ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION

VOLUME 2

APPENDICES

THE ENQUIRY PAPERS
## THE ENQUIRY PAPERS

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PEOPLE AND GROUPS CONSULTED

Enquiry Reference Groups, Working Parties and Committees: Membership and Meetings

Record of Enquiry Consultations
CONSULTATIVE COMMITTEE

The Consultative Committee met on 8 occasions. Its membership was as follows:

Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education (Chair)
Mr Geoffrey Bean, Principal, Prince Alfred College (to October)
Ms Kate Castine, Studies Directorate, Education Department (from September)
Ms Judy Elton, Working Women's Centre
Dr Viv Eyers, Executive Director, Senior Secondary Assessment Board of SA
Mr Neil Jackson, Chief State Manager, Westpac
Ms Jan Keightley, Studies Directorate, Education Department (to September)
Dr John Mayfield, Education Department (April)
Father John Neill, Principal, Blackfriars Priory School
Professor Colin Power, School of Education, Flinders University of SA
Mr Colin Read, Principal, Noarlunga College of TAFE
Dr Tony Shinkfield, Principal, Collegiate School of St Peter (from October)
Dr Bob Sumner, SA College of Advanced Education
Ms Pat Thomson, Principal, Paralowie R-12 School

REFERENCE GROUPS

The Parent Reference Group met on 5 occasions. Its membership was as follows:

Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education (Chair)
Mr Kon Fotiadis, Ethnic Schools Advisory Committee
Mrs Lesley Johnson, High School Councils Association of SA Inc
Mrs Margaret McKenzie, South Australian Association of School Parents' Clubs
Mr Terry Nichols, Federation of Parents and Friends Associations of Independent Schools of SA Clubs
Ms Liz Pryzibilla, Federation of Parents and Friends Associations of South Australian Catholic Schools
Mrs Dot Sandland, Isolated Children's Parents' Association, SA
Mr Ian Wilson, South Australian Association of State School Organisations Inc

The Teacher Reference Group met on 7 occasions. Its membership was as follows:

SA Institute of Teachers nominees:

Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education (Chair)
Ms Leonie Ebert, Principal, Christies Beach High School
Mr Jim Dellit, Principal, Smithfield Plains High School
Mr George Hackett, Riverland College of TAFE
Ms Margaret Howard, Deputy Principal, Gepps Cross High School
Ms Susan Hyde, Port Augusta High School
Mr Don Jarrett, Mawson High School
Mr Rob Mutton, Christies Beach High School
Ms Tanya Rogers, Deputy Principal, Elizabeth High School
Association of Teachers in Independent Schools nominees:

Mr Roger Marshman, Prince Alfred College
Mr Michael Moschou, Kildare College

Chairman's nominees:

Ms Eleanor Ramsay, Equal Opportunities Officer, Education Department
Mr Bob Stunell, Pennington Professional Centre, Education Department

The Student Reference Group met on 4 occasions. Its membership was as follows:

Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education (Chair)

State Council of Students nominees

Mr Nick Bishop (Concordia College student)
Ms Jolanta Ciuk (Christies Beach High School student)
Ms Jodie Gower (Le Fevre High School student)
Mr Troy Jackson (Port Augusta High School student) alternated with
Ms Bronwyn Andrews (Port Augusta High School student)
Mr Peter Neilsen (Wirreanda High School student)
Ms Beverley O'Brien (The Heights School student)
Mr Robert Stevens (Le Fevre High School student)

Higher and Further Education Student Association nominees

Ms Clare Buswell, Students' Association of Flinders University
Mr Peter Darwin, Roseworthy Agricultural College Student Union Council
Mr Michael Fox, Students' Association, University of Adelaide
Mr Steve Jenkins, Students' Association, Regency College of TAFE
Ms Christobel Parham, SA Institute of Technology Union
Ms Lucy Schulz, Council of the South Australian College's Student Organisations

The Tertiary Education Reference Group met on 7 occasions. Its membership was as follows:

Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education (Chair)
Mr Brian Abbey, University of Adelaide
Professor Brian Abrahamson, Flinders University of South Australia
Mr John Chalklen, SA College of Advanced Education
Dr Graham Elford, University of Adelaide
Dr Trevor Greenwood, South Australian Institute of Technology
Mr David Hester, Chairman of the Joint Matriculation Committee
Dr Michael Jones, Flinders School of Medicine
Ms Alison Mackinnon, South Australian Institute of Technology
Dr Susan Magarey, University of Adelaide
Mr Neil Oxenberry, South Australian Institute of Technology
Mr Bob Scholefield, Department of Technical and Further Education
Mr Gordon Tasker, Department of Technical and Further Education
Dr Norman Thompson, SA College of Advanced Education
The Employer/Union Reference Group met on 7 occasions. Its membership was as follows:

Mr Walter Stamm, Bishop, Stamm & Associates (Chair)
Mr Horrie Aspinall, Engineering Employers Association, SA
Ms Vivienne Colmer, Australian Clerical Officers Association
Mr Malcolm Dobie, Engineering Employers Association, SA
Mr Glen Edwards, Office of Employment and Training
Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education
Mr Chris Guille, State Bank of South Australia
Ms Michelle Hogan, United Trades and Labour Council
Mr Brian McCormick (retired Personnel Manager, Bridgestone)
Mr Graham Mill, Industrial and Commercial Training Commission
Mr Paul Rosser, SA Gas Company
Ms Nancy Sly, Myer Stores Ltd

WORKING PARTIES

Two Working Parties were established in May 1987 to examine and report on two specific areas of enquiry, viz. curriculum patterns and course articulation.

The Curriculum Patterns Working Party met on 8 occasions. The terms of reference and the membership are set out in the report of the Working Party.

The Course Articulation Working Party met on 8 occasions. The terms of reference and the membership are set out in the report of the Working Party.

OTHER GROUPS

Four smaller Groups were also established to assist with specific areas of the Enquiry, viz.:

The Research Management Group, which guided the Enquiry's research programme, met on 5 occasions. Its membership is set out in the attachment to the research report, "Facts, Figures and Commentaries about Senior Secondary Education".

The Mathematics Education Research Steering Group, which supervised the mathematics part of the qualitative data gathering, met twice. Its membership is set out in the attachment to the above-mentioned research report.

A Working Group on Higher Education Selection Processes was established in August 1987 to consider and comment to the Tertiary Education Reference Group on the following questions:

1. In view of the diverse purposes attached to senior secondary schooling, what can institutions of higher education reasonably expect from senior secondary school programmes and SSABSA assessment processes?

2. How far do present arrangements meet these expectations?

3. Are there other arrangements which might lead to more effective and equitable selection?
(4) What are the distinctions between Publicly Examined Subjects and School Assessed Subjects in terms of content and process? Is there a case for at least some School Assessed Subjects to count as preparation for entry to institutions of higher education?

The Working Group met twice. Its membership was as follows:

Professor Colin Power, Flinders University of SA (Convenor)
Mr Brian Abbey, University of Adelaide
Dr Trevor Greenwood, South Australian Institute of Technology
Dr Norman Thompson, South Australian College of Advanced Education
Ms Megan Lewis, Roseworthy Agricultural College

A second working group, the Joint Working Party of the Enquiry and the TAFE/Schools Co-operation Project was also established in August 1987 to consider and comment to the Tertiary Education Reference Group on the following questions:

(1) How can senior secondary schooling and SSABSA assessment processes aid preparation and selection for courses in technical and further education?

(2) How far do present arrangements meet reasonable expectations? In particular, how is the overlap in school/TAFE levels accommodated?

(3) Should any present arrangements be extended to assist preparation for and selection of TAFE entrants? Are there other arrangements which might lead to more effective practices?

(4) In what ways to criteria for entry into institutions of higher education take account of TAFE qualifications? Are there grounds for extending these arrangements or devising others to facilitate such entry?

The Joint Working Party met on 5 occasions. Its membership was as follows:

Dr Norman Thompson, South Australian College of Advanced Education (Convenor)
Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education
Mr Vern Ager, TAFE/Schools Co-operation Project
Mr John McCarthy, Department of TAFE
Mr Roger Both, Principal, Morphett Vale High School
Ms Helen Sanderson, Education Department of SA
Ms Gwyneth Ottrey, Department of TAFE
Dr Gary Willmott, Senior Secondary Assessment Board of SA
Mr Darryl Alfred, TAFE/Schools Co-operation Project (Executive Officer)
ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION

RECORDS OF ENQUIRY CONSULTATIONS*

OTHER STATES

Victoria

November 1986
Meetings between Mr K R Gilding and officers of the
Ministry of Education, Victoria
[concerning the implementation of the Blackburn Report]

May 1987
Ms Clarice Ballenden, Ministry of Education

August 1987
Ministry of Education (Mr J Dellitt, Principal,
Smithfield Plains High School, on behalf of the Enquiry)

Western Australia

November 1986
Meetings between Mr K R Gilding and
- representatives of WA school sectors
- staff of the Secondary Education Authority of WA
- tertiary admissions and education staff in the
  higher education sector in WA
- Dr David Mossenson, Chairman of the Secondary
  Education Authority [on English Expression]
[concerning the implementation of the McGaw Report]

October 1987
Meeting with Dr Lesley Parker, Secondary Education
Authority of WA (Mr K R Gilding)

ENQUIRY REFERENCE GROUPS

March, May, September,
October, December 1987
Parent Reference Group Meetings

March, June, July, September,
October, November 1987
Tertiary Education Reference Group Meetings

March, May, September,
October 1987
Student Reference Group Meetings

March, May, July, August
September, October, November, 1987
Teacher Reference Group Meetings

March, May, August, September,
October, November, December 1987
Employer/ Union Reference Group Meetings

* in chronological order within categories.
Consultative Committee

February, March, April (2), July, August, October, November 1987

Consultative Committee Meetings

EDUCATION DEPARTMENT

(This list and the following list of non-government schools do not include schools participating in the various aspects of the Enquiry's research programme.)

March, August, October, 1987

Director General of Education

March 1987

Area Directorates: †Adelaide Area Office
†Western Area Office (DUCT)
†Eastern Area Office
Northern Area Office
Southern Area Office

April 1987

The Heights School (students, parents and teachers) hosted by the School Administration

May 1987

Special Education Section

June 1987

Mount Gambier (students, parents and teachers) hosted by Mount Gambier High School Council and Administration

July 1987

Equal Opportunities Unit (about young people of non-English speaking background)

July 1987

Teachers Registration Board

July 1987

Curriculum Advisers, Northern Area

July 1987

Adelaide High School

August 1987

Equal Opportunities Unit (about education of girls)

August 1987

School and Community Consultations Port Lincoln and Cleve hosted by the Western Area Education Office

August 1987

School and Community Consultations Whyalla and Port Augusta hosted by the Western Area Education Office

August 1987

Principals of Secondary Schools, hosted by Southern Area Education Office

August 1987

Deputy Principals of Secondary Schools, hosted by Southern Area Education Office

August 1987

High School Principals Association, Annual Conference

August 1987

Deputy Principals of Secondary Schools, hosted by Adelaide Area Education Office
September 1987  Morialta High School, Staff Conference
September 1987  Norwood High School, Staff Conference
September 1987  Goodwood High School, Staff Conference
September 1987  Principal, Pinnaroo Area School
October 1987  High School Principals Association
October 1987  Adelaide High School
October 1987  Education Department Senior Executive meeting
November 1987  Technical Studies Teachers Association
November 1987  High School Principals Association
November 1987  Marion High School, Staff Conference

**NON-GOVERNMENT SCHOOLS**

August 1987  Deputy Principals of Catholic Schools
August 1987  Christian Brothers College (parents)
August 1987  Federation of Parents and Friends Associations of Non-Government Schools
September 1987  St Dominic's Priory School, Staff Meeting
October 1987  Director, Catholic Education Office
October 1987  Director, Independent Schools Board
November 1987  Director, Catholic Education Office
November 1987  Heads of Secondary Independent Schools

**STUDENT GROUPS**

August 1987  Southern Area State Council of Students, hosted by Southern Area Education Office
August 1987  State Council of Students Annual Conference
August 1987  Graduate Diploma of Education Students, SACAЕ

**INSTITUTIONS OF HIGHER EDUCATION**

January 1987  Preliminary consultation with Chairman, Joint Matriculation Committee
February 1987  Preliminary consultation with Acting Vice-Chancellor, Flinders University
February 1987 Consultation regarding participation and equity in higher education - Flinders University

February 1987 Joint Matriculation Committee

April 1987 Seminar, Flinders University (on attrition and selection)

May 1987 Seminar, University of Adelaide (on admissions policy in higher education)

June 1987 Engineering School, SA Institute of Technology (Professor Evans)

September 1987 University of Adelaide (Executive Committee)

September 1987 SA College of Advanced Education (Submission working group)

September 1987 University of Adelaide (Matriculation Committee with Deans of Faculties)

September 1987 South Australian Institute of Technology (Academic Administration)

September 1987 Flinders University (Matriculation Board)

November 1987 SA College of Advanced Education (Academic Committee)

November 1987 University of Adelaide

November 1987 Flinders University (Professor Brian Abrahamson)

November 1987 Roseworthy Agricultural College (Dr Barrie Thistlethwaite)

November 1987 SA Institute of Technology (Dr Trevor Greenwood)

November 1987 Flinders University Matriculation Committee

November 1987 SA Institute of Technology

**EMPLOYERS/UNIONS**

February 1987 Preliminary Consultation with employer/union representatives

February 1987 Preliminary consultation with Office of Employment and Training

August 1987 Dissemination of Checklist of Employer Opinion to members of Institute of Personnel Management, ethnic and country employers

October 1987 Meeting with union representatives
TECHNICAL AND FURTHER EDUCATION

February, April (2) 1987
Consultations with Director-General TAFE

February 1987
Consultation with National TAFE Research Centre

April 1987
Consultation with Deputy Director-General TAFE

July 1987
Consultative Committee of TAFE/Schools Cooperation Project (contact continuing through joint working party)

November 1987(2)
Consultations with Director-General TAFE

ETHNIC AFFAIRS COMMISSION

(The Ethnic Affairs' Commission hosted for the Enquiry a series of consultations with the groups indicated.)

July 1987
Ethnic Affairs Commission, preliminary consultation

August 1987
Multicultural Education Consultative Committee, Tertiary Multicultural Education Committee

August 1987
Ethnic Schools Association
Ethnic Schools Advisory Committee

August 1987
Ethnic Communities Council
United Ethnic Communities

August 1987
Parents from established ethnic groups

August 1987
Parents from newly arrived groups

November 1987
Dr S Salagaras (Ethnic Affairs Commission)

November 1987
Language and Multicultural Education Representatives

November 1987
Language and Multicultural Education Representatives
SSABSA

February, March
April, July,
September, October,
November, December 1987

OTHER

February 1987 Office of Tertiary Education (TAFE accreditation requirements)
February 1987 SA Institute of Teachers (deputation)
February 1987 Correspondence School (Ms P Birkett)
March 1987 Youth Bureau
March 1987 Secondary Deputy Principals Annual General Conference
April 1987 Youth Guarantee Workshop
May 1987 Office of Tertiary Education: Women in Tertiary Education Committee
May 1987 Opening of South Australian Association of State School Organisations Conference
June 1987 Opening Annual General Meeting of Tertiary Education Administrators Institute
June 1987 Australian College of Education meeting at Berri
June 1987 Consultation with CITY
July 1987 Australian College of Education meeting at Adelaide
August 1987(2) Mr Denis Gleeson, Keele University (visiting fellow, SA College of Advanced Education) (UK Technical and Vocational Education Initiative)
October 1987 Dr Barry McGaw (Seminar on Selection for Higher Education)
October 1987 Schools and Industry Seminar
October 1987 Northern Area Transition Education Association Seminar
October 1987 SA Institute of Teachers
EDUCATION FOR FIFTEEN TO EIGHTEEN YEAR OLDS

SOME QUESTIONS FOR DISCUSSION AND RESPONSE
The Enquiry into Immediate Post-Compulsory Education was set up in December, 1986. It is asked to look at the educational requirements of 15 to 18 year-olds, with particular reference to senior secondary schooling and the influence on it of higher education admission requirements. The complete Terms of Reference can be found at the end of this paper.

Since then reference groups of parents, employers, students, employers, academics, teachers and administrators have identified issues that seem important.

This paper highlights some issues on which the Enquiry would particularly welcome comment.

The Enquiry has asked individuals and organisations to make submissions as soon as possible and at the latest by 17 September 1987.

There is a response sheet in the middle of this paper with questions and spaces in which to make your comments and suggestions.

Do not hesitate to attach extra sheets, to raise other issues, or to comment only on those issues that seem important to you.

Post the completed response sheet to the address given. All responses will be carefully considered in the writing of the Report of the Enquiry to be submitted at the end of this year.

Responses and all correspondence should be sent to:

Enquiry into Immediate
Post-Compulsory Education
Level 14, Wakefield House
30 Wakefield Street
Adelaide SA 5000
Phone: (08) 227 1488
INTRODUCTION

Changes during the last twenty years have affected the ways in which young people move into adult life in our society. To mention just a few, there have been changes in economic expectations, in employment possibilities and in the degree of sensitivity shown towards disadvantaged people.

In the mid '70's employment possibilities for young people began to change and funding for higher education was constrained. As a result pathways which young people used to take into adult life have become difficult to find and increasing numbers are staying on at school.

In the case of employment, temporary, minor or partial forms of work are increasingly common. These changes are likely to be more than a by-product of unemployment. They are likely to be a more far-reaching set of responses to changes in the nature of employment, technology, attitudes towards work and life styles generally.

At the same time the funding constraints have reduced the level of participation in higher education. The achievement of a matriculation score at or above the minimum no longer ensures admission to courses which a student might reasonably wish to enter.

Young people, particularly those who are already disadvantaged, are vulnerable to some of the dangers inherent in these changes.

Education cannot solve these problems but it can respond more or less sensibly to the circumstances in which young people find themselves.

Many people are saying that it is time to reconsider the nature and purposes of immediate post-compulsory education, that is, education for 15 to 18 year olds.

Though the Enquiry will take account of this wide perspective, it will focus on senior secondary schools as its Terms of Reference require.
Young people have different hopes about jobs and careers but all have two major needs:

- the need for a broad general education which will make more intelligible the world in which they are growing up and which will prepare them for future learning and for participation in that world;
- the need to prepare to gain a living as young adults by developing a range of interests and skills and a sound information base about the world of work.

In earlier years some secondary students were trained in practical work and some in academic studies. Today more people are saying that practical preparation for earning a living should happen for all young people within a general education which provides a foundation for informed participation in the common culture and for continued learning.

A recent report of the Commonwealth Schools Commission, "In the National Interest", argues that an increasing number of young people (65% nationally by 1992) should remain to the end of secondary school in order to gain such an education. It holds that this greater retention, together with planned increases in other forms of education and training, would virtually get rid of youth unemployment by the early 1990's.

**Questions for discussion**

What are the purposes of education for 15 to 18 year olds?

What should it be trying to do?

Ought all young people be involved in education between the ages of 15 and 18?

What are the roles of the secondary schools and other agencies such as TAFE?

What proportion of students should go forward to senior secondary school?
Some people think that when students are no longer under compulsion to attend school they should not have to do compulsory subjects.

Others argue that leaving subject choices entirely to students means many will not gain important knowledge and may cut themselves off from options in education and employment.

