or which are foreseen in introducing more flexible course structures as well as a range of entry and exit points for Associate Diplomas and Diplomas.

As this is a project for, and about the Department of Employment and TAFE in South Australia, which is at an important stage in the development and re-development of its curricula, the project seeks to be formative and developmental, and supportive of current initiatives.
2. THE STUDY METHODOLOGY

This chapter broadly describes the methods used in this study. Detailed accounts of methodology, particularly in relation to the gathering and processing of course enrolment, graduation and attrition data, are presented in Chapter 3.

A range of techniques was employed. Techniques included:

- gathering and reviewing relevant literature from both South Australia and interstate;

- detailed analysis of syllabus documents for a range of the South Australian Department of Employment and TAFE's Associate Diplomas, Diplomas and their related courses;

- analysing student records to determine numbers of enrolments, graduates and non-active students (including withdrawals) for the range of Associate Diplomas and Diplomas. In addition, a detailed analysis of the student records was made in two specific courses: the Associate Diploma in Accounting offered at Adelaide College and the Diploma in Business (Hospitality Management) at Regency College. (A more detailed account of the methodology for this component of the study is presented in Chapter 3.) Finally a telephone survey of current and non-active students as well as graduates was conducted;

- holding discussions with TAFE staff both in South Australia and interstate on issues related to the project but, in particular, gathering their views on the alternative ways of structuring TAFE courses and the issues of providing adequate entry and exit points through the processes of recognising prior learning and credit transfer; and

- interviewing some key individuals outside TAFE with an interest in the area of multiple entry and exit points.

The original project brief (Appendix 1) was agreed to in late 1988 and the project began in August 1989. Hugh Guthrie and, later, Philip Loveder, worked on the project and prepared this report. Hugh Guthrie was responsible for project management and the work underlying Chapters 4 and 5 (course structures and selection, credit transfer and articulation), while Philip Loveder gathered the information related to course enrolments, attrition and graduation rates and conducted the two case studies in Accounting and Hospitality Management which form the basis for Chapter 3.

A project reference group was formed. This group met 3 times: September 1989, February 1990 and July 1990. It consisted of:
• Maurice Byrne, Assistant Director, Policy and Systems Division (Chairperson);
• Robin Ryan, Assistant Director, Policy and Systems Division;
• Geoff Wood, Director, Curriculum; and
• Bob Williams, Director, South East College of TAFE.

This group provided both advice and assistance to the project team.
3. STUDENT RETENTION, ATTRITION AND GRADUATION RATES IN ASSOCIATE DIPLOMAS AND DIPLOMAS

3.1 INTRODUCTION

This chapter deals specifically with graduation, retention and attrition in Associate Diploma and Diploma programs offered by the South Australian Department of Employment and TAFE. Such data are increasingly being used as quantitative measures which are indications of tertiary course effectiveness (see Guthrie 1988). In light of the 1989 resource agreement between the South Australian and Commonwealth governments, which emphasises the requirement to improve completion rates and refine selection procedures in TAFE, the need for gathering and accurately reporting such information is clear. TAFE in South Australia has recognised this need:

Assessment of performance is most useful for managing education systems and accounting for the use of resources and the fulfilment of their statutory charters

(SA DETAFE 1989, p.1).

Historically, record systems at both State and college levels have been oriented to reporting information rather than to using it for management purposes. Databases at the college and State level are still, for the most part, unable to manipulate basic data (although considerable progress has been made to reverse this trend in Central Office and several metropolitan colleges). This part of the project aims to document performance data for the Diploma and Associate Diploma courses offered in South Australia to assist in DETAFE's drive to develop performance indicators, and to provide insight into reasons for student attrition for two courses which will form case studies.

The aims of this chapter are therefore threefold. They are to:

- describe and analyse DETAFE retention figures on both a course and subject basis within Associate Diploma and Diploma courses;
- compare these data to enrolment, graduate and withdrawal statistics we collected at the college level; and
- undertake detailed analysis of student records for two courses: the Associate Diploma in Accounting (based at Adelaide College) and the Diploma in Business (Hospitality Management) at Regency College. These will form two case studies that will examine the issues relating to multiple entry and exit.
3.2 METHODOLOGY

Gathering the enrolment, retention and graduation data

Retention rates were determined by comparing data on nominal versus actual student hours available on DETAFE's ISSAS computer system. These are derived from attendance data and compare the hours on the basis of initial enrolment against those based on roll books. This is useful for examining retention within individual subjects or modules. It also identifies the percentage of those who complete the course in whole or part, based on the student hours that would have been generated had all those who enrolled actually completed the subject. This statistic makes no judgement about whether the students successfully completed the subject. Retention rates can also be described as the number (or percentage) of students that either complete, continue or resume studies in a particular year. These two definitions, however, are different, with each being valuable in its own right. We have used information based on the former statistic.

Gathering enrolment, withdrawal and graduate statistics created considerable difficulty for us, due partly to:

- the relative 'newness' of Associate Diplomas and (particularly) Diplomas as TAFE qualifications, with most being accredited since 1986;
- the complicated nature of the inter-relationship between different qualifications and colleges offering the same program; and
- a lack of suitable data at the college level.

A procedure for gathering enrolment, withdrawal and graduate data was established after discussions between the researchers and Regency and Adelaide College staff. The collection of data on attrition (the number of students discontinuing a study program without first successfully completing it) proved the most difficult due to the number of part-time students in the programs, and because no official notification procedure for withdrawal presently exists. Moreover students might move to other courses in the same college or to other colleges and therefore not be lost to TAFE - only the course in which they were enrolled. Collection of enrolment and graduate data was relatively straightforward by comparison, since total enrolment numbers can generally be readily obtained from the student database.

The collection of graduate data was achieved by accessing lists from graduation ceremonies. Such information was available in most cases.

For each Associate Diploma or Diploma, Heads of School were contacted and, where possible, were asked to provide the data from their own sources. In at least half the cases, this was not possible
due to staffing constraints, and therefore one of the researchers inspected the student records to gather the required data manually. Occasionally, this required working at the college to examine student record cards. It must be stressed that with each School involved, lecturing staff were constantly informed of progress and aided us by providing course details and critical comment. In all cases, the data collected were discussed with and viewed as representative by the Heads/Deputy Heads of the various Schools.

Enrolments were determined by isolating a core subject (or group of subjects) that must be attempted in the initial semester of enrolment. For example, in the School of Mechanical Engineering at Regency College, any student enrolling in subject M01303-Engineering Mechanics 1, could be regarded as a first entry in the range of Associate Diplomas offered by that college. This procedure also prevented single subject enrolments being grouped with actual Associate Diploma enrolments.

As mentioned previously, the most difficult data to collect were the number of withdrawers. With some exceptions, these withdrawers were of three types:

**Type 1:** This was any student who withdrew from the core subject and went no further;

**Type 2:** Any student who completed the core subject, but withdrew from subsequent subjects, and did not complete the penultimate subject (such as a final project or field placement for example); and

**Type 3:** Any student who has not been active over a specified time (as suggested by lecturing staff), but usually this was any student who had not attended any subject in the specified course over a two year period.

We accept that some error may exist in our data due to the number of 'sleepers', that is, students who withdraw temporarily from their studies, or became inactive, but plan to return to them.

The graduation data presented (see Table 3.1) was in all cases for the then highest award in which graduation was possible in that year. Thus, if an Associate Diploma course was first offered in 1985 for example, graduates in that year will include those completing the previous award (that is, an Advanced Certificate or Certificate). This was done to allow comparative analysis. The picture is complicated because individuals undertaking a previous award may have:

- automatically transferred to the new Associate Diploma or Diploma; or
- undertaken bridging course work prior to transfer to the new award; or
completed the previous qualification under some sort of sunset clause.

**Conducting the case studies**

Two case studies were agreed upon by the project Advisory Committee. These were the:

- Associate Diploma in Accounting: and
- Diploma in Business (Hospitality Management).

The case studies:

- gathered graduation, attrition and retention data to determine exit points, subject sequence, etc;
- analysed entry procedures and counselling, including any credit transfer arrangements;
- analysed curriculum documents where appropriate; and
- considered the possible reasons behind student persistence and attrition (principally by interviewing staff and a group of current and former students).

The case studies were achieved in two phases. Firstly, student records were obtained for both courses to determine the persistence and attrition patterns based on an analysis of the enrolment data. In the case of the Associate Diploma in Accounting only a sample of the student population (N=60) was used for this analysis. This was because of the difficulty in gathering and analysing comprehensive student records for the target population.

The second phase involved discussion with staff and interviews with a selection of current students, graduates and withdrawers out of the program to address some of the following questions or issues:

- reasons for enrolling in a course of study;
- reasons for withdrawing or persisting;
- whether counselling was available prior to enrolling or withdrawing;
- attitudes to multiple entry and exit in Associate Diploma or Diploma courses.

The procedure for contacting graduate, presently enrolled or withdrawn students for both programs involved sending to each randomly selected student chosen for the study, a covering letter issued by the respective
Colleges, plus a reply slip and pre-paid envelope which enabled the student to either agree or not agree to participate in the study. Once replies were received, we individually interviewed the students. In both case studies the respective Colleges were concerned to protect the rights of their students.

For the Hotel School Case Study at Regency College, 120 students were contacted directly by mail. Only eighteen students agreed to a follow-up telephone interview, and of these, fourteen were successfully contacted. For the Accounting Case Study, 60 students were contacted by Adelaide College, with fifteen students agreeing to participate. Eleven students were successfully interviewed.

3.3 RETENTION, ATTRITION AND GRADUATION DATA

Based on the statistics we collected and those supplied by SA DETAFE, the results can be summarised thus:

- using the definitions outlined on p.10 retention rates based on 'student hours' data for all Associate Diploma and Diploma courses were very high. This compares the nominal with the actual student hours in each course calculated each year and compares enrolments with the actual persistence in the course based on data from roll books. There has also been a general trend for retention to increase over time (see Table 3.1);

- retention tended to be highest in the 'less-technical' courses such as music, tourism and hospitality management and lowest in the more technical courses such as engineering, drafting and accounting;

- attrition exhibited an inverse relationship, whereby attrition was highest in the technical courses and lowest in the 'less-technical' ones. Attrition rates exceeding 50% were consistently reported in engineering courses before selection procedures were introduced;

- the number of graduates compared to new enrolments is low for all programs, although there is a trend to improved retention rates. Again, technical courses experienced lower graduate rates than 'less-technical' ones.

Graduation

Table 3.2 provides detailed enrolment, attrition and graduate data for the Diploma/Associate Diploma programs offered by TAFE. These data were collected to identify potential performance indicators that could be used for management purposes.

The ratio of graduates to new enrollers on a yearly basis (Table 3.3) was used as one measure of course performance. Several technical courses such as the Associate Diplomas in Mechanical and Electronic
### TABLE 3.1 - Numbers of students who enrolled, graduated or withdrew from Associate Diplomas (1983-1990)

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</tr>
<tr>
<td>Hotel Cater/Mngt</td>
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<tr>
<td>Hospitality Mngt</td>
<td></td>
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</tr>
<tr>
<td>Architect Drft</td>
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<tr>
<td>Building Techno</td>
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<td></td>
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</tr>
<tr>
<td>Accounting</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>L. Govt. Admin</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Drft</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Total 1988-1990**

<table>
<thead>
<tr>
<th>Current</th>
<th>Graduate</th>
<th>Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>2005</td>
<td>7</td>
</tr>
<tr>
<td>Bank &amp; Finance</td>
<td>237</td>
<td>3</td>
</tr>
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<td>L. Govt. Admin</td>
<td>105</td>
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</tr>
</tbody>
</table>

* common enrolment
** first semester only
Current: currently active student
### TABLE 3.2: Student Retention in DE TAFE 3500/3600 Courses

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Ass Dip in Accounting</td>
<td>-</td>
<td>-</td>
<td>93.2</td>
<td>90.9</td>
</tr>
<tr>
<td>Ass Dip in Animal Technology</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
</tr>
<tr>
<td>Ass Dip in Archit. Drafting</td>
<td>80.7</td>
<td>86.8</td>
<td>84.9</td>
<td>93.1</td>
</tr>
<tr>
<td>Ass Dip in Art</td>
<td>-</td>
<td>94.5</td>
<td>96.3</td>
<td>97.8</td>
</tr>
<tr>
<td>Ass Dip in Banking &amp; Finance</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>91.9</td>
</tr>
<tr>
<td>Ass Dip in Bld. Tech.</td>
<td>84.6</td>
<td>88.5</td>
<td>90.9</td>
<td>91.8</td>
</tr>
<tr>
<td>Ass Dip in CIMM</td>
<td>93.0</td>
<td>88.8</td>
<td>93.6</td>
<td>88.5</td>
</tr>
<tr>
<td>Ass Dip in Dental Hygiene</td>
<td>100.0</td>
<td>74.9</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Ass Dip in Electrical Eng.</td>
<td>79.0</td>
<td>82.6</td>
<td>85.9</td>
<td>85.3</td>
</tr>
<tr>
<td>Ass Dip in Electronic Eng.</td>
<td>90.5</td>
<td>91.4</td>
<td>92.1</td>
<td>90.3</td>
</tr>
<tr>
<td>Ass Dip in Geoscience</td>
<td>97.2</td>
<td>98.2</td>
<td>94.3</td>
<td>98.1</td>
</tr>
<tr>
<td>Ass Dip in Health Surveying</td>
<td>88.5</td>
<td>86.6</td>
<td>91.7</td>
<td>94.6</td>
</tr>
<tr>
<td>Ass Dip in Hosp. Management</td>
<td>93.6</td>
<td>95.8</td>
<td>100.0</td>
<td>98.6</td>
</tr>
<tr>
<td>Ass Dip in Library Studies</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>94.2</td>
</tr>
<tr>
<td>Ass Dip in Local Govt. Admin.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>87.2</td>
</tr>
<tr>
<td>Ass Dip in Mechanical Draft.</td>
<td>100.0</td>
<td>100.0</td>
<td>98.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Ass Dip in Mechanical Eng.</td>
<td>83.8</td>
<td>85.4</td>
<td>85.8</td>
<td>87.4</td>
</tr>
<tr>
<td>Ass Dip in Music Teaching</td>
<td>-</td>
<td>89.2</td>
<td>87.1</td>
<td>94.6</td>
</tr>
<tr>
<td>Diploma in Music</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>95.0</td>
</tr>
<tr>
<td>Ass Dip in Production Eng.</td>
<td>83.6</td>
<td>86.0</td>
<td>92.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Ass Dip in Refrig. Air Cond.</td>
<td>81.2</td>
<td>84.2</td>
<td>93.0</td>
<td>93.2</td>
</tr>
<tr>
<td>Ass Dip in Structural Draft.</td>
<td>93.0</td>
<td>90.9</td>
<td>87.5</td>
<td>77.6</td>
</tr>
<tr>
<td>Ass Dip in Survey Drafting</td>
<td>90.2</td>
<td>70.0</td>
<td>-</td>
<td>79.6</td>
</tr>
<tr>
<td>Ass Dip in Surveying</td>
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<td>92.2</td>
<td>90.2</td>
<td>92.8</td>
</tr>
<tr>
<td>Diploma in Tourism</td>
<td>-</td>
<td>100.0</td>
<td>100.0</td>
<td>99.9</td>
</tr>
</tbody>
</table>

**Source:** Derived from Statistical Services Branch - DE TAFE Records
Engineering have historically suffered from low graduate rates, but have improved their 'performance' as a result of new selection procedures. The Mechanical School at Regency College, for example, introduced selection criteria in 1989 (see section 5.3) in conjunction with the reduction in actual numbers of new enrolments (from 160 in 1985 to 100 in 1989). The rate of graduation has continued to increase by comparison. Over the same period, attrition has fallen from a high in 1985 of 58.8% to a low in 1989 of 32.0% (see Table 3.4).

The Diploma in Business (Hospitality Management), which replaced the Associate Diploma in Hotel and Catering Management in 1989, is a good example of how the effects of increased intake can be misinterpreted as a reduction in the 'performance' of a program. In Table 3.3, the percentage of graduates compared to new enrolments dropped considerably in 1988 from a high in 1986 (where numbers of graduates closely matched new enrolments). The explanation for this is that the number of new enrolments trebled in 1988. However the number of graduates for the next few years would be affected by those who had enrolled prior to the jump in enrolment numbers. It is clear that the tables should not be used in isolation, and the impact of students still active in the system and swings in actual numbers enrolling need be taken into account when using the statistics.

It is interesting to speculate how the problem of capturing and analysing these data can be overcome. We believe the only way to overcome this problem is to analyse the student data on the basis of those who have enrolled in a program within a particular time-frame - say on a year or semester basis and devise a system whereby the enrolment, retention, attrition (and if so at what point) and graduation of each student is logged and analysed so that managers at the college level and others at central office have a clearer picture of the dynamics of the movements of students into, within, between and out of subjects, or courses and colleges. For most Associate Diplomas this could be managed simply on a micro-computer using appropriate software. For larger courses or a college-based system, a micro-computer might be required. However, the problems posed to the development and maintenance of such a database by improved flexibility in entry points, times of entry, etc. will need to be considered in deciding whether to implement and use such a system.

**Attrition**

Attrition rates were determined for programs where withdrawal data were made available (Table 3.4). Due to the extreme difficulty in obtaining statistics for numbers of currently active students (on a cohort basis), attrition was determined as a ratio of the number of withdrawn students to new enrolments. The exceptions were for the three Associate Diploma courses in Business Studies at Adelaide College where aggregate course statistics were obtained, including numbers currently active.
Attrition tended to be higher in some courses (engineering and building courses for example) and lower in others (music, tourism, hotel and catering management). Very low rates were recorded for courses in the tourism and hospitality area. Both programs have a relatively low student intake each semester and vigorous student selection procedures, which may contribute to the low rates.

The rate of attrition (withdrawals versus new enrolments) has historically been high in TAFE Associate Diploma and Diploma courses. Highest rates have been recorded in the typically technical courses (especially engineering and drafting) and lowest in the 'less-technical' courses (music, music teaching, hotel and catering management).
### TABLE 3.3: Performance: Ratio of Graduates to New Enrolments (%)

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arch.Drafting</td>
<td>14.3</td>
<td>15.5</td>
<td>13.5</td>
<td>33.3</td>
<td>25.7</td>
</tr>
<tr>
<td>Art</td>
<td>43.9</td>
<td>30.6</td>
<td>27.1</td>
<td>34.5</td>
<td>26.3</td>
</tr>
<tr>
<td>Bld.Tech.</td>
<td>19.0</td>
<td>6.9</td>
<td>4.4</td>
<td>25.6</td>
<td>30.4</td>
</tr>
<tr>
<td>Electrical Eng.</td>
<td>40.0</td>
<td>21.1</td>
<td>45.7</td>
<td>10.9</td>
<td>7.6</td>
</tr>
<tr>
<td>Electronic Eng.</td>
<td>15.2</td>
<td>15.6</td>
<td>18.4</td>
<td>21.4</td>
<td>21.5</td>
</tr>
<tr>
<td>Geoscience</td>
<td></td>
<td></td>
<td>69.5</td>
<td>90.0</td>
<td>77.2</td>
</tr>
<tr>
<td>Health Survey.</td>
<td></td>
<td>26.1</td>
<td>10.3</td>
<td>45.4</td>
<td>52.3</td>
</tr>
<tr>
<td>Hosp. Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29.7</td>
</tr>
<tr>
<td>Hotel &amp; Catering Mgt.</td>
<td>63.6</td>
<td>90.4</td>
<td>63.6</td>
<td>18.7</td>
<td></td>
</tr>
<tr>
<td>Mechanical Eng.*</td>
<td>33.3</td>
<td>28.2</td>
<td>42.7</td>
<td>50.5</td>
<td>55.0</td>
</tr>
<tr>
<td>Music</td>
<td>14.6</td>
<td>14.3</td>
<td>12.5</td>
<td>11.3</td>
<td>14.8</td>
</tr>
<tr>
<td>Music Teaching</td>
<td>25.7</td>
<td>42.1</td>
<td>22.8</td>
<td>21.1</td>
<td></td>
</tr>
<tr>
<td>Refrig. &amp; Air Cond.</td>
<td>4.6</td>
<td>20.7</td>
<td>22.2</td>
<td>7.7</td>
<td>15.2</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>53.1</td>
<td>36.8</td>
</tr>
<tr>
<td>Tourism</td>
<td>44.4</td>
<td></td>
<td></td>
<td>40.8</td>
<td>25.7</td>
</tr>
</tbody>
</table>

* Mechanical Engineering includes the Associate Diploma in: Mechanical Engineering, Mechanical Drafting, Production Engineering, Structural Drafting and CIMM.