The Enquiry is looking for approaches to senior secondary curriculum which can both take advantage of the emerging interests and skills of young people and ensure that they all gain access to knowledge which will enable them to participate intelligently in society.

The Schools Commission report referred to earlier puts it this way:

The Commission is firmly of the view that the main responsibility of the secondary school is to develop broadly educated people whose knowledge and skills are generally useful and readily refocused.

That is, there should be general education for all, together with attention to the special interests of individual students. This latter could include, for example, preparation for higher education or TAFE.

Higher education is discussed in Section C.

It has also been argued that more flexible interconnecting pathways between school and other activities (eg studies in TAFE) are necessary to provide an education suitable for the wide range of students.

It has already been agreed that some SSABSA-accredited year 12 subjects undertaken in schools will be granted status in certain TAFE certificate courses. It could also be possible for some subjects commonly undertaken by 16 and 17 year-olds in TAFE Colleges to be recognised on the SSABSA certificate and a similar arrangement made for programmes such as Community Improvement.
How far do present arrangements meet the aspirations and needs of young people?

Through Youth (CITY) and the Community Youth Support Scheme (CYSS).

Joint curriculum development by the departments of Education and TAFE could provide broadly preparatory studies for students wishing to go on to the latter.

Questions for discussion

What kind of general education could build on what young people had already learned and help them to take part intelligently and with confidence in the common culture and in the workplace?

What curriculum patterns might such a general education follow? How might specialised vocational studies fit into the patterns? Could the patterns include combinations of in-depth and broader studies?

Is it desirable and practicable to include among the patterns a demonstration of competence in English expression? Could the curriculum in this (and other areas) involve a range of approaches appropriate to particular groups of students?

Should other agencies besides secondary schools be able to contribute to studies and experiences of young people of this age?

Would it be helpful to young people for generally recognised goals to be set out for the completion of secondary education, for example certification of successful completion of an approved pattern of studies?

If so, how can we ensure that those who do not immediately complete secondary education can do so when they wish? Under what sort of conditions could this occur?

Over the past twenty years the number of young people staying at school has grown rapidly and the reasons why they do so have become much more diverse.

In the '70s the Education Department introduced the Secondary School Certificate as an alternative to the Public Examinations Board matriculation certificate to help schools with new approaches to learning and teaching for students not wishing to matriculate.

In 1984 the Senior Secondary Assessment Board of South Australia (SSABSA) took over the matriculation certificate and the Secondary School Certificate and now issues a single year 12 certificate. The Board accredits subjects at year 12 level in two categories according to their main mode of assessment. There are publicly examined subjects and school-assessed subjects.

In 1986 more than 40% of the 14,000 year 12 students undertook courses other than traditional matriculation, including school-assessed subjects and other programmes.

The moves for change have been partly successful but they have also been frustrated because non-matriculation studies are not widely regarded as having a status equal to publicly examined subjects. It is important that their acceptance be further encouraged and links with subsequent activities strengthened and given greater public recognition.
WHAT ARE THE EDUCATIONAL ASPIRATIONS AND NEEDS OF YOUNG PEOPLE?

Please return completed Response Sheet to:
Enquiry into Immediate Post-Compulsory Education,
Level 14 Wakefield House,
30 Wakefield Street, Adelaide, SA 5000,
WHAT SHOULD YOUNG PEOPLE LEARN AND EXPERIENCE TO MEET THEIR ASPIRATIONS AND NEEDS?
HOW FAR DO PRESENT ARRANGEMENTS MEET THE ASPIRATIONS AND NEEDS OF YOUNG PEOPLE?
WHAT RECORD OF ACHIEVEMENT SHOULD YOUNG PEOPLE GET WHEN THEY FINISH SECONDARY EDUCATION?

HOW SHOULD SENIOR SECONDARY SCHOOLING BE ORGANISED TO HELP YOUNG PEOPLE LEARN?
It should be noted that scaled matriculation scores for university entry are gained from publicly examined subjects, although for some courses Colleges of Advanced Education accept discounted scores in school-assessed subjects. It is sometimes argued that excluding all school-assessed subjects from university entry requirements is no longer appropriate.

In relation to matriculation courses, it is also argued that the high degree of specialisation means that the curriculum for senior secondary students is in many cases narrow. A related argument says that this specialisation adversely affects the curriculum in earlier years of schooling as well.

Despite specialisation, high attrition rates in a number of first year higher education courses seem to indicate that success in matriculation does not adequately prepare some young people for university and college. People have suggested that better information for students about particular courses and greater attention by institutions to the problems of transition from secondary to higher education might help remedy this.

Whether students do traditional matriculation courses or more recently developed programmes, in neither case does the curriculum necessarily provide them with the kind of general education outlined in Section B above.

There are two other matters for comment. One is the competitive nature of matriculation and the consequent pressure on students. In 1986, 85% of admissions to higher education in South Australia were matriculants but only about half of these came directly from school or within a year of leaving. There is thus strong competitive pressure from both past and current matriculants which will increasingly contribute to frustration and disappointment caused by an already inadequate number of places.

The second matter also derives from the tendency for school leavers to delay applying for admission and to seek instead other occupations and experiences on leaving school. It can be argued that such experiences should be taken into account in higher education entrance, thus modifying the present matriculation requirements.

It is important that measures for change recognise the claims of older people for educational services as well as improving them for the young.

Questions for discussion

Do matriculation courses provide students who do them with a broad and general education including preparation for further study?

How could the pressure of matriculation be reduced? What consequent changes to the selection processes for higher education would be needed?

How could young people be better informed about the options open to them in higher and further education and in employment?

How could entry requirements for higher and further education and for employment be derived from a general education?

What might be the advantages, if any, of allowing a broader range of subjects for matriculation purposes?

What are the strengths, in content, approach and assessment methods, of publicly examined subjects and school-assessed subjects which should be retained and further developed?

What are the weaknesses to be avoided?

What might be the advantages of allowing post-school experience to count towards requirements for entry for higher education?

What are the implications of any of the above for courses in institutions of higher education?
WHAT RECORD OF ACHIEVEMENT SHOULD YOUNG PEOPLE GET WHEN THEY FINISH SECONDARY EDUCATION?

A record of achievement can be important as a way to

- give a goal to be worked towards;
- recognise performance;
- give information to employers and institutions of tertiary education.

In South Australia the school record takes two forms:

- the SSABSA certificate at the end of year 12, which reports achievement in accredited subjects;
- the School Leaver Statement which is issued by the school and provides information on achievement in subjects studied, involvement in school activities and the personal qualities of the student. This statement is available whenever a student leaves.

Introduction of a certificate of general education certifying completion of some organised but flexible pattern of study and experience could give more young people an opportunity to undertake a broad and general education at this age and to have that achievement recognised.

In particular, a broader education might result if the certificate had to be gained before a student could be considered for higher education. Entry requirements for higher education could be included as part of the certificate requirements for such students.

Such a certificate could provide a clear set of goals for all young people. It could give recognition to a wide range of achievements and could improve opportunities for disadvantaged groups of students.

Some people have suggested that a pattern of studies designed for successful completion by all students might require a senior secondary school curriculum organised on a two year (years 11 and 12) basis rather than on the current year 12 approach. It would be important in this case to ensure that students could complete requirements whether or not they stayed at school straight after they turned fifteen.
Questions for discussion

Should a certificate of completion of secondary education be introduced in South Australia to be awarded on successful completion of approved patterns of studies in immediate post-compulsory education?

Where should it be possible for students to undertake these studies (for example, schools, TAFE Colleges, employment/study combinations in work places)?

How could we ensure that studies approved for the certificate were valued by employers, students and the community generally?

You will have considered the matter of curriculum patterns in Section B. You may like to consider here how your views could be reflected in certificate arrangements.

In view of any suggested arrangements, would you want to argue that award of the certificate be based on studies usually taken on a two year (years 11 and 12) basis?

How could we ensure that people who did not stay at school till year 12 could gain the certificate?

The creation of flexible organisations, hospitable and responsive to young people and offering broad curricular opportunities, suggests to some people radical changes to present provision e.g. the setting up of senior secondary colleges as in some other Australian States and Territories.

The position in South Australia, with small classes and declining enrolments in many localities, suggests there would be educational advantages in terms of range of curriculum which could be provided with larger numbers in senior secondary colleges. It is also argued that senior colleges could provide more suitable places for young adults than schools which also cater for children.

On the other hand there would be resource problems and industrial difficulties in the establishment of new institutions. Such an approach could also significantly increase the need for student travel, involve the loss of a neighbourhood school, discourage some students from continuing and remove leadership and role models provided by senior students.
Less radical restructuring has often seemed more manageable. Already, a number of locally appropriate moves have been made, involving clusters of schools and sometimes TAFE Colleges, with a view to sharing resources and extending curricular offerings. These have been very successful but sometimes they are dependent on the continued support of individual teachers or administrators.

A development of the cluster idea is the formation of multi-campus schools under the control of a single school council and administration. In this form one campus could be the senior secondary campus.

Another approach is that of distance education, in which curriculum offerings can be extended by use of communications technology between centres and schools a long way from each other.

Questions for discussion

How can educational resources best be utilised to meet the aspirations and needs of young people?

Would it be worthwhile to establish one or two post-compulsory colleges in appropriate areas, perhaps in association with a TAFE College?

Should we move to develop multi-campus schools in localities where that seems to be appropriate?

How can communications technology contribute?

What are the strengths and weaknesses of each of the above approaches?

ACKNOWLEDGEMENTS

Photographs kindly supplied by

Doug Nicholas; Photographic Department, University of Adelaide; Publications Branch, SA Education Department; Penny Ramsay; TAFE, SA; "The Advertiser".
ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION

TERMS OF REFERENCE

The Enquiry will be required to investigate and report upon:

(1) The effects on curriculum patterns in senior secondary schooling of matriculation and other entry requirements and of selective admission procedures for institutions of higher education. With respect to this matter particular attention should be given to -
- addressing the number of subjects presently required for matriculation, the modes of their assessment, the period of time over which they may be gained, the groupings of subjects from which matriculating scores may be calculated, and the scaling and aggregation of subject scores for the purposes of selection for admission to higher education.
- addressing the effects on curriculum patterns of current policies and practices regarding pre-requisite subjects and assumed knowledge both in schools and in institutions of higher education and in this context noting any effects of higher education admission requirements on the school curriculum in years preceding the senior school.

(2) Desirable patterns of curriculum for senior secondary schooling, having regard to those years as a period of education in its own right and as a period for preparation for higher and further education and employment. With respect to this matter particular attention should be given to -
- desirable entry and selection procedures for further and higher education institutions which relate to desirable patterns of senior secondary curriculum.
- the desirability and practicality of providing subject and course offerings which can readily be related to each other and to multiple possible outcomes in higher and further education and employment.
- ways to encourage young people to continue their studies beyond the year of compulsory schooling.
- the need to increase opportunities for students from a wide range of backgrounds to undertake tertiary education.
- the desirability of establishing generally recognised goals for the senior secondary years, while noting that many young people leave and re-enter formal education during the immediate post-compulsory years and that completion of secondary education is not now marked by the same or a single end-point for all students.
- the nature of the relationships between secondary schools and TAFE and higher education institutions and the extent to which the resources of each can be used in the provision of desirable patterns of curriculum.
- curriculum patterns which enhance the development of skills in the use of English language.

(3) the implications of current and any projected senior secondary curriculum patterns for courses and structures in tertiary education, in particular for the structure and length of basic, honours and professional degree courses in higher education.

(4) the desirability and practicality of including a demonstration of satisfactory performance in English expression as a requirement for admission to institutions of higher education.

(5) resources required to implement any proposals arising from the Enquiry.

For the purposes of these Terms of Reference, tertiary education is defined as courses conducted in Universities, Colleges of Advanced Education and Institutions of Technical and Further Education. Higher education is defined as tertiary courses which are conducted in Universities and Colleges of Advanced Education other than certificate courses and courses that do not lead to an academic award.

The Enquiry will be expected to consult widely and appropriately through the use of reference groups and other means and to report to the Minister of Further Education and Employment and to the Minister of Education no later than 24 December 1987.

The Enquiry will also be expected (i) to take account of the national context in which tertiary and senior secondary education are placed, investigate work recently undertaken and moves currently being made in other parts of Australia, and take account of the mobility of young people between the education system of South Australia and those of the various Australian States and Territories; and (ii) to take cognisance of policies being developed by South Australian agencies concerned with the nature of post-compulsory education and to act in cooperation with those agencies.

* In South Australia the South Australian College of Advanced Education, Roseworthy Agricultural College and the South Australian Institute of Technology are Colleges of Advanced Education.
LIST OF SUBMISSIONS RECEIVED
LIST OF SUBMISSIONS RECEIVED

Schools/TAFE

Adelaide High School Council Inc
Adult Migrant Education Service, Adelaide College of TAFE.
Allendale East Area School Council (two school councillors' responses)
Annesley College Council
Annesley College (Teaching Staff)
Ardrossan Area School
Augusta Park High School Council

Banksia Park High School Council
Birdwood High School Council
Blackwood High School (Blackwood High Community)

Cabra Dominican College
Caritas College
Ceduna Area School Council
Ceduna Area School (Staff)
Christian Brothers' College (Parent Group)
Christian Brothers' College (Staff)
Christies Beach High School Curriculum Committee
Cowell Area School
Croydon Centre for Hearing Impaired Children
Croydon Park College of TAFE (Heads of Schools)

Edward John Eyre High School
Edward John Eyre High School Council
Elizabeth High School (Curriculum Management Committee)
Enfield High School (Principal)
Enfield High School (Parent)

Findon High School Council (school parents' response)

Geranium Area School (three parent responses)
Glossop High School Council (individual members)
Glossop High School (Staff)
Gilles Plains College of TAFE Council
Gilles Plains High School
Glengowrie High School (Staff and Council)
Glenunga High School Council (three parent responses)
Grant High School (Staff)
Goodwood High School
Heathfield High School Council
Heathfield High School (Student Representative Council)
The Heights School (Curriculum Review Team)

Immanuel College (Working Party on Gilding Report)

Karcultaby Area School (School Council, Student Representative Council and staff)
Karoonda Area School (Karoonda Student Representative Council)
Kingston College of TAFE Council
Kingston Community School Council
Kingston Community School (Staff)

Lameroo Area School Council
Leigh Creek Area School (survey)

Manum High School (Staff)
Manum High School (year 11 Legal Studies Semester Class)
Millicent High School (two anonymous)
Mitcham Girls High School Council
Mitcham Girls High School (Staff)
Mt Barker High School (Curriculum Committee)
Murraylands College of TAFE

Naracoorte High School (attendees at parent conference)
Noarlunga College of TAFE Council
Noarlunga College of TAFE (Staff)
Nuriootpa High School

Para Vista High School Council
Parndana Area School (Secondary Staff)
Penola High School Council
Peterborough Area School (Staff and Council)
Port Adelaide High School Council
Port Adelaide High School (Staff)
Port Lincoln High School (Student Representative Council)
Prince Alfred College
Pulteney Grammar School

Reynella East High School (Staff)

Salisbury East High School Council Inc
Seaton High School Council
Seymour College (Education Subcommittee of Seymour College Parents' & Friends' Assoc)
South East College of TAFE Council
SA Correspondence School (Secondary Staff)
St Aloysius College
St Paul's College (Community)
Swan Reach Area School (anonymous)
Swan Reach Area School Council

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Tea Tree Gully College of TAFE (Staff)
Thomas More College Parent Education Committee
Urrbrae Agricultural High School (Urrbrae Curriculum Committee)
Victor Harbour High School Council
Walford Anglican School for Girls Inc
West of the Range High School Principals Association combined
and Port Pirie Secondary Principals Association submission
Whyalla College of TAFE
Wilderness School
Wirreanda High School (Gilding Enquiry Group)
Wudinna Area School
Yankalilla Area School Council (Education Committee)
Yorketown Area School Council

Organisations/Associations

Adelaide University Staff Association
Adelaide Area Schools/TAFE Co-ordinating Committee
Aboriginal Education (Education Department of SA)
Advisory Committee on Women in Tertiary Education
Association of Teachers in Independent Schools (SA) Inc (Professional Development Committee)
Australian College of Education (South Australian Chapter)
Australian Council for Education Through Technology (SA Committee)
Cambodian Australian Association Inc (Senior Welfare Worker)
CITY High Schools Program (Co-ordinator)
Commissioner for Public Employment
Council of SA College Student Organisations
Daws Road Centre
English as a Second Language Teachers' Association, SA
Federation of Parents and Friends Associations of SA Catholic Schools
ISB Languages Group, SA Independent Schools Board Inc
Isolated Children's Parents' Association SA
Isolated Children's Parents' Association SA (North East Branch SA)
Languages Other Than English Curriculum Committee (Education Department of SA)
Modern Language Teachers' Association of SA
Northern Area Transition Education Association
Polish Communities
Port Pirie and Districts Parent Clubs Association
Riverland Principals Association
SA Participation and Equity Program
South Australian English Teachers Association
South Australian Visual Arts Education Association
Southern Area Secondary Principals' Association
State Council of Students

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TAFE/Schools Co-operation Project (Mr Vern Ager, Project Officer)
Tea Tree Gully Community Services Forum
Technical Studies Teachers' Association SA Inc

Trade Development Council Secretariat, Australian Department of Trade
(E G Wilshire, Executive Director)
United Trades and Labour Council of SA
Yahl Primary Parent Club
Yorke Area Council (SA Institute of Teachers)

Tertiary Education Institutions

Department of Technical and Further Education
The Flinders University of South Australia
Roseworthy Agricultural College
South Australian Institute of Technology
South Australian College of Advanced Education
The University of Adelaide

Other Major Institutions/Organisations

Education Department of South Australia
High School Principals Association
Independent Schools Board
Senior Secondary Assessment Board of South Australia
South Australian Ethnic Affairs Commission
South Australian Institute of Teachers

Individuals
Anonymous (23 - including 3 Employer Checklist respondents)
Mr John Althorp
Mr C W Artis
Mr Jeff Baxter (SACAE, Sturt), Vern Treilibs (SSABSA), Michael Wheal
(SA Correspondence School) (combined)
Mr D G Benson (member, Whyall TAFE College Council)
Ms Ann Beruldsen (Parafield Gardent High School)
Mr Ian D Brice (Department of Education University of Adelaide)
Mr Dennis Clark (Deputy Principal, Elizabeth High School)
Dr J H Coates (Chairman, Department of Physical & Inorganic Chemistry,
University of Adelaide)
Council Member (The Heights School)
Council Member (Modbury High School)
Kym Davey (Elizabeth College of TAFE)
Mrs P A Dayman (Deputy Principal/Director of Studies, Salisbury East High School)
Mr John G Deane (Head of Language Studies, Adelaide High School)
Mr David Forward
Mr John Foyster
Mr Geoff Fullerton
Mr Peter Gilchrist
Mr Albert Gillissen
G F Glostic
Ms Maxine Goulding (Goulding Public Relations)
Miss Hamood and Miss Edwards (Cleve Area School)
Mr David Hester (Classics Department, University of Adelaide)
Mr Les Hughes (Chairman, Ardrossan Area School Council)
Ms Janet Hunt, Education Officer, Australian Council for Overseas Aid
Mr Quentin Iskov
Ms Helen Jackson
Mr P W James
Mr Brian Johnston (Wattle Park Teachers Centre)
Ms Gwen Jones
Mr Harold Jones
Ms Judith Kapferer (School of Education, Flinders University of SA)
Mr Martin Lindsell and Mrs B K Lindsell
Les Loffler (Coordinator, Materials Development Centre, Wattle Park Teachers Centre)
Dr Mary Luszc (Senior Lecturer in Psychology, Flinders University of SA)
Dr Errol McCoy (School of Physical Sciences, Flinders University of SA)
Dr J W McKay
Dr B Mageean (Acting Dean, School of Education, Flinders University of SA)
Mr Don Matters
Mr Mike Moschou (Kildare College)
Rev Fr John Neill, (Headmaster, Blackfriars Priory School)
Mr Kurt H Nolte (ESL Teacher, Norwood High School)
J R Prescott (Elder Professor of Physics, University of Adelaide)
Jane Quigley (Teacher, Enfield High School)
Mrs R Quinn
S Roberts
Mr Paul Rosser (SA Gas Company)
Dr Michael Rowan (Lecturer in Philosophy and Communication Studies, SACAE, Magill)
Mr Brendan Ryan (Lecturer, School of Studies in Education, SACAE, Magill)
W F Shaw (Director, Special Interest Music Centre, Woodville High School)
Dr A J Shinkfield (Headmaster, St Peters College)
Mr Graham Speight (Principal, Pinnaroo High School)
Students (2) (Cleve Area School)
Ms Josephine Tiddy (Commissioner for Equal Opportunity)
Mr Vern Treilibs (Senior Secondary Assessment Board of SA)
Ms J Vincent, V Golcich, E Slee, M Hutchinson
Mr Michael Wheal (SA Correspondence School)
J Whiteland
Ms J Wilkinson
Mr Michael Wohltman (Senior of Languages, Risdon Park High School)
Year 11 female Prefects (Plympton High School)
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PART A

OVERVIEW OF SUBMISSIONS

A total of 234 written submissions were received by the Enquiry. Many submissions responded directly to the Enquiry's discussion paper "Education for Fifteen to Eighteen Year Olds", while others chose to discuss issues which they perceived as relevant to the Enquiry's terms of reference. Some later submissions examined suggestions outlined in the Working Party papers "Problems and Possibilities in Senior Secondary Curriculum" and "Issues at the Interface".