** Surveying includes: Surveying and Survey Drafting, Drafting Associate Diplomas.

### TABLE 3.4: Attrition: Ratio of Withdrawals to New Enrolments (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>32.5</td>
</tr>
<tr>
<td>Arch.Drafting</td>
<td>64.2</td>
<td>53.5</td>
<td>67.3</td>
<td>68.4</td>
<td>39.3</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>34.1</td>
<td>69.3</td>
<td>59.3</td>
<td>47.2</td>
<td>50.8</td>
<td></td>
</tr>
<tr>
<td>Banking &amp; Finance</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>20.8</td>
</tr>
<tr>
<td>Bld.Tech.</td>
<td>73.8</td>
<td>51.7</td>
<td>44.4</td>
<td>84.4</td>
<td>73.9</td>
<td></td>
</tr>
<tr>
<td>Electrical Eng.</td>
<td>51.1</td>
<td>42.1</td>
<td>60.0</td>
<td>32.8</td>
<td>39.1</td>
<td></td>
</tr>
<tr>
<td>Electronic Eng.</td>
<td>53.4</td>
<td>54.8</td>
<td>51.9</td>
<td>54.9</td>
<td>54.9</td>
<td></td>
</tr>
<tr>
<td>Hosp.Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.5</td>
</tr>
<tr>
<td>Hotel &amp; Catering Mgt.</td>
<td>36.3</td>
<td>14.3</td>
<td>7.8</td>
<td>4.6</td>
<td>7.8</td>
<td>18.6</td>
</tr>
<tr>
<td>Local Govt. Admin.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>9.3</td>
<td>15.8</td>
<td>12.5</td>
<td>22.6</td>
<td>24.0</td>
<td></td>
</tr>
<tr>
<td>Music Teaching</td>
<td>17.1</td>
<td>19.5</td>
<td>14.2</td>
<td>10.7</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>Refrig. Air Cond.</td>
<td>32.5</td>
<td>27.5</td>
<td>27.7</td>
<td>28.5</td>
<td>21.7</td>
<td></td>
</tr>
<tr>
<td>School Mechanical Eng. (overall)</td>
<td>58.8</td>
<td>58.7</td>
<td>45.8</td>
<td>43.2</td>
<td>32.0</td>
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<tr>
<td>Tourism</td>
<td></td>
<td>4.1</td>
<td>1.5</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Figure 3.1 presents enrolment and graduation data between 1985 and 1989 for selected Associate Diploma courses in graphical form. Three programs (Mechanical Engineering, Electronic Engineering and Architectural Drafting) have experienced net declines in the number of enrolments accepted between 1985 and 1989, but have seen increased graduate rates. It should be stressed that graduate numbers for 1985 included the then highest award (an Advanced Certificate or Technician's Certificate). Lecturing staff in these schools suggested the increased graduation rates are partly due to new and stricter entry procedures.
Three programs have seen an increase in the numbers of annual enrolments. In the case of the Electrical Engineering program, this has been without a commensurate rise in the number of graduates. The Hotel School at Regency College to which the hotel management data relates has experienced significant increases in Associate Diploma and Diploma enrolments between 1988 and 1989, and so, as a result, the number of graduates is expected to grow considerably over the next two to three years. The apparent graduation rate will therefore also improve.
3.4 CASE STUDIES

There is a generally accepted belief within TAFE that new students, unlike those of universities and CAEs, enrol in courses, then leave the program when they have achieved their own objectives. Moreover, they may enrol in courses rather than single subjects or short courses to avoid paying for a fee-for-service program. Therefore, should they not be counted as a success by TAFE, rather than a failure as previously?

This is of course one major reason why students withdraw or defer, but there are many others. Parkinson et al. (1987) studied the attrition rate of part-time students in certificate courses. Examining their data indicates that:

- 19.1% said they left because of inadequate study skills and lack of background knowledge;
- 10.4% considered they had inadequate study skills affected by pressure of home;
- 13.3% said they left because the course was uninteresting with unstimulating teaching methods and disorganised staff;
- 6.3% suggested their career options had been broadened but they were adversely affected by unstimulating teaching, inflexible timetables and travel;
- 10.1% said they found employment and left (TAFE may, or may not have contributed to this); and
- 8.8% left before finishing because they believed the course met their needs.

The remaining 32% reported that they left for a variety of reasons including:

- problems with travel;
- home responsibilities; and
- changes in career plans.

If these figures translate to Associate Diplomas it could be suggested that, while fulfilling objectives or needs was a factor in attrition, it was one of only a number of factors and, perhaps, one of the largest of the more favourable ones. How often do we talk about the 13.3% + 6.3% that left because what TAFE provided was, for them, not really very good? What does TAFE do about the 19.1% + 10.4% that did not feel adequately prepared for study? (This latter issue will be addressed in chapter 5.) The following case studies will attempt to address some of these issues.
Case study one

Regency College Hotel School (Associate Diploma in Hotel and Catering Management and; Diploma in Hospitality Management) 1985-1990.

Student records were made available to us by the Hotel School to help analyse any trends in student attrition. The individual records of the 25 students identified as withdrawing from either the Associate Diploma in Hotel and Catering Management or the Diploma in Business (Hospitality Management) at Regency College were examined to determine subject completion rates and sequences.

Since 1985, 357 students have participated in either the Associate Diploma or Diploma programs. Currently, 150 students are presently active and over the five year period, some 25 students have withdrawn.

Table 3.5 provides a breakdown of the total number of subjects completed. A completed subject is one where the student receives an actual grade (pass, fail or status), indicating they completed the subject. The results from 1985-1989 for both programs suggests that those students who do withdraw, tend to do so very early in a program. In the Associate Diploma course, 57.2% of students withdrew after completing less than two subjects, and a further 28.6% withdrew with less than five subjects. A similar trend was exhibited in the Diploma program, where over half the students who withdrew completed less than two subjects and 18.2% less than five.

TABLE 3.5 - Subjects Completed by Students at the Time of Withdrawing 1985-1989

<table>
<thead>
<tr>
<th>SUBJECTS COMPLETED</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 2</td>
<td>8</td>
<td>57.2</td>
</tr>
<tr>
<td>3 - 5</td>
<td>4</td>
<td>28.6</td>
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<td>6 - 8</td>
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<td>7.1</td>
</tr>
<tr>
<td>9 - 11</td>
<td>1</td>
<td>7.1</td>
</tr>
</tbody>
</table>

No = 14

<table>
<thead>
<tr>
<th>SUBJECTS COMPLETED</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 2</td>
<td>6</td>
<td>54.5</td>
</tr>
<tr>
<td>3 - 5</td>
<td>2</td>
<td>18.2</td>
</tr>
<tr>
<td>6 - 8</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>9 - 11</td>
<td>2</td>
<td>18.2</td>
</tr>
</tbody>
</table>

No = 11
Subject sequence was analysed to determine the subjects or groups of subjects from which students tended to withdraw.

**Associate Diploma - Hotel and Catering Management**

The Associate Diploma in Hotel and Catering Management (accredited in 1984) was a 1325 hour, 36 month nested course designed to prepare students for progression to managerial positions within the hospitality industry. Composed of three stages (Food and Beverage Certificate, Advanced Certificate in Hotel and Catering Operations and the Associate Diploma in Hotel and Catering Management), the first two were required prerequisites for being offered admission to the final stage Associate Diploma program of 625 hours over two semesters.

Table 3.6 provides a breakdown of student outcomes for the 14 students who withdrew from the course between 1985 and 1987. The subjects most commonly withdrawn from included the core subject, Hotel and Catering Management I, Liquor Supervision and Industrial Placement. Historically, students have been granted status for former experience in the industry, this being a major reason for the ‘apparent’ high rates of attrition in the subject, Industrial Placement for both the Associate Diploma and Diploma programs. Subjects most commonly failed included both Hotel and Catering Management I and II, Liquor Supervision, Premises Plan, and Kitchen Design, and Computing.

**Diploma - Hospitality Management**

The Diploma in Hospitality Management was first offered in 1989 as a 2668 hour, 6 semester full-time program (or equivalent part-time) replacing the Associate Diploma course (see section 4.3 for further information about this course). Unlike its predecessor, this course was designed as a stand-alone course.

Table 3.7 provides a breakdown of student outcomes for the 11 students who have withdrawn from the program. The statistics collected by the researchers suggest that students tend to withdraw during the first three semesters of the Diploma. Only two students attempted any subject past the third semester.

A student is more likely to withdraw from a semester 2 or 3 subject, especially if it has a high technical content. The subjects; Hospitality Statistics I, Business Law 1A, Accommodation II and Marketing I displayed the highest rates of attrition. Lecturing staff at Regency College also suggested that high rates of student dropout in the accommodation-related subjects are due to their poor student acceptance; they are frequently seen by students as irrelevant to their future career needs, which predominantly lie in food and beverage operations.
<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>STATUS</th>
<th>FAIL</th>
<th>PASS</th>
<th>WITHDRAW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing for Hotels &amp; Restaurants</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Computing</td>
<td>0</td>
<td>2</td>
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<td>Totals</td>
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To determine the predominant reasons for student withdrawal or deferment in the Associate Diploma or Diploma programs within the Regency College Hotel School, lecturing staff were interviewed to provide insights. Students were then contacted in order to test their validity.

Over the period 1985 to 1989, 25 students have withdrawn from their studies for various reasons. Four students were known to have left due to significant job offers by the industry before their courses were completed. Three students officially withdrew, then subsequently returned. One student transferred to an overseas college to continue his studies in his home country. This leaves a net figure of 18 students for which there was no readily available explanation for withdrawal.

Prior to withdrawing, counselling was available to students if they wished. Lecturing staff at the School suggested that the most common reason for withdrawing related to students not being able to meet the demands of the course. A second important factor was financial difficulties.

We interviewed 14 presently enrolled students, graduates and withdrawn students to determine major factors that influence student attrition or persistence, reasons for enrolling in a course of study, counselling procedures and so forth.

Five graduates, 5 currently enrolled and 4 withdrawn students from both the Associate Diploma and Diploma programs were interviewed.

Three of the 5 graduates stated they had acquired a Post-Secondary Certificate, and this was their highest level of education reached before initial enrolment in their chosen Diploma course. The remaining two had completed year 12 or its equivalent. The five withdrawn students had not completed any post-secondary award. One student had completed a TAFE pre-matriculation (year 11 equivalent) course, another completed year 11 and the remaining two had previously matriculated. Of those students who were presently enrolled, two had matriculated, two had completed year 11 (or its overseas equivalent), and the other had obtained a post-secondary certificate in an unrelated area.

These very limited results suggest that students having previously undertaken tertiary studies may have a greater propensity for advanced level studies and a greater likelihood of success. It is difficult to determine how representative this small sample is of the program as a whole however.
Major reasons for enrolling in a course of study within the Hotel School were:

- the hospitality industry was a vocation that interested the respondent;
- to upgrade their present (or previous) position in the industry;
- their previous vocation was unstimulating or inappropriate to their skills;
- to re-enter the workforce after an absence (here related to child-bearing);
- to enter the hospitality industry in the first instance;
- the course would allow the respondent to advance to a managerial position.

The most commonly cited response was the first. Several students had previously worked as bar or waiting staff and wished to advance to jobs of greater responsibility. It was frequently stated, also, that the hospitality industry held career opportunities and was a growth industry. However, at least three students (two who had previously graduated) stated they were disillusioned with their present vocation within the hospitality industry. It was their experience that even after receiving formal qualifications, they could not advance much further than basic waiting duties.

Of the 14 students interviewed, the majority (12) had been, or were, full-time students; the remaining 2 were part-time. All students, regardless of their present academic status, received counselling prior to enrolling. This was done in conjunction with selection procedures which are outlined in section 5.4 for students enrolling in the Diploma course. All 4 withdrawn students were counselled prior to leaving the program.

Most of the students interviewed had previous experience in the hospitality industry before enrolling. Six of the 14 were working in a position related to their studies at the time of enrolment. The majority are presently employed in the industry in some capacity. Of the 5 graduate students contacted, two presently work in a management role (one as the General Manager of a Restaurant/Bistro, the other as the Housekeeping Supervisor for a large South Australian hotel). Two graduates are presently working as bar staff in hotels (one as a casual employee to fund further studies), while the remaining student is employed in an occupational area unrelated to hospitality.

Two withdrawn students are presently employed in hospitality-related jobs. One student is employed in food preparation, the other as a waiting staff. Another student withdrew from studies to accept an assistant managerial position interstate, later returning to
South Australia after deciding the work was not appropriate. The final student is presently studying in another college.

Presently, only 2 of the 5 active students are employed in a related occupation to fund their studies, and two of those are casual waiting staff.

Graduate and presently active students were then asked whether they had previously considered withdrawing from the course, and if so, why? The results were somewhat surprising in that all five graduates, and two presently enrolled students suggested that there were factors which were a potential threat to their ability to continue the course. These related to:

- course difficulties;
- financial matters;
- personal relationship issues; and
- work related matters.

Of the 7 students, 2 suggested they had some difficulty with the course structure, and both sought advice from lecturing staff before deciding to persist with their studies. Three claimed personal matters influenced their decision to consider withdrawing, one stated pressing financial needs at the time and a further student found the pressures of work a problem.

Similarly the four withdrawn students were asked why they withdrew from their studies and the primary reasons for their decision. Three students stated their primary reasons for withdrawing related to course difficulties. In one case, several reasons were given, including conflict with a lecturer; however course related problems were paramount. One student left due to a significant interstate job offer.

The issue of multiple entry and exit was considered by asking respondents whether they would have preferred to complete less of a course and receive a lower award, rather than completing the Diploma course in its entirety. All five graduate students suggested they always intended to complete the entire program, and believed that in order to progress in the hospitality industry, training at the para-professional level was critical. Three of the four withdrawn students believed there is merit in a multiple exit program. One typical response was:

'I completed half the course (Diploma) and would have liked to receive something for it . . .'
Presently enrolled students were mixed in their attitude to this issue. Three saw merit in such a program, while two believed the present situation is more appropriate.

Case study two

*Adelaide College School of Business Studies (Associate Diploma in Accounting) 1986-1990.*

The procedure for analysing trends in student attrition within the Associate Diploma in Accounting course was identical to that used for the Regency College Hotel School case study. However, due to the size of the program (652 withdrawn students were identified for example), a randomly selected sample of 60 students was chosen for detailed study.

Table 3.8 provides a breakdown of the total subjects completed by students at the time of withdrawing. The results indicate that students tend to withdraw early in the program, rarely completing more than a single subject. Some 55.0% of students withdraw without successfully completing a subject and a further 30.0% completed less than three subjects. No student in the analysis completed more than nine subjects.

**TABLE 3.8 - Subjects Completed by Students at the Time of Withdrawing**

<table>
<thead>
<tr>
<th>Subjects Completed</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
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<tr>
<td>0</td>
<td>33</td>
<td>55.0</td>
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<tr>
<td>1-3</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>4-7</td>
<td>7</td>
<td>11.6</td>
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<tr>
<td>8-10</td>
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<td>3.4</td>
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</table>

No. = 60

*Associate Diploma - Accounting*

The Associate Diploma course was first offered in 1988 as an 864 hour, four year, part-time, 8 semester program replacing the Advanced Certificate course.

Tables 3.9 and 3.10 provide a breakdown of student outcomes for the 60 sampled students who have withdrawn from the program since complete date records were first computerised in 1988. Of these, 23 students were identified to have first enrolled prior to the introduction of the Associate Diploma program in 1988.

To ensure that a full student record was available, one of the researchers manually perused student enrolment cards to provide the required information. Thirteen students, however, had incomplete records. Senior enrolment staff and the Business
School agreed this was due to students enrolling from other colleges into the Adelaide College program, and being given prior status. However their status was not formally documented in their student record.

The subjects most commonly withdrawn from tend to be in the first two semesters of the course. Of the 60 students, 43.3% withdrew from the initial subject: Introductory Accounting. This supports previous findings by Thomson and Krzemionka (1990) who found approximately 55.0% of students withdrew from this subject at a Statewide level. High rates of attrition occur in the communication modules (especially Communications Modules B, P and W) which are not specifically Accounting subjects.

Attrition tended to be high in the subject Financial Accounting I in semester two for both the Advanced Certificate and Associate Diploma programs.

It is also interesting to note that high rates of attrition occur in the business-related subjects (such as Business Law I and Business Economics/Economics). This may reflect students preference for subjects related specifically to Accounting and/or Finance, rather than typically business-oriented study.

**TABLE 3.9 – Advanced Certificate in Accounting Outcomes by Subject**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fail</th>
<th>Pass</th>
<th>Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Accounting</td>
<td>1</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Communications I</td>
<td>S1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Financial Accounting I</td>
<td></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Communications II</td>
<td>S2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Financial Accounting II</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Business Law I</td>
<td>S3</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Costing I</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Business Law II</td>
<td>S4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costing II</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>S5</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Accounting Elective*</td>
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<td>3</td>
<td></td>
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<td>Australian Politics</td>
<td>S6</td>
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<tr>
<td>Law Elective</td>
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<tr>
<td>Humanities Elective</td>
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*NOTE:* The elective can be any Accounting subject, but usually: Advanced Accounting, Information Processing Concepts, Auditing Procedures and Practice.
### TABLE 3.10 - Associate Diploma in Accounting

**Outcomes by Subject**

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<thead>
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<th>Subject</th>
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<th>Pass</th>
<th>Withdrawn</th>
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</thead>
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<td>26</td>
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<td>Communications Mod J</td>
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<td>Financial Planning and Control</td>
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<td><strong>TOTALS</strong></td>
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<td>28</td>
<td>81</td>
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*NOTE: The elective should be chosen from:
- Supervision
- Australian Politics
- Financial Decision Making
- Taxation Law and Practice II

Between 1988 and (semester 1) 1990, 2005 students enrolled or were active in the Adelaide College accounting program. Some 652 students withdrew from the course or became inactive over the same period. Lecturing staff suggested that the major reasons for student withdrawal related to:

- difficulties with the course work;
- students transferring to other colleges (especially Panorama which offers the course full-time); and
- students completing only part of the course because their needs had been met.
As with the previous case-study, presently active, graduate and withdrawn (non-active) students were interviewed. Eleven were interviewed overall, of whom 7 are presently enrolled students, two were graduates (one from the Advanced Certificate course) and two had withdrawn. The graduate completing the Advanced Certificate program is presently completing a final bridging subject to allow him 'roll-over' status and therefore receive the Associate Diploma award.

Most respondents had completed study to at least a year 11 or 12 standard. Of the seven presently active students, one had previously obtained a post-secondary award, four had completed year 12 (or its interstate/overseas equivalent) and two had a year 10 level education. Both withdrawn students and the two graduates had matriculated.

The major reasons cited for enrolling in the Associate Diploma program at Adelaide College were:

- employer required some form of job-specific training be undertaken;
- student had formally completed the Business Practice Certificate and wanted to expand their area of expertise;
- the area of business studies had always been of interest;
- to enhance student's career prospects;
- to enter the accounting field in a professional capacity;
- the student had arrived in Australia unskilled and wished to gain a vocation; and
- to re-enter the workforce after an absence.

The most common response related to career aspirations. Several respondents were presently working in the finance industry, but wished to do so in a more professional capacity. The need to obtain 'an official piece of paper' to allow them to earn a better wage was a strong motivating force for several. The next most common response was that the respondent had previously arrived in the country and wished to embark upon a career.

Because of the nature of the course, all students interviewed were, or had been part-time students. Adelaide College presently offers the course on a part-time basis only.

Students were asked whether any counselling had been made available to them prior to enrolling. Without exception, students stated that no formal interview was necessary or forthcoming. An official expression of interest was made by the student to the
College via an application form, which was used in the ultimate selection procedure (the procedure is described in more detail in Section 5.3). However, both students who withdrew from the program received some counselling prior to withdrawing. One left study completely, the other enrolled in the Banking and Finance Associate Diploma which is closely linked to the Associate Diploma in Accounting (see Section 4.3).

Most students interviewed claimed they had previous experience in the accounting/finance industry before enrolling. Again, the majority are presently employed in the industry in some capacity. Six of the seven active students contacted work in a range of financial roles including:

- reconciliation work;
- banking and finance;
- taxation; and
- book-keeping.

Both graduates presently work in accounting-related vocations, one as the Financial Manager of a health institution, the other as an Accountant. Both withdrawn students are working in fields unrelated to accounting but are, however, within the general business occupational area.