A wide diversity of views were presented on a large number of issues pertinent to immediate compulsory education. The content analysis in Part B has attempted to draw out the major themes and extrapolate from the submissions views expressed upon them. Such a summary must inevitably omit some minority or personal views; however, all submissions have been read carefully and the information obtained from them integrated into the discussion.

The following table describes the source of submissions and indicates the percentage originating from each source.

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<th>ORIGIN OF SUBMISSION</th>
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<td>INDIVIDUAL SUBMISSIONS</td>
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<tr>
<td>from Community Members</td>
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<tr>
<td>INDEPENDENT SCHOOLS, CATHOLIC SCHOOLS</td>
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<tr>
<td>includes Principals, Teachers, Boards and Councils</td>
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<tr>
<td>PARENTS, PARENT BODIES</td>
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<td>TEACHER ASSOCIATIONS</td>
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<tr>
<td>TAPE COLLEGES</td>
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<tr>
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<td>REPRESENTATIONS FOR DISADVANTAGED GROUPS</td>
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<td>STUDENTS, STUDENT BODIES</td>
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<tr>
<td>ANONYMOUS</td>
<td>7.5%</td>
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See Appendix C for a complete list of submissions received.
PART B

ANALYSIS OF SUBMISSION CONTENT

1. POST-COMPELLSORY SCHOOLING

1.1 Aims

As increasing numbers of students are remaining at school after their compulsory years, the nature of the immediate post-compulsory secondary school population has undergone some significant changes. Respondents generally believed that South Australia's present educational provision for 15 to 18 year olds was directed mainly at the student planning to move into tertiary study. The growing number of students in the post-compulsory years without such an aspiration were left in many cases with few options other than joining classes and activities related to tertiary entry. The need to accommodate all students in the immediate compulsory years was a major theme. The majority supported the concept of a "broad general education" for all students and the notion of providing flexible educational opportunities for students to develop transferable skills was strongly favoured.

Spelled out in terms of general aims for the immediate post-compulsory years respondents believed a broad general education should include the following aspects:

(i) Life Skills -- including personal and social skills facilitating confidence and self esteem; survival skills for a period of rapid social change; and skills enabling students to "learn how to learn";

(ii) a knowledge of Australian society and its multi-cultural heritage;

(iii) preparation for employment and unemployment;

(iv) preparation for tertiary study; and

(v) preparation for adulthood.

Most respondents believed that all 15 to 18 year olds should be encouraged to participate in post-compulsory schooling but many warned that unless the existing climate changed within schools, many students who stayed on would do so for "the wrong reasons". A very small minority advocated the raising of the school leaving age, but few were willing to support the idea of compulsory education beyond year 10.

1.2 Student Aspirations

Students' submissions frequently expressed decisively that what they wanted from senior schooling was

(i) A knowledge about how and where to get a job;

(ii) information about how to function in the adult world;

(iii) survival skills; and

(iv) a good school experience.
Other respondents generally talked around the aims expressed in 1.1, while some claimed that 15 to 18 year olds were not mature or experienced enough to make a realistic statement about their aspirations.

### 1.3 An Extra Year

That the demands of year 12 required more time was a frequently stated view. Others reminded the Enquiry that South Australian school leavers were a year younger and consequently less mature than their counterparts in other states and many overseas countries. An optional extra year, not as an entity in itself but rather as an extension of time to complete years 11 and 12, was favoured to solve these concerns. Such a year would also facilitate re-entry and enable secondary students to consider part-time work/study options. Slightly more respondents favoured an extra general introductory or bridging year at the tertiary level rather than a year 13 in the senior secondary school.

Finding funds to resource such a year for schools, tertiary institutions and students was seen as a major but not insurmountable obstacle.

### 1.4 Staffing

A critical need for professional development of senior secondary teachers both at the pre-service and in-service levels was spelled out in a large number of submissions. Areas which respondents believed teachers were currently ill-equipped to handle included technology, assessment, career preparation and a changed post-compulsory student population. An urgent need for curriculum reform, particularly in relation to teaching methodologies, would also necessitate the professional development of a large number of teachers at the post-compulsory level.

Many submissions claimed that the cutting of resources for this area of education indicated a government failing to grasp the significance of preparing young people for a rapidly changing society and thus putting in jeopardy South Australia's future.

### 1.5 Administering Immediate Post-Compulsory Education

Some submissions described the need for a rational, clearly defined arrangement of education authorities to take responsibilities for various levels of education. It was pointed out that a major problem confronting the post-compulsory sector was the number of agencies which provide or could provide educational services to this age group. The development of an authority which co-ordinated and administered this sector and provided a degree of continuity from the compulsory education sector to the tertiary sector is logical. A suggested structure is outlined in Table 2.
TABLE 2

<table>
<thead>
<tr>
<th>EDUCATIONAL LEVEL</th>
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<tr>
<td>1. PRE-COMPULSORY</td>
<td>CHILDREN'S SERVICES OFFICE</td>
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<tr>
<td>2. COMPULSORY</td>
<td>EDUCATION DEPARTMENT</td>
</tr>
<tr>
<td>3. IMMEDIATE POST-COMPULSORY</td>
<td>NEW AUTHORITY</td>
</tr>
</tbody>
</table>
| 4. TERTIARY       | (i) TAFE  
                      (ii) COLLEGES OF ADVANCED EDUCATION  
                      (iii) UNIVERSITIES |

2. STRUCTURE AND MANAGEMENT OF THE SENIOR SCHOOL

2.1 Review of Existing Provisions

In the majority of cases respondents described years 11 and 12, apart from being the most senior years, as very little different from years 7/8 to 10. Students experienced a relatively normal school day from approximately 9.00 am to 3.30 pm with a pre-determined timetable adhering to 40 or 50 minute periods of time for each lesson. Students were expected to conform to school rules and were largely involved in learning situations in which the major decisions were made by teachers. It was reported that a few schools were attempting to develop a senior school environment which they believed would be more suited to 15-18 year olds.

Because of the changing composition of the senior school population and the increasing retention rate, the "shape" of senior schools must change and so must many of the processes within it. It must accommodate those who choose to be involved and motivate the less enthusiastic student to return. It needs a more flexible nature; it should be more oriented to young adults than school children and more conducive to learning. It must adequately prepare young people for the transition from school to "the real world".

2.2 A Desired Shape for the Senior Secondary School

Submissions generally noted the wisdom of sharing resources among schools in geographically appropriate clusters. Hub schools were suggested for some areas. However most were wary of large multi-purpose schools and cluster arrangements which necessitated a substantial degree of student and/or teacher mobility. The notion of a separate senior secondary college or school received limited support though some submissions, mainly from senior students, teachers and TAFE personnel saw merit in such a school structure. A number of respondents felt senior schools should be given a fair trial and evaluated carefully. It was noted that some South Australian schools currently used a senior secondary college structure; these schools could be used as a basis for a review of their viability.
The school structure which many respondents felt would work best was that of the SUB-SCHOOL; "a school within a school". Drawing from a large number of suggestions it seems that a senior school could consist of years 11 and 12 and possibly a year 13. It would occupy a separate physical area within a school. A large percentage of its staff would teach exclusively at the senior level. Such staff through pre-service training and in-service would utilize teaching methodologies which removed them as the pivot for learning and which enabled students to be at least part negotiators of their learning. Staff would relate less formally to students, adopting a role more akin to that practised in the tertiary sector. Essentially, although the senior school would differ in many ways from the school attended by the year 7/8 to 10 students, it would still be part of the total secondary school structure enabling younger students to "look up" to their seniors and encouraging senior students to take some responsibility for those in the junior years.

A move towards a far less rigid timetabling structure was envisaged by the majority. Initially, a curriculum which spanned years 11 and 12 (and possibly year 13) was suggested. The use of modules of time rather than strict 45 minute lessons was canvassed. An even more popular view was that of extending teaching time to utilize "twilight hours", early morning, vacation periods generally and summer schools particularly.

Modern technology, if well used and supported by teacher time, was seen to have significant possibilities for extending and enriching the senior school program. Distance mode teaching, computer technology, duct and video services were mentioned as having merit not only for isolated students (ie, isolated by geographical distance, language, disability or socio-economic circumstance) but for all students. Correspondence School services and some TAFE/school innovations were mentioned as examples of "technology working well".

2.3 Other Agencies/Providers

One of the most urgent concerns articulated was that of recognizing the role which other agencies or providers had in the education of 15-18 year olds. The TAFE/school frontier was frequently cited and respondents expressed a considerable degree of frustration about the slowness of negotiation between these two major providers. More positively some submissions referred to successful sharing processes particularly between TAFE and secondary schools.
Submissions generally agreed that schools should take the major responsibility for the education of 15-18 year olds. However it was strongly argued that other providers should have their "educational offerings" recognized and used by the schools. Difficulties of administering and co-ordinating such a process were frequently discussed and some submissions made very practical, innovative suggestions to resolve these difficulties. "Management" became an operative word as respondents suggested various ways of accommodating this important and much desired process. Flexible timetabling, itinerant teachers, students at large, community based programs, integrated work experience and part-time work and study were most frequently mentioned as possible processes of an "across agencies" education program for 15-18 year olds. The concept of an "Education Broker" who detailed each student's program was convincingly argued. It was also mentioned that a senior school principal (or other key person) would clearly need management skills to co-ordinate, integrate and facilitate a senior school program.

To reap the best benefits for students, it was seen that all agencies offering education programs at the senior school level, should have these programs accredited. A body responsible for accreditation was regarded as absolutely necessary. Some respondents suggested that SSABSA's brief could be extended to include this role, a few named the Education Department as accreditor, while others said that a new body should be formed to take up this responsibility. One of the major outcomes of the accrediting process would be that students could receive a record of all accredited subjects upon leaving school. This, it was believed, would enhance the possibility of them gaining employment.

2.4 Student Management and Counselling

Senior school counselling needs were highlighted by the majority of submissions. All parties who responded to the issue saw counselling as needing "some review" at least, and at most "urgent upgrading". Respondents often alluded to the frequency of hard pressed, goodwilled teachers being pushed into the counselling role. Quite obviously they did not have the training and often lacked the expertise or time to fulfil this role adequately.

The paucity of experienced, fully trained secondary school counsellors was frequently deplored. The major areas of counselling need were listed as

(i) "In-School" course/subject counselling;
(ii) personal counsel;
(iii) career counselling (post-school study and employment opportunities); and
(iv) across agency counselling as provided by a "Broker Counsellor".

"In-School" counselling and the work of the "Broker Counsellor" frequently required not only counselling skills but management skills as well. This is a comparatively new area which needs serious consideration.
Career counselling was seen as a right, not purely an option, for all year 11, 12 and 13 students. With a rapidly changing, somewhat uncertain and unpredictable society surrounding them, comprehensive, easily understood, up-to-date information on post-school study and employment opportunities should be available to all students. A regularly up-dated computerized data base was widely supported in spite of its initial cost. (This sort of information was particularly requested for disadvantaged groups whose families or community contacts were unable to support them adequately in this area.) Although the data base was seen as invaluable, "its use must be consistently supplemented by strong and supportive human counsel", was a dominant view.

2.5 Re-Entry and Mature Entry

The majority of informants applauded the idea of re-entry and associated it with a necessary "new flexibility" within post-compulsory schooling. The school climate of the senior sub-school was seen as one which not only accommodated but supported re-entry by both young and mature age students.

Part-time work linked with senior schooling was also strongly recommended because it enabled students to make a more realistic transition from school to work and provided the economic wherewithal for students unable to afford full time study at school.

Some respondents saw difficulties in integrating 15-18 year olds with mature age students, and a few student submissions sounded a somewhat perplexed warning about how they would cope with mature adults in school. TAFE structures and teaching methodologies were named as an appropriate model for a mixed student population.

2.6 Community Awareness

A commonly reported problem was that the wider community was generally unaware of immediate post-compulsory school structures, its curriculum, assessment and certification procedures. This was often attributed to the frequent changes accorded to it. It was suggested that changes brought about by the Enquiry should be spelled out in a well planned community awareness program, possibly using public media. In this way all members of the community - employers, parents, tertiary institutions and even students and teachers within the school sector - would be better informed and have clearer notions about the purposes and processes of immediate post-compulsory secondary schooling.
3. CURRICULUM PATTERNS

3.1 A Starting Point

A great variety of curriculum models were suggested by respondents as being appropriate for Senior Secondary schools. These have been noted by the Enquiry.

A significant proportion of submissions advocated the International Baccalaureate as a model which could well be adapted for use in this State, while some others saw the Swedish three year post-compulsory education model as more appropriate. Respondents suggested that as these models appear to service their clientele very satisfactorily and have international recognition, curriculum developers in South Australia should examine them in detail.

3.2 Curriculum Rationale

Many pages of many submissions discussed in general terms the rationale behind a curriculum for students in the post-compulsory sector. Cogent points have been integrated into the subsequent analysis. Questions were raised as to how a curriculum can provide a "broad general education" for all students and yet provide "in-depth subjects" for those who require them. The majority opted for a curriculum which enabled every student to develop as a "whole person" with the necessary personal, academic and social skills to move with confidence and unimpaired self-esteem into Australian society. It was envisaged that a school leaver should possess the necessary skills either to seek out employment or to engage in further study.

Two major themes emerged in response to the perceived inadequacies of the present curriculum. The first relates to the strongly held belief that the present year 11 and 12 curriculum is pitched largely at the tertiary entrant. The reaction to this is summarized in the following brief quotation: "The artisan is as important as the academic". The second refers to the current emphasis upon "content" leaving little time to attend to the "process" of teaching. One respondent says it this way: "We must teach them to think, not just acquire knowledge and skills".

3.3 The Shape of a Post-Compulsory Curriculum

The majority of submissions supported the idea of a curriculum framework which spanned years 11 and 12 (and a thirteenth year for students who required more time to complete a two year program). The semester system was highly favoured, as was a point or unit system of credit for subjects successfully completed over one or more semesters. Overall, respondents preferred a six:six pattern of subjects for years 11 and 12. Flexibility was advocated as a necessary element of a post-compulsory curriculum. Students must be free to re-enter or study part time; mature entrants should also be encouraged to return. Curriculum timetabling should be such that students could take a number of subjects offered by other providers and should make use of "twilight hours", summer schools, early morning and vacation schools.

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3.4 The Nature of the Year 11/12 Curriculum

Although a large percentage of submissions referred to the "non-compulsory" nature of the post-compulsory years, many argued for a compulsory core within a curriculum which offered a "broad general education" to all students. Some submissions addressed this issue of "compulsion" by suggesting a curriculum framework which allowed students choice within a number of designated areas; others were willing to go no further than suggesting that some subjects be regarded as "highly desirable" but certainly not compulsory.

It was felt that "a broad general education" could include two basic subject categories: "in-depth" and "general". All students should be required to undertake some "general" subjects. There was no general consensus on how many from each category a student should take, although some respondents suggested a 50:50 balance, while others said at least one and preferably two "general" subjects.

Tertiary Entrance Subjects were supported for those aspiring to higher education. Though not equated with "in-depth" subjects ("in-depth" subjects need not be tertiary entrance subjects) they were regarded as a component of the "in-depth" subjects within the curriculum.

It was strongly argued that the post-compulsory secondary school curriculum must include offerings from other accredited providers. As mentioned in 3.3, this would necessitate a much more flexible curriculum and school structure to enable students to move into other agencies. Curriculum flexibility was also discussed in the context of accommodating part-time and mature age entrants.

Distance mode teaching was suggested as a reliable way to extend a school's year 11 and 12 curriculum, particularly when supported by itinerant or supervisory teachers.

The SAS and PES subject distinctions were highly criticized. It was believed that the distinction between these two types of subjects was largely based upon their assessment mode. Respondents said that such a classification was "unfortunate", "unnatural" and "exclusive" and should be abolished. Most argued that all subjects should be of equal value even if for different purposes. (See 5.2).

3.5 Post-Compulsory Curriculum Composition

What constitutes "a balanced program of studies" obviously perplexed many respondents. The following discussion is an attempt to synthesise the generally preferred directions which have been expressed over the whole range of submissions. Three major curriculum clusters or groupings are discernible, although a number of submissions would wish to further divide subject categories.
CLUSTER I

The following list draws descriptive names direct from submissions. Obviously there will be overlap which curriculum developers would need to address:

- English
- ESL
- English Language
- English Expression
- Language Studies/Skills
- Communication Studies
- English Rich Subjects
- Arts Subjects
- Social Sciences
- Humanities
- Languages

This cluster revolves around English Language and its function in a variety of subject settings. Although English Language is the mode of expression in each area, it should not detract from the subject content.

Discussion about subjects within this cluster included reference to the necessary development of written and verbal English communication skills, some referring to it as "functional English". The need for remediation for less able students was frequently expressed, as was a system which enabled average and able English language students to explore other "English Rich" subjects rather than be confined to a specific subject called "English". (See 4, English Expression).

CLUSTER II

This cluster involves a group of subjects which focus upon quantitative analysis, computational skills and experimental methods:

- Maths
- Science
- Technology

Basic mathematical or numeracy skills which enabled students to function comfortably in society were seen as a necessity for all students. If students had achieved these skills at the compulsory level of schooling, they should not be required to undertake more mathematics at the post-compulsory level. However, remediation should be available for students who had not achieved the required level of skills.