Presently active students and graduates were asked whether there were any factors that jeopardised their desire to persist. Only one presently active student claimed there had been, and this related to the inappropriateness of some aspects of the course. Neither graduate considered withdrawing at any point in their studies.

The two withdrawn students were asked their primary reason(s) for leaving the program. One found the course dull and realised it wasn't appropriate to his primary area of interest (public relations), the other did not provide a response to this question.

Most students suggested they always intended to complete the entire course, and for them, multiple entry and exit was not an issue. However, when asked, most agreed a case exists for allowing students wishing only to obtain certain aspects of the course to receive some appropriate recognition. Both students who withdrew from the course were strongly in favour of multiple exit, especially one who had completed a considerable amount of the course (three semesters) at the time of withdrawal.

Summary of the case studies

In concluding this section, we should indicate several trends which became obvious in the case studies, and are worthy of mention.
Firstly, of particular interest to the issue of retention in Associate Diploma courses, it appears that students tend to withdraw from a program of study very early on, most commonly in the first two semesters. Within the Hotel School, students also tended to withdraw from subjects with a high level of technical content; in the School of Business-Accounting program business related subjects were those most commonly abandoned. In regard to the issue of multiple entry and exit, students interviewed from both programs were supportive of the idea, especially so if they had not completed the full program of study previously. Finally, student attrition appears to relate primarily to difficulties with meeting the course requirements.

3.5 SUMMARY AND CONCLUSIONS

In this chapter we have examined the enrolment, attrition and graduation rates for nearly all the Associate Diplomas and Diplomas offered.

In general it appears that:

- graduation rates, determined as the ratio of graduates to new enrollers on a yearly basis, were generally low for all programs. Technical courses such as engineering and accountancy experienced lower rates than less-technical courses such as hospitality and music. Attrition, the ratio between the number of withdrawn students and new enrolments, was considerably higher in technical than less-technical courses. Retention rates, based on 'student hours' data were generally high for all Associate Diploma and Diploma courses, but consistently higher in some less-technical areas (hospitality, dental hygiene and tourism);

- results of the two case studies, the Diploma of Business (Hospitality Management) and Associate Diploma in Accounting, conclusively point to the fact that students who withdraw from a course of study, tend to do so very early, usually within the first two semesters. The major reasons for withdrawing tended to relate principally to course or financial difficulties. In relation to the issue of multiple entry and exit, most students agreed the introduction of multiple exit especially had merit in helping TAFE meet the training needs of its students. Notably students who withdrew from either program were enthusiastic about its introduction. After analysis of relevant curriculum documents and actual attrition points, no self-evident exit point was found in either case study.

1. In at least one case the Associate Diploma was too new to be worth analysing. In other cases no data were provided by the colleges concerned, despite persistent requests.
We readily acknowledge the limited nature of the case studies, but suggest that further similar studies examining other Associate Diplomas or Diplomas could be fruitful.

Moreover, a number of issues emerged which relate more to the acquisition of the information rather than the information itself. It is this area, we believe, which will be of significant interest both at the college and central office levels. We found:

- the data we needed were not readily available or, if they were, they were not in a form which enabled it to be readily manipulated;

- the data were presented in a form which was useful for reporting, but not for analysis;

- data records were incomplete for one of the case studies in that complete student records were not available, even although it appeared that some of those students whose records were analysed should have had status or exemptions in certain subjects;

- there was no facility to map student progress readily on the basis of student cohorts so that comparable student enrolment, graduation, attrition and retention data would be gathered and calculated. Furthermore, information on subject sequencing, and the progression of individual students and cohorts could not be analysed. Such information would be valuable to college middle and senior managers particularly, as well as those in central office;

- (in at least one case study) there was an apparent lack of adequate withdrawal procedures, both in terms of student counselling and (in particular) in the follow-up of those who had ceased to attend classes. Perhaps more formalised procedures for withdrawal are needed, with appropriate penalties to students who do not formally notify TAFE that they wish to withdraw. (They are, after all, occupying expensive student places and, potentially, jeopardising the viability of class groups.);

- a need for clearer definitions of some terms, particularly those of attrition and retention, and which can be applied at a number of levels.

For example attrition can occur -

- from a subject but not a course;
- from a course but not a college;
- from a college but not the course; and
- from TAFE.
Likewise, retention can be at the subject, course, college or TAFE level, even although there may be associated attrition.

Such a matrix of possibilities suggests the need for a more unified and comprehensive system of data capture, analysis and exchange than exists at present. This system could be decentralised, but using a common data structure or package and in a form where data can be readily exchanged between schools, colleges and with central office; or, alternatively, be centrally developed and implemented at college level. The concentration on key performance indicators (including attrition, graduation and retention rates), together with other potential useful management information will certainly help to sharpen definitions and associated data capture and analysis procedures. The management information system currently being developed by DETAFE for college and central office use, particularly the student information system should address many of the issues which have, to some extent, frustrated this project.

We therefore recommend that:

- the Centre’s project team meet with the SA DETAFE team responsible for developing the management information systems in order to share our experiences with them;

- a more formal system of following up and (if appropriate) counselling students who are not actively participating in their subjects/courses be instituted, and that procedures relating to monitoring the level of student withdrawal and attrition be tightened; and

- a comprehensive management system concerned (in particular) with documenting student enrolment, subject enrolment, status and completion information, attrition, retention and graduation be formulated and adopted. This could be developed and implemented centrally or be maintained using agreed parameters. The system should be devised to facilitate the transfer of student data between courses and colleges, and between colleges and the central office. It should be based on student cohorts.
4. COURSE STRUCTURES - WHAT IS, WHAT COULD BE

4.1 THE HISTORY

Associate Diplomas and Diplomas fall in the 'middle' of the 9 categories adopted by the AEC and overlap exists at the Associate Diploma and Diploma levels between the TAFE and higher education sectors. It is this overlap which makes them an important component of TAFE's offerings and of interest to this present study (see Figure 4.1).

**Associate Diplomas**

According to the guidelines prepared by the Australian Council on Tertiary Awards (ACTA), Associate Diplomas are Stream 3400 and 3500 courses (The classification system used for TAFE courses is presented in Appendix 2) and are of two broad types:

- specific courses designed around the needs of a designated occupation or vocation; or
- courses in a specific area, but which emphasise breadth rather than depth and which are treated at a level appropriate to a general understanding of a field of knowledge.

It was expected (see Australian Council on Tertiary Awards 1989) that:

*Students will be considered for admission to such courses after completion of a full secondary education....*

However it was recognised:

*That institutions will consider other factors such as practical experience, maturity and motivation relating to likely success.*

(Australian Council on Tertiary Awards 1989, p.11)

Thus, satisfactory completion of Year 12 in an Australian school system or its equivalent is the 'normal' entry point expected for both Associate Diploma or Diploma courses. To enrol in an Associate Diploma, students who had not completed Year 12 are expected to complete bridging or supplementary studies to ensure an adequate preparation for achieving the educational objectives of the course. This supplementary work is expected to take one year of full-time study or equivalent.

Students with less than a Year 12 education are expected to complete bridging or supplementary studies through the completion of a related TAFE Certificate or Advanced Certificate course and Year 11. Usually these courses are 3122 or 3222 programs.
FIGURE 4.1 - Categories of award and overlap between the TAFE and higher education sectors in South Australia

In South Australian DETAFE, courses at the Associate Diploma level mature entry (20+ with evidence of ability to undertake advanced level studies) is possible.

South Australian DETAFE has 23 Associate Diplomas. These are listed in Appendix 3. All are Stream 3500 courses. They normally require 2 years of full-time study or its equivalent.

Diplomas

Diplomas are Stream 3600 courses which provide the basic qualification for a profession - usually prior to employment. Alternatively they may not be directly related to a professional qualification, but rather be a broad treatment of a number of subjects.

They are seen by ACTA as providing:

... for development of basic professional competence and understanding of the problems of the profession sufficient to meet the registration requirements of specific professional bodies and the needs of major employers in those professional areas. This will usually involve significant periods of practical experience in developing professional skills, supported by the employers and the professions.

(Australian Council on Tertiary Awards 1989, p.12)

Diplomas normally require Year 12 for entry and are of 3 years full-time or equivalent duration. Entry requirements for a Diploma are the same as those for Associate Diplomas. Such factors as practical experience, motivation and maturity could be taken into account by institutions when assessing an individual student's readiness for entry. Some allowance may also be made if the student has 6 months or more full-time practical experience in the area. South Australian
DETAFE has 3 Diplomas - in Music, Tourism and Hospitality Management. ACTA has indicated its willingness to consider the national registration of Diploma courses of less than 3 years in duration:

... which give credit for previous relevant formal training.

(Australian Council on Tertiary Awards 1989, p.12)

**Previous arrangements**

In the past, South Australian DETAFE has stuck relatively rigidly to the ACTA guidelines (See Australian Council on Tertiary Awards 1989) and, at the time, it was appropriate to do so to establish the credibility of TAFE's awards (particularly at the Associate Diploma level) in the eyes of external groups (for example, the higher education institutions). The demise of this body and the establishment of the National Training Board and RATE (the Register of Australian Tertiary Awards), coupled with the more liberal approach to the interpretation of the guidelines by some of the other TAFE agencies and the pressures of award restructuring, opens to debate the way in which South Australian Associate Diplomas and Diplomas might be structured in the future.

For many in TAFE, the problem with applying the ACTA guidelines to TAFE awards was the similarity of requirements for entry into higher education. They are seen as post-year 12 qualifications in level or equivalent and it is, perhaps, the determination of what is equivalent to and what is post-year 12 - and why - which is the nub of the problem. Many first year higher education programs are (and have to be) predicated on the assumption that not all those who wish to enrol and are selected necessarily have studies in that particular area at secondary school. First year biology courses at university level, for example, go back to basics because it cannot be assumed that all students have studied biology at Year 12 level - although the majority generally have. TAFE courses similarly have to cater for a lowest common denominator while, potentially, allowing for people to be given credit for knowledge and skills they have already acquired elsewhere. The issue of the recognition of prior learning is picked up again in the next chapter.

It is, perhaps, the debate over the equivalence to Year 12 study which has seen a progressive moderation by SA DETAFE of entry requirements to Associate Diplomas and Diplomas and a move towards a more liberal interpretation of equivalence, embodied in the Department's Bulletin No 465 as:

... completion of a one-year full-time study or equivalent but which recognises practical experience as part of this time component.

(DETAFE Bulletin 465, p.2)

TAFE also has mature entry arrangements which allow people of 20
years or older to apply for and be selected if they have evidence of the ability to undertake advanced level studies. However one must ask the question: What constitutes suitable evidence? Moreover, what happens to a 19 year old who left school at Year 10 but has developed a deep and abiding interest in a particular area and wants to begin an Associate Diploma? He or she has been working for a number of years, is highly thought of by their employer who supports their application to enrol in an Associate Diploma. On paper they are ineligible (until they turn 20 anyway) - so how can TAFE ensure that these potential students are treated fairly? The point is that the age of 20+ is an essentially arbitrary cut-off point and should be acknowledged as such.

The fact is that much of this previous discussion - equivalencies and arbitrariness - are features of the interfaces between courses and levels of study (that is secondary schooling, TAFE, higher education) which are an important part of the selection and credit transfer processes which TAFE needs to develop in order to support a system which offers more entry and exit points in its Associate Diplomas and Diplomas. TAFE courses in the future are likely to be far more flexible; access to them will be more open and will acknowledge previously acquired skills and knowledge. TAFE is trying to break away from the time-serving mentality enforced upon it both by ACTA guidelines and by those who believed time served was more important than outcomes achieved. We shall return to this issue again in the next chapter (Chapter 5).

4.2 ISSUES IN RESTRUCTURING COURSES

In this section we will consider a number of the issues related to the context in which TAFE presently exists and which have acted as a catalyst to restructure industrial awards and their related courses. As such it is a theoretical treatment which attempts to encapsulate the vision for courses in the future.

Stevenson (1989) suggests that TAFE needs to develop curricula which meet both the needs of industry and of individuals. This involves flexibility in the way in which the course is designed and offered, but the primary purpose of a particular program also needs to be clearly understood. Purpose is a strong factor in deciding what is included in a program, and what is not.

His paper also suggests the need for the development of a 'spiral curriculum' in which certain concepts are referred to and taught in progressively greater depth and breadth as an individual advances through a program of study. Such an approach is consistent with one where students move from wholes to parts, that is, from viewing content in terms of increasing layers of detail.

The second, and undoubtedly more important factor which is (and increasingly will be) affecting the structure of TAFE Associate Diplomas and Diplomas is the challenge that industry and award restructuring poses for TAFE, its colleges and its courses.
Hall and Hayton (1989) have suggested that award and industry restructuring will have a major effect on TAFE course content and course structure. Courses preparing individuals for the new industry structure (of high skill, new technology and integrated work organisations) will need to develop the individual's ability to:

- adapt to changes in technology;
- more readily transfer skills to new areas of specialisation;
- combine skills in two or more disciplines; and
- readily accept and seek retraining at appropriate points throughout their working life.

The keyword for appropriate course structures of the future will therefore be flexibility, and it has been suggested that this could be achieved more readily by a modular course structure with broad-based modules early in the course. Modules should be developed to stand alone as much as possible and be capable of being separately assessed. The structure therefore allows for multi-skilling, a number of alternative training pathways, multiple entry and exit points, and retraining.

Such an approach is only possible if:

- the length of the course (or period of study) is not considered a major criterion of learning success;
- courses specify the performance standards to be achieved (and the conditions under which performance is to be achieved);
- courses can be developed, approved, accredited and reaccredited quickly.

However this does cause difficulties if a special approach to curriculum development is adopted because of the design constraints enforced by having a curriculum structure which builds progressively on previous learning against one which necessarily assumes fewer pre-requisites and therefore has greater flexibility.

However, the move to produce courses in modular format may be fundamentally at odds with this concept of 'spiralling', which suggests a limited range of pathways. Award restructuring on the other hand will require flexibility and the ability to 'pick and choose' from a range of options which can provide a breadth and/or depth of knowledge and skills - according to need. Furthermore licensing and other requirements may suggest particular programs of studies or 'core elements' which will be mandatory. Thus it is likely that there will be a recommended course of study or a recommended core in which 'spiralling' is possible.
It is also likely that any 'spirals' will concentrate on key features such as those outlined above (greater emphasis on conceptual learning etc.) which become the 'golden threads' of the curriculum development process. Nevertheless this will lead to a conflict between flexible course offerings and having courses where there is so much flexibility that 'the whole' of the course is really less than the sum of its parts. In short, very flexible courses may not have sufficient integrity.

TAFE courses will need to allow for both horizontal mobility (that is, between occupational areas or subject disciplines) and vertical mobility (that is, between job levels and between academic awards or institutions). This means:

- course structures which allow a greater range of choices in combinations of subjects or modules, including cross-disciplinary combinations across traditional disciplines such as mechanical and electrical engineering (and this is already occurring);
- course structures which allow multiple entry and exit points and retraining;
- a restructuring of education towards administrative groups and courses based on industries rather than occupations;
- greater integration and articulation between educational institutions and between the educational sectors of secondary, TAFE, advanced education and university.

The restructuring of some industries and the changes to industrial awards, work practices and skills profiles, therefore will have a significant impact on course structures and content of what TAFE offers. In the debate over the form of TAFE curricula much is currently being made of:

- changing skills profiles, in the light of industry and workplace reorganisation. These changes will affect curriculum structure and content and (potentially) the course profiles of individual TAFE colleges;
- retraining workers to upgrade, broaden or extend their current profile of skills;
- career path development (and therefore the need to consider courses in relation to each other). The newly created career paths will lead, increasingly, to nested or 'ladder' curricula (see below) with a number of potential entry and, in particular, exit points. However this means that the curriculum development process needs to be viewed more holistically than it has been in the past. There also has to be a clearer link between an 'industrial award' and a related training program or 'course award';
the recognition of skills that individuals already hold (this issue will be picked up in the following chapter);

the need for adequate credit transfer arrangements so that individuals can move readily between both sectors and providers of education and training, and awards (see the following chapter);

flexible, more responsive curriculum development techniques to cater for the needs of TAFE's diverse range of clients;

a move towards competency-based approaches which will involve the development of suitable training facilities, learning resources and assessment methods;

adopting modular course structures and self-paced learning where appropriate;

changes in the learning process to focus on more 'open' methods of curriculum delivery, including more workplace training, so that training is delivered how, when and where it is needed; and

a need to 'maintain' programs over their accredited period in order to keep them as current as possible and, if possible, to avoid the need for their very significant redevelopment each 5 years or so.

4.3 COURSE STRUCTURES TO PROVIDE MULTIPLE ENTRY AND EXIT POINTS

This section describes the structures which are already in place in SA DETAFE's courses to facilitate course entry and exit.

Essentially there have been two broad approaches developed to provide multiple entry and exit points. These are:

- linked awards; and
- nested awards.

Linked awards are where courses at a similar level have a considerable degree of overlap in content.
Nested awards arise from a recognition that although individual awards are entities in themselves they:

... could also serve as components in courses leading to other awards. Some courses might be designed to facilitate transfer from one institution to another with maximum credit. Such arrangements might arise from transitions of the following kinds:

- Certificate or Advanced Certificate to Associate Diploma or Diploma
- Associate Diploma to Diploma or Bachelor Degree
- Diploma to Bachelor Degree

In other cases advanced standing may be awarded to students successfully completing one award who wish to proceed to a higher level award in that field. Advanced standing is generally dealt with on a course by course basis. In some instances a course in its entirety rather than individual units may be considered - e.g. an Associate Diploma could give up to two years’ standing towards a related Diploma or one year’s standing towards a related degree.

(Australian Council on Tertiary Awards 1989, p.5)

In the latter case sophisticated 'models' of the original concept are presently being developed in the South Australian Department of Employment and TAFE.

These two approaches will now be discussed in turn. Those with a good working knowledge of the range of DETAFE’s curricula at the Associate Diploma and Diploma levels should skip the following sections and consider the issues and questions raised in Section 4.5.

Linked awards

Examples of linked awards at the Associate Diploma level include:

- the Associate Diplomas in Surveying and Survey Drafting;
- the Associate Diplomas in Accounting and Banking and Finance;
- a number of the present Associate Diplomas in engineering; and
- the Associate Diplomas in Building Technology and Architectural Drafting.
The nature of these links is summarised below:

- **in surveying and survey drafting**, there is a common core of 684 hours, comprising 8 subjects over stages 1 and 2 of the course. The program then offers drafting and field surveying streams at stages 3 and 4 of 780 and 840 hours respectively. In addition, endorsement subjects in the areas of drafting graphics, computer graphics or an approved subject from the Associate Diplomas in Surveying, Survey Drafting or Geoscience is possible. Some status is available from other DETAFE awards (Work Supervisors Certificate and Certificate in Geoscience). Status for certificates or subjects completed at other institutions would be considered on a case-by-case basis;

- **in accounting and banking and finance**, both Associate Diplomas are 864 hours in length, of which 432 (or 50%) are in common. Supervision represents a potential common elective. Most course components are in the form of 54 nominal hour subjects. Status is determined by application to a Head of School at the 3 Schools of Business Studies in DETAFE in South Australia (based at Adelaide, Panorama and Elizabeth Colleges) who advise the Director of Curriculum. A number of the subjects in the Associate Diploma are also in other TAFE awards offered at the Certificate or Advanced Certificate level;

- **in mechanical engineering** sub-professional awards (Mechanical Engineering, Mechanical Drafting, Structural Drafting, Production Engineering) are of between 1444 and 1480 hours' duration. A common core of 580 hours exists with the balance of the programs being made up of appropriate specialist studies of 540 hours and electives (216 hours, which are common to all 4 Associate Diplomas) plus a final project of 144 hours (undertaken after the equivalent of 6 months full-time work experience). The Associate Diploma in Computer Integrated Manufacture conforms to the same core structure; however specialist subjects and electives are somewhat different; and

- **in architectural drafting and building technology** there is an interim arrangement between a 'linked' and 'nested' award structure because of the relationship between the Associate Diplomas in Building Technology and Architectural Drafting (both of which are 1985 nominal hours) and the Advanced Certificate in Building (of 855 hours duration). All three awards have 9 subjects (totalling 558 hours) in common. The two Associate Diplomas have 18 subjects in common, totalling 972 hours. Both Associate Diplomas involve 500 hours of studio work or work experience. 747 of the Advanced Certificate's 855 hours are in common with the Associate Diploma in Building Technology. The linkages are represented diagrammatically in Figure 4.2.
Thus a person might enter these two Associate Diplomas via:

- Year 12;
- a trade course;
- the Advanced Certificate in Building in whole or part (and therefore with some level of status; or
- the other Associate Diploma in whole or part (and therefore with some status)

**FIGURE 4.2 - Building/Architectural Drafting Links**

The linked awards provide two or more possible exit points, but all at the same level of award. The last example, in the building studies area (and described in Figure 4.2 above) has 3 potential exit points at 2 levels - two Associate Diplomas at Stream 3500 and an Advanced Certificate at Stream 3300. In addition the curriculum document for the Associate Diploma in Building Technology and the Advanced Certificate in Building points out that:

- 558 hours common to all 3 qualifications
- 747 hours common to Adv.Cert. and Assoc.Dip. in Building
- 972 hours of subjects common to the Assoc. Diplomas in Architecture and Building Technology (not including 500 hours of studio or work experience)
The Local Government Association has considered 2/3 of the Advanced Certificate in Building plus the subject 'Building Act' as sufficient for the Local Government Building Inspectors Qualifying Certificate, as set out in the South Australian Building Act 1970-71 and Regulations (group 1, Part 3, paragraph 3.6(2)(a)(i)).