A number of submissions argued strongly that maths should not occupy such a dominant position in the year 11 and 12 curriculum and that Maths I and II should be reduced to a single subject. This suggestion was strongly resisted by engineering and some science faculties at the tertiary level.
Some submissions suggested that a general science subject, perhaps "Science in Society", be offered at the post-compulsory level.

Technology or "Technocracy" was seen by most respondents as a critical component of the curriculum. Some submissions spelled out curriculum details for this subject which included "data analysis" and "keyboard skills", while others described a broader subject related to the use of Technology in the community.

CLUSTER III

This somewhat heterogenous subject cluster has as its central theme individual development, either personal or vocational, within the context of Australian society. Again, subject names are drawn directly from submissions and so do not take into account overlap.

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Submissions argued for more attention to be given to Personal Development, Vocational Education, and an Awareness of Australian Society. It was generally believed that such an educational component would better enable a student to make a successful transition from school to work or further study. Many suggested that today's school leavers lacked confidence and high self esteem because schooling does little to emphasize these areas. Counselling alone could not overcome these deficiencies; it was argued that actual curriculum subjects need to be devised, recognized and implemented to address this area of need. Others saw the importance of including elements of some of the above-mentioned subjects across all the subjects within a curriculum.

Information about human relations and the Australian community generally were also seen as desired components of the curriculum. Given equal importance were the practical aspects of vocational education, work experience and community service. Work experience was emphasized as a "real" way to prepare students for adulthood and the world of work. A significant number advocated it as a subject in its own right for which students should receive credit. Some suggested that it should arise out of other subject areas and so be more integrated into the curriculum.
3.6 Essential Learnings Across the Curriculum

Respondents expressed a serious concern about the inability of today's year 11 and 12 curriculum "to teach students to think", "to think critically", "to learn how to learn", "to research and reason", "to solve problems" and more generally to be negotiators of their own learning. The teacher-centred curriculum which, largely because of current assessment procedures emphasises "content, pushes aside any real opportunity to develop "process". "Processes" are seen as essential learning within all subjects across the curriculum. A significant number of submissions argued that these essential learnings must be identified and become the focus of a curriculum pattern for the senior secondary years. They suggested that such a curriculum would lead to better informed, better prepared, more able and more adaptable school leavers. Those who opposed this notion saw enormous practical difficulties in organizing a curriculum around essential learnings shared by separate subject areas. Protagonists agreed that such a change would require radical rethinking and organization, but certainly should not be dismissed because it is "too hard". An immediate, more accessible change could be the introduction of student negotiated learning and appropriate teaching methodologies to accompany it. This view was forwarded by a large number of sectoral and individual submissions.

Curriculum "developers" to work on these vexed questions relating to process, student negotiated learning, and essential learnings across the curriculum, were seen as immediate requirements. The long term goal should be the implementation of changes through a series of carefully planned stages.

3.7 Associated Issues

Accreditation for senior secondary school subjects, as well as the accrediting of subjects offered by other agencies, was seen as essential. The majority of submissions agreed that SSABSA's brief could be extended to include this role.

Assessment was seen largely as a responsibility shared between SSABSA and schools as long as the moderation and scaling processes currently used were carefully monitored and further refined. Many respondents pleaded for a more innovative approach to assessment and requested more school-based assessment.

Respondents were almost unanimous in their recommendation to appoint a co-ordinating body for the post-secondary school sector. As to which body should fill that role, there was no one clear-cut conclusion. Some said that SSABSA with extended authority could fulfil the role, while others suggested the establishment of a new body with representatives from schools, TAFE and other educational agencies, higher education, the Education Department, SSABSA and the community. Others saw co-ordination as school based.

Curriculum development was an area which many felt should not be vested in the same body as that which assessed and accredited subjects within the curriculum. Schools, TAFE, higher education, other educational providers, the Education Department and industry expressed a wish, or were nominated, to be part of a curriculum development working party. The notion of a "working party" giving a picture of ongoing development was suggested rather than the more static idea of a committee or administrative body.
4. ENGLISH EXPRESSİON

4.1 Introduction

English and its role in the post-compulsory years was a seriously debated topic. Almost every submission supported the notion of English Expression as an integral part of the immediate post-compulsory school curriculum at least until Year 11. As to the exact nature of the subject and how it should be taught and assessed many had suggestions but few agreed upon answers emerged.

4.2 English as Perceived by English Specialists

Secondary language specialists, argued defensively that the existing English Curriculum at the post-compulsory secondary level was comprehensive and certainly had the scope to produce students quite able to cope adequately with the English requirements of employment and tertiary study. They demanded research evidence from the tertiary institutions to support the claim that students are ill prepared in the area of English language.

As to the introduction of English Expression at the Year 11 level, English specialists raised doubts on three issues: (i) What constitutes English Expression? (ii) How can English Expression be adequately assessed and by whom? (iii) That until the dilemma of realistically integrating and assessing English in all subject areas is solved, teachers of English are limited in their teaching of the subject. This last view is strongly supported by the proponents of "Essential Learnings" across the curriculum.

4.3 Tertiary Institutions and English Language

Tertiary institutions make strong claims about the unpreparedness of school leavers in the field of English Expression. Students are criticized for their generally poor ability to write essays, reports, and research documents. They are less criticized for their verbal abilities. An accusing finger is pointed at the school and the claim is made that in spite of a curriculum which gives lip service to the various needs of English Expression both in language and writing, there is a "failure to deliver the goods". Tertiary institutions are strongly insistent that students come to them possessing the necessary language skills to undertake advanced studies; this means being competent in written and verbal English. They do not feel it is their role to provide remediation in this area.

4.4 What kind of "English" do Students Require?

School leavers in the workforce and at tertiary institutions who have at some time experienced or are presently experiencing difficulty in the area of English, suggest that the sort of skills they would have liked to acquire in the senior secondary school were written and oral communication skills, research and writing skills and a practical knowledge of how to use Australian English to their advantage in their place of work or study. In retrospect they assert that much of their senior school English studies related to advanced studies in English language and literature and thus had little relevance to their current practical needs.
4.5 A Post - Compulsory Secondary English Subject

The nature of an appropriate English subject for all senior school students is elusive. In fact, respondents in their disagreement implicitly indicated that there may be no one suitable subject for all. Thus, it is very worthwhile to briefly mention some of the more widely canvassed suggestions.

Remedial English for those students who have difficulty in grasping the rudiments of the subject should be available, just as an English subject concentrating on advanced English language and literature should be offered to the student who shows particular aptitude in the area. English for Tertiary Study could be structured around essay and report writing, research skills, seminar preparation and presentation, and be offered to students wishing to pursue tertiary study. English for Employment was suggested as a way of teaching school leavers some basic oral and written skills expected of them in the workplace. English as a Second Language must also be given its rightful place.

To reiterate an earlier comment, it was argued by several submissions that English language is and should be recognized as an integral part of subjects right across the curriculum. Therefore the teaching of English must be a total school responsibility, not just confined to the English facility or department. All teachers must contribute to this essential learning.

A number of submissions raised the point of view of a category of "English Rich" subjects which if taught with this English language component in mind, as well as the subject specific content, could be classified as viable alternatives to a specific English Language subject. History would be an example of an "English Rich" subject. This notion was well supported by several major submissions. (See 3.5).

5. ASSESSMENT

5.1 Broadening Assessment Procedures

Many teachers adamantly objected to assessment procedures which rated students by a single criterion of marks or grades. They called for major reform in this area suggesting criterion based assessment as an appropriate substitute.

Attention was drawn to the content base of most current assessment procedures; students are given information and are assessed upon their knowledge about its content. In today's educational climate such a narrow, single-purpose assessment mode is regarded as suspect. Skills and processes are of critical importance and a student's grasp of these should also be assessed; this was the generally expressed view. "Essential learnings" in the area of skills and processes across the curriculum need to be identified by competent curriculum developers and standards established. Assessment should then relate to the "achievement of measurable skill and process competencies" as well as content.
Overall, a general broadening and exploration of assessment modes was urgently requested. The International Baccalaureate was frequently alluded to as having assessment processes worthy of detailed consideration by South Australian education authorities.

Associated with developing and refining assessments was the call for professional development of teachers at the immediate post-compulsory level in this area. Several submissions also pointed out the need for tertiary institutions and staff to look more constructively at their generally more conservative processes of assessment with a view to improvement.

5.2 Dismantling the PES/SAS Distinction

That School Assessed Subjects should be regarded as equal to Publicly Examined Subjects was a view frequently voiced. Respondents deplored the high status which PES had unnaturally assumed and claimed that SAS should be of equal merit to PES. Few argued against their intrinsically different purposes; it was the status differential that caused concern. The division of two sets of subjects primarily on their assessment mode was not acceptable.

Tertiary Entrance Subjects were seen as desirable and probably necessary. It should be the responsibility of tertiary education institutions to designate such subjects and not rely on the current SAS/PES distinction.

It was felt that the removal of the distinction would allow subjects to develop in their own right and would eliminate the "academic creep" problem currently associated with some SAS. A resolution would also encourage the development of subjects and associated assessment procedures which could relate more specifically to students with different personal needs and abilities. This flexibility would also better accommodate the part-time student, the re-entrant and the student in the "fast lane".

Many submissions emphasized that however subjects were reclassified, it was important to maintain standards, encourage excellence and continue to assess with academic rigour.

5.3 Public Examinations

Arguments "for" and "against" examinations were raised by many informants. Most favoured a component of the overall assessment of a subject taking the form of a public examination, particularly if a subject related to tertiary entry or specific employment situations.

Many students complained that they were ill-prepared for examinations because the first they contended with occurred in Year 12; some teachers agreed. Though no students particularly liked exams they would rather "suffer" them more frequently so as not to be disadvantaged in final assessments.

Of critical importance, respondents suggested that the exam component was desirable but was certainly not the only or even the major way that a subject could and should be assessed.
5.4 School Based Assessment

Although external assessment (not necessarily by public examination) was regarded as necessary and important by the majority, school based assessment, particularly if externally moderated, was also seen as an intrinsic part of assessment. Schools generally felt they should have "their say" for "their students". Most accepted external moderation at the Year 12 level.

With the move towards a Year 11 and 12 cohesive curriculum some raised the question of how far Year 11 assessments should be externally modified - and by whom? Should SSABSA's role be extended to include this brief or should schools largely work out their own processes? The latter pathway was generally favoured, with respondents feeling there should be as little intervention from an external assessment body at the Year 11 level as possible.

5.5 Moderation and Scaling

Although both moderation and scaling were roundly criticised by many respondents, others defended it as totally necessary, particularly in a system which used a single aggregate score. Those with educational expertise, and those who were thoroughly conversant with the statistical and mathematical processes involved, were quick to point out its shortcomings, but also justified its use. "The assumptions behind the scaling process require ongoing investigation and the actual means by which scaling is applied also needs constant monitoring", said informed respondents.

Cross subject scaling was loudly disclaimed, and the immediate abandonment of discounting was a common request.

That scaling discriminates against girls in maths and science and against boys in English was a strongly expressed view. One submission asserted that "boys can gain university places by scaling rather than merit. That sort of scaling is indefensible". Certainly the issue of gender bias within scaling caused many respondents to make decisive comments about its inequity and to request the Enquiry to seriously address the question.

A significant number of submissions pointed out the general community ignorance about these processes and requested that as long as they are an integral part of South Australia's assessment procedure, the community at large should be given full information about them.
5.6 Assessment Stress

The pressure to perform well in order to gain scarce places in tertiary institutions and employment together with the mode of assessment, whether it be by public examination or by school arrangement, caused respondents to argue that means should be found to reduce the excessive stress these factors caused. "Year 12", said one respondent, "is more a race than a learning situation", and as a consequence becomes a most unsatisfactory year for a majority of students. A health professional argued, convincingly, that the "turbulence" caused by this stressful environment (created entirely by humans) was a critical health hazard for young adolescents which should be removed. The following section attempts to draw out some suggestions of how this pressure can at least be reduced. It must be mentioned that some felt a reasonable degree of pressure was fair, tolerable and realistic.

5.7 Reducing Assessment Pressure

By broadening assessment procedures, removing their emphasis on content and dismantling the SAS/PES subject division, assessment pressure could be significantly reduced. This would also need to be accompanied by a move away from the five subject aggregate score and the currently meaningless matriculation cut off point of 59. (This area is discussed in more detail in Section 7 on TERTIARY SELECTION.) A major complaint about pressure specifically related to the unrealistic amount of work to be covered in a short time. Respondents generally favoured a more flexible time frame to enable students to cover work over several years as a way of reducing this pressure.

Redeemability was also frequently raised. The finality of Year 12 results achieved during the year in school assessments and in public examinations at the year's end seemed to many respondents unfair and unnecessarily inflexible. A review of the situation was requested as a matter of urgency.

5.8 Administering Assessment

SSABSA's overall role in administering assessment was regarded positively, though some were critical. It was generally felt that SSABSA's brief could be extended to include any changes in assessment procedures which may be implemented as a result of the Enquiry. The rationale behind such a continuation related to the perceived need to consolidate and work upon existing acceptable foundations. As to be expected, a number of submissions rejected this view, calling for a new assessment body.

An interim arrangement suggesting the establishment of a representative working party to address the assessment question was widely supported.
6. CERTIFICATION

6.1 The Need for a Credential

An almost unanimous view emerged from respondents who addressed the issue of certification that some form of common credential be awarded to students moving out of post-compulsory education. Some described it as a "rite of passage" into the world of work or further study and saw it as a necessary incentive toward which students could work. One respondent put it this way: "Somebody should say what they (students) have done and how well they have done it". "Preferably on nice parchment", suggested another.

6.2 The Nature of the Credential

Several agreed upon features have been drawn from the submissions. Respondents suggested

(i) that the credential be issued whenever a student moved out of post-compulsory schooling whether at year 11, 12 (or 13);

(ii) that all completed school subjects activities and experiences be recorded on the credential;

(iii) that other providers of post-compulsory education and experience have input if students had undertaken courses or activities with them; and

(iv) that the credential have the flexibility to be updated if school leavers undertake further secondary study at a later date.

Differing views were presented on the following aspects:

(i) More than half the submissions favoured a single multi purpose certificate, while the remainder argued for a cumulative portfolio or folder of relevant information.

(ii) More respondents suggested a record of achievement noting grades than purely a record of completion.

(iii) The notion of a graduation certificate (and accompanying graduation ceremony) was suggested by a small number. Though not opposing this idea, few others actively gave it support.

(iv) A number of submissions from the secondary sector said that the current school leaver's certificate had the potential to be upgraded, but in its present form was not considered adequate as a single credential.

(v) Several suggested that an "extended" SSABSA certificate would suffice but this view was opposed by a minority.

(vi) Some tertiary submissions suggested that academic transcripts be available on call at the post-compulsory secondary level. Few submissions from the secondary sector considered this idea which suggests that further collaboration on this issue between the two sectors may be useful.
6.3 Administering the Credential

Few respondents considered the question of how the issuing of a credential should be administered. However views on how the process of administration should work were forcibly argued by those who did address the question.

Many recommended SSABSA as the appropriate body to administer certification. With extended responsibilities its role would need to be broadened and extra resources provided if it was to carry out this task efficiently. The development of a centralized computer system to accommodate cumulative records was an important practical suggestion made be several respondents.

Several opposed the idea of SSABSA as the credentialling body and argued that certification was definitely within the province of the school.

7. TERTIARY SELECTION

7.1 The Need for Change

Submissions generally expressed a high degree of dissatisfaction with the tertiary selection procedures currently employed in South Australia. The following discussion draws out the major criticisms and debates surrounding the selection issue thus highlighting the need for change.

7.1.1 The Aggregate

Arguments against the aggregate as a single major tool for tertiary selection were "loud and long", particularly from parents, students, teachers and administrators. It was labelled variously as "unfair", "unreal", "discriminatory" and "impersonal". A few submissions alluded to the objectivity of the aggregate and so described it as a "fair means", others drew attention to its cost effectiveness as a positive feature. However, very few felt it was the best measure for selecting appropriate students for tertiary study.

7.1.2 The Scaled Aggregate

Statisticians, some educationists and academics supported the notion of "a scaled aggregate" as a major element of selection. Although many accepted the logic of scaling many did not, and called for an immediate review of the process. The use of cross-subject scaling was the most contentious issue. A number of parent, student and some teacher submissions requested more information on the scaling process and how it related to selection procedures.

7.1.3 Discounting

This issue evoked some very angry responses. Several submissions addressed this issue alone. Students, teachers and parents argued that it be abandoned. Submissions from tertiary institution and education authorities offered little in defence of discounting. However one major institution saw that, at least, it should be modified and was in the process of putting its idea into practice within the institution. The majority of respondents addressing the issue saw discounting as discriminating against students undertaking studies in School Assessed Subjects.

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7.1.4 The Quota System

The relative shortage of tertiary places in many faculties has inevitably caused intensive competition for places. This caused respondents to condemn the quota system and its unfortunate repercussions which can cause students to use educationally indefensible methods to achieve a high aggregate score to gain a coveted place. Quotas also conferred a "de facto" status upon some subjects and often detracted unfairly from others.

7.1.5 Mismatch Between Secondary and Tertiary Education

A number of submissions drew attention to the nature of our schooling system, describing it in terms of "resembling the American model", while our tertiary system, they claimed, is largely based on "that practised in the UK". (Some argued that our tertiary system is modelled on a "Scottish" system.) Such a mismatch between systems is seen as a major contributing factor to the currently high first year attrition rates in tertiary institutions. Tertiary selection procedures are such that the discrepancy between systems is not taken into account and students who are potentially able to cope with both systems cannot be recognized by a selection procedure primarily based on a single aggregate score. This links with the assertion that secondary students are generally ill-prepared for tertiary study.

7.1.6 Haphazard Selection of Career Paths

One submission described tertiary selection as "good luck rather than good management". Highly motivated, personally suitable and academically able students frequently lose tertiary places to outstanding exam performers who may not be highly motivated, suitable or possess the necessary "stickability" for a particular career path. This haphazard selection of a career path, frequently producing poorly motivated students, is blamed in part on present selection procedures.

Inadequate counselling for tertiary entrants is the other major concern. All sectors recognized the paucity of career and personal counsel for students embarking on tertiary study.

7.1.7 Immaturity of Tertiary Entrants

Several submissions pointed out that both now and for several years to come school leavers in South Australia will be a year younger than their counterparts in other States and in many equivalent overseas countries. This means that a large percentage of students entering tertiary institutions are less mature than is necessary for tertiary study. This often leads to failure in their first (or subsequent) years of study. Many submissions favoured an extra year, preferably as a general first year of tertiary study, to enable school leavers time to mature.
7.1.8 Attrition

Tertiary institutions suggested a variety of reasons for the alarmingly high first year attrition rates: poor preparation of students in years 11 and 12; immaturity; inadequate counselling and lack of motivation and discipline. On the other hand, secondary schools largely blamed inappropriate selection procedures, inadequate counselling and outmoded teaching and assessment procedures at the tertiary level. Tertiary students, in retrospect, highlighted several of these issues pointing particularly to poor preparation for the tertiary world of study, little real knowledge of their elected career study path and the belief that a "high score" was the critical entry qualification.