(Curriculum document 1986, p.6)

This, notionally, provides a further exit point. It was also pointed out in this curriculum document that the Advanced Certificate in Building was considered, informally, by the Building Licensing Authorities as a minimum academic level recommended for a builder's licence.

In this way it can be seen how these awards, and parts of awards, have recognition and status, and are equated to particular job classifications which are described in the relevant curriculum document. However, this recognition and status can change upon reaccreditation and/or with shifts in the policies of the outside bodies involved.

Nested awards

Nested awards are a series of related awards at different levels which are wholly or partially subsumed within an Associate Diploma or Diploma course, and which provide certain exit points, but culminate in the award of an Associate Diploma or Diploma - for example:

- the Certificate of Geoscience (Field Assistant) and the Associate Diploma in Geoscience;
- the Advanced Certificate of Tourism and the Diploma of Business (Tourism). These qualifications are also linked to the Certificate in Travel and Tourism and are related to a number of awards in the hospitality area;
- the Certificate in Dental Technology, Advanced Certificate in Dental Technology and the Associate Diploma in Dental Technology;
- the Certificate in Animal Attending, the Certificate in Animal Care and the Associate Diploma in Animal Technology; and
- the Certificate, Advanced Certificate and Associate Diploma in Art, together with Certificates in appropriate study areas.

(The classification system used for TAFE courses is presented in Appendix 2 for those unfamiliar with the coding system.)

The nature of each of these nested awards is described below. (Those with a good working knowledge of these programs could skip this section and go to Section 4.5 on page 57.)
Geoscience

The Associate Diploma in Geoscience has a course length of 1410 hours offered in two phases. The first phase is completed on a block release basis in 4 blocks of between 180 and 200 hours' duration, totalling 760 hours. The blocks may be completed in any order. The remainder of the course (Phase II) is of 650 hours' duration, incorporating a 300 hour field and laboratory project.

The Certificate in Geoscience is made up of 750 hours of instruction, including the first 3 blocks of Phase 1 of the Associate Diploma (570 hours), together with field experience of 120 hours and class 2 driving instruction (60 hours). The course organisation is represented in Figure 4.3.

Associate Diploma in Geoscience (3500)

![Diagram of course organisation](image)

**FIGURE 4.3** - Course Organisation for the Geoscience Nested Qualifications

It can be clearly seen that, while the majority of the certificate course counts towards the Associate Diploma in Geoscience, there are 180 hours (or 24%) of the Certificate course which are not common to the Associate Diploma and which would therefore need to be completed if an individual student wished to exit with the Certificate. On the other hand a person wishing to enrol in the Associate Diploma but holding the Certificate should receive credit for blocks 1 to 3 of the Associate Diploma.
Dental Technology

The Associate Diploma in Dental Technology (of 2044 hours) is a 3-stage course with 2 identified exit points. After completion of stage 1 (6 semesters of 960 hours) the student may exit with a (3212) Certificate in Dental Technology - Basic Trade. In stage 2, and with a further 609 hours of tuition over 6 semesters, a student may exit with an Advanced Certificate in Dental Technology. A further 475 hours (3 semesters tuition), in stage 3, allows a student to exit with an Associate Diploma. Alternatively the 'course' could be regarded as 3 distinct, but cumulative, courses of study.

The Advanced Certificate is predominantly vocational in orientation; however it also includes 84 hours of business studies subjects (communication, using small computers, supervision). The Associate Diploma is predominantly made up of business studies subjects (225 hours) to provide business and management skills, together with a teacher-supervised applied research project of some 220 hours nominal duration. Some 30 hours are also devoted to laboratory design. The structure is represented diagrammatically in Figure 4.5. Exit points are provided at the end of the trade level, and at the end of the Advanced Certificate or Associate Diploma. Entry points are clearly provided by those entering the trade (see entry statement on p.74 of this report) or at some time after trade or the Advanced Certificate qualifications have been completed.

In contrast the curriculum document for the Associate Diploma of Applied Science in Dental Hygiene suggests that intending students hold the National Certificate of Proficiency offered by the Dental Assistants' Association of Australia, or its equivalent together with Radiography Certificate offered by the same body. It should also be noted that a St. John Ambulance Association First Aid Certificate has become a prerequisite for the Certificate of Proficiency Course. The Associate Diploma is conducted full-time over 53 weeks of academic contact. Its duration is 1509 hours. It is divided into 4 parts of 363, 427 and 311 and 408 hours' duration. Clinical practice accounts for 806 (or about 53%) of the total course time.
Exit point
Associate Diploma in Dental Technology

Stage III
475 hours
Exit point
Advanced Certificate in Dental Technology

Stage II
609 hours
Exit point
Certificate in Dental Technology - Basic Trade

Stage I
960 hours

Entry point

FIGURE 4.5 - Relationships Between Qualifications in Dental Technology

Associate Diploma of Applied Science in Dental Hygiene

Certificate of Proficiency

Radiography Certificate

St. John Ambulance Assoc.
First Aid Certificate

(recommended)

FIGURE 4.6 - Relationships Between Courses Not Offered by TAFE and the Associate Diploma of Applied Science in Dental Hygiene
The course therefore provides a potential career path for dental assistants seeking to upgrade their qualifications and equips them for a wider range of employment. The structure is presented in Figure 4.6. It is not, however, a nested award, although it does suggest that students should acquire some non-TAFE qualifications before undertaking the course. In this sense it is fairly unusual amongst TAFE awards at the Associate Diploma level.

**Animal Technology**

The Associate Diploma in Animal Technology is a 678 hour (minimum) course, with prerequisite entry courses made up of the Certificate in Animal Attending (a 180 hour, 3100 course) and the Certificate in Animal Care (which is a 360 hour, Stream 3222 course). This latter course contains 270 hours of the study, plus 90 hours of electives in the areas of veterinary nursing, animal technology or zoo and fauna technology. The Associate Diploma itself has a core of 558 hours, together with a minimum of 120 hours of electives plus a 100 hour applied research project. Many of the elective topics relate to information or staff management, or communications. Together, the 3 courses total a minimum of 1218 hours. The 3100 course is designed for animal house/hospital attendants. The 3222 certificate is seen as suitable qualification for the clinical assistant to a veterinary surgeon or an animal technician, while the Associate Diploma is seen as a suitable qualification for a laboratory or animal house manager, or for senior technicians. As such the structure of the course enables multiple entry and exit in line with student aspirations although such a structure may provide similar difficulties to those experienced in the hospitality area with a similar nested award (see p.54).

The curriculum document has recommended backgrounds for students enrolling in both Certificate courses which are obviously set at lower levels than those for the Associate Diploma. Entry points may be direct to the Associate Diploma itself or through the Certificate in Animal Care for those with a lower level of qualifications. Three exit points are provided by completion either of the two Certificate courses or the Associate Diploma itself. The structure for these awards is presented in Figure 4.7.
The Para Veterinary Studies Unit (PVSU) at Gilles Plains College of TAFE pre-vocational course in Animal Management gives full status in the 3100 award - with the exception of the communications subject, plus partial status in both the 3222 and 3500 awards.

**FIGURE 4.7 - Course Relationships in Animal Technology**

**Art**

The Associate Diploma in Art is an award of 1440 hours, which is structured to provide exit points at the end of each of its four stages. These qualify students to receive the associated awards of the:

- **(3221)** Certificate in (a specified study area) made up of:
  - ceramics;
  - fabric design;
  - fibre construction;
  - jewellery;
  - leathercraft;
  - painting;
  - printmaking;
  - photography; and
  - sculpture;

- **(3222)** Certificate in Art; and


The Certificate in (study area) consists of 432 hours tuition in stage I of the course. Students receive a grounding in their major area of study, plus other basic studies. The Certificate in Art (Stage II) involves a further 252 hours tuition, involving drawing, design, art history together with other minor studies as well as continuing their major area of study. Stages I and II may be undertaken in parallel.
Those awarded a Certificate (Study Area) and who subsequently complete the Certificate in Art must surrender the Certificate in their study area. Further, those awarded a Certificate in Art cannot apply for a Certificate in their study area.

The Advanced Certificate (stage III) is a 720 hour program concentrating on the main study area together with drawing and visual studies. The final stage of 720 hours leads to the award of the Associate Diploma in Art where further vocational studies are mixed with subjects to develop product presentation and small business skills. There are therefore four exit points, corresponding to the four stream levels of award. The major entry point is through the Stream 3221 Certificate in (study area) and a range of entry criteria is described in the syllabus document. These selection criteria are discussed in the next chapter (see section 5.2, p.72).

Tourism and Hospitality

The Diploma in Tourism, accredited in December 1987, subsumes the Advanced Certificate in Tourism. The program is offered over 3 nominal years (but on a full or part-time basis) with exit to the Certificate course for operative level occupations possible at the end of the first year. The Advanced Certificate is seen as a supervisory level qualification; the Diploma is at management level (and, typically, of a large or small tourist facility).

The Diploma is of 2480 hours, of which 1645 hours constitute the Advanced Certificate. According to the curriculum document the awards correspond to accepted career paths in the industry. Career path planning is a component of the students' course of study.
The Certificate of Travel and Tourism is a 3222 course of 648 or 661 hours' duration (depending on the option chosen). In all, the first year studies in the Advanced Certificate or Diploma would give credit for 8 subjects (totalling 305 hours) in this Certificate. There are two elective streams (travel or tourism) in year 1 of the Certificate (which is offered over 2 years part-time). The travel elective includes the IATU/UFTAA preliminary Diploma (of 112 hours duration). The tourism option consists of Accommodation 1 - front office procedures and Language 1, totalling 125 hours. The Certificate's options are also possible options in the Diploma and Advanced Certificate courses and include the computer applications packages (25 hours) in the second year of the Diploma Course. Depending on the options chosen, the amount of status granted in the Advanced Certificate and Diploma could rise for those holding the Certificate. Moreover there is considerable overlap in the apparent content of Introduction to Cultural and Ethnic Studies and Introduction to Marketing in the Certificate course and the two equivalent subjects in the Diploma course (Cultural and Ethnic Studies I and Marketing I). The Certificate in Travel and Tourism is the very least prescribed qualification under the Travel Agents Act 1986 for a person seeking a travel agents' licence. The interrelationship between the 3 courses is presented in the diagram below (Figure 4.9).

FIGURE 4.9 - Relationships Between the Awards in Tourism
In contrast, the Diploma in Business (Hospitality Management) does not operate under a nested structure (although its predecessor - an Associate Diploma course - did). One of the major reasons for abandoning the nested structure was the constraints that such awards placed on the entry criteria for a series of nested courses - particularly those (such as the Diploma) which are in high demand. On the one hand, the courses at operative level suggest a particular range of skills and abilities at entry - along with a particular level of vocational ambition - "I want to be ....". On the other hand, other individuals with a different range of entry skills, abilities and experience may wish to enter at the management level directly, without necessarily going through any intermediate steps. The basic difficulty for the course designers was whether the entry criteria for the lowest or the highest levels of award should be used for selection, or whether the criteria should fall somewhere in between the requirements of the 'extremes'. If the entry criteria were set for those at the operative level, but (say) Year 12 was demanded, that may deny the operative course and the industry good potential operatives who could always aspire higher later. On the other hand those with higher initial level of intellectual skills may have been held back by others with (initially) lower levels of skill and knowledge.

For example, the Hotel and Catering Operations Certificate is designed:

> to provide an education in the principles and methods of hotel, restaurant and catering institution service and instil an attitude of pride in work skills, professional competency and adaptability to changes in hospitality industry conditions and expectations. Completion of this course will enable the student to gain employment as a waiter, cocktail waiter, junior receptionist or room valet within the hospitality industry.

(SA TAFE Handbook 1990, p.111)

However the Diploma in Business (Hospitality Management):

> ... is undertaken by people wishing to work in the hospitality industry in a managerial capacity as a food and beverage manager, front office manager, canteen manager, banqueting manager, restaurant manager, and also in assistant manager positions. Students will be given a broad based package of hospitality knowledge and skills leading to more specialised and advanced levels.

(SA TAFE Handbook 1990, p.110)

These two awards are clearly targeted at different client groups. Thus both the tourism and hospitality awards begin courses at three levels: the operative (Certificate), supervisory/specialist (Advanced Certificate) and management (Diploma).
Whilst awards in the tourism and hospitality area are related (and the Advanced Certificate and Diploma in Tourism are nested), advanced standing through credit or status arrangements, is possible through a relatively high level of common course subjects, and the relationships between awards enable entry levels to be appropriate to the terminal qualification rather than the entry requirements relevant to the qualification granted at the lowest possible exit point. In short, the selected entry criteria may present a problem if good potential operatives are selected into a program for managers, rather than good potential managers. Therefore it is suggested that the terminal qualification must be the basis for determining the entry criteria for the course while potential exit points provide 'watersheds' for those whose goals change during the course. Good articulation and credit transfer arrangements are still necessary in such circumstances and so related awards still need to be devised holistically and with a number of possible pathways in mind so that maximum individual benefit can be derived from whatever a student has done so far. Such structures also enable them to return to more advanced level studies in the future, but (possibly) within an appropriate timeframe.

It has recently been proposed that courses at the Diploma and Certificate Levels in tourism and hospitality be made 'generic' both because of their present high level of overlap and also to provide even greater flexibility and options for students studying in this area.

The Diploma in Business (Hospitality Management) operates on a credit point system, is of 2668 hours duration, including 1753 hours of core subjects, 315 hours of electives and 600 hours of industry placement. A total of 450 credit points is required to gain the Diploma. Students may transfer to the Certificate in Hotel and Catering Operations or the Advanced Certificate in Hospitality after successful completion of either semester 1 or semester 2 of the Diploma course. Appropriate status is given in such cases, the amount being determined by the subjects already taken and the course to which transfer is sought. Credit is also available in a number of other TAFE awards, for example the:

- Diploma in Business (Tourism);
- Associate Diploma in Accounting; and
- Associate Diploma in Banking and Finance.

The Certificate in Hotel and Catering Operations (Stream 3222) is of 539 hours duration, taken over 10 weeks full-time or the equivalent period part-time. The award, like others in the Hospitality area, uses a system of credit points (of which 84 are necessary to gain the award).

Students receive full status in the Certificate for successfully completed and equivalent subjects in the:

- Certificate in Dining Room Service (3100); and/or
- Hospitality Traineeship.
Appropriate status is given for equivalent subjects in the Advanced Certificate (Hotel and Catering Operations) or the Diploma in Business (Hospitality Management).

The generic Advanced Certificate in the hospitality area has 8 options, depending on the major study subjects chosen. Electives are also available. The common core involves a minimum of 25 credit points; major studies, a minimum of 55 credit points. A maximum of 20 credit points can be gained in elective areas. Electives may be additional subjects from core and/or the major study area or a related major study area in the Advanced Certificate. This is designed to allow individuals to develop a depth or breadth of skills according to need.

The options for the course are as follows:

- Advanced Certificate in Hospitality (Kitchen Operations - Chef Lecturer);
- Advanced Certificate in Hospitality (Kitchen Operations - Chef);
- Advanced Certificate in Hospitality (Hotel and Restaurant Patisserie);
- Advanced Certificate in Hospitality (Chinese/Asian Cookery);
- Advanced Certificate in Hospitality (Meat and Smallgoods Management);
- Advanced Certificate in Hospitality (Baking Technology and Management);
- Advanced Certificate in Hospitality (Hotel and Restaurant Operations); and
- Advanced Certificate in Hospitality (Food Processing Technology).

Students may attend in full- or part-time modes. Full-time study is approximately 18-20 weeks (or 600 hours equivalent of content time). A minimum of 100 credit points is required to complete the qualification.

Those students who complete the Advanced Certificate will receive relevant credit into the Diploma course. Transfer is also possible from the Diploma course (with relevant status) to the Advanced Certificate.

However this potential for portability within and between levels of award raises another issue. Students exiting the Certificate or Advanced Certificate and who wish to enter the Diploma at the end of Semester 1 or 2, with appropriate advanced standing may, in practice, have difficulty in doing so because there are few if any places available since staff and resources are seen as finite. This may occur even if the Hotel School at Regency believes these students have done well in
lower level awards and are therefore suitable and acceptable (even ideal) applicants for entry to the Diploma. The problem arises essentially because the School must then allow for progression within the initial group selected. (What happens if nobody takes the option to transfer from the Certificate or Advanced Certificate to the Diploma and there is little or no attrition amongst the Diploma students themselves? See Chapter 5.) Because of articulation arrangements designed into the program it must also allow places for those who are qualified and suitable for entry to the Diploma with advanced standing. (What happens if no places are available for them?) The key issue here is that the course structure is not preventing flexibility. What is preventing flexibility is logistics. It is suggested that more thought and resources may need to be given in order to have a college's human and physical resources better deployed to allow for, and preserve, a greater degree of flexibility in a course (including the entry and exit points available).

Thus a question which relates basically to curriculum design and the way a course and its articulation arrangements have been structured readily becomes a logistical question at the college level whereby decisions need to be made about the deployment of school resources to enable the design to actually work.

4.4 SOME RECENT INITIATIVES

Two recently proposed groups of awards have taken the concept of nesting a step further. These are in the areas of:

- community services; and
- computing and information systems.

Community Services

A series of awards (see Figure 4.10) are proposed for community services employing:

- an introductory certificate;
- specialised studies in community care at the certificate level;
- an Advanced Certificate made up of core, elective and free choice, but containing a number of endorsements; and
- an Associate Diploma in Management (Community Services) containing core, elective studies and a further series of endorsements.

In this case the series of awards have been devised, but these also contain a large number of endorsements which could be used both as stepping stones between levels of award and also as a means of
meeting individual or organisational needs without having to complete an entire award at a higher level. So far only the Stream 3221 Certificate in Community Services (Introductory) is in place. In addition there is a range of courses in the 3221 and 3222 areas of health and care, residential care and special care. These latter courses are presently under review.

The structure and relationships of the various proposed programs here are not as significant as the use this award structure makes of endorsements as building blocks to a further qualification and to enable an individual to gain skills without, necessarily, undertaking an entire qualification.

FIGURE 4.10 - The Award Structure in Community Services (after Casha)
Computing and Information Systems

This proposed series of awards is made up of 2 Associate Diplomas (in Information Systems and Computer Applications) which are nested with 12 other awards at the 3221, 3222 and 3300 levels. The awards are listed in Table 4.1. The structure is designed to provide a series of flexible entry and exit points.

The courses are made up of preliminary studies (4 subjects: business fundamentals, information system fundamentals, programming fundamentals and technology fundamentals) core studies and advanced electives made up of subjects which represent an extension of the core together with professional subjects and 3 major streams (systems analysis, programming and microcomputing) together with an enterprise applications stream. The culmination of the studies at Associate Diploma level is the completion of a project, together with a specialist technical or management subject. It is envisaged that most students will not complete all the preliminary subjects as they will be pre-tested at entry and given appropriate status if they meet the competency requirements, or have status granted from prior studies. (This issue will be picked up again in the following chapter.)

Table 4.1. Proposed courses for multiple entry and exit point awards in the Computing and Information Systems area.
4.5 ISSUES AND QUESTIONS

A series of questions and issues arise from the consideration of actual and potential course structures. A number of these issues have already been raised early in the chapter (see Section 4.2 in particular). The provision of multiple entry and exit points to Associate Diplomas and Diplomas is balanced between:

- the practical detail which underlies the process of 'packaging' Associate Diploma and Diploma courses in a way which provides flexibility; and
- the logic which underlies their inherent integrity as 'awards'.

It is clear that a wide variety of structural arrangements are already in use in South Australian Associate Diplomas and Diplomas and have been for some time. Further freedom and changing circumstances (e.g. award restructuring) are all giving rise to other structural arrangements.

However a number of issues arise in considering how to balance a flexible and pragmatic design approach to awards whilst at the same time maintaining their integrity. These issues are:

- the need for flexibility in awards and a holistic view to their development;
- the balance between the need for credentials and meeting a range of other needs;
- the extent to which awards and the entry and exit points they contain reflect industrial reality including the greater use of statements of attainment and endorsement; and
- the resource and logistical implications of improving the flexibility of awards and increasing the number of entry and exit points they contain.

These issues will be discussed below.

These issues also suggest at least three important questions for this study. These questions are:

- Should Associate Diploma/Diploma programs be made more flexible?
- In what ways could course structures be changed to:
  - improve flexibility?
  - allow more entry and exit points?
  - improve apparent attrition rates?
- better meet the needs of the users of the course?

- What needs to happen in order to change course structural arrangements for Associate Diplomas/Diplomas?
  - within colleges?
  - at central office?
  - between colleges offering the same or similar programs?
  - outside TAFE itself?

These questions will be addressed in the section 4.6.

**Flexibility**

The moves towards industry and award restructuring, combined with the need for initial training and re-training to broaden and/or increase skill levels, will require TAFE to be more flexible in the way it both structures and delivers its courses. This is so for all awards, including Associate Diplomas and Diplomas. This flexibility will be manifested in a number of ways, including:

- allowing people to enter and leave individual programs at points which meet their needs and/or which reflect the needs of their organisation, sector of the industry, industry or licensing arrangements;

- ensuring that the courses in a particular area are developed holistically so that cross-crediting arrangements are extensive, a large number of subjects are in common and there are a number of potential pathways leading to a variety of end points which are viable in industrial terms;

- articulating with other levels of award where appropriate, for example at the school/TAFE, TAFE/higher education interfaces and within TAFE itself;

- giving recognition for prior learning (this issue is picked up again in the next chapter) and would, for example, give credit to college Director-approved short courses which were, essentially, individual modules or subjects (or groups of these) from a substantive award;

- breaking major awards into viable sub-units (such as short courses, statements of attainment or endorsements) to allow individuals to complete and gain partial credit for higher level of qualification and, by completion of subsequent sub-units, or individual subjects, form these into a substantive qualification. A more radical proposal would be that it should be subjects or modules, not courses, that are accredited, but that there were
approved groupings of accredited subjects or modules for those wishing to gain a recognised academic award;

- providing a program of core, major strand and free choice elective studies (or 'options') within an award course so that students obtain a core of relevant basic skills and knowledge which is the basis of their chosen occupation. The major strand provides the technical and other content needed for industrial credibility. The free choice component enables a broader range of content to be pursued or, alternatively, the student may opt to undertake studies in a chosen area at greater depth so that individual and/or organisational needs can be met; and

- the provision to upgrade a course as the need arises within the accredited period (and within reasonable limits), so that new elements can be added to a course, and other elements modified or deleted. In some cases this might lead to restructuring course awards to retain their currency and relevance. For the South Australian Department of Employment and TAFE this has become easier through the devolution of responsibility for accreditation of courses of less than 400 hours to the Director (Curriculum), and those of 400 hours or greater to the Chief Executive Officer (CEO).

Thus flexibility is achieved at a variety of 'levels' in the curriculum development process and for a range of purposes. The decisions about course structures, arising from design decisions made during curriculum development are all very well. It is however, the translation of the intents of a design into the reality of a course delivered in a college by a variety of means and where students are actually enrolled, taught and assessed (and which, eventually, gives rise to a range of learning outcomes) which is of particular importance.

Curriculum development is undertaken not only for accreditation but also for delivery and so the way in which the curriculum is designed not only needs to be seen to be suitable (at accreditation) but also needs to be workable at implementation.

The current curriculum design practices within TAFE in South Australia have developed a range of flexible structural arrangements. None is absolutely perfect: some are more flexible than others. In fact, there is no universally applicable 'model' for good course design or structure. The design process therefore needs to focus on potential entry points, desired outcomes, useful end points and suitable pathways in a framework of consultation with industry (as well as other interest groups) and an appropriate policy on curriculum development, implementation and review processes. Therefore the structure that finally emerges should represent the best compromise given the expressed needs of the various target groups and the design and operational constraints within which each curriculum has to be made to work.
The issues raised here will be amplified in the next few sections. One problem related to the development of flexible structures the achievement of a balance between the need for credentials, and meeting the various other needs of interest groups.

**Credentialism versus need**

Because accredited awards are largely free to TAFE's clients (apart from some material costs and student service fees) and other programs offered on a fee-for-service basis cost organisations or individuals money, some would suggest that TAFE is award driven - possibly at the exclusion of meeting the real needs of clients. It is also often said that students withdraw from a course because their needs have been met. This, too, is an argument of convenience which, although undoubtedly true in many cases, is certainly not the predominant reason for withdrawal (see section 3.4 in Chapter 3). Students did not want to obtain the credential (so the argument goes) but had to enrol in the whole course to get what they wanted. This discussion forms part of the training versus education debate - which we certainly have no intention of raising in any detail here.

One of the authors can recall being involved in the development of a course in another State. Part of the industry was institutionalised or public service based and used credentials - such as Certificates or Associate Diplomas - to determine when a person was entitled to a particular job classification (for example a technician rather than a technical assistant). This, of course, had implications for career progression. Credentials were important to such people. Another (and perhaps the larger) part of the industry was more concerned with ability to do the job and less with the qualifications people held. It was concerned with competence not qualification and companies in this sector of the industry were prepared to pay according to the contribution they believed the person made to the success of their organisation and the demonstrable skills of their staff rather than on the qualifications staff held. This part of the industry wanted short, specific courses in particular (but identifiable) areas, delivered on a needs basis and over a fairly short but intensive period of time. They were not so concerned with whether or not the courses led to an accredited award (even though it may have involved the payment of fees).

For others, credentials are important in that they allow for licensing to practise (such as automotive mechanics, real-estate agents or land brokers) or membership of professional and para-professional associations. Such memberships are recognitions of an individual's achievement or status. Therefore in such cases these bodies can exert considerable influence on course content and structure, offering automatic licensing, or recognition by and the membership of the body concerned. However this can have a detrimental effect on the number of entry and exit points and the possible modes of delivery. It may reduce flexibility in the design and structure of the course and may reduce the amount of possible articulation and credit transfer
available, particularly that into the award - because the external (and internal) stakeholders like the award to have the highest possible status. The move towards approaches for learning which are more concerned with the competencies attained and less with the time served may meet the needs of both groups better. (The current enquiry chaired by Ivan Deveson may help to restore this dilemma.)

To respond to these various needs the institution concerned opted for a traditionally-based Associate Diploma of 2 years full-time or equivalent part-time. Although it asked 'the industry' what it wanted it, in fact, delivered almost precisely what at least one important sector of the industry hadn't really asked for.

This anecdote also indicates that an industry's (or an individual's) needs are by no means uniform and a variety of possible responses may be required, or alternatively, TAFE may have to make reasoned and defensible choices when there are competing demands. For example, the course could have been broken in to a number of sub-units and delivered by traditional means as well as offering short intensive courses (which gave credit in the major award) on a needs or fee-for-service basis.

This point elaborates on one of the issues raised under flexibility. While many students may wish to obtain a credential, others want to do individual subjects, modules or groups of these. This point is picked up again shortly when the notion of making more use of statements of attainment or endorsements is considered. This, of course, is a structural or design issue for a program. Of greater importance is (as we have already suggested) the question of turning a design or structure into reality. Again we will return to this issue when addressing the three questions we posed earlier in this section in the conclusions to this chapter.

The need for industrial reality

The issues of flexibility, credentialism and need raise a series of questions which need to be considered when trying to identify in what ways, if any, Associate Diplomas and Diplomas can be structured to provide multiple entry and exit points. This, especially, gets back to a question of whether:

- a whole Associate Diploma or Diploma is greater than the sum of its parts and is, therefore, largely indivisible; or
- an Associate Diploma or Diploma is a program which is made up of a number of distinctly identifiable components which are viable in their right and, together, go to make up a number of minor awards and a major award.

However this is a basic structural and design question. The likely answer is 'Yes' and 'No'. There will be some awards which are capable of being broken down into components. Others will have
their own integrity but may have components which are part of other 'strands' in the curriculum which could go to make up some form of post-initial qualification (such as an endorsement) because they can broaden an individual’s knowledge and skill base.

Inspection of the syllabus documents for a range of TAFE’s Associate Diplomas and Diplomas suggest that no use has been made of Statements of Attainment and Endorsements. Endorsements are courses which are subsequent to an initial vocational course. Those at the 4400 or 4500 levels are for para-professionals, technicians or higher. South Australian TAFE only has 19 approved courses in Stream 4000 - ranging from a Statement of Attainment in Earth Moving Operation (4100) to a Statement/Endorsement in Advanced Local Government Work Supervision (4300).

Since endorsements are post-initial qualifications, those entering Associate Diplomas direct from school would not necessarily have any initial qualification which could be endorsed. Others, holding 3212 or 3222 or other recognised awards, could obtain a 4500 award as part of their Associate Diploma or Diploma. However could a student receive endorsements once they had qualified for a 3212, 3222 or 3300 course within an Associate Diploma or Diploma? The Community Service Award structure (Figure 4.9) proposes the extensive use of endorsements at both the Advanced Certificate and Associate Diploma levels. Statements of attainment or accredited (but short) courses could, potentially, be used to create a nested series of awards or courses within a major course such as an Associate Diploma or Diploma.

Since many students who enrolled directly in an Associate Diploma or Diploma may not qualify for a lower level of award, some sort of formal credit for study of an Associate Diploma or Diploma in part needs to come by means of:

- using a lower level award (as with the nested courses); or

- a course of study approved either at the level of the College Director or the Director (Curriculum) - if it is under 400 hours - which is based on individual subjects or modules (or groups of these) within a mainstream accredited award approved by the CEO. These would typically be fee-for-service courses; or

- making greater use of single subject enrolments, statements of attainment or shorter accredited courses which, themselves, form components of major accredited awards.

Again, any such strategies and programs need to be based on what is realistic in terms of an industry’s particular industrial awards, occupational groupings, and related training needs and TAFE’s ability to ‘market’ the awards it has developed.
The other problem with award segmentation is that its 'compartmentalisation' may prevent the proper development of generic skills and underlying principles because these do not receive sufficient attention and reinforcement in a 'dismembered' qualification. Stevenson (1989) has talked of the 'spiral' curriculum and that breaking an award down may mean that is not able to spiral sufficiently to develop and reinforce the important concepts, skills, principles, knowledge and attitudes which go to make up the major award from which they are derived. Nevertheless the drive towards producing programs with a flexible, modular format will act to break down the integrity of awards.

There is an interim argument which might suggest that awards could be structured using a core program with a series of 'strands' and 'options' which have an inherent integrity and can therefore stand alone. These could be offered as minor awards in their own right.

The extent to which Associate Diplomas can be restructured may depend on the way in which job and skill requirements of a particular vocation relate to the training requirements and, hence, the way in which a course can be structured to develop blocks of appropriate skills as needed and which can be built on, as distinct from an 'all-or-nothing', 'take-it-or-leave-it' award.

Recognition might then be given to the blocks of skills which, progressively, are built up by the student into a substantive qualification. All this is tied to the notion of needs-driven recurrent education and the development of modular programs of training rather than 'credentialism'.

In the National Metals project the link between basic wage, classification and training requirement has been established and is enshrined in the industrial award. It also allows status to be given to prior studies and, increasingly, recognising previously acquired skills and learning from a variety of sources (see Chapter 5).

**Resources and logistics**

The move to improve flexibility in TAFE's courses should lead to the provision of a range of entry and exit points which have industrial 'currency'. This, in turn, will have significant effects on both State and college resources and logistics - at least on the short- to medium-term. Indeed the issue of providing more possible entry and exit points, or not, is merely one part of a wider range of resource and logistical ramifications arising from the current restructuring of industry and its related industrial awards. In addition course designs are moving away from an approach which is concerned with hours of study and, therefore, to some extent based on time-serving, towards one which is more concerned with achieving competencies - or, more broadly, desired outcomes.
The notion of time-serving underpins much of the thinking about the way in which Associate Diplomas and Diplomas are structured and delivered. In this sense the approach echoes the higher education system. The move towards a more competency-based approach means that:

- courses might become more flexible in terms of where, when and how learning and teaching take place (i.e. learning systems will become more 'open'). This will mean that the time of entry will become more flexible, not just at the beginning of a term or semester. The duration of the program may also vary according to how 'successful' a student is, as well as whether they opt to undertake studies over a short intensive period or to choose a program (like most programs offered in TAFE at present) which is more drawn out. These sorts of issues, of course, will have effects on staff timetabling and the way in which learning facilities and resources are designed and used. Finally it will affect the range and type of learning resources developed. All of these considerations, of course, need to be coupled to a better management information system (a point which will be expanded upon shortly);

- new methods of assessment will need to be developed and refined to ensure that, used together, they represent a reasonable measure of whether desired outcomes have been attained and competence (in the broadest sense) has been achieved. This may require assessment within TAFE and, more broadly, assessment in real or simulated work situations; and

- there will be a need to improve systems of recognising when skills and knowledge of competencies have been attained and, in addition, what skills and knowledge people have acquired prior to beginning study. This issue will be taken up in the following chapter.

The provision of multiple entry and exit points is therefore likely to result in:

- a need for better student record and data management systems to enrol and track student progress as well as help in resource planning and use. The system needs to be able to record student progress on a cohort basis (that is, on the basis of all students enrolling in a particular year or semester so that information on progress and attrition is most comparable). It may be useful also to consider having a records system which is compatible across the TAFE system in South Australia to promote ready exchange of student record data. The choice boils down to a decentralised system with common data structures which enable data to be compared easily and transferred readily between elements of the system or, alternatively, a centralised system. This issue has already been considered in the previous chapter;
better enrolment procedures and counselling at enrolment and throughout the course. This will be done to make fairer decisions about who should enter a course, and at what point (that is, with what status). This issue will be picked up again shortly; and

giving greater attention to the review and maintenance of courses and course components in order to retain their credibility and to refine the processes of the implementation, delivery and assessment. It would also be used to gain feedback from clients (both students and local industry) about their suitability and therefore what adjustments need to be made to better meet the needs for which the award was designed. This is the subject of a study for DETAFE in South Australia which is to begin shortly.

At a more widely applicable level and as a result of award restructuring, it is probable that there will be:

- a rationalisation of TAFE's services. The award restructuring process may cause TAFE to focus its delivery of particular range of programs on a smaller number of sites, and the range and combination of staff skills required will need to broaden to meet the training needs arising from restructured awards. As a result, staff may need to be relocated to provide the new mixes of skills likely to be needed. However, a variety of delivery procedures may be used. As always, country colleges will need to deal with and support a wide range of programs which are as flexible as possible;

- a rationalisation of courses/course structures. It is likely that there will be a rationalisation in the number of courses as a result of award restructuring. However, these courses will become generic awards, designed holistically, with a variety of shorter awards incorporated and a number of potential pathways (thus giving a variety of entry and exit points). Such awards will allow for a core, with a range of strands and options and may include the possibility for local or even enterprise-specific input within the 'options' component of the course structures. Moreover, if people are completing sub-awards (or awards at a lower level) which represent what they really want, then this can only improve attrition rates because it will eliminate those from the statistics who do not declare their real intentions when enrolling and hence become an attrition statistic even though their learning goals have been achieved.

4.6 CONCLUSIONS

In raising these issues we have answered to some extent the questions posed at the beginning of the last section. However, to take the questions one at a time - it is clear that there is already flexibility in the ways in which courses are designed and delivered to allow a range
of entry and exit points. Nevertheless it is also clear that further flexibility will have to be introduced:

- to use TAFE's current physical, fiscal and staff resources better; and
- to meet the needs of an increasingly diverse range of clients in ways which best suit them. (This will arise from the award restructuring process and an increased demand for more and more continuous retraining.)

The second question concerns ways in which course structures could be changed. Strategies include:

- the use of a range of entry points based on:
  - identified and recognised stages in a total career path which suggest natural entry points, and
  - the recognition of the skills and abilities an individual brings to the program and, therefore, the extent to which people have already achieved certain stated outcomes for the course (see the next chapter).

Thus some entry points are formally recognised, but others are flexible and based on the process of the appropriate recognition of prior learning - whatever its source; and

- the use of a range of exit points based on:
  - the possibility of single subject enrolments\(^1\). (In this sense other people have never enrolled in a course. It is just a process for removing them from the statistics),
  - identified career points with associated TAFE awards enshrined in the industrial award, and
  - short courses, statements of attainment or endorsements based on an identified block of skills which stand alone and become a stepping stone to an initial or post-initial qualification.

The final question concerns the processes required to change the structural arrangements for courses at a variety of levels. It is clear that a variety of structural arrangements exist which have already improved the number and variety of entry and exit points to the Associate Diplomas and Diplomas offered by DETAFE.

\(^1\) Current debates over fees may make this type of exit point a more attractive proposition, because it may eliminate the use of such enrolments by individuals or groups as a means of free fee-for-service type programs.
Certainly the more relaxed interpretation of the ACTA guidelines has enabled greater flexibility in the interpretation of entry criteria.

However this does not really affect the point of entry unless it is accompanied by appropriate credit transfer and articulation arrangements, as well as recognising and giving credit for a wide range of prior learning.

The structural arrangements that can be devised can be constrained by the design criteria for the curriculum as well as the philosophical positions of those involved in its development and use. Curriculum development has been, is, and always will be a political activity and, hence, the structural arrangements possible are limited by two factors:

- the extent to which the curriculum structure (including its entry and exit points) is saleable to the interest groups contributing to its development. If unions, employer groups, learning bodies, professional associations, university staff in related awards or TAFE lecturers will not buy the structure then any concept (including multiple entry and exit) is doomed to failure; and

- the logistics involved in implementing the structure and making it work at, or near, the limit of its potential. (The example cited in the Hotel School where, it is said, resources constrain the potential flexibility of existing course structures so that multiple entry and exit points are certainly possible but not so probable is a case in point.)

In order to improve flexibility, including providing more entry and exit points to DETAFE's Associate Diplomas and Diplomas, a number of things need to happen. These include:

- developing creative course structures offering a range of entry and exit points which are in accord with any relevant industrial award and which provide appropriate opportunities for career and skills development;

- making more use of accredited short courses, statements of attainment and endorsements but within the framework of awards at both the Associate Diploma and Diploma level. It is possible that subjects or modules, not courses, are accredited, and that there are approved subject/module groupings that lead to recognised awards or to licensing. (The initiatives in the restructuring of the metals courses is moving TAFE that way.) The training guarantee and the outcome of the Deveson inquiry may both have interesting effects on the marketability of such programs and options;

- working to develop and sell (to sometimes conservative clients) the most creative course package possible. Note that the conservatism may not only be found outside TAFE;
examine logistical arrangements for Associate Diploma and Diploma courses at the college level to determine whether any existing entry points of a course can be utilized and that those seeking entry at that level would have a reasonable chance of entering at that point (with any advanced standing to which they were entitled);

- if they were entitled to advanced standing, that they could, in fact, expect to complete the award somewhat sooner than if they enrolled at the initial point of entry. (Some work done in another TAFE agency has indicated that subject or module sequencing and prerequisites can prevent an individual completing the award within the time suggested in the curriculum! Further, the times when particular modules or subjects are available to be taken may not enable an individual to complete a course more quickly despite having advanced standing.) In short, the arrangements for delivering courses in more creative ways need careful consideration by colleges; and

- more information needs to be gathered about the ways in which students move into, out of, and between TAFE Associate Diplomas and Diplomas to determine what, if any, natural entry and exit points there are. More information is needed from clients, particularly students, about why they are choosing to enter, leave or remain in their Associate Diplomas and Diplomas. In this way it may be that TAFE can improve the level of service it offers to its clients. There have been considerable problems in gathering and processing such information about student progress (see Chapter 3).