7.1.9 Tertiary Dominance over the Secondary Curriculum

A majority of respondents believed that the current mode of tertiary selection, critically depending upon a high aggregate score over five year 12 subjects, forced aspiring tertiary entrants into selecting year 12 subjects which, when scaled and moderated, produced an optimal score. A ripple effect also permeated a student's choice of year 11 subjects. Over a number of years a science/maths combination has proved the best "score catcher". Hence science subjects, particularly physics and chemistry in addition to Maths I and II, have come to dominate the senior school curriculum. (This complex issue of tertiary dominance over the senior secondary curriculum is also interwoven with recommended pre-requisites, subject status, scaling, equity and the tendency for an increasing number of employers to choose employees on their aggregate score at year 12.)

Almost inadvertently it appears that tertiary institutions, especially universities, have had a very great influence upon the shape of the senior secondary curriculum. Most regard this influence as negative.

7.1.10 Matriculation

Originally, this concept had real meaning in South Australia; students who scored a required number of points matriculated and automatically gained entry into a tertiary institution, usually of their choice. Today, having gained the required matriculation score of 59 points, gives no guarantee at all that a student will gain a place in a tertiary institution, let alone within the career path of his/her choice. It is therefore convincingly argued that the present concept of matriculation be abandoned.

7.2 Models for Tertiary Selection

Some constructive suggestions were made about how to change, modify and improve selection procedures. Four basic, previously tried models were canvassed as alternatives to replace the scaled aggregate as the primary selection mode.
7.2.1 Entrance Examinations

To release the hold many respondents believed tertiary education institutions have over the senior secondary curriculum, a move to entrance examinations was advocated. It was envisaged that each institution would conduct its own examination and that careful guidelines be given to schools and school leavers about requirements for these examinations.

7.2.2 Criterion Based Selection

Many argued that other criteria should be used in tertiary selection. A scaled aggregate was regarded as one possible criterion. A profile which took into account aptitude, personal suitability, motivation, levels of achievement in specified subjects and accredited work experience was more strongly supported. Problems associated with measuring these criteria were recognized as was the problem of resourcing such a comprehensive yet highly desirable process of selection. It was felt, however, that the probability of students succeeding because of a more reliable selection procedure far outweighed the cost of implementing the process.

7.2.3 A Sub-Aggregate

Serious consideration was given by a number of respondents, mainly from the tertiary education sector, to a move towards a sub-aggregate system for tertiary selection. "Best Three" was favoured, although engineering faculties are unwilling at this stage to consider less than four (see section on Pre-Requisites 7.3.2). Although the idea of a sub-aggregate was suggested somewhat cautiously by some respondents, particularly if there was no control over the nature of, and performance within other subjects, there seemed a willingness to examine the idea further with a view to implementation.

7.2.4 Deferring Selection

The idea of deferring selection until the end of a general first year of tertiary study was promulgated by a number of tertiary educationists. This notion was also supported by submissions from the secondary sector. The main advantages of such a delay were seen as (i) giving students time to mature (ii) allowing them to experience tertiary study and (iii) encouraging them to get a feel for several subjects and possible career paths. Further debate and discussion particularly within the tertiary education sector on this issue was strongly recommended.

7.3 Processes to Facilitate Tertiary Selection

7.3.1 Use SAS for Entrance?

Respondents' views were polarised on this subject. Some higher education authorities, particularly at the university and institute level, believed that School Assessed Subjects were not appropriate for tertiary entrance and should resume the role for which they were originally designed, that is, as general subjects for students not wishing to pursue further study at the tertiary level. A number of respondents condemned the "academic creep" of some SAS subjects; some went as far as to criticize teachers who tried to raise the status of these subjects.
The opposite point of view suggested that selected SAS should be regarded as tertiary entrance subjects. Certainly it was argued that the methodology and content of some SAS warranted them being regarded as such. Some tertiary institutions already accepted some School Assessed Subjects for entry, while others indicated a willingness to further consider the matter.

The view that the distinction between Publically Examined Subjects and School Assessed Subjects be removed was widely supported. (See 5.2) If this were to happen a completely new complexion would be placed upon the selection issue, for tertiary institutions would then need to reassess their subject entry requirements.

7.3.2 Pre-Requisites

Again respondents expressed opposite views on whether or not tertiary institutions should prescribe pre-requisites. Those involved in secondary schooling firmly suggested that stated pre-requisites would positively assist students in preparing for tertiary study. While some tertiary institutions were willing to state requirements (de facto pre-requisites), most were understandably cautious about formal pre-requisites.

Science and engineering faculties were the most adament in their requirements, the latter regarding Maths I and II, Physics and Chemistry as necessary for any engineering students. Other faculties such as languages and music also imposed pre-requisites whether informal or formal.

7.3.3 Tertiary Preparation

Tertiary institutions said that most school leavers entering their institutions were poorly prepared for study at the tertiary level. Tertiary students reiterated this theme. Exceedingly high attrition rates were presented as concrete evidence. Some form of tertiary preparation was advocated. Suggestions included preparation classes in the senior secondary school and orientation programs for beginning tertiary students at tertiary institutions. The notion of a bridging year was supported by a significant number while others argued than an extra year of experience either as a year 13 or in the world of work may well be the best tertiary preparation.

Another line of argument on this issue related to teaching methodologies. Some said that teaching in year 11 and 12 should reflect the tertiary mode, while others drew attention to the need to review the sometimes rigid and occasionally archaic methods used by some tertiary staff.

7.3.4 Work Experience

Inherent in the notion of Work Experience as an accredited subject was the view that students who had worked in the field which related to their proposed studies should be given credit for this work and preference in tertiary selection over the entrant who had not had an appropriate work experience.
7.3.5 Counselling for Tertiary Study

Related to section 7.3.3 "Preparation for Tertiary Study", respondents expressed a need for broader and more effective counselling in both senior secondary schools and tertiary education institutions. Counsellors, it was suggested, should be more easily accessible to beginning tertiary students. Few disagreed with the notion that students at the tertiary level should be given the academic, social and economic support they needed. It was also recommended that the existing view of a counsellor's major role as that of helping students with problems would need to be broadened to include a more constructive and preventative role.

7.3.6 Resourcing Selection Procedures

Most of the proposed changes in tertiary selection would necessarily require extra resources. Few respondents had constructive ideas about where such resources could be found. Many demanded that governments had a moral responsibility to reallocate scarce resources to service this critical area of "educating our youth for our futures". Accusing fingers were pointed at both the State and Commonwealth Governments' "lack of commitment to the education of 15-18 year olds". Comparisons were made with countries such as Sweden and the USA and pleas for a "better deal" for South Australia's youth were frequent. Several submissions suggested that those students who moved into tertiary education were the future leaders of the nation and as the "intellectually superior" needed special support as equally as those whose "talents lay elsewhere". "It is a matter of equity," argued one respondent.

8. THE TAFE SCHOOL INTERFACE

8.1 TAFE School Co-operation

That TAFE and Senior Secondary schools should co-operate in the provision of education at the immediate post-compulsory level was one of the most supported views over all submissions. Schools, it was claimed, cannot pretend that they can cater for all types of students in a wide variety of courses. It is therefore essential to use the educational services provided by agencies such as TAFE. One submission said it this way:

"There should be a closer link between schools and TAFE. There is no reason to assume that a given student could not divide his time between two institutions. It would be a needless luxury to spend a huge sum of money on equipment for one...school when a neighbouring TAFE has the necessary plant..."

The vocational nature of many TAFE courses appealed to respondents, who saw prevocational experience as a necessary component of senior secondary schooling, particularly if it involved "hands-on" experience. Their arguments focused upon preparing students for employment and assisting them in their transition from school to work. As schools currently undertook very little prevocational training, TAFE, in co-operation with schools, was seen as the appropriate provider in this area. TAFE affirms its role in vocational training and is, at least at the college level, in basic agreement with assisting schools to prepare students for the world of work.
The view that senior schools largely concentrate on preparing students for tertiary entrance at the cost of providing a broad general education for all students and assisting students not wishing to enter institutions of higher education, was frequently linked with the debate on TAFE school co-operation. TAFE, it was claimed, coped very successfully with the school leaver who did not immediately aspire to enter institutions of higher education. The further education programs at TAFE provided an acceptable alternative for those school leavers, who it seems increasingly believe that TAFE study is more likely to lead to employment than most other post school options.

Attention was particularly drawn to students in neither of the above mentioned categories who were often overlooked by schools and TAFE. One submission suggested: "There is a need for close co-operation between TAFE and the Education Department to ensure that services offered dovetail rather than allowing the existence of a substantial proportion of the age cohort which receives educational services from neither ministry."

A significant number of submissions pointed out that TAFE programs were generally successful in preparing students for work and certainly there is evidence that a majority of TAFE graduates are successful in finding employment.

Respondents urged senior secondary schools to look to TAFE as a model and, where possible, work in conjunction with them. The more mature environment provided by TAFE colleges appealed to students in the 15 to 18 year old cohort and was described by them as both comfortable and conducive to successful study.

8.2 TAFE's Role

Debates about TAFE's role in the education of 15 - 18 year olds often reached a sticking point when actual frameworks for co-operation needed to be devised. The following résumé gives some indication of the diverse views about the issue. Throughout the discussion there is a strong recognition that TAFE school co-operation is eminently desirable, but many impediments seemed to bar the way to the implementation of a workable co-operative process.

The Department of TAFE claimed that of all school leavers entering tertiary institutions, one third move into TAFE. At one stage it was stated that more 15 - 18 year olds attended TAFE than school, though this is likely to change as senior secondary school retention rates rise. These statements demonstrate the major role that TAFE plays in the education of South Australian young people at the immediate post-compulsory level.

Attention was drawn to the significantly different roles taken by TAFE and schools. Schools, it was suggested, are "teaching/learning institutions concerned with learning how to learn" whereas TAFE concentrates on "the teaching of skills." A number of respondents drew attention to the fact that school teachers need professional qualifications and registration whereas "TAFE lecturers are not necessarily professionally qualified in pedagogy."
Some argued that TAFE's elevation to tertiary status removed it from the arena of needing to provide pastoral care and a broad general education to its students. Senior Secondary Schools, particularly in the Catholic and independent sectors, held the view that 15 - 18 year olds needed these elements of care and general education and so immediate post-compulsory education should be the province of schools, not TAFE. This view, that Secondary Schools should be the major provider and be responsible for the education of 15 - 18 year olds, was agreed upon by most respondents. TAFE should be free to carry out its stated role of further education for the whole community. Part of its contribution only should be the education of the 15 - 18 year olds.

Several respondents held that part-time employment and study either at TAFE and/or school should be an option provided to 15 - 18 year olds. That courses relating to self-employment and self-sufficiency could be undertaken by senior school students within local TAFE colleges was an idea well documented in some submissions. These courses of study could be undertaken in conjunction with part-time work.

Several TAFE colleges expressed a degree of dissatisfaction with having to provide literacy and numeracy courses. They felt that basic skills such as these are the responsibility of schools and that students who enrol in TAFE courses should already possess these skills. If not, they should return to school to get them and not expect TAFE to provide educational services in this area.

The question of funding joint TAFE school ventures arose with a general agreement that more resources would be required. The philosophy of "user pays" was forwarded as a way of funding selected TAFE school initiatives.

Unanswered questions included: "How would TAFE courses taken by school students be administered?" and "What recognition should be given to students who completed them?" Student mobility between schools and TAFE colleges was also raised as a management concern.

The area of accreditation of TAFE courses was contentious. Some believed SSABSA should accredit TAFE courses for secondary students while others, particularly TAFE representatives, strongly opposed this on the grounds of TAFE having its own more appropriate accreditation processes suited to its courses.

8.3 TAFE's View

The predicted increase in retention rates for both school and TAFE at the immediate post-compulsory level will indeed place a much greater demand upon both sectors to better service this group. From information given in submissions it was obvious that there is a lack of clarity about the roles which schools and TAFE should undertake in the educational provision for 15 - 18 year olds. This is exacerbated by a progressive decrease in resources.
Much has been done by TAFE and the Education Department to devise more effective ways of co-operation and several useful foundations are now in place. Initially, both parties agree that immediate post-compulsory education is the primary responsibility of the senior secondary schools and the authority which directs them. TAFE, although a major provider of education at this level, is, as stated in the previous section, primarily concerned with offering further education to the broader community. TAFE, however, sees the need to co-operate with the school sector in providing education for 15-18 year olds because it believes the duplication of services is undesirable, particularly in the light of limited resources to the education sector generally. It must also be noted that TAFE has a variety of very successful and appropriate courses of study for this age cohort.

The "student at large concept" which implies "learning beyond school while being at school" is strongly supported by TAFE as a way in which senior secondary students can undertake part-time courses at TAFE colleges while attending school. TAFE favours this notion of the school being a student's base.

The issue of accreditation of courses is a complex one. TAFE develops and delivers its own courses frequently in collaboration with business and industry; its courses are accredited by outside authorities. TAFE believes it would be inappropriate for SSABSA to accredit its courses. However TAFE suggests that there is no reason why TAFE subjects and TAFE gradings should not be recorded on a student's SSABSA certificate.

A framework for the transfer of credit between TAFE and SSABSA is to be implemented in 1988 and an Articulation Committee has been established by TAFE to work on the "jointing together" of secondary school and TAFE courses.

Many successful examples of TAFE school co-operation are evident around South Australia, but as yet TAFE asserts "no clear rationale or organizational structure has emerged." They claim it is very difficult to transfer successful models of co-operation to other geographical locations. Because TAFE also regards its role in immediate post-compulsory education as marginal to its overarching responsibility for further education to the broader community it can provide little more than localized support for joint TAFE school initiatives.

8.4 Examples of TAFE School Co-operation

Several submissions from TAFE colleges outlined very successful TAFE school co-operative ventures, while many school submissions referred to local liaisons with TAFE colleges which they believed enhanced their senior secondary school program. Country schools particularly saw their link with TAFE as essential. Examples of co-operation or proposed co-operation included the following:

(i) Yorktown Area School with a TAFE college campus situated in its grounds sees it as feasible "for students to do prevocational courses as part of post-compulsory schooling within TAFE";
(ii) the Northern Area Transition Education Association (NATEA), established in 1981, provides a viable model of co-operation. It offers an important curriculum option for senior secondary students and promotes their retention within the education system. The co-operative program between a number of schools and TAFE colleges in Adelaide's northern suburbs includes a comprehensive LINK program, integrated studies for Year 11 students and unit studies within the Certificate of Vocational Education for senior secondary students. In all cases, students attend the local TAFE college to undertake their studies;

(iii) Goodwood High School, though not specifically linked to TAFE, prepares students for entry into TAFE courses by paying particular attention to the articulation between its courses and those offered by TAFE;

(iv) Noarlunga College of TAFE is "promoting more flexible and interconnecting pathways between itself and other agencies" and particularly wishes to investigate collaborative courses with adjoining senior secondary schools. Its innovations include a Certificate in Vocational Education (CVE) and the development of an Individualized Competency-Based Program for the Basic Trade Course, both very useful education programs for 15 - 18 year olds;

(v) the Blackfriar's School model utilizes TAFE courses in the Business Studies area. TAFE determine course content, assessment accreditation and certification in these courses; and

(vi) the Adelaide College of TAFE offers some places to remotely situated Year 11 and 12 students in the Small Business and Computing field. These courses are offered "through a co-operative arrangement with the Education Department Correspondence School."

Arrangements such as these are regarded positively by respondents, the majority of whom would wish for a more recognized, formalized and better resourced co-operative pattern of educational provision between TAFE and the school sector.

8.5 Concluding Comments

As a matter of urgency, there is a need to work towards a resolution of the difficulties which exist at the TAFE school interface. Submissions acknowledge the work being done, but despair at its slow progress. Respondents sometimes expressed concern about the apparent inflexibility and short sightedness of the negotiators. It was stated categorically that while co-operative programs between the two sectors are uncertain, while education authorities in various sectors are unable to devise clear pathways for students wishing to undertake studies concurrently within the TAFE and school sectors, and while resourcing in this area is given low priority, a large number of students at the immediate post-compulsory level are at risk. Respondents believe those at risk are often students already with a disadvantage and who therefore should be given more consideration on the grounds of equity.
9. TRANSITION FROM SCHOOL TO WORK

9.1 Inadequate Preparation

Criticism of the school sector for inadequately preparing students for the transition from school to work came from employers, students, parents and some teachers. They said that schools concentrated on preparing students for tertiary study and failed to give enough time to preparing them for their future employment. Generally respondents agreed that students should be given more opportunity to undertake work experience at the senior secondary level and that it should be recorded on a credential. A significant number of respondents also suggested classes which prepared students for employment by addressing such questions as personal marketing skills, conduct in the workplace, attitudes towards work and employer/employee relationships. The absence of adequate basic literacy and numeracy skills among young employees was a serious area of concern discussed in a large number of submissions.

Many respondents raised the question of unemployment and the need for schools to prepare students for this eventuality. These discussions frequently alluded to students being taught time and leisure management.

Several employer submissions, particularly from the public employment sector, discussed the need for school leavers to have basic skills in the area of technology. Assessing the skills of school leavers, employers found a majority of their young employees underskilled in keyboard skills, computer awareness and "an ability to extract and extrapolate" information in a useful form.

9.2 Part-Time Work and Study

Overall, submissions supported the idea of part-time work and study at the senior secondary level (See 2.5). It would require different senior school structures which more comfortably accommodated the part-time student, re-entrant or mature age entrant who wished to combine secondary study and work. Curriculum patterns and time-tabling would also need a degree of flexibility to enable part-time students to work and study (see 3.3). One of the greatest advantages of part-time work and study was seen to be its covert function of smoothing the way for a student to move from school to full time employment.

9.3 School Based Employment Initiatives

A number of submissions suggested that students, particularly in business studies areas, could set up and run small businesses. Most convincing were submissions which actually alluded to successful ventures. The positive outcomes of such initiatives were manifold, particularly in relation to a student's eventual transition from school to work.
9.4 TAFE as a Successful Transition Model

Students, parents and employers commended TAFE colleges on their pre-vocational programs, suggesting that they not only prepared students for employment, but also provided them with the necessary "hands on" experience. Certainly there was evidence provided from TAFE colleges that a majority of TAFE graduates were successful in finding employment. A number of submissions suggested that senior secondary schools should look to TAFE as a model and where possible work in conjunction with them to assist students in making a successful transition from immediate post-compulsory education to employment. (See 8.1 and 8.2).

10. EQUITY

10.1 Equity in Context

Catering for all students of all abilities and all social, cultural and environmental backgrounds was a common theme throughout all submissions. Many respondents drew attention to the fact that immediate compulsory schooling should particularly cater for disadvantaged students who are the most likely to "drop-out" of senior schooling and join the ranks of the unemployed. "Equal opportunity should be integrated into every aspect of post compulsory schooling, not just tacked on as an afterthought", stated one submission.

10.2 The Needs of Disadvantaged Groups

A number of submissions were received from specific groups within South Australia who believed that, whatever changes were heralded by the Enquiry, their particular needs should be considered. More general submissions frequently referred to the question of equity and drew the Enquiry's attention to the needs of particularly disadvantaged groups.

Clearly documented submissions were received from Aboriginal representatives, a variety of ethnic communities, geographically isolated groups, organizations and individuals representing disabled students, representatives for young people from non-English speaking backgrounds and schools catering for students in lower socio-economic categories. Many submissions drew attention to the disadvantages with which girls must contend and some made mention of the difficulties which gifted children face at the post-compulsory level.