In order to offer more entry and exit points in its Associate Diplomas and Diplomas it is recommended that DETAFE should:

- foster creative solutions at both the central office and college levels to problems which will invariably arise in the provision of more entry and exit points;

- improve the level of service already offered by targeting and employing its resources (particularly at the college level) in ways which create access opportunities for clients and enable them to undertake and complete programs which meet their needs in ways which best suit them. This, in part, is a notion of quality management where needs and problems are recognised and ways are sought to meet the needs and solve the problem; and

- break down any rivalry and protectiveness which may exist either between central office and the colleges over the ownership of an Associate Diploma or Diploma and between colleges offering that Associate Diploma or Diploma in whole or part. Moreover, selection procedures and other policy and procedural matters which relate to the provision of a variety of entry and exit points should help rather than retard the entry of suitable students and their exit at appropriate times.
5. MULTIPLE ENTRY AND EXIT POINTS - SELECTION, CREDIT TRANSFER AND ARTICULATION

5.1 INTRODUCTION

In the previous chapter we discussed the issue of course structure, reviewing a number of the arrangements presently in place or being contemplated in South Australia. In this chapter the issue of entry points and exit points will be examined in terms of the selection processes used, along with those for credit transfer and articulation. In addition previous formal and informal study, together with life experience, are increasingly being recognised as important factors in determining whether (and at what point) a person may enter a program of study.

Thus the issues underlying this particular aspect of multiple entry and exit points relate to:

- the student selection policy and the counselling that students undergo when entering a course, when they transfer to other programs or exit altogether;

- the systems of credit transfer and articulation available for the program on the basis of a student's previous study (whether formal or informal) within or outside TAFE, as well as their life and work experience; and

- the assessment processes used to judge a student's readiness for entry, progress and completion of courses or course components.

The selection practices used in South Australian TAFE have been considered in general by Brenton Holdcroft (1988): those in Business Studies were discussed by Peter Holdcroft (1986).

5.2 THE ENTRY POINTS TO CURRENT TAFE ASSOCIATE DIPLOMA AND DIPLOMAS

Students may arrive in an Associate Diploma or Diploma from a number of sources and with a variety of backgrounds including:

- a successfully completed Year 12;

- one year of equivalent full-time study of some kind;

- whole TAFE awards, particularly in Streams 3212, 3222 and 3300;
• subjects or modules from another SA TAFE Certificate, Advanced Certificate or Associate Diploma taken in the recent or even distant past;

• whole or partially completed TAFE awards from interstate for which credit may be sought in an Associate Diploma or Diploma offered by SA TAFE;

• Interstate or overseas qualifications approximating to the TAFE level, completed in whole or part;

• relevant, but non-accredited training programs that the applicant has undertaken - but particularly in-house training programs;

• relevant work experience;

• relevant life experience; and

• qualifications completed in whole or part at a university, CAE or equivalent in South Australia, interstate or overseas (i.e. at an equivalent, or higher [or just different] level to the Associate Diploma or Diploma in which credit is sought).

This range of alternatives is usually dealt with on a case-by-case basis by colleges using information gathered from students, DETAFE guidelines and past precedents as a basis. However, there are concerns that guidelines and precedents may not be applied uniformly across colleges, leading to concern about the equity issues such inconsistency raises. Moreover, there is a strong push from governments to avoid people repeating work or learning skills in which they are already competent. Clearly it is a waste of time trying to teach someone to type at 40 words per minute if they can already type at 50. Likewise if they can already type at 35, their skills merely have to be honed to enable them to achieve the criterion of 40 rather than their (necessarily) having to learn to type again from scratch.

This represents a simple example where there are current national standards: it becomes much more complex when trying to make judgements about more complex skills, abilities and the underlying knowledge needed by individuals practising a particular vocation at a particular level. Here the National Training Board will have an important role to play.

The issues of the recognition of prior learning and of credit transfer and articulation will be picked up later in this chapter.

The most up-to-date requirements for entry into Associate Diplomas and Diplomas (as discussed in the previous chapter) are:

• satisfactory completion of Year 12;
satisfactory completion of one year of equivalent full-time study in TAFE which recognises practical experience as part of this time component; or

for students aged 20 or more, evidence of the ability to undertake advanced level studies.

A range of other arrangements, however, are suggested in DETAFE’s curriculum documentation.

In some courses the third condition (mature entry for 20+) is modified to enable the learner to demonstrate their ability to undertake advanced level studies. This is assessed by:

- performance on a standardised achievement test; and/or
- the nature and extent of previous experience in work.

A number of courses (including the Associate Diploma in Accounting) suggest that a personal counselling interview would be held prior to, or following, selection. (It varies from course to course.)

Others suggest:

Strategies to assist students with learning and prior knowledge deficiencies include personal coaching by staff out of duty hours, referral to alternative courses in other certificates, referral to established remedial classes, or if the numbers are sufficient, the establishment of a special remedial class.

(Curriculum Document, Associate Diploma of Building Technology 1988)

The Associate Diploma in Dental Technology represents a special case since Stage I of the program is a trade course. In its curriculum document the entry criteria for the Associate Diploma are as follows:

It is recognised that under the Australian Council of Tertiary Awards (ACTA) the recognised, minimum level of secondary education for entry into an Associate Diploma is year 12 (or equivalent). However, under the apprenticeship system employers may take on apprentices at year 11 level. These students therefore may be considered to have enrolled in the Certificate in Dental Technology (basic trade), and provisionally in the Associate Diploma. At the completion of Stage I, these students can be considered for eligibility for enrolling formally in the Associate Diploma, on the grounds that they would have satisfactorily completed Stage I subjects and would satisfy one or more the ACTA conditions of entry:

(a) satisfactory completion of year 12;
(b) satisfactory completion of year 11 and satisfactory completion of the Basic Trade Certificate (which amounts to at least one year full-time study); or

c) for students aged 20 years or more, evidence of ability to undertake advanced level studies.

Alternatively these students can enrol for the Associate Diploma on completion of the basic trade certificate when they would have satisfied one or more of the ACTA criteria and would have satisfactorily completed the Stage I course work which is a prerequisite for Stage 2 of the Associate Diploma.

(Curriculum Document, Associate Diploma in Dental Technology, 1986)

The curriculum document for the Associate Diploma in Art suggests that entry to this course is by a personal counselling interview.

Students are expected to demonstrate a high degree of personal desire to become a professional artist-craftsman. A portfolio of work to establish a student's level of current ability and future potential must be supplied to support the request for entry. When the demand for the course exceeds the number of places available the selection of students is based upon potential demonstrated with their folio of work and the current status of class enrolments in requested subjects.

(Curriculum Document, Associate Diploma in Art, undated)

Statements about the criteria for student entry to some of the earliest Associate Diplomas (particularly in engineering) were far more flexible or, looking at it another way, open to interpretation. They suggested:

An important tenet of TAFE courses is to have as few entry restrictions as possible, giving all students an opportunity to achieve the course objectives at the set level. In practice, since 1977, about 75% of graduates have already earned a previous TAFE Certificate - usually a Basic Trade Certificate - and about half the rest have entered the course after completing year 12. As well, students who enrol for single subject normally have many years of experience and a specific requirement for the subject to heighten their motivation.

In order to establish a starting point for course design purposes, completion of year 11 is taken as a basis, especially for mathematics and science. If however, year 11 has not been completed, or mature students are not confident of their performance at that level, special assistance is available. Engineering Mathematics I is normally taken over 72 hours but a subject called Mathematics IN can cover the same objectives.
content and standards and students sit for the same examination, but take the course over 108 hours.

All lecturers counsel students as to their ability to enter the various subjects. Other strategies used to assist students with learning and knowledge deficiencies include personal coaching, referral to lower level courses in other Certificates, referral to established remedial classes or if the numbers are sufficient the establishment of a special remedial class.

(Curriculum Document, Associate Diploma in Production Engineering, 1982 p.25.)

This was, perhaps, a reflection of the fact that many of the early Associate Diplomas were upgraded from lower level courses. This entry policy is, however, potentially more liberal than that used subsequently. However the changes notified in Bulletin 465 of SA DETAFE have, again, liberalised the conditions of entry - moving them away from the ACTA guidelines.

5.3 THE SELECTION PROCESSES USED

Hawke and Sweet (1983) suggested four goals for selection. These were:

a) to identify applicants most likely to profit from the course of instruction;

b) to identify those most likely to fail or withdraw;

c) to promote the efficient utilisation of resources; and 

d) to provide an administrative means of dealing with an excess of applicants over places available.

Interestingly their list did not mention access and equity issues explicitly.

A range of selection procedures has been a feature of TAFE curriculum documents and college practices. Holdcroft’s (1988) review pointed out that a number of procedures in use, including:

- entry criteria enshrined in TAFE policy (e.g. the Bulletin 465 criteria);

- application forms;

- interview/counselling sessions;

- written tests;

- application portfolio;
I auditions;
preference client profile;
'first-past-the-post' (or first-come-first-served); and
sorting and ranking the results of any one or more of the above.

Up until very recently TAFE colleges have often used a 'first-come-first-served' approach to student selection for their courses. Concern over attrition rates, and the questions of access and equity which arise from this process have given rise to a student selection policy for South Australian TAFE, which was developed several years ago (see Powles 1990).

Major concerns with the first-come-first-served approach are (see Powles 1990):

- it is inefficient - particularly when high attrition rates follow;
- it is not fair and disadvantages those not familiar with the system or who may make late career decisions, those who cannot (for valid reasons) attend on enrolment day(s), or live some distance from the college concerned, or in the country;
- it may not provide appropriate referral and support mechanisms for students;
- it can result in demeaning queues and a (potentially large) group of disgruntled people who are not selected;
- it may not select from the potential applicants available those most likely to succeed in the course and/or on the job: that is, standards cannot be assured; and
- it may not achieve the equity principles of enabling a reasonable mix in the social composition of the students in a course - or possibly, enrolments to discriminate positively in favour of particular groups (especially those from disadvantaged backgrounds).

The advantages of first-come-first-served (Powles 1990) are seen as fairness, its simplicity, administrative convenience and cost-effectiveness.

Given the competition for places in many TAFE courses (the Diploma in Business - Hospitality Management - is a good example of this), some more fair, equitable but effective system of student selection needed to be found. This has meant introducing a system which sifts and sorts all the applicants to enter TAFE programs and then selects those who appear most suitable. Those who accept their places are then enrolled.
To this end the South Australian Department of Employment and TAFE has developed a selection policy for students (SA DETAFE, 1987) which tries to reflect both administrative and educational needs - particularly in counselling students and identifying those who:

- are most likely to be successful; and
- (if selected) are in need of some assistance to complete the program successfully.

It also attempts to provide counselling to those not gaining admission so that they can undertake studies appropriate to their needs and abilities.

The policy document is generally available and so it will not be discussed in detail here. Suffice it to say that it involves a number of processes, including:

- the provision of up-to-date and accurate course information to students;
- the availability of educational and career counselling;
- preselection assessment (including diagnostic tests, auditions; etc) with the techniques used varying and dependent both on the nature of the course, and the vocation on which the course is based;
- interviews with prospective students; and
- referral to alternative programs (e.g. Certificate in Vocational Education - Breadmaking Cake and Pastry and the Associate Diploma in Health Surveying) have developed selection procedures and associated preferred client profiles.

The TAFE National Centre funded a study in this area (Thompson and Krzemionka 1990) which aimed to:

- develop a model for student selection for Business Studies courses, which would be suitable for implementation nationally;
- develop student entry profiles for a number of different Business Studies courses;
- develop appropriate selection criteria for these courses;
- develop appropriate instruments to assess students' preparedness and suitability to successfully undertake these courses; and
- evaluate the effectiveness of the student selection procedures.
The program chosen to develop a model was the Associate Diploma in Accounting. Demand for course places in some business studies programs is high, and there are high attrition rates, suggesting that resources were not being used most efficiently. This, in part, contributed to the selection of the Associate Diploma in Accounting as one of the two case studies described in Chapter 3. Indeed the Diploma in Business (Hospitality Management) has also developed and implemented selection procedures.

The model for student selection that DETAFE has developed is based on:

- making access more fair and equitable;
- improving selection procedures and retention rates;
- improving counselling procedures and providing a better level of academic support;
- providing preselection assessment to determine a student's suitability for the program.

The procedures proposed are potentially time consuming and therefore expensive. Will all this effort and expense be worth it in times of:

- improved access and equity?
- better retention rates?
- greater program relevance? and
- improved client satisfaction?

Only time and experience will tell.

Informal evidence gathered at colleges during our study suggests that the introduction of preferred student profiles and more rigorous selection procedures is believed to have reduced attrition in a number of courses (including Associate Diplomas) where such processes have been introduced and used. For example, the School of Mechanical Engineering at Regency College has seen improved graduate and reduced attrition rates as a result of student selection procedures introduced in 1988 (see Section 3.3).

The process for determining a student's academic preparedness (and appropriateness) for entry into the Mechanical Engineering program at Regency College begins with the School sending to students registering interest, a 'student kit' which gives detailed information on the course, a preferred student profile, costs associated with enrolling in the course and general information on the College and its support services.
Application forms are to be filled out at the same time and returned at an interview session. Of 30 minutes' duration, these interviews are the most important part of the process and include a short written examination. The selection examination aims to show what assistance the student would need to:

- enter the course; and
- determine what extra remedial work is necessary to attempt the course.

In addition it may demonstrate the specific stream to which the student would be most suited.

The test includes a section on diagnostic mathematics, industrial reading and a self-expression test. The application forms and tests are then used at a further interview/counselling session intended for penultimate student selection.

However we are not aware of what effects the procedures have had in terms of access and equity issues and improving program relevance.

The selection procedures used can be staged such that progressively more time consuming selection processes are introduced to discriminate between an increasingly selected sample of those who apply.

Finally, after the process of selection has been completed it is possible to consider the cases where students should be given credit for previous formal study or, more generally, be granted recognition for their prior learning. This may be introduced as an expansion of the selection process, or an entirely separate process. However it will use much of the data which has been collected for selection purposes.

5.4 EXAMPLES OF PROCEDURES

In this section we will discuss the selection procedures used currently in the Associate Diploma in Accounting and the Diploma in Business (Hospitality Management), since these represent the two 'case studies' in this project.

Associate Diploma in Accounting

The process used for selecting students for the Associate Diploma in Accounting at Adelaide College is, broadly, that an individual who inquires about the course is sent a form which requests details about name, address, age, educational background, relevant work and other experience etc. When this form is returned it is used to calculate a score base on a series of weightings generated for each factor. These scores are then ranked and a cut-off line is determined. In essence those above the line are selected and those below are not.
Thompson and Krzemionka (1990) have reviewed the literature in relation to student access and equity in general and developed a suggested model for selection into the Associate Diploma in Accounting. This model is now described briefly. The steps in the proposed process are outlined in Figure 5.1 and are as follows:

- **Advertising** - a co-ordinated approach using the press, local community networks and relevant private and public sector organisations and their publications could be used. Preparatory programs and lower level TAFE courses are a source of students. Advertising could also be used to reach under-represented or disadvantaged groups;

- **Registration of Interest** - intending applicants could register to attend an information session. Alternatively, a rolling list of interested applicants could be maintained and contacted prior to the next information session;

- **Information Forwarded** - interested applicants are sent comprehensive course information which details minimal entry skills and requirements, cost of course materials, career overviews and pathways, and an outline of the selection procedure;

- **Information Session** - this provides an opportunity for prospective students to meet staff, raise questions, to complete and lodge application forms and to arrange preselection assessment and interview. Details about available student services (learning support and ESL) could also be described;

- **Preselection Assessment** - this can involve objective testing and self-assessment by the applicants to help them determine their suitability for the course and aptitude for accounting;

- **Interview** - an interview guideline and a list of suggested questions allow for a reasonably uniform approach to interviewing applicants and is part of a two-way communication process to enable information to be exchanged. Following the interview a decision is made about the suitability of each of the applicants;

- **Successful Applicants** - are offered a place. Course orientation and commencement concludes the process; and

- **Unsuccessful Applicants** - are notified and the reasons for their non-acceptance stated. These applicants are invited for counselling and to seek referral to suitable alternative programs (other Business Studies courses, preparatory courses, courses in other areas, etc.).
An evaluation process is proposed in the model to review and refine the selection processes and criteria, and the information sheets used.

These procedures have not been trialled as yet and it is therefore not clear whether the procedure will cost less in time and resources than other approaches - such as the 'first-come-first-served' approach. Thompson and Krzemionka (1990) suggest that there will almost certainly be a initial increase in costs as colleges implement the process; however better selection may also lead to better retention.

Adelaide College has not adopted the procedures proposed for two main reasons: it was suggested that it would be very resource intensive to interview the large number of applicants for the Associate Diploma. Secondly, it was felt that the system may not necessarily be any more valid and useful than the selection processes already in place - although it was acknowledged that there were similar doubts about the usefulness and validity of existing selection practices.

The bottom line was that those at the College were unconvinced that the extra effort and resources required in introducing and using these proposed procedures would be worthwhile in terms of the outcomes likely to be achieved.

Thompson and Krzemionka (1990) also report some difficulty in reaching consensus over the entry criteria. This should come as no surprise given the size of the Accounting program (see Chapter 3) and the range of institutions at which the course (or components of it) is offered. Moreover they report:

- many Business lecturers were happy with the process if used for providing information. They were less happy with them as a basis for selection and their role as 'judges';
- lecturers also doubted the reliability of the self-rating instruments - especially if they were used to make decisions between alternative applicants;
- staff in colleges did not feel they owned the process; rather it was seen as a central office initiative; there was also concern about how it would be resourced; and
- there was a need for in-service training in the suggested process to both 'sell' it and to give the lecturers the knowledge and skills they need both to use the system and develop it further. There was also a need to trial the resources properly.

Thompson and Krzemionka (1990) point out that a formal trial was to be held at Adelaide College. However:

... the profile proved such a stumbling block that consultations broke down completely and the College declined to go ahead with the trialling.

(Thompson and Krzemionka 1990)
However another college has expressed interest in trialling the process on students who have already been accepted for the program on the basis of the college's existing procedures.

**Diploma in Business (Hospitality Management)**

The Business Studies approach just described has built on the work already undertaken in both the Tourism and Hospitality areas where a model student selection procedure, entry profile and preselection assessment instruments have been developed. The 'model' is presented in Figure 5.2 and should be contrasted with that in Figure 5.1.

In broad terms the model is similar to that proposed in Business Studies. However:

- no advertising stage is suggested;
- the hospitality model proposes an initial process of counselling (if desired) prior to the information session; and
- a process of preselection assessment (in English and mathematics) and an interview is suggested.

Materials made available to us by the Hotel School at Regency College include:

- a preferred client profile;
- a client profile checklist (of questions similar to those used in the skills assessment test);
- a listing of student assistance services (including advanced English for those learning English as a second language, counselling and study assistance);
- a skills assessment test of 45 minutes duration;
- a student information sheet completed by the student, asking for details of previous education, experience in the hospitality industry and other relevant life or work experience, reasons for wishing to undertake the course and important skills the applicant believes a hotel/restaurant manager needs;
- a list of interview questions;
- an interview appraisal form completed by members of the panel (the industry, staff and students are represented on this panel); and
- a checklist on interview techniques for use by members of the interview panel.
These forms were clearly used as a basis for those developed for the Associate Diploma in Accounting.

A staff member from the Hotel School indicated that the selection procedures had been a useful mechanism for helping the School to select the 30 or so students for the course. (There are about 200 applicants for the available places.) The technique involved assessing those who met the selection criteria. The results of mathematics and English tests were also used. There was less confidence in the interview process.

Overall it was felt that the processes had helped to reduce attrition, although the picture was complicated by changes to the student profile to one which was younger and more academically qualified. These students had also given the hospitality course a higher rather than a lower rating in their applications for post-school studies. It was therefore not seen as a 'second best' choice. It was also believed that staff take their role in identifying and redressing learning difficulties in the student group very seriously. In summary, it was felt that the process was worthwhile for a course with a large number of applicants, but a relatively low student intake.
FIGURE 5.1 Flow chart of proposed entry procedures - Associate Diploma in Accounting (after Thompson and Krzemionka 1990)
EXPRESSION OF INTEREST BY STUDENT IN COURSE

DETAILED COURSE INFORMATION PROVIDED
This would include:
- Course outline
- Essential skills/knowledge attributes - client profile checklist
- Selection criteria
- Selection procedures and dates

MAY INVOLVE INITIAL ACADEMIC COUNSELLING - IF DESIRED BY STUDENT/PARENTS

Alternative Course  Bridging Course

COURSE INFORMATION SESSION
- Student Information Form filled in and lodged with lecturing staff at this session.
- Interview panel - industry and student lecturer
- Preselection assessment English and Mathematics

not accepted  accepted with academic support  accepted

ALTERNATIVE COURSE  BRIDGING COURSE  COURSE ORIENTATION

FIGURE 5.2 The model for the student selection procedures employed for the Diploma in Business (Hospitality Management)
5.5 CREDIT TRANSFER, ARTICULATION AND RECOGNITION OF PRIOR LEARNING

Two major reports have examined the issue of credit transfer (NBEET 1989) and the recognition of vocational training and learning (ESFC 1990). In addition Broadmeadows College of TAFE have produced a series of reports on the recognition of prior learning. All these issues are closely related.

According to the NBEET discussion paper on credit transfer released in 1989 the concept involves:

... the use of a student's previous education and training achievements (both formal and informal) as the basis for entrance into another education or training program, and in some cases to claim advanced standing by way of exemption of part of that program. Credit transfer is a component of the broader based concept of articulation which provides for the specific design of education and training programs in ways which facilitate and maximise opportunities for credit transfer.

(NBEET 1989, p.9)

Recognition of prior learning (or RPL):

... is the acknowledgement of the full range of an individual's skills and knowledge irrespective of how it has been acquired.

(Broadmeadows College of TAFE 1990, p.6)

RPL provides a process of recognising the formal and informal learning that an individual has undertaken and is, hence, a means to the achievement of credit transfer and, more broadly, articulation.

The TAFE systems themselves and the TAFE National Centre have been examining articulation arrangements between TAFE and schools and TAFE and the higher education sector (see also Parkinson 1985, Parkinson et al. 1986). New South Wales TAFE has published details of its articulation arrangements with a number of higher education institutions. In addition NSW TAFE published a guide for their enrolment officers in late 1989 setting out the procedures for granting advanced standing to students enrolling in TAFE courses and listing those subjects in which standard credit or exemption would be granted. Exemption is granted:

- when a student does not have to attend classes or be assessed in a subject because his/her background of study outside ... TAFE, or, his/her experience within commerce or industry is deemed ... to be sufficient to satisfy course completion requirements in the subjects for which exemption is granted. Exemption may be granted to those students who have studied in: non-TAFE educational institutions (e.g. Colleges of Advanced
Education and Universities, ... schools and private institutions; interstate education institutions; and overseas education institutions, and, those students who have had experience in commerce and industry in Australia or overseas. Entry, exemption and selection tests may also be the basis for the granting of exemptions. Students receiving an exemption will have that subject result shown as 'EXEMPT' on their notice of results.

(NSW TAFE 1989, p.1)

This is the same as granting status in a particular subject or module.

Credit is granted:

- when the student does not have to attend classes in a subject or be assessed in that subject and can transfer their grade or marks from an identical or equivalent subject previously completed in ... TAFE to the subject in the course in which they are currently enrolling. This grade transfer is included in the calculation of the award grade. Equivalence is determined ... and means that the same or similar objectives/topics are covered in both subjects.

(NSW TAFE 1989, p.1)

There are essentially two forms for the granting of credit transfer: one is the automatic recognition of the credit or status for formal training programs from whatever source, on the basis of its perceived equivalence to an element or elements of the program in which credit or status is being sought. After such a judgement is made a precedent is set which should enable subsequent applicants with the same training, and similar or better attainment, to be granted credit or status automatically. The second is based on the judgements about all of an individual's previous learning experiences, both formal and informal which, together, entitles him or her to some degree of credit or status. Clearly the status or credit given can be in terms of:

- subject for subject;
- an unspecified block of credit; and
- provisional credit or status until an individual 'proves' him or herself.

Such systems depend on documentation and records to make initial judgements, and testing or other more intensive and demanding procedures are used if the need arises. Strachan and Thomson (1987) have described Australian practices in crediting the previous training and experience of mature aged students in formal TAFE courses. Thomson (1989) developed procedures for the assessment of experiential learning, particularly as it relates to the recognition of technical qualifications from overseas.

In this sense the RPL system developed by Broadmeadows College of TAFE is another manifestation of the processes which the Council on
Overseas Professional Qualifications (latterly NOOSR) uses to assess those claiming status for their overseas qualifications. In many ways the differences in the duration and structure of equivalent qualifications in the different States and Territories presents those trying to determine credit or status with a not dissimilar problem. Indeed a national project funded by the Australian Committee on TAFE Curriculum (ACTC) and being undertaken by staff from the ACT Institute of TAFE is presently examining the similarities and differences between a range of State/Territory Associate Diplomas. The outcomes of this project will be of considerable interest in South Australia and elsewhere.

The development of the RPL system in Victoria

RPL is seen as one of a number of ways of improving flexibility in course delivery.

Broadmeadows College of TAFE’s Principal Report on RPL (1990) suggests a number of potential advantages for the process, including:

- the completion of formal education studies in a shorter period of time;
- elimination or reduction of duplication in learning already acquired;
- efficient response to industry skill shortages;
- fairer access to studies which the individual may wish to undertake;
- increasing career and education options through mobility of training and credentials;
- stronger links between industry and education;
- greater understanding and recognition of workplace training needs;
- cost reduction in education/training provision for industry, education and the individual;
- enhancement of career path options for individuals;
- greater ease in multi-skilling or broad-based skilling; and
- potential reduction in time required for retraining.
The approach is targeted at the individual and is an acknowledgement of the skills and knowledge gained through:

- formal training (conducted by TAFE, another education provider or within industry);
- work experience (including informal training); and/or
- life experience.

It focuses on learning outcomes where an individual's experience is measured against the benchmarks of the outcomes defined by the particular curriculum or the skills and competencies underlying an individual's classification based on a recognised industrial award.

The benchmarks themselves are determined by some appropriate body, such as an Industry Training Council in South Australia, through the curriculum development or industrial relations process or, at the national level, through the national skills standards determined by the National Training Board.

The model itself involves three phases (see Figure 5.3). These phases are request, assessment and review. They are described in detail in the Broadmeadows Report (Broadmeadows College of TAFE 1990). In addition, the final package developed by Broadmeadows will include training and applications manuals for both the education sector and industry.

In broad terms the phases involve:

- a request - the applicant considers whether or not to apply to have his/her prior learning recognised. The applicants need adequate information about the courses for which recognition might be sought and details about the process of RPL itself.

The applicant then may decide to apply for RPL and should apply for and receive an application form plus necessary advice and support. Finally the applicant submits his/her application reflecting and recording their prior learning and attempting to relate it to stated course requirements;

- assessment of the application - which involves an interview focusing on the application and the written information supplied therein, together with any evidence of prior learning. The three steps in this phase involve the interview, a decision by the panel formed to assess the application to:
  - grant recognition;
  - deny recognition; or
  - require further assessment;
and notifying the applicant of the decision reached. A range of information such as references, reports, work samples etc. might be supplied - much like the portfolio which forms part of the selection processes in the South Australian Associate Diploma in Art; and

- if required, review the decision - either because the panel has not been able to reach a decision about whether or not to grant recognition, or the applicant decides to appeal against the denial of recognition. In this case a method of review is selected, the review is conducted, a decision is reached and the applicant is notified.

The Broadmeadows report emphasises strongly the need for training in the use of such a system to ensure that decisions made are as consistent as possible. Moreover, the similarities between the steps in the RPL process and those used in, or proposed for, selection in some South Australian Diplomas and Diplomas are self-evident.

Credit transfer and articulation processes

Credit transfer and articulation arrangements into and out of Associate Diploma and Diplomas are potentially more complex than they first appear. Selection criteria and processes are used to get people into courses, reject them and, possibly, counsel them on suitable alternatives. Once selected, however, the issue of precisely at what point each individual will enter a course arises. It is too simplistic to say that everybody starts at the beginning and keeps going until they either drop out, transfer to another program, exit at an earlier point or complete the program in which they originally enrolled.
We have already established the way in which course structures can provide a range of entry and exit points and considered some of the circumstances which may prevent the full potential of a designed course structure being realised. It now seems appropriate to consider each of the entry points to Associate Diplomas and Diplomas described in Section 4.3 and consider their ramifications for credit transfer and articulation.

**Satisfactory completion of Year 12**

This alternative selection criterion seems to be one of the easiest to judge: an individual has either completed Year 12 successfully or not. Unfortunately this is not necessarily so. Certainly an individual who has completed Year 12 successfully in another State or Territory should be deemed automatically to have met this selection criterion. The difficulty arises when trying to consider what, if any, status they will receive for their Year 12 studies. Negotiations in South Australia have been proceeding between the Department of Employment and TAFE and the Ministry of Education. A joint statement by the two responsible ministers on schools/TAFE cooperation (1989) suggested that:

> To facilitate the transition of people from secondary education to further study and training, the various education providers must co-operate and co-ordinate the delivery of their services...

> To realise this purpose, the education and training providers, with other certificating and approving bodies, must ensure that these pathways provide opportunities for people to move readily between courses of study and between employment and studies...

> Co-operation ... is essential to ensure articulation of courses and awards and to facilitate transfer of credit for completed studies.

(Joint Ministerial Statement 1989, pp. 2 and 3)

In addition:

> Transfer of credit will operate each way between the secondary sector and Department of Employment and TAFE in courses, subjects and at levels of study to be negotiated and agreed formally between the two sectors.

> Normally full credit will be granted, unless there are components of curriculum uncompleted, such as on-the-job or workshop experience, which would justify provisional credit.

(Joint Ministerial Statement 1989, p.4)

Already there has been some agreement at the school/TAFE interface about subjects which can be mutually recognised as equivalent. A
number of these are in the business studies area. As the curriculum document for the Associate Diploma in Accounting notes:

As from 1 January 1988, the Director-General of TAFE will grant status to students enrolling in TAFE Certificate courses, on the basis of achievement at prescribed levels in nominated subjects accredited by SSABSA at Year 12 level. No status is available in the Associate Diploma for Year 12 subjects.

(Curriculum Document, Associate Diploma in Accounting, revised 1989, p. 65)

However, the practice of granting no status for Year 12 subjects in the Associate Diploma appears anomalous when compared with practices in the Associate Diploma in Dental Technology (p.75). Moreover, if a person enrolled in a Certificate course, obtained status for a Year 12 subject in that course and subsequently enrolled in the Associate Diploma would that status be withdrawn? SA DETAFE does not appear to have any clear and consistent policy in this area.

There have also been a number of cases where mutual arrangement could not be negotiated, for example:

- automotive;
- technical studies;
- electrical/electronics; and
- dance/drama.

In some cases, studies at Year 12 are seen as useful, or are a pre-requisite to TAFE studies such as Associate Diplomas - but they do not attract any credit in these awards.

**One year equivalent full-time study**

This entry criterion was, until recently, satisfactory completion of Year 11 and another course (usually a 3212 or 3222 Certificate) which amounted to a year's equivalent full-time study. The current entry conditions recognise practical experience as part of this time component and note that the one year of study (or study and experience) would be of a bridging supplementary nature to ensure an adequate preparation to achieve the educational objectives of the course.

These conditions are, quite properly, open to considerable interpretation. This is both a potential strength and weakness.

It certainly offers a distinct advantage in that it allows potential students with a diverse range of backgrounds the opportunity to be selected into an Associate Diploma or Diploma. Its major weakness (paradoxically) is that the criteria are open to a variety of interpretations and, because of the inconsistencies in TAFE's present selection procedures, these interpretations may lead to some students
being selected in some courses (and at some colleges) while they might be rejected at others. This is neither fair or equitable.

For most Associate Diplomas and Diplomas, however, this is not as great a problem as it is with some of TAFE's other larger and more ubiquitous programs.

Nevertheless, clear guidelines need to be developed to make the application of such criteria as uniform as possible. Moreover, there needs to be, and is, an understanding of the separation of the steps in the whole process of selection from:

- application;
- eligibility;
- selection; and
- enrolment (enters course).

To be eligible to be selected may not, in certain awards, ensure selection.

**Whole or part completed awards of SA DETAFE**

Individuals in this category may have completed a Certificate, Advanced Certificate, Associate Diploma or Diploma prior to applying for entry. In some cases such previous study will help to determine their eligibility for selection (see above). Alternatively, they may have completed part of a course and use this to assist their claims for eligibility and selection, and (possibly) to enter the course with some advanced standing.

As we have already seen there are many cases where Associate Diplomas are either linked (Section 4.3) or have whole or part awards subsumed within their structure (Section 4.3) or (at the very least) contain subjects which are common to other TAFE awards.

The automatic granting of subject-for-subject credit is not a difficult process. It merely depends upon having a listing of a student's previous studies so that an assessment of credit can be made. This record of credit given should then go on the student's record for that course (and at that college). In one of our case studies (see Chapter 3) we found that no permanent record was maintained of the student's record prior to entering the college and course concerned. It was therefore impossible for us - and the college - to document the student's full record of relevant study.

1. This is what one of the researchers has referred to as the 'John West principle of student selection' - 'It's the students that College X rejects that makes College X the best' (or words to that effect!)
There are two issues of concern however. The first is the extent to which previous subjects (some possibly taken a number of years ago) might be still be seen as acceptable for granting status in a current award. Should there be sunset clauses on old subjects from previous awards to prevent them being used for credit purposes later? It is tempting to answer yes - but no is really the most appropriate answer.

The reason for this is that students may have passed the earlier subject and have extensive industry experience. Clearly, then, the decision about whether credit should be granted goes beyond the application of rules. These need to be flexible to ensure that students are treated fairly and equitably and so:

- giving automatic credit,
- using a challenge test, or
- (if the student wishes) enrolling them in the subject based on provisional credit or status and seeing how he/she performs,

are three potential strategies which could be used. The first two give status or credit almost immediately. The final one allows the student (and the college) time to determine that the student possesses the necessary knowledge and skills. At that point credit could be given to allow the student to 'fast track' subjects and/or other elements of the course.

The second is the issue of the curriculum document and/or the colleges teaching them requiring that only a certain amount of an award can be claimed as status or credit in this award. For example, the curriculum document for the Diploma of Music states:

No student will be granted status in more than 30% of the course where they hold no other awards and 50% when another similar award is already held.

The curriculum document for the Associate Diploma in Banking and Finance points out that:

Each application for credit, or status for entry into the course, or for subjects within the course will be considered individually by Head of School, Senior lecturer/lecturers concerned. No student will in general (our emphasis) be granted status in more than 50% of the course.

No such requirement is documented in the curriculum document for the Associate Diploma in Accounting (a closely related course - see Section 4.3). The Associate Diplomas in Banking and Finance and Accounting have 50% (432 hours) of their subject matter in common.

If a student had completed 2 years of a 3 year degree in Music Performance and wished to transfer to the Diploma in Music, would they only get credit for 30% of what they had completed? If a student
had almost completed an Associate Diploma in Banking and Finance interstate but was transferred by their bank to South Australia would they only receive credit for 50% of the course? (It may be hard to convince the bank that banking and financial practices are so different between States and Territories.)

Moreover, if students in the Associate Diploma in Accounting chose as their elective, 'supervision' or (as they are allowed in the Accounting course) an elective 'from any other approved subject from any other business studies award' (Curriculum document, p.6), then the students would have 486 hours or 56% of the Associate Diploma in Banking and Finance. Would that 6% of credit be withheld? The words 'in general' allow some flexibility, but would that flexibility be consistently applied? The fact is that these are restrictive practices which, potentially, reduce flexibility and the potential to provide a range of entry points by giving full credit for equivalent studies undertaken elsewhere.

**Other credit transfer and articulation points**

Other points of entry to Associate Diplomas or Diplomas may result from whole or partial completion of:

- interstate or overseas awards at the TAFE or equivalent level; and
- qualifications completed in whole or part in the higher education sector either in Australia or overseas.

These are readily dealt with as long as adequate documentation is available to determine what credit was possible. At the TAFE level, credit transfer and articulation should certainly be facilitated if the student has studied interstate and, on the basis of those studies, is seeking credit in a course in SA DETAFe which is based on the same national common core curriculum.

The issue of the amount of credit or status becomes more problematic when documentation is poor or not available - or where the training and experiences are not formalised. The introduction of the Training Guarantee will mean that training programs offered in industry should become more formalised and better documented. Increasingly, industry will be seeking articulation for their training with TAFE and other providers of accredited courses. They will also be seeking accreditation for their own programs, or to be recognised as providers of accredited programs such as Associate Diplomas in whole or part.

Relevant work and life experience is, perhaps, hardest to determine because there is likely to have been no formal program of study or skills acquisition, yet the necessary knowledge, skills and attitudes for the course in which credit is sought are nonetheless valid.
Documentation of relevant experiences and formal testing represent the range of options available to help assess the knowledge and skills already held, and therefore the entry point for an individual. The RPL processes outlined earlier which can be used to recognise previous informal and formal learning together with counselling will be important steps in opening up present Associate Diplomas and Diplomas to a wider range of entry points.

5.6 SUMMARY AND CONCLUSIONS

In the previous section of the report we were concerned with formalised structures - the ways in which courses could be designed to provide a range of entry and exit points. In this present section we have been more concerned with the other major issues in relation to entry points, which are:

- selection processes; and
- recognition processes leading to an appropriate level of credit transfer and articulation.

Broadly, the conclusions which can be reached and associated recommendations are:

- TAFE in South Australia is moving towards more rigorous and equitable selection processes for its courses. Already a number of Associate Diplomas and Diplomas use the procedures similar to those outlined in the Department's 1987 policy document. However, these procedures need to be universally applied;
- selection procedures need to be supported by a formalised process for recognising prior learning, whether that learning was formally acquired or not. To that end it is recommended that:
  - the RPL system developed at Broadmeadows College of TAFE be investigated and adopted (with possible adaptations) if appropriate;
  - a policy be prepared relating to:
    - recognition of formal prior learning,
    - recognition of on-job training and work experience, and
    - recognition of life experience;
  - the program management groups (or some other appropriate body) develop and maintain a standard series of exemptions or automatic credits for use by those counselling students on their application
and/or following their selection and enrolment to a particular course. (These would include programs offered by private providers as well as schools, TAFE and the higher education sector);

- standardised assessment procedures be developed for use in assessing prior learning and granting appropriate credit; and

- removing unnecessarily restrictive practices which artificially limit the amount of credit or status which a student can bring to a program and which, in turn, possibly forces such a student to repeat work or relearn competencies already acquired.
6. SUMMARY AND CONCLUSIONS

6.1 INTRODUCTION

This study for the South Australian Government was established to:

- gather data on student and graduate numbers in the Associate Diplomas and Diplomas offered by SA DETAFE;
- document initiatives in multiple entry and exit in such courses;
- propose other possible approaches; and
- investigate and report problems with providing multiple entry and exit points and suggest possible solutions.

Because of the dynamic nature of TAFE and its external environment at present the circumstances in which the project was conceived have changed markedly during its conduct and by the time it was completed. The process of award restructuring is in full swing in a range of industries, and is being actively contemplated in others; the Australian Council of Tertiary Awards has been replaced by a national register (RATE); the National Training Board has been established and the drive towards standards-based training has increased in momentum. Finally, an enquiry has been established into the charging of fees for TAFE award courses (the Deveson enquiry).

The present study was established in a context of:

- concern over the lack of flexibility in the structure of TAFE awards at the Associate Diploma and Diploma levels;
- (apparently) low graduation rates from Associate Diplomas and Diplomas;
- a lack of knowledge about the dynamics of student movements into, out of and within such awards; and
- award courses (such as Associate Diplomas and Diplomas) being free, whilst other non-accredited programs are offered on a fee-for-services basis so that individuals may have contributed to course attrition by wishing to complete part of award at little or no financial cost.

In gathering information we have consulted with a range of individuals both in South Australia and interstate, conducted a literature review, analysed the curriculum documents for a range of current Associate Diplomas and Diplomas, discussed proposed course structures with appropriate staff in the Curriculum Services Division of SA DETAFE
and, finally, analysed student records and other data as well as interviewed a range of current students, withdrawers and graduates in two courses selected for case study.

A range of conclusions can be drawn which relate to:

- the information gathered on enrolment, retention, attrition and graduation (the statistics);
- the structures of the courses (the structures); and
- (finally) the arrangements for articulation, credit transfer and the recognition of prior learning (the articulation).

6.2 THE STATISTICS

The Department of Employment and TAFE needs, and is working towards, a better management information system. It was clear from our work that the present systems of information gathering and reporting of student data were inadequate, particularly if their intended purpose is better management.

Presently, there is no uniform student records system at the college level. The data that were available were often in a form that was useful for reporting, but not for analysis or for supplying any management information. Statistics on student attrition in most cases (other than some smaller programs) were unavailable, even though such attrition has been recognised as an important performance indicator. This has arisen because of a lack of adequate formalised withdrawal procedures. With moves towards modularised course structures and multiple entry and exit points, the problems of collecting attrition data will be compounded. Statistics on enrolment and graduation were available in most cases, and did not present the researchers with much difficulty. Retention data were a greater problem, because retention does not merely represent initial enrolments less withdrawals. It is a far more complex dimension.