Properly, it was argued that these groups within South Australia should be treated equitably and if deemed necessary special provision be made for their welfare in the post-compulsory school sector. It was strongly suggested that those responsible for educational resource allocation should seriously consider the needs of these disadvantaged groups.
That post-compulsory secondary schools and tertiary institutions should increasingly facilitate the participation of students from these groups in their education programs was a strongly articulated view. Some respondents continued by pointing out that besides the equity issue, which they saw as just and right, the well-planned involvement of disadvantaged students in post-compulsory education should, and unquestionably would, enrich the quality of life for other students labelled "advantaged". The long term social and economic advantages of actively involving such students in post-compulsory schooling were also documented.
EMPLOYER CHECKLIST

OCTOBER 1987
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In 1987, the Enquiry into Immediate Post-Compulsory Education established an Employer/Union Reference Group to ensure that the views of this important sector were brought before the Enquiry. Members of the Reference Group decided that a checklist should be offered to employers as a means of supplementing the information and ideas brought forward in formal submissions to the Enquiry.

The Checklist was developed by the Reference Group and mailed to 275 members of the Institute of Personnel Management (Australia Incorporated) (SA Division) to complete if they so wished. Of these, 58 responded. Others were distributed to country and ethnic employers. Twenty-four of these were returned. At the request of members of the Reference Group, 20 more were distributed to manufacturers and 12 of these were returned. After including late returns from the other groups the total number of returns was 105. The Reference Group is of the opinion that the data is rich in information and, though the response rate is relatively small, some trends are apparent.

It appears there are some matters about which employers feel strongly whatever their backgrounds. These matters are summarised below.

**purposes of senior secondary education**

Virtually all employers believed that preparation for the workforce should be an important part of secondary education. Just as strongly they believed that students should leave school with a knowledge of Australian society. They should have some useful knowledge and skills which could readily be refocused. Some of these skills could be learnt in schools. However, all senior secondary education need not take place in schools and some 15 to 18 year-olds would be better served in TAFE Colleges learning technical skills.

**preparation for work**

Employers expected school leaver employees to have the literacy and numeracy skills to operate in their businesses and also to have some understanding of the business world. While some felt that school leavers should have some technical skills the majority accepted the responsibility for teaching them the appropriate technical skills for the jobs. Teachers, they felt, should have more opportunities (via work experience programmes etc) to learn about the workforce and senior students should spend time in the workforce as part of their upper secondary education. In addition, employers would like to be involved in the business of identifying prerequisite studies for successful transition to the workforce.

**selection**

Employers found school assessments useful but also felt assessment and certification procedures should include matters of interest to employers eg candidates' motivation, leadership skills and attitudes, in addition to gradings.

There was division of opinion on the value of school based assessment as compared with public examinations. Much seemed to depend on personal experience here.

**stress**

There was little sympathy for the stress experienced by year 12 students and many employers seemed to think a little stress in year 12 was a good preparation for life.

**numeration, literacy and communication skills**

The majority of employers held the view that school leavers who applied to them for jobs had inadequate English writing skills. They were dissatisfied with young people's ability to express themselves and with their listening skills. Employer attitudes to school leaver mathematics and problem solving skills were also not favourable. Comments indicate that literacy and numeracy were major areas of concern to employers.
ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION

Employer Checklist

Introduction

In 1987, the Chairman of the Enquiry into Immediate Post-Compulsory Education, Mr Kevin Gilding, established the Employer/Union Reference Group to ensure that the views of this important sector were brought before the Enquiry and to act as a sounding board to the Enquiry's consideration of matters relating to employers, unions and industry generally.

At the time of the launching of the Enquiry's discussion paper: "Education for Fifteen to Eighteen Year Olds" (May 1987), members of the Reference Group decided that an additional stimulus paper should be offered to employers to supplement the information and ideas brought forward in formal submissions to the Enquiry.

Employers are busy people and find it difficult to make time available for consultation. Not all of them employ school leavers. There are a range of businesses in South Australia with very different requirements and it was felt that employers may have as diverse views as there are types of work.

Accordingly, the Employer Checklist was developed by the Reference Group with the help of officers from the Enquiry. It was mailed in early July to 275 members of the Institute of Personnel Management (Australia Incorporated) (SA Division) to complete - if they so wished - as an alternative to the response sheet in the Discussion paper. Of these, 58 responded. Others were distributed by Reference Group members or other interested people to country employers and ethnic employers. Twenty-four of these were returned. At the request of members of the Reference Group 20 more Checklists were distributed to manufacturers and 12 of these were returned. After including late returns from the other groups the total number of respondents was 105.

The response is small but the Reference Group is of the opinion that the data is rich in information and, though all Checklists have not been returned, some trends are apparent. It appears that there are some matters about which employers feel strongly - whatever their backgrounds. These matters are discussed below.

The full Checklist with responses appears in Appendix A, while respondents' comments and suggestions are presented in Appendix B.

The purposes of secondary education

Agreeing

The following statements were agreed with by 75% or more of respondents.

- Preparation for the workforce should be an important part of senior secondary education. 98%
- School leavers should have knowledge of Australian society and a sense of national identity. 98%
- The main responsibility of the secondary school is to develop broadly educated people whose knowledge and skills are generally useful and readily refocused. 93%
- It is necessary to stipulate certain areas of study to which all 15 to 18 year-olds should be exposed. 89%
- Some 15 to 18 year olds would be better off in TAFE Colleges learning technical skills rather than in schools. 82%
- Young people could learn useful technical skills in senior secondary school as part of a general education. 78%

There was some agreement on the following statement.

- All 15 to 18 year-olds should be encouraged to complete year 12. 61%
Disagreeing

A moderate proportion of respondents disagreed with the following statement.

- Only those 15 to 18 year-olds who intend to go on to higher education should stay on for year 12. 70%

Minority view/undecided

Respondents seemed to feel strongly about all the statements in this section and few failed to respond or were undecided.

Suggestions and comments

Suggestions for essential areas of study included:

- English expression and literature;
- humanities;
- Australian history: social, political, economic;
- maths, arithmetic, science, computing;
- communication skills;
- better mastery of the 3 Rs;
- trade subjects;
- "current" business skills: accounting, keyboard, clerical skills;
- finance, budget control;
- careers.

Comments were diverse. One employer, for instance, wrote:

The scheme of study should stipulate certain aspects/skills to be taught to all students in all schools. This would give greater uniformity in the education and ensure students are prepared for work/further study. Skills in communication, learning and interpersonal relationships would be valuable.

Another said:

If the educational system was valid the broader areas of “required” knowledge should be in place by age 15. With professional help/guidance, students should be able to choose their own studies relative to their areas of interest. There may be some common ground in the overall pattern if analysed but this should be by chance rather than design.

Preparation for work

Agreeing

The following statements were agreed with by more than 75% of respondents.

- I expect school leaver employees to have the literacy and numeracy skills I need for my business. 98%
- Employers should be invited formally to identify prerequisites for successful transition to the workforce. 94%
- I accept responsibility for teaching young people the appropriate technical skills for my business. 91%
- Teachers should have more opportunities to learn about the world of work. 91%
- Fifteen to 18 year-olds should spend time in the workforce as part of their upper secondary education. 89%
- I expect school leaver employees to have some understanding of the business world. 76%
Fifty percent to 75% of respondents agreed with the statements below.

- In senior secondary school young people seem to have little opportunity to develop their ideas about their job futures. 70%
- I expect school leaver employees entering my business to have some technical skills. 66%

Disagreeing

The following statement was a cause of moderate disagreement:

- Most young people I meet seem to have no ambition at all. 65%

Minority view/undecided

On these items there were sizeable groups who were "Undecided".

- The influence of higher education on what students are taught should be reduced (25% undecided).
- The school leavers I have employed recently seem to have some business knowledge which helps them to be assimilated into the workforce (24% undecided).

With the second statement, however, 49% of employers disagreed.

On the following statement, employers were almost evenly divided.

- School leavers who seek my employment have unrealistic expectations (eg expect to become managers almost at once) (45% agreed and 46% disagreed).

Suggestions and comments

With regard to teachers learning more about the world of work, suggestions such as the following were made:

> work experience/observation programmes for teachers;
> speakers from industry to visit staff;
> visits by teachers to the workplace;
> promotion of liaison between classroom and industry should be encouraged;
> employers could provide seminars for teachers;
> "permanent" career advisers in schools;
> teachers should spend 12 months in private enterprise early in their careers.

A typical comment on this issue would be:

Some of the teachers I know have never worked outside of the school/academic environment. Their base for discussion of the "real world" is therefore limited to what they think, read or have been told.

An employer observed:

Unless a child has parents or perhaps close family acquaintances involved in PRIVATE ENTERPRISE he/she is unlikely to have any concept of the philosophies, expectations and pressures of employment outside the public sector environment.

There is therefore a considerable need for Private Enterprise employers to participate in the educational process from a very early stage so that these concepts can be put forward to prepare children for an environment where we must compete with the rest of the world.
Selection

Agreeing

In the area of selection there was strong agreement (more than 75%) on the issues presented below.

- Assessment and certification procedures should include matters useful to employers. 87%
- School assessments are useful to me. 77%

Between 50% and 75% of respondents agreed with the statements below.

- I am more interested in young people’s attitudes to work than in their academic achievements. 71%
- It is better for young people to be keen to learn in the workplace than for them to have specific technical skills on entry. 69%
- I have found the School Leaver Statement useful when selecting young people for positions. 58%
- I have found the SSABSA Certificate a useful guide for selection for commercial/clerical positions. 54%

Disagreeing

There were no statements in this section with which respondents expressed strong or moderate agreement.

Minority view/undecided

There was no definite agreement or disagreement with the statement following and there was a notable percentage in the "Undecided" group.

- For employment purposes it would be helpful to have the SSABSA certificates earlier (43% undecided).

There was a clear division of minority opinion on the reliability of school assessment.

- School assessments are not as good as public exams for measuring student achievement.

Here, 33% agreed or strongly agreed, 22% were undecided and 43% disagreed or strongly disagreed.

The following statements also had large percentages in the Not Applicable/No Response (NA/NR) groups:

- I have found the SSABSA Certificate a useful guide for selection for professional/trainee positions (27% undecided, 25% NA/NR);
  apprenticeships (25% undecided, 25% NA/NR);
  unskilled positions (34% undecided, 22% NA/NR).

Suggestions and comments

Suggestions were made as to what should be included in assessment and certification procedures. These included:

> ambitions, goals in life;
> competencies, aptitudes;
> attitudes;
> dependability, motivation, behavioural leadership, interaction with others.

Comments were often contradictory as can be seen from the following.

Surprisingly most statements are factual even if a little rosy.
I find current documentation uninformative to the point where I wonder if it has been designed to confuse and conceal.

Employers were equally divided on the subject of school assessment compared with examinations. One, for instance, wrote:

The arguments against examinations are “other worldly”, and do not address the realities and requirements for making a living.

There were, however, rather more comments in favour of school assessment such as:

Some students perform better under examination conditions than others. Assessments provide a better insight into student performance than an examination.

and

The achievements of a student over a period of study reveal more of the individual’s ability.

Responses seemed very much related to the individual employer’s experiences.

Some employers were doubtful about whether assessment and certification procedures would be able to offer specific information of use to employers.

Teachers in general don’t understand the real world so their comment on a student’s suitability is of little use.

Stress

Agreeing

There was little sympathy for the stress experienced by year 12 students. Indeed, the fact that so many respondents agreed with the following statement indicates some commonality of belief in the character building aspect of stress.

- A little stress in year 12 will prepare young people for life. 74%

Disagreeing

The following statement was a cause of moderate disagreement:

- I believe many job applicants have been exhausted/"burnt out" by year 12 studies. 67%

Minority view/undecided

Clear trends were evident in responses to the items in this section though 17 % of employers were undecided as to whether job applicants were "burnt out" by their year 12 studies.

Suggestions and comments

There was little in the way of comments here. Such as there were tended not to be sympathetic to young people, eg:

- We live in a competitive and complicated world. Stress and survival are part of that world not chocolates.

Another employer felt that schools may be doing students a disservice:

Students are not prepared for work they are actively dissuaded from competing in competitive sports...... Regardless of theory and hopeful dreaming, life is competitive in every way. The young must compete for friends, university places boyfriends/girlfriends, jobs or promotions.
Numeracy, literacy and communication skills

Agreeing

There was no strong or even moderate agreement on any of the statements in the literacy and numeracy section.

Disagreeing

Respondents expressed moderate disagreement (50% - 75%) with the statements below.

- The young people who apply for jobs with me have adequate English writing skills. 70%
- Most of the young people who come to me for jobs can express themselves well. 55%

Minority view/undecided

Though a third of respondents agreed with the following statement a number were undecided:

- Recent school leaver applicants had poor reasoning and analysing skills (33% agreeing, 41% undecided).

There is a problem with the statement on mathematics in that it followed some positively oriented items. It seems from supporting comments that some respondents may have interpreted this statement wrongly and that, in fact, the proportion of employers believing that school leavers do not have enough mathematical knowledge might be considerably higher. The results were:

- The school leavers who come to me for jobs do not have enough mathematical knowledge (48% agreeing or strongly agreeing, 16% undecided, 34% disagreeing or strongly disagreeing).

Employers tended to be rather negative about students’ listening skills; a sizeable minority disagreed with the following and about a fifth were undecided.

- The young people I have employed recently have good listening skills (49% disagreeing, 22% undecided).

Suggestions and comments

Employers believe that young people should have numeracy and English expression skills before leaving school. One wrote this criticism of the education system.

[It is] *An indictment on the education system that many young people lack the basic skills.*

Employers seemed especially concerned about English expression:

*I am of the opinion .... that greater English, mathematical and expression skills are required by school leavers - especially English and expression. These representative skills are likely to get them their first employment.*

In addition, employers felt that the school system did not encourage young people to develop their reasoning and analysing skills. One respondent wrote:

*Tendency seems [to be] to restrict people in their right to think. Most 16/17 year olds do not score well with a problem solving test we use.*
Additional comments

Space was allocated at the end of the Checklist for additional comments. Many employers made extended comments which are reproduced in Appendix B.

Overall, there seemed to be little satisfaction among the employers with the way 15-18 year olds are prepared for the workforce: teachers should have more direct experience of the workforce and employers themselves should be more involved in schooling.

Employers were concerned with students' literacy, numeracy and communication skills; they stressed the importance of acquiring these rather more than specific technical skills. This comment made by one employer is representative of many:

_I believe students need to be taught to think for themselves, to think ahead and to weigh up the consequences of their actions. In order to do this - they require skills of communication, literacy, numeracy and logic - to my mind, basic skills required for any position or further study._

_Students also need realistic information as to the requirements of both higher education and workplaces, as to their conduct, attitude, time constraints and pressures, team work etc._

_In this way we may improve the depth, stability and reliability of our future "members of society"._
**ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION**

**EMPLOYER CHECKLIST**

This Checklist has been devised at the request of the Employer Reference Group which advises the Enquiry into Immediate Post-Compulsory Education. It is intended to complement the response sheet of the Discussion Paper or to provide an alternative to it.

The following statements reflect comments made by employers and others from the consultative groups set up by the Enquiry into Immediate Post-Compulsory Education. Please signify how far you agree or disagree with statements by placing a tick in the appropriate box beside any statements that relate to you and your situation.

If you would like to make additional comments please write in the space provided at the end and/or attach extra sheets of paper. Asterisks (*) appear against the statements on which the Enquiry would particularly welcome your comments and additional spaces have been provided.

### The purposes of senior secondary education

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NRNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The main responsibility of the secondary school is to develop broadly educated people whose knowledge and skills are generally useful and readily refocused.</td>
<td>41</td>
<td>52</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>School leavers should have knowledge of Australian society and a sense of national identity.</td>
<td>38</td>
<td>60</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>It is necessary to stipulate certain areas of study to which all 15 to 18 year-olds should be exposed.</td>
<td>40</td>
<td>49</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

* Young people could learn useful technical skills in senior secondary school as part of a general education.

### Preparation for work

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NRNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation for the workforce should be an important part of senior secondary education.</td>
<td>66</td>
<td>32</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>All 15 to 18 year-olds should be encouraged to complete year 12.</td>
<td>27</td>
<td>34</td>
<td>14</td>
<td>17</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Only those 15 to 18 year-olds who intend to go on to higher education should stay on for year 12.</td>
<td>8</td>
<td>16</td>
<td>5</td>
<td>50</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Some 15 to 18 year-olds would be better off at TAFE Colleges learning technical skills than in schools.</td>
<td>26</td>
<td>56</td>
<td>7</td>
<td>8</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>In senior secondary school young people seem to have little opportunity to develop clear ideas about their job futures.</td>
<td>18</td>
<td>52</td>
<td>15</td>
<td>13</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Fifteen to 18 year-olds should spend time in the workforce as part of their upper secondary education.</td>
<td>29</td>
<td>60</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>The school leavers I have employed recently seem have some business knowledge which helps them to be assimilated into the workforce.</td>
<td>1</td>
<td>23</td>
<td>24</td>
<td>43</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>
Employers should be invited formally to identify prerequisites for successful transition to the workforce.

The influence of higher education on what students are taught should be reduced.

* Teachers should have more opportunities to learn about the world of work.

School leavers who seek my employment have unrealistic expectations (e.g., expect to become managers almost at once).

Most young people I meet seem to have no ambition at all.

I accept a responsibility for teaching young people the appropriate technical skills for my business.

I expect school leaver employees entering my business to have some technical skills.

* I expect school leaver employees to have the literacy and numeracy skills I need for my business.

I expect school leaver employees to have some understanding of the business world.

Selection

*I have found the School Leaver Statement useful when selecting young people for positions.

* I have found the SSABSA Certificate a useful guide for selection for professional/trainee positions; commercial/clerical positions; apprenticeships; unskilled positions.

School assessments are useful to me.
School assessments are not as good as public exams for measuring student achievement.  
*Comment*

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NR/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>22</td>
<td>22</td>
<td>40</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Assessment and certification procedures should include matters useful to employers.  
*Comment*

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NR/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>68</td>
<td>6</td>
<td>6</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

**Stress**

A little stress in year 12 will prepare young people for life.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NR/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>59</td>
<td>12</td>
<td>9</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

I believe many job applicants have been exhausted/"burnt out" by year 12 studies.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NR/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>17</td>
<td>51</td>
<td>16</td>
<td>5</td>
</tr>
</tbody>
</table>

**Numeracy, literacy and communication skills**

The young people who apply for jobs with me have adequate English writing skills.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NR/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>17</td>
<td>12</td>
<td>52</td>
<td>18</td>
<td>2</td>
</tr>
</tbody>
</table>

The school leavers who come to me for jobs do not have enough mathematical knowledge.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NR/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>37</td>
<td>16</td>
<td>28</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Most of the young people who come to me for jobs can express themselves well.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>NR/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>31</td>
<td>12</td>
<td>46</td>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>
EMPLOYER CHECK LIST

COMMENTS

(MAIN SAMPLE)

MEMBERS OF THE INSTITUTE OF PERSONNEL MANAGEMENT
The purposes of senior secondary education

* It is necessary to stipulate certain areas of study to which all 15 to 18 year-olds should be exposed.

Comment

39 comments recorded

**MAIN SAMPLE (n=58) COMMENTS**

**Agree (34 comments)**

Some suggestions made:
(Several more than once
i.e. English, maths, communication skills.)

- English expression and literature,
  another language, maths and/or computing.
- English/communication skills.
- Better understanding of basic 3 R's.
- Maths & English should be compulsory subjects.
- Trade subjects.
- Literacy & numeracy.
- Especially current business/workplace strategies.
- Aust. history/social/political, economics.
- Finance, budget control.
- Science, humanities.
- Investigative ability needs.
- Keyboard skills, work processing.

Comments:
- The scheme of study should stipulate certain aspects/skills to be taught to all students in all schools. This would give greater uniformity in the Education and ensure students are prepared for work/further study. Skills in communication, learning and interpersonal relationships would be valuable.
- Provided the subjects are self-confident building and give them skills to cope with other than work environments.
- English expression both written and oral. Health education such as nutrition,

**Disagree (3 comments)**

Comments:
- Career-path training essential.
- If the educational system was valid the broader areas of "required" knowledge should be in place by age 15. With professional help/guidance, students should be able to choose their own studies relative to their areas of interest. There may be some common ground in the overall pattern if analysed but this should be by chance rather than design.
- I am not convinced that our Education System should not educate our 15-18y.o. for education's own sake i.e. there is merit in pursuing knowledge at any level. This eventually leads to a better and broader-viewed employee. However, literacy & numeracy are probably essential.

**Undecided (2 comments)**
Continued

* Young people could learn useful technical skills in senior secondary school as part of a general education.

Comment

30 comments recorded

Agree (24 comments)

Some technical skills listed:
- Accounting
- Keyboard
- Clerical
- Computing

Comments:
- Provided the quality and flexibility of 'teaching' staff is improved.
- Provided there is co-ordinating and co-operation between schools and TAFE, Schools could usefully offer introductory courses. At present there is too much

Disagree (3 comments)

Comment:
- TAFE is already geared up to handle this in a prof. way. It would seem ludicrous to duplicate this resource. Additionally TAFE people are technically, professionally & socially more appropriate for "real world" based training.

Undecided (3 comments)

Comment:
- I believe it is important to gain the 'basics' - skills of communicating and coping in society first then - can augment such skills with technical or other skills later, or indeed - concurrently
Preparation for work

* Teachers should have more opportunities to learn about the world of work.

Comment

35 comments recorded

Agree (33 comments)

Some suggestions made:

- Work experience programs/observation.
- 'Refresher' arrangements through career would be of benefit.
- Speakers from industry/visits to work place.

Disagree (1 comment)

Comment:

- Opportunities are there but they do not take advantage of them.

Undecided (1 comment)

Comment:

- I believe some teachers do not have an appreciation of the world of work. Some
Continued

- good liaison between classroom and industry.
- seminars provided by 'work' people.
- permanent career advisors.

Comments:

- It has always amazed me that teachers who have never been outside the world of academia can prophesy to know what is best for the workforce transition - particularly career guidance counsellors.
- I am concerned by the naivete of school teachers and their cloistered lifestyle. Commerce and education have a rocky marriage at secondary school level.
- Probably the greatest influence on secondary students' knowledge of work.
- I think this is the key to the problem. How can a teacher prepare a student for the real world of work when they have never experienced it themselves.
- Only if they are prepared and able to assimilate the learning, i.e. not setting out to change industry overnight.
- Many teachers do not know how to 'teach' to achieve objectives, care little for the individual student and would be 'lost' in a business world.
- Children turn to their teachers for advice and assistance in determining their future but the lack of knowledge of teachers in this regard is alarming.
- I believe teachers as part of their job should be required to have an understanding of the employment potential of the subjects they teach. Sabbatical tuition and work experience.
- Some of the teachers I know have never worked outside of the school/academic environment. This base for discussion of the "real world" is therefore limited to what they think, read or have been told.

Continued

have been in the school system all their lives, firstly at school as students then teacher's college then back to school as teachers.
* I expect school leaver employees to have the literacy and numeracy skills I need for my business.

**Comment**

28 comments recorded

### Agree (27 comments)

- Some comments made:
  - large numbers of young people are illiterate or innumerate.
  - they don't (even some graduates).
  - limited.
  - cannot demonstrate the necessary literacy to understand or complete application forms.
  - very poor.
  - sadly lacking.

**Comments:**

- Only the basic competency needed - but still needed as a foundation on which to develop skills.

- It is essential that all school leavers have literacy and numeracy skills for everyday things as well as in the workforce. It would be reasonable for employers to assume that school leavers are proficient in these areas.

- We test school leavers for numeric, clerical, verbal and spelling skills. A very high number fail these tests, even after having completed year 12.

- The results of our aptitude tests reveal a standard well below the norms; particularly in numeracy tests that indicates these skills are not being adequately taught - contrary to beliefs; school leavers do need to have adequate skills in these areas.

- The number of years spent at high school should give some indication of the skill level of a school leaver. i.e: year 12 should impart at least a basic level of numeracy and literacy. OR leaver statements should be clear and unambiguous re competence levels.

### Disagree (1 comment)

- Literacy and numeracy skills are certainly necessary, but continued development of these skills should occur through ongoing education, (e.g. TAFE; SAIT.).
These aspects are considered very important as they cannot be taught by an employer and should not have to be. This should be basic to a child's education. The expectation would be that these skills would be learnt in the primary and early secondary school years.

**Selection**

*I have found the School Leaver Statement useful when selecting young people for positions.*

**Comment**

25 comments recorded

<table>
<thead>
<tr>
<th>Agree (11 comments)</th>
<th>Disagree (8 comments)</th>
<th>Undecided (6 comments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some comments made:</td>
<td>Leavers statements should be clear and unambiguous re competence levels.</td>
<td>Some comments made ambiguous.</td>
</tr>
<tr>
<td>gives an indication of application.</td>
<td>Very often the comments are found to be unrepresentative and not qualified against proper objectives.</td>
<td>not been truthful.</td>
</tr>
<tr>
<td>any written information is of benefit.</td>
<td></td>
<td>not a prime tool for selection.</td>
</tr>
</tbody>
</table>

**Comments:**

- Surprisingly most statements are factual even if a little rosy.
- It is of some value in helping to determine a person's attitude to work and ability in certain areas.
- Always read teachers comments on personality etc. Then look at results during the year.
- Major emphasis on application and work skills is essential to me in selection process. A good and simple concept that works for both parties.
- Best to have a series of reports available, as averaging mechanism (improvement) indicators.
- Depends on school. Some give an excellent assessment; others churn out figures and fatuous comments.
- Commonwealth Govt. selection is usually conducted by Selection Test. The school leaver statement can sometimes be misleading. Some academic high achievers are not suitable for certain types of work.
- Some scepticism about usefulness. Concern
* Continued

I have found the SSABSA Certificate a useful guide for selection for professional/trainee positions; commercial/clerical positions; apprenticeships; unskilled positions.

Comment

17 comments recorded

* Continued

I do not place a great deal of emphasis on the school leaver statement in my employment selection process. (both) should say more about the student's attitudes, approach to work, personal qualities/aptitudes, etc. The school leaver statement is useful in providing a current assessment of the former pupil's academic performance, only after immediate separation from secondary school.

Disagree (8 comments)

School to school are difficult. Comments don't truly reflect the students character. At this stage of school we feel that teachers write the "right" thing. They do not cover the right topics/areas or give credible references - they are not in my opinion designed adequately for employers to interpret.

Undecided (6 comments)

is for now and the future but statement not altogether overlooked.

Some comments made:
- no real value for unskilled.
- C/wealth govt. selection is usually conducted by Selection Test.
- not a prime tool for selection.
- uninformative......designed to confuse and conceal.
- don't like the SSABSA Cert. all that much.
- have more confidence in personal assessments.

Comments:

The subject descriptions are useful and give insight into the type of learning and skills imparted to the students.
An extra payment is given to holders of SSABSA Certificate, above base award, depending on total mark achieved - therefore we rely heavily on the certificates accuracy.

We have no positions for young people for which the SSABSA Certificate is a requirement. If someone applying for a clerical position had one, they would get preference over someone else who did not.

The comments are not succinct enough for differentiation between qualities of the large bulk of students.

The certificate is a guide but without the school assessments it is not explicit enough to identify the most appropriate applicant.

Non-specific on PES, SAS so standard not definable - can be misleading because of detachable summary.

Both should say more about the student's attitudes to work, personal qualities, aptitudes etc.

Each school has its own set of rules on the use of the above - comparisons from school to school are difficult.

Certificate arrives too late ie Jan/Feb. Most apprenticeships are filled by September!
**School assessments are not as good as public exams for measuring student achievement.**

* Agree (6 comments) *

Some comments made:
- in some areas eg: maths, English.
- because I don't believe school assessments are objective enough.

Comments:
- The arguments against examinations are "other worldly", and do not address the realities and requirements for making a living.
- Competing with all schools in public exams instead of internal only.

* Disagree (12 comments) *

Some students perform better under examination conditions than others. Assessments provide a better insight into student performance than an examination.
- They should be better. The difficulty in their outright acceptance is the lack of knowledge about who is doing the assessment.
- I was exposed to the absurdity of the PEB system and always thought it to be blatantly unfair and an inaccurate measure of my ability.
- The achievements of a student over a period of study reveal more of the individuals ability.

* Undecided (5 comments) *

- Any system is only as good as its honesty.
- Depends a great deal on the subject and the reliability of assessment measures employed.
- Good school assessments are best. Poor school assessments make the demand for public exams.

---

**Assessment and certification procedures should include matters useful to employers.**

* Agree (21 comments) *

Some suggestions made:
- ambition, goals in life.
- competency, attitude.
- dependability, motivation, behavioural leadership, interaction with others.
- attendance.
- reliability.
- aptitudes.

* Disagree (3 comments) *

Comment:
- The education system is not equipped to know what the employer wants and jobs can vary enormously between Companies.

* Undecided (2 comments) *

- Presentation now given satisfies my needs.
- In view of lack of teacher knowledge about work in
Continued

This would be useful if the student is aware of the field of employment he/she is going to be pursuing in the final year of secondary schooling. Current school assessments and SSABSA certificate already helpful to employers in present format. Perhaps could be improved upon slightly. These could readily be summarised and agreed between employers and educationalists. Employer needs to know qualifications of assessor and criteria on which assessment based. The current system is totally unfair to the student and represents a non-caring, irresponsible attitude on the part of teachers (or the education system) when reports are handed out on the last day of school re no opportunity for a student/parent/potential employer to clarify anything for 6-8 weeks over Christmas etc.

Numeracy, literacy and communication skills

Recent school leaver applicants had poor reading and analytical skills. Comment: 20 comments recorded

Agree (10 comments)
Some comments made:
- poor grammar.
- could not read the application forms correctly.
- attributes are not developed sufficiently.
- basically immature due to leaving school too early.
- most students appear to lack rational critical thought.
- employees need to know critical thinking.

Disagree (4 comments)

- An indictment on the education system that many young people are not educated properly or given an opportunity for a student/parent/potential employer to clearly articulate the last day of school re the system when reports are handed out on the part of teachers or the education cartel. Insensitive and irresponsible attitudes of teachers and students.
- The current system is totally unfair.
- Assessment based on which employer needs to know qualities. Education professionals.
- Employers and employers agreed between employers and employees that could be summarised and improved upon slightly.
- In present format, reporting could be improved. Certificates already helpful to employers and current school assessments and SBPASS.
- This year of secondary schooling is aware of the field of employment is aware of the student. This would be useful if the student

Industrial and commerce

Continued

Undecided (6 comments)

Undergraduate (6 comments)
Continued

Comments:

- This is another question requiring a black and white answer! Not all school leaver applicants have poor reasoning and analytic skills.
- Tendency seems to restrict people in their right to think. Most 16/17 year olds do not score well with a problem solving test that we use.
- Too much "cloudy" material, insufficient work related input.
- Largely because they aren't familiar with business practice, and have no conceptual basis for analysing.
- These are not well taught if taught at all the sciences are too often taught as recall and some application students are not given the opportunity to make decisions/make mistakes/take risks etc. we learn from such activities.

Continued

and expression skills are required by school leavers - especially English and expression. These representative skills are likely to get them their first employment.

- All applicants fairly well screened by results, references, etc. Only top few with good skills are actually interviewed.
- School leavers are selected for short lists through co-operation between the high school career advisor, work experience and company literacy and numeracy assessments.

Continued

- The learning course for these people is very steep - some take a while to develop confidence and to adjust to their "new" life style.
- Applicants are difficult to assess at interview. Despite supposed additional interview training school leavers lack confidence at interview.
EMPLOYER CHECK LIST

COMMENTS

(VOLUNTARY SAMPLE)
The purposes of senior secondary education

* It is necessary to stipulate certain areas of study to which all 15 to 18 year-olds should be exposed.

**Comment**

<table>
<thead>
<tr>
<th>Agree (12 comments)</th>
<th>Disagree</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some suggestions made:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- English grammar, comprehension, expression should be compulsory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Aust political and economic system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Basic maths, English should be compulsory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Computer studies, keyboard.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Literacy, numeracy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bookkeeping.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Finance planning for later life, income management.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong>:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- And not forgetting one's attitude and behaviour in the home and workplace.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Assume 3 R's taught by this stage. Then direct to more introductory workforce studies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Productivity, Responsibility of oneself to the Community. Less reliance on welfare support, Australia's competitiveness relative to the rest of the world.</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Undecided (1 comment)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comments:</strong>:</td>
<td></td>
</tr>
<tr>
<td>- Technical skills of various jobs is a very wide range and unlikely to meet everyone's requirements.</td>
<td></td>
</tr>
</tbody>
</table>

* Young people could learn useful technical skills in senior secondary school as part of a general education.

**Comment**

<table>
<thead>
<tr>
<th>Agree (8 comments)</th>
<th>Disagree</th>
<th>Undecided (1 comment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Coupled to more work experience activities, with more teacher contact, during work experience.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Depending on ability/aptitude, yes. However not to the detriment of general education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Basic directional knowledge. Specialist pre-vocational training offered by T.A.F.E.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Young people coming to the timber industry do not have the ability to prepare a timber tally sheet. The writing and accuracy is</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Preparation for work

**Teachers should have more opportunities to learn about the world of work.**

* Comment

<table>
<thead>
<tr>
<th>Agree (6 comments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some suggestions made:</td>
</tr>
<tr>
<td>. work experience scheme.</td>
</tr>
</tbody>
</table>

**Comments:**
- Suggest a group from industry is used to give information to students in an informed manner.
- Only to extent of changing work environment appreciation technology etc., not product knowledge.
- How can teachers educate young people satisfactorily when they are in many instances totally unaware of the outside work environment.
- Some teachers NEVER venture into the real-world and are often poor business people on a personal level.

<table>
<thead>
<tr>
<th>Disagree (1 comment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
</tr>
<tr>
<td>. Teachers' responsibility is to provide basic training. Work related skills can be acquired at a later stage.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Undecided</th>
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</thead>
</table>

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**I expect school leaver employees to have the literacy and numeracy skills I need for my business.**

* Comment

<table>
<thead>
<tr>
<th>Agree (11 comments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some comments made:</td>
</tr>
<tr>
<td>. Perhaps English 'aint wot it uster be!</td>
</tr>
<tr>
<td>. an essential task of secondary, education.</td>
</tr>
<tr>
<td>. broadly speaking, we have this now.</td>
</tr>
</tbody>
</table>

**Comments:**
- As I. stated previously not all jobs involve
Selection

* I have found the School Leaver Statement useful when selecting young people for positions.
Comment

6 comments recorded

* I have found the SSABSA Certificate a useful guide for selection for professional/trainee positions; commercial/clerical positions; apprenticeships; unskilled positions.
Comment

4 comments recorded

Continued

- the use of a computer. The ability to write instructions re prod plan, safety report, discipline report. Calculate feed speeds, log volumes are simple everyday tasks not done very well.
- Basic skills are essential. On the job training will provide the necessary refinement.
- Even those with top grades often have poor English and maths skills - particularly in relation to spelling.

Agree (4 comments)

Comments:
- Supports or disputes personal impressions at interview.
- Many S. L. Statements give a good indication about the 'all-round' abilities of students.

Disagree (1 comment)

Comment:
- Only negative comments are accurate. Human nature dictates that most reports/comments are good.

Undecided (1 comment)

Comment:
- School performance does not always = work performance.

I Comment:
- Reports used as a guide for shortlisting.
- Other skills are equally as important communication, being alert, dedication.
- But not essential. Maturity of year 12 students, plus attitude more important.

Comment:
- We have used these for clerical qualifications. However, accent is changing towards interview, resume, etc.
| * School assessments are not as good as public exams for measuring student achievement. Comment |
| | Agree (2 comments) |
| | Comments: |
| | . Hard to compare internal and externally examined applicants. |
| | . In my opinion public examinations were satisfactory. I do not believe the statement that examinations are not a fair test of ability. In my experience the work put is reflected in results which is applicable to life? The stress has never affected my performance, the sense of achievement has been rewarding. |
| | Disagree |
| | Undecided (3 comments) |
| | Comment: |
| | . Each have their advantages and disadvantages. The value of school assessments rely upon the human element which will vary. |

* Assessment and certification procedures should include matters useful to employers. Comment

| | Agree (7 comments) |
| | Some suggestions made: |
| | . like attendance. |
| | . particular skills/attributes, weaknesses. |
| | . willing to undertake work studies. |
| | . attitudes. |
| | Comments: |
| | . Children should be taught the facts of life. Not everyone is equal - you have to perform! |
| | . Increasingly, there is useful information about the character and commitment of the student - if you 'read between the lines'. |
| | Disagree |
| | Undecided |

| Numeracy, literacy and communication skills |
| * Recent school leaver applicants had poor reasoning and analysing skills. Comment |
| | Agree (3 comments) |
| | Comments: |
| | . We live in a competitive and complicated world. Stress and survival is part of that world not chocolates. |
| | . I have not been impressed by the all round skills or knowledge and attitude |
| | Disagree |
| | Undecided (3 comments) |
| | Comments: |
| | . Generally 'short listed' applicants live up to the expectations created by their...
Agree (3 comments)

of some applicants. Obviously being taught to challenge everything - not always easy to employ as a consequence!

Disagree (3 comments)

letters of application, references, S.L. statements. Current generation being taught to question issues etc. helps reasoning and analysing but inhibits listening. Our experience has been with students gaining work experience. The majority have had good reasoning ability.

Undecided (1 comment)
EMPLOYER CHECKLIST

COMMENTS

(MANUFACTURERS SAMPLE)
MANUFACTURERS SAMPLE (n=21) COMMENTS

The purposes of senior secondary education

* It is necessary to stipulate certain areas of study to which all 15 to 18 year olds should be exposed.

Comment

7 Comments recorded

Agree (7 comments)

. Communication skills, verbal and written.
. Reasonable community standard of arithmetic.
. English, spelling, maths.
. And they are taught at a level commensurate with the vocation to which they aspire.
. Students should be taught money management and motivation skills.
. Areas of general living skills (as taught in TAFE life skills component).
. English, basic Maths.
. English - students should have an understanding of available vocations and the cultures that are inherent.

Disagree (No comments)

Undecided (No comments)

* Young people could learn useful technical skills in senior secondary school as part of a general education.

Comment

7 comments recorded

Agree (6 comments)

. Base skills should be taught so that students who are undecided about their vocation have room to change.
. Development of creative & physical rather than theoretical skills would be helpful.
. Computer literacy in practical sense.
. Probably in conjunction with TAFE link courses.
. System should not be biased against students who wish to do year 12, then decide to do a technical course.
. Higher education or development of technical skills should be a matter of individual training and not a common requisite.