The statistics we collected pointed to several trends:

- graduation rates for all programs are generally low, with courses such as accountancy, engineering and building exhibiting lower rates than other courses such as hospitality and tourism;
- attrition from technical courses was significantly higher than for less technical ones;
- retention, based on 'student hours' data was high for all programs. There was also a trend toward increased retention (in terms of student enrolment numbers) over time, with recent retention figures being higher than previously. Retention was also consistently higher for less technical areas than more technical ones.
Several conclusions can be drawn from the case studies:

- Student withdrawal from courses tends to occur early in the program, usually within the first 2-3 semesters;
- The major reasons for withdrawing relate most commonly to either course difficulties or financial considerations; and
- Students interviewed generally saw merit in introducing courses with more flexible entry and exit points.

In terms of what might be done to improve the information available to the system in general, but the colleges in particular, it is recommended that:

- Enrolment procedures be amended if necessary, to gather information on previous TAFE-level study, college, course etc. - so that students do not accumulate a plethora of enrolment numbers. (In the data we examined some students enrolled in the one course at the one college had a number of enrolment numbers due to typographical errors and inadequate cleaning of the database.) Another alternative is introducing 'smart cards' which contain a student's academic records, or having the issue of enrolment numbers centrally controlled. The important outcome is that students (ideally) have only one enrolment number for their entire career in TAFE and that (for the purposes of management information) can be recognised as having first enrolled in a course at a particular time and college;
- A working group be established to clarify, if necessary, the definitions of:
  - Enrolment;
  - Attrition;
  - Retention; and
  - Graduation.

The terms retention and attrition are, in fact, applicable to a number of different levels and there needs to be a clear and uniform understanding and application of their meaning across the system;

- Task forces at the college and program management group levels be established to develop a uniform strategy for student record collection and management which will be useful:
  - At the college level; and
  - Centrally, including both central office and the program management groups.
This should enable information to be made available on:

- enrolment patterns for particular courses and program areas;
- student movement into, out of and between courses and particular program areas (this includes attrition and student progress data at a variety of levels and would document students' study patterns);
- student movement between colleges in the same or different courses and program areas;
- retention and graduation rates at:
  - course level;
  - college level;
  - program level; and
  - TAFE level;

  to be measured and documented;

- computer-based and other appropriate record gathering, keeping and manipulation systems be devised and implemented once the strategy has been considered and agreed to;
- the data capture and analysis be undertaken on a cohort basis rather than as it is at present. The present system merely examines inputs and outputs without providing any information of the dynamics which exist between them; and
- that a staged approach be adopted to development and implementation of an integrated management information system, involving full consultation and moving from the simple (say a relatively small Associate Diploma or Diploma) to something more complex - for example the Associate Diploma in Accounting. This latter problem would have to be considered at a PMG or system level: the former could be an internal college project, but conducted within the framework of the agreed strategy.

It is likely that the concerted effort made in the development of management information systems in SA DETAFE has meant that most of these recommendations have been at least considered if not already acted upon, independent of this report.

6.3 THE STRUCTURES

It is clear from an inspection of curriculum documents that there has always been a degree of flexibility in structures and that a range of entry and exit points already exist in a number of Associate Diplomas and Diplomas by means of linked and nested arrangements (see section 4.3). However, there is scope for further flexibility by:
• breaking courses into viable sub-units (such as short accredited courses, statements of attainment or endorsements) to allow individuals to gain at least partial credit in a higher award, yet complete an award which is recognised in its own right; and/or

• developing a series of generic subjects or modules (as in the national metals project) which can be combined in various ways to produce an award course. Such a course is made up of core, major strand and elective studies (or options) according to an approved formula. Awards at various levels would be dictated by the appropriate formula (how many of which types of subjects or modules need to be taken) which should provide articulation yet allow flexibility. If minimum criteria for (say) an Associate Diploma were not met, a student's statement of record would be assessed in terms of the formula for the next lowest level of award. It would also allow particular subjects or modules to be upgraded readily and others to be added or deleted to meet emerging needs without necessarily affecting the integrity of particular awards.

Both these proposals, individually or in combination, would serve to balance the sometimes conflicting roles of meeting needs and obtaining approved credentials.

Nevertheless, whatever was proposed would need to be realistic in terms of the vocational and training requirements the programs were designed to address.

The two case studies reported in Chapter 3 did not reveal any apparent and 'natural' exit points. This might suggest that there were no watershed sub-awards contained within either the Diploma in Business (Hospitality Management) or the Associate Diploma in Accounting. It is possible (in the case of Accounting) that time and other resources did not permit such watershed exit points and sub-awards to be revealed. In short, if they are there, we just didn't find them. Alternatively it is possible that insufficient attention has been given to the possibility of creating useful programs of study within the overall framework of these and other Associate Diplomas and Diplomas. The very limited number of interviews suggest, however, that most people intend to persist through to the end of the course in which they enrol, but a variety of circumstances may actually, or potentially, prevent them completing a full award. Some graduates and current students suggested that they had contemplated withdrawal. Students also saw merit in watershed awards within larger awards.

The development of more sophisticated student record systems may enable DETAFE to determine whether or not potential entry and exit points exist. If undertaken with the presently available data it would take considerable time and effort to obtain and manipulate the information necessary - particularly for the large business studies
awards. Alternatively such 'natural' points may not exist. Rather DETAFE may need to be more proactive in the way it packages awards, creating larger awards, and a range of smaller awards within each, that make industrial sense, and give people 'parcels' of skills upon which they can build. Essentially, however, this is a matter of good 'market research'.

An alternative view of present structural arrangements is that TAFE programs, while having some degree of flexibility designed into them are, in fact, prevented from exploiting the full potential of the curriculum design because of logistical or other constraints. In some cases these constraints will be real; in others they are the manifestations of a restricted view of the available alternatives for turning design potential into practice. In short, the present climate requires that TAFE management and staff, particularly at the college level, be as creative as possible in their use of physical, fiscal and staff resources - so that flexibility is enhanced (including providing more flexible and creative course design and delivery systems). For their part those in central office must place as few restrictions as possible on those in the field thereby enabling them to exercise their creativity. In addition central office can act as a bridge which enables creative and exemplary practices to be disseminated and considered more widely.

While a number of these innovations have probably already been considered or even implemented it is recommended that:

- the Curriculum Services Division's newsletter be used to initiate and maintain debate in the area of flexible approaches to course design, particularly the provision of a variety of structured entry and exit points where appropriate. (This debate might also be supported by a Statewide staff development program);

- Program Management Groups examine the issue of flexible design and the provision of a range of entry and exit points to programs in this area and report the extent to which such initiatives could be fostered to the Planning and Program Management Committee (PPMC), for example;

- Program Management Groups implement studies to determine factors which are impeding and assisting the implementation of the range of entry and exit points available in their program areas and, in collaboration with Curriculum Services Division, industry advice and college input, propose ways (if appropriate) in which better use could be made of existing fiscal, physical and human resources to allow programs to achieve their design potential.

6.4 THE ARTICULATION

The previous chapter (Chapter 5) dealt with the issue of articulation,
credit transfer and the recognition of prior learning. While not directly related to course structure, they represent other less formal, but more variable, entry points for programs such as Associate Diplomas and Diplomas.

In 1987 SA DETAFE developed a comprehensive student selection policy which was used as an exemplar of good practice in Powles' (1990) work on selection for high-demand TAFE courses. TAFE itself has also been doing some work, particularly in the areas of the TAFE/school interface (which could affect entry points for Associate Diplomas and Diplomas), and the TAFE/higher education interface - which would normally only concern those who had completed a substantive award already.

The major issue here is student selection and entry, but entry at what point? Increasingly there is pressure to ensure that work already completed elsewhere is not repeated or working to attain competencies which are, in fact, already held. Accordingly a natural extension of the existing processes of student application, selection and enrolment is the recognition of prior learning. While this concept is by no means new (TAFE and other sectors of education have been doing such things for some time - albeit in an ad hoc and potentially inequitable way) and the processes already in use for recognising overseas qualifications are very similar to those proposed in Victoria for use in recognising prior learning (Broadmeadows College of TAFE 1990). However TAFE in South Australia needs a uniform and well understood process for recognising such prior learning - no matter what the source.

In South Australia the Hotel School at Regency College has been instrumental in developing testing procedures to recognise in a formal sense the skills that experienced but unqualified chefs hold. In the same way testing procedures in the recognition of child care skills have been proposed. Therefore to improve articulation, improve equity and properly recognise the existing skills of those who apply for and are selected into TAFE courses a comprehensive approach is needed, including:

- applying the current selection policy as widely as possible and extending it to cover the recognition of prior learning through the selection and enrolment process, or after enrolment has taken place;

- listing of standard exemption or credit transfer arrangements to be used for each accredited course (and which is updated on the basis of new precedents) so that articulation arrangements are as equitable as possible;

- removing restructure practices which unnecessarily or unreasonably limit the range of points at which students can enter programs. In addition due recognition should be given for their previous study, their skills and their work and life experience. (This will include better recognition of the training of
private providers and their incorporation into standard articulation arrangements, including credit transfer and exemptions;)

- the critical investigation of the RPL approach developed in Victoria with a view to adopting it (modified if appropriate) or developing a similar approach for use in South Australia; and

- the training of college staff in the counselling, student selection role and involving them in the development of suitable RPL procedures. Training should then be provided to staff involved in student selection and enrolment in the RPL procedures devised.

Implementation of many of the recommendations in this chapter and those made in the summary and conclusions sections of the other chapters should enable the South Australian Department of Employment and TAFE to take account of the dynamics of student movement into, out of and within its Associate Diplomas and Diplomas and, through surveys of client satisfaction and other research, establish curriculum structures, enrolment procedures and processes for recognising prior learning which give students more flexibility in structuring courses to meet their own, their organisation's and their industry's needs. This will include the provision of a greater range of formal and informal entry points, as well as a greater number of exit points than at present for many awards.
REFERENCES


Department of TAFE, South Australia. (1988). Corporate Objectives and Strategic Priorities Document. Adelaide: South Australian Department of TAFE.


APPENDIX I: ORIGINAL PROJECT BRIEF

DRAFT CONCEPT PROPOSAL

APPROACHES TO PROVIDING MULTIPLE ENTRY AND MULTIPLE EXIT POINTS FOR SA TAFE ASSOCIATE DIPLOMAS

INTRODUCTION

The assumption that all TAFE associate diploma students should complete a whole, unbroken course has no basis in practice and should have no basis in principle. In practice, only a minority of students complete an (unbroken) course; and the important principle of "articulation" (whereby previous, relevant, successful studies should have some currency when enrolling for new courses) should ensure that there are multiple entry points. Recent federal government reports support the principle of articulation; and recent industrial award agreements will encourage multiple entry and multiple exit as a feature of technician and para-professional courses, not just associate diplomas. Therefore, the research is timely.

The intention, then, is to achieve flexibility both in entry and exit points, and in choice of subjects or modules within and across disciplines. The notion might be built around blocks of employable skills where individuals can undertake a course of study which has immediate application in their work. Subsequently their work or aspirations may change, but their previous experience can be built on in order to acquire additional qualifications which, eventually, may build to a series of qualifications which are recognised as being at associate diploma level. Thus the project might examine the extent to which current associate diplomas in SA TAFE can be "unpacked" into a number of component awards or, to look at it another way, the packages of programs and learning experiences which, if taken together (or packaged), may be seen as constituting an associate diploma. It may be that such approaches are not appropriate for all TAFE associate diplomas.

AIMS

1. To document student and graduate numbers in the current South Australian associate diplomas and diplomas.

2. To document initiatives for multiple entry and exit point structures for TAFE associate diplomas and advanced certificates (for example there have been some initiatives in the metals industry in SA. There may also be useful examples which could be gleaned from TAFE authorities interstate).
3. To propose approaches for multiple entry and multiple exit points in TAFE associate diplomas using selected courses as case studies.

4. To investigate and report the problems associated with multiple entry and multiple exit and to suggest solutions to these problems, with a special emphasis on course structuring.

METHODOLOGY

A project advisory group will be formed. This should be made up of the Centre's project officer, a college based person involved in the development and delivery of associate diplomas, a relevant member of the curriculum development staff, a person associated with course accreditation and an individual with a planning/research background. The committee should be chaired by an appropriate officer within DTAFE. The project officer should maintain a close liaison with DTAFE staff, spending at least part of the project period at the SA TAFE Head Office.

The first objective will be achieved by:

- gathering and documenting the statistics held by SA TAFE Head Office on enrolment and graduate numbers in the associate diplomas offered by SA TAFE;
- contacting colleges running associate diplomas to obtain more detailed statistics and information about student drop-out, persistence and graduation.

The project will use this information, along with other data and reports to gain some insight into the major points of (and reasons for) student exit.

The other three project aims will be achieved using a variety of information gathering techniques which could include:

- documenting and analysing any current and relevant initiatives in developing multiple entry and/or exit points for courses both in SA TAFE and interstate;
- analysing appropriate syllabus and other relevant documents;
- interviewing, as individuals or groups, a selection of:
  - TAFE lecturing staff;
  - TAFE Head Office staff, including curriculum developers and those associated with course accreditation;
  - ACTA;
  - students and graduates of selected associate diploma courses;
representatives of industry/commerce in relevant areas - including employee and employer organisations, members of course advisory committees and relevant associations who may grant recognition to holders of relevant TAFE awards.

The project may produce a short series of discussion papers which will be disseminated within SA TAFE and to other interested parties. These could be used as a focus for a single meeting (or series of meetings) to discuss the proposals and the issues and problems associated with their adoption.

A final report detailing the project's process and findings would be produced for presentation to the Director-General. This report would aim to be both short and clear and would:

- discuss the viability of the concept of multiple entry and exit points;
- report the problems associated with multiple course entry and exit and suggest likely solutions; and
- propose the most suitable approaches for multiple entry and exit if the approach appears viable.

It is likely that the project would work best if the associate diplomas and other courses were carefully selected "case studies" which would reflect a range of the likely issues which would arise in developing such an approach to course exit and entry.

TIMETABLE

The project will start in mid-1989 (although the Advisory Committee may meet during the first half of the year in order to set the project in train). It will be completed by the end of 1989.
APPENDIX 2: A DESCRIPTION OF MAJOR AND MINOR STREAMS

<table>
<thead>
<tr>
<th>STREAM 1000:</th>
<th>COURSES FOR RECREATION, LEISURE AND PERSONAL ENRICHMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Courses in this category are those offered for personal enrichment and enjoyment. Other outcomes, especially vocational, are not the intent of the course. These courses can include technical content areas such as welding, typing, woodworking and agriculture as well as handicrafts, hobbies, life skills, and self expression.</td>
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<table>
<thead>
<tr>
<th>STREAM 2000:</th>
<th>COURSES FOR ENTRY TO EMPLOYMENT OR FURTHER EDUCATION</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Courses in this category are those offered to provide remedial education or other preparatory activities to enable participation in subsequent educational or social settings. These courses are subclassified as follows:</td>
</tr>
<tr>
<td>2100</td>
<td>Basic education and basic employment skills - studies which aim to achieve basic skills and standards (e.g. literacy and numeracy, EPUY, career exploration, link course).</td>
</tr>
<tr>
<td>2200</td>
<td>Educational preparation - preparation for further education (e.g. certificate entrance, pre-certificate, tutorial mathematics for certificate students, Tertiary Orientation Program, Diploma entrance etc.).</td>
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<thead>
<tr>
<th>STREAM 3000:</th>
<th>INITIAL VOCATIONAL COURSES</th>
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<tbody>
<tr>
<td></td>
<td>These courses are subclassified as operatives, skilled, technician/paraprofessional, and professional. In the cases of stream 3200 they are further sub-divided.</td>
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<tr>
<td>3100</td>
<td>Operatives - courses which prepare students for vocations requiring a level and range of skills less than that normally required for a tradesperson, e.g. plant and machine operators, cleaners etc.</td>
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<tr>
<td>3200</td>
<td>Skilled - courses offered in a particular vocation, trade or craft requiring a high degree of skill usually in a wide range of related activities, performed with a minimum of direction and supervision.</td>
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<tr>
<td>3210</td>
<td>Courses for recognised trades including courses which grant partial exemption to recognised trade courses.</td>
</tr>
<tr>
<td>3211</td>
<td>Courses which grant partial exemption to recognised trade courses, e.g. pre-apprenticeship and pre-vocational (trade based) courses.</td>
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<tr>
<td>3212</td>
<td>Complete trade courses.</td>
</tr>
<tr>
<td>3220</td>
<td>Other skills courses - skilled courses other than those for recognised trades.</td>
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<tr>
<td>3221</td>
<td>Courses which grant partial exemption to other skills courses, e.g. pre-vocational (non-trade bases).</td>
</tr>
<tr>
<td>3222</td>
<td>Complete courses.</td>
</tr>
<tr>
<td>TAFE AWARDS</td>
<td>CHARACTERISTIC</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>Diploma</td>
<td>professional</td>
</tr>
<tr>
<td>Associate Diploma</td>
<td>para-professional, higher technician</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>post-trade (or trade level)</td>
</tr>
<tr>
<td>Certificate</td>
<td>operative (sub-trade) or trade or trade level</td>
</tr>
<tr>
<td>Endorsement (Initial TAFE Courses)</td>
<td>'subsequent' (post-initial)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Statement of Attainment (Other Courses)</td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>basic education skills or educational preparation</td>
</tr>
<tr>
<td>No Award</td>
<td>recreation, leisure, enrichment</td>
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</tbody>
</table>

N.B. - every course must have a stream, and an award must be appropriate to a course with a particular stream. However, because a course is in a particular stream does not mean that any award will be given on its completion - it may be a non award course.

Generic Titles:
- Diploma and Associate Diploma awards
  - Applied Science (Dip. or Assoc. Dip. App. Sc.)
  - Architecture (Dip. or Assoc. Dip. Arch)
  - Arts (Dip. or Assoc. Dip. A.)
  - Business (Dip. or Assoc. Dip. Bus.)
  - Education (Dip. or Assoc. Dip. Ed.)
  - Engineering (Dip. or Assoc. Dip. Eng.)
  - Health Science (Dip. or Assoc. Dip. Hlth Sc.)
  - Law (Dip. or Assoc. Dip. Law)
  - Music (Dip. or Assoc. Dip. Mus.)
  - Social Science (Dip. or Assoc. Dip. Soc. Sc.)
3300 Trade technician/trade supervisory/or equivalent courses which provide skills at a level beyond trade or trade-equivalent skills and may include skills needed for supervision, e.g. mastercraftsman, trade technician.

3400 Paraprofessional/technician - courses that usually cover a breadth of specialised skills leading to employment in paraprofessional vocations. The work of graduates requires the exercise of judgement and may involve specialist functions. This work is carried out primarily in support of professionals or other paraprofessionals or independently, e.g. the Queensland Certificate of Management course.

3500 Paraprofessional/higher technician - higher level courses preparing people for para-professional vocations usually at higher occupational levels than those of Stream 3400 courses, e.g. Higher Certificate, Fellowship Certificates.

3600 Professional - a course at a higher level than a Higher Technician Course.

STREAM 4000: COURSES SUBSEQUENT TO AN INITIAL VOCATIONAL COURSE

These courses comprise those offered subsequent to other courses or equivalent on-the-job experience. They are further classified at the level at which the skills are taught as follows:

4100 At the operative level
4200 At the skilled level
4300 At the trade technician/trade supervisory/or equivalent level
4400 At the paraprofessional/technician level
4500 At the higher paraprofessional/higher technician or higher level
APPENDIX 3: LISTING OF CURRENT ASSOCIATE DIPLOMAS AND DIPLOMA OFFERED BY DETAFE IN SOUTH AUSTRALIA

Associate Diploma in Accounting
Associate Diploma in Animal Technology
Associate Diploma in Architectural Drafting
Associate Diploma in Art
Associate Diploma in Banking and Finance
Associate Diploma in Building Technology
Associate Diploma in CIMM
Associate Diploma in Dental Hygiene
Associate Diploma in Electrical Engineering
Associate Diploma in Electronic Engineering
Associate Diploma in Geoscience
Associate Diploma in Health Surveying
Associate Diploma in Hospitality Management
Associate Diploma in Local Government Administration
Associate Diploma in Mechanical Drafting
Associate Diploma in Mechanical Engineering
Associate Diploma in Music Teaching
Diploma in Music
Associate Diploma in Production Engineering
Associate Diploma in Refrigeration and Airconditioning
Associate Diploma in Structural Drafting
Associate Diploma in Survey Drafting
Associate Diploma in Surveying
Diploma in Tourism