Disagree (1 comment)

. Insufficient level if intended to pursue technical trade.

Undecided (No comments)
Preparation for Work

* Teachers should have more opportunities to learn about the world of work.

Comment.

9 comments recorded

Agree (7 comments)

- Many metal work teachers have never been in a factory and therefore cannot convey to students knowledge of what to expect in that vocation.
- How else can they effectively teach.
- Teachers are often in a world of their own and would do well to learn more about the outside "world".
- Too many teachers have lived only in an academic world.
- Work experience two weeks in every year.
- Teachers should spend 12 months in private enterprise early in their career.
- I believe that Teachers are at a great disadvantage as generally speaking they have no practical experience in the business world and are therefore teaching idealistically rather than practically.

Disagree (No comments)

Undecided (1 comment)

I would have thought that the limited time spent in actual school hours, long leave periods, etc. that teachers would have ample time to learn about the world of work.

* I expect school leaver employees to have the literacy and numeracy skills I need for my business.

Comment.

5 comments recorded

Agree (5 comments)

- Many technically oriented students in the past have had poor command of spelling and hence reading.
- Very strongly agree.
- Students need to be able to converse better and to add up without a register or calculator to know basic arithmetic more - not heavy maths.
- Literacy and numeracy skills that will allow them to cope in business & private life, e.g. envelope from job applicant couldn't even spell City of Adelaide correctly. Numbers reversed 15=12. Person was 16 & still at school!
- English, spelling, maths.

Disagree (No comments)

Undecided (No comments)
Selection

* I have found the School Leaver Statement useful when selecting young people for positions.

Comment.

3 comments recorded

Agree (2 comments)

- I look for tech skills, reasonable grades and most of all co-operative students.
- Found this to be very helpful and generally accurate.

Disagree (1 comment)

'Utterly useless. Maths in one school is totally different to every other school. I ignore statement unless it is extremely good/bad.'

Undecided (No comments)

* I have found the SSABSA Certificate a useful guide for selection for professional/trainee positions; commercial/clerical positions; apprenticeships; unskilled positions.

Comment.

2 comments recorded

Agree (1 comment)

- In general a report reflects the students personality, versatility, leadership qualities, discipline.

Disagree (1 comment)

- Written for teachers. Confusing in definitions.

Undecided (No comments)
### School Assessments vs. Public Exams

<table>
<thead>
<tr>
<th>Agree (1 comment)</th>
<th>Disagree (1 comment)</th>
<th>Undecided (1 comment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least it compares to a set objective standard.</td>
<td>Should have alternative.</td>
<td>Need both.</td>
</tr>
</tbody>
</table>

3 comments recorded

### Assessment & Certification

<table>
<thead>
<tr>
<th>Agree (2 comments)</th>
<th>Disagree (1 comment)</th>
<th>Undecided (No comments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person and motivation assessments would be helpful.</td>
<td>Teachers in general don't understand the real world so their comments on a student's suitability is of little use.</td>
<td></td>
</tr>
<tr>
<td>Attitude, presentation, literacy and memory skills, specific and defined practical skills.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 comments recorded
### Numeracy, literacy & communication skills

* Recent school leaver applicants had poor reasoning and analysing skills. 

**Comment.**

5 comments recorded

<table>
<thead>
<tr>
<th>Agree (1 comment)</th>
<th>Disagree (2 comments)</th>
<th>Undecided (2 comments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative and drive to enquire seems to be lacking and the ability to listen and absorb general duties.</td>
<td>They do it better than I could at their age.</td>
<td>Answers to these questions are of a general comparison as the personal abilities of applicants has varied greatly.</td>
</tr>
<tr>
<td></td>
<td>Based on our applications for apprenticeships (Fitter &amp; Turner)</td>
<td>Do not have objective technique to test this. Wouldn't mind one if you have one.</td>
</tr>
</tbody>
</table>
EMPLOYER CHECKLIST

ADDITIONAL COMMENTS
The following comments were taken from the last 2 pages of the Checklist where employers were invited to make additional general comments. The comments have been sorted into 6 categories:

<table>
<thead>
<tr>
<th>Number of Employers Commenting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Preparation for work/career education counselling</td>
</tr>
<tr>
<td>2) Schooling</td>
</tr>
<tr>
<td>3) The system/education/general</td>
</tr>
<tr>
<td>4) Job applicants</td>
</tr>
<tr>
<td>5) Teachers</td>
</tr>
<tr>
<td>6) Stress</td>
</tr>
</tbody>
</table>

There is a certain amount of overlap between categories as employers often chose to comment on more than one issue.

1) Preparation for Work/Career Education/Counselling

Unless a child has parents or perhaps close family acquaintances involved in PRIVATE ENTERPRISE HE/SHE is unlikely to have any concept of the philosophies, expectations and pressures of employment outside the Public Sector environment.

It is doubtful that teachers, academics and educational administrators can provide such an insight.

There is therefore a considerable need for Private Enterprise employers to participate in the Educational process from a very early stage so that these concepts can be put forward to prepare children for an environment where we must now compete with the rest of the world.

School leavers should attend workshops in interviewing, counselling as they relate to job applications. Shown how to prepare a resume folder - Cover, clear plastic pages, Paperwork arranged in sequence.

The work experience project which operates at present for Years Nine, Ten and Eleven students allows the students to obtain some exposure to industry. Commendation to the Careers Counsellors at High Schools within our region for their use of this facility.

Only to emphasize that prior to Year twelve students should be assessed to determine their strengths and weakness before they embark on their careers.

More should be done in schools to assist school leavers in interview techniques, etc. I have offered my services free to a number of schools in the past - to go over the role an agency can play in helping them to find the 'right' job, interview communications and presentation, etc. - however have been told at 'not necessary. However I am constantly interviewing school leavers who are poorly presented, lack enthusiasm and who don't know how to 'sell' themselves.
I have given answers from a clerical/receptioniste perspective. I have not employed school leavers directly into professional positions.

In a receptioniste role with a very high level of public contact (some quite difficult), there are few school leavers mature enough to handle a wide range of difficult/sensitive situations.

Need for further consultation with parents and youth workers who are often dealing with the young people who are failing in the current system.

The main qualities required are in appearance and presentation plus communication skills including diction and confidence and positiveness in their own abilities. Too many young people tend to sell themselves short.

Most do not have sufficient knowledge of opportunities in the work force.

Most, but not all work experience students, who have worked in my salon often lack the ability to converse in general day to day topics. They lack their own ability to express their personality and be themselves. Communicating to adults and greeting people with a basic smile is often missing. Most of your waking hours are spent at work and young people seem to forget that daily attitude is the foundation of life.

Most students applying for top jobs know where they are going, they are motivated and are usually excellent.

The problem students are the majority whose parents do not influence them. The old saying applies: "10% make it happen, 60% watch it happen and the other 30% wonder what did happen.

The 'real world' is a tough place with little heed given to excuses for poor performance. It is better for young people to set higher standards for themselves so that employers do not hear:--

It will do.
It's OK - its nearly right!
I thought it would be O.K. if.

(2) Schooling

School needs to prepare students for a life in the 'real' world. This includes work, sport, recreation and leisure.

Students are not prepared for work, they are actively dissuaded from competing in competitive sports. Leisure and recreation is emphasised. Assessments are personal achievements - not competitive achievers. Regardless of theory and hopeful dreaming, life is competitive in every way. The young must compete for friends, university places, boyfriends/girlfriends, jobs and promotions.

Schools do not recognize this aspect of life and do not prepare our young generation with the personal, technical and professional skills to assist their own development as well as being a useful contributor to society.
Finally, private enterprise is scorned by all teachers I know (and I know quite a few) and this negative attitude must end up colouring the students' view of manufacturing industry (as an example). A view spread by those in most contact with children and who have the least exposure to the 'real' world.

I believe students need to be taught to think for themselves, to think ahead and to weigh up the consequences of their actions. In order to do this - they require skills of communication, literacy, numeracy and logic - to my mind, basic skills required for any position or further study.

Students also need realistic information as to the requirements of both higher education and work places, as to their conduct, attitude, time constraints and pressures, team work, etc.

In this way, we may improve the depth, stability and reliability of our future 'members of society'.

What is the role of the Arts/Crafts in developing the student in preparation for the world of work? No mention of ETHICS AND MORAL VALUES.

I am convinced, after employing many thousands of people in nine countries with diverse cultural and social moves, that regularly tested progress toward the achievement of established standards of literacy, numeracy and social skills (measured by public examinations at leaving, tertiary qualifying and tertiary levels) is the optimum programme for a successful and contributory life.

Re-evaluation of the worth of craft and technical skills so as to make such careers much more attractive and sought after is also essential to Australia's recovery from the present malaise.

Ideally students would be 'streamed' by about Year 9/10 into academic/technical/practical studies suited to their abilities/temperaments/aspirations.

In practice, some if not most remain uncertain of a clear career path even in Year 12.

Wherever possible/practicable, the education system should aim to capitalise on, and encourage, individual strengths.

Our present education system is not flexible enough and it has lost touch with its market. The main areas of concern are standards of maths, english, science plus attitude, initiative and discipline. 15 to 18 year olds, (in the main), are unprepared for the transition between school and work.

The problems we see with the educational system is that it is attempting to give students such a broad base of knowledge and skills it achieves no real employable skills.

From grade one (1) in primary school through to Year twelve (12) students performance should be measured with tests and exams.
If the student does not achieve 50% plus he repeats a year. The result is that students end up knowing where they sit in the academic scheme and select a career to suit.

My children are promoted every year regardless of academic skills. Their impressions or their skills could be overrated.

(3) The system/education general

Employers tend to see the need to recruit smartly presented, motivated, highly skilled school-learners - whereas over educationalists see their role as not necessarily producing this "type" or "category" of school leaver, but a well rounded, thinking and self sufficient and able to cope.

I cannot balance the two ends of the spectrum at this stage. However, I am highly suspicious of the "grades" only system as testing seems to impact more than any other variable in the learning that has occurred and too often the test actually becomes the syllabus; both at work and at school. I would like to see your enquiry address the need for employers to be educated in the need for a healthy mind in their employee and likewise the educators educated in the needs of employers - this may be able to address this complicated area and whilst it may find more questions than answers, could lead to a "better" workforce in future.

The major problem is lack of co-operation between the three agencies involved

Schools
Universities/Colleges
Employers

All have responsibilities to ensure kids are exposed to the data and resources they need. Mostly, we leave it to the schools to "guess" what is needed and then criticise them when they get it wrong!

The education system is under the hammer! Unfortunately it appears many of our teachers are first out the door. Greed and what I get out of the system in preference to what I can put in. The children unfortunately think the same way. Unless we go back to the basics, the education system will be way off beam.

Sadly the lack of a truly professional business like approach is not only lacking in High schools but also in some Lecturers, etc. in the Tertiary institutions.

School leavers are what we make of them. If their suitability for employment is low, blame parents and the system. Mostly kids are nice people.

(4) Job applicants

This company essentially only employs apprentices except for a minimal number of clerical staff - not more than one or two juniors per annum. Our response therefore is essentially related to our requirements for electrical apprentices. We believe the right level of education
for these students is above average results in Physics, a minimum of Mathematics 1S and a good level of literacy and reading comprehension. Naturally they must have a mechanical aptitude which we tend to determine by testing them through an industry scheme. We normally choose our apprentices from Year 11 and 12 students and mostly the latter.

The biggest proportion of apprenticeship applicants have not excelled at arithmetic.

Unfortunately the general standard of applicant is poor and seems to be getting worse.

(5) Teachers

There is a greater need for teachers to experience the problem of work, and to understand the pressures and advantages by comparison with the teaching profession so that they can communicate their attitudes more effectively to students.

I believe very strongly that Teachers should have to spend a compulsory 2-4 weeks in the work force in duties other than teaching.

Given the number of weeks they opt on holidays per year this could be fitted in without affecting the teaching year.

(6) Stress

The question of stress is overstated. A ploy that is used to gain compensation. Do you realise the cost of stress related compensation claims runs into millions of dollars. Like R.S.I. it is only a recent problem.

Not enough emphasis is placed on lifestyle

Good diet.

Exercise

No drugs.

The influence of fast foods on eating habits is at an unacceptable level.

A healthy lifestyle is a prerequisite for a person to cope with the day to day work and home problems.

More limited job opportunities is forcing students to apply for positions that were not of their choosing so that they have a job. Pressure at home also contributes to this trend.
REPORT TO THE CURRICULUM PATTERNS WORKING PARTY

PROBLEMS AND POSSIBILITIES IN
SENIOR SECONDARY CURRICULUM

AUGUST 1987
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<td>C: THE BUILDING BLOCKS OF CURRICULUM</td>
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<td>Common Studies</td>
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<td>Studies and Activities outside the school</td>
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<tr>
<td>E: ASSESSMENT</td>
<td></td>
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<tr>
<td>Assessment as guarantee, and servant, of curriculum</td>
<td></td>
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<tr>
<td>Assessment as comparison</td>
<td></td>
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<td>F: CERTIFICATION AND THE USE OF CERTIFICATION</td>
<td>150</td>
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<td>Certification as guarantee of curriculum, and standards</td>
<td></td>
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<tr>
<td>Certification as symbol of achievement and transition</td>
<td></td>
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<td>Other users of certificates</td>
<td></td>
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<tr>
<td>G: THE PROCESS OF CHANGE</td>
<td>152</td>
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Curriculum Patterns Working Party
of the
Enquiry into Immediate Post-Compulsory Education

Chair: Ms Pat Thomson
Acting Chair: Ms Judith Haigh

Members:
Dr Ian Davey (University of Adelaide)
Mr Jim Dellit (Smithfield Plains High School)
Dr Viv Eyers (SSABSA)
Mr Kevin Gilding (Enquiry into Immediate Post-Compulsory Education)
Mr Brian Huppatz (Sacred Heart College)
Ms Janis Koolmatrie Equal Opportunities Unit, Education Department
Mr Dean Kuhl (Department of TAFE)
Mr John Pederson (Education Department)
Dr Kay Schaffer (SACAE)
Ms Nancy Schupelius (Wirreanda High School)

Executive Officer: Ms Ione Brown
Consultant: Mr Dean Ashenden
In view of the rising numbers of students in senior secondary education, their diverse needs and unpredictable futures, the Curriculum Patterns Working Party is asked to advise the Enquiry on the following matters:

1. Whether it is desirable and practicable to specify a range of subject groupings and experiences and thereby a range of appropriate options for completion of senior secondary education.

2. Whether it is desirable and practicable to
   - regard the years of post-compulsory schooling as inter-related
   - associate certain TAFE courses with those available in the years of post-compulsory schooling as part of an inter-related post-compulsory stage and the consequences of so doing.

3. The extent to which present curricular resources may be used to achieve the above aims.

4. The means of encouraging greater participation at this level with more equal opportunities and outcomes for groups who have not previously had educational opportunities at this level.

5. The educational and resource implications for schools, tertiary institutions and other agencies of any proposals relevant to the above.

In carrying out its functions the Working party will
   - take account of public response to the Discussion Paper in the particular area with which it is concerned
   - conduct or supervise investigations relevant to the area under consideration and consult with relevant interests and groups
   - report formally to the Enquiry by the end of September and discuss progress with it in the interim.

*2 June 1987*
Changes in participation, and curriculum

1. A five year-old beginning school in South Australia in 1945 stood less than one chance in twenty of continuing to Year 12 (Leaving Honours) in 1957. The survivors were mainly male, Anglo and middle class, and almost all were destined for University. They prepared themselves by choosing four or five subjects from a total offering of only seventeen subjects. The group starting school thirty years later is the first in history to be more likely than not to stay for twelve years. More than half of them are female, many come from migrant and working class families, and a few, still far too few, are Aboriginal. Most of them will not go directly on to higher education, though more than 70% will eventually take up further or higher education. Today's Year 12 cohort is offered no fewer than one hundred and eighty four subjects, some recognisable descendants of the old Leaving Honours subjects, others covering almost very conceivable field of learning and activity, and taught, learned and assessed in ways not even imagined thirty years ago.

2. These extraordinary changes in access to education, in education levels and in the richness of curriculum give the lie to the persistent claim that schools are inflexible, and behind the times. Yet it is also clear that continuing change is sought, and desirable. There are still too many young people who, after an unsatisfactory encounter with formal education, leave school early, especially from groups which historically have received least benefit from formal education: women, Aboriginals, disabled people and those from non-English speaking backgrounds. There is continued pressure on schools to make curriculum more useful, and to serve larger and changing economic goals as well. A closer look at the curriculum suggests that changes are also needed to provide young people with a greater understanding of human achievements and the particular society in which they live.

Problems in the organisation of studies and students

3. Curriculum which seems to be rich and broad when we see it in a Year 12 Handbook is not necessarily so when we look at the curriculum of an individual student, or groups of students. Many students' courses are narrow rather than broad and avoid rather than fill gaps or repair deficiencies from the earlier years. Many students over-specialise, as Maths/Science students or Arts/Humanities students or, increasingly, as vocational studies students. These divisions are often 'vertical' as well as 'horizontal'. That is, different values are attached to different kinds of study, often deriving from the vocational opportunities which they open up, or close off. Moreover the divisions have differential impact on different groups, so the differential value
attached to particular studies positively disadvantages those young people who undertake courses which are accorded lower status.

4. These patterns and hierarchies are supported by a combination of rules and absence of rules about the subjects students may take. Other than the Universities' matriculation rules there are no requirements about combinations of studies which students may take. The Senior Secondary Assessment Board of South Australia (SSABSA) groups studies into 10 Areas for management purposes but the Board has no authority to constrain student choice in any way, and its Areas certainly do not function so as to place studies or students in levels or streams. Student choice is constrained, however, by the requirements of the Universities and Colleges of Advanced Education. The Universities require that students seeking entry to them study subjects which have been publicly examined (the Publicly Examined Subjects, or PES), and not merely publicly assessed, via moderation, as is the case with the School Assessed Subjects (SAS). The Colleges of Advanced Education accept both PES and SAS subjects, but they discount (by three points) scores gained in School Assessed Subjects and they make a further distinction within the SAS group in not accepting subjects from the Community Studies' group which record the results of assessment on a two-point scale (successful/unsuccessful) rather than the usual 20-point scale. Arising from the range of TAFE programmes there are a wide range of entry requirements to TAFE. This is affected by the responsibility of individual institutions for selection on a program basis and the national TAFE awards scheme which has begun to have a major influence.

5. In the absence of rules about balance, breadth or commonness set by other authorities the requirements of the Universities and the Colleges have the unintended effect of structuring the whole curriculum. In creating the PES subjects, non-PES subjects are unavoidably created, and the non-PES studies are themselves divided in a similar way. A further division is established by the widespread belief that the sciences and mathematics are more likely to yield higher scaled scores and/or that students should 'keep their options open' (for all courses and faculties) by studying Sciences and Arts/Humanities. Finally, there is a third group of subjects, at least some of them registered with SSABSA, which are designed to supplement of students who are not aiming at entry to higher education.

6. These divisions amongst studies are related to divisions amongst students, who are regarded as 'academic' or 'non-academic' according to the type of course in which they are engaged. Students are rather more creative than the de facto curriculum framework, and increasing numbers make up their courses from mixtures of PES and SAS subjects (and mixtures of Community Studies and other SAS subjects). Many of these students add Registered subjects as well. But there remains a strong clustering of students around PES or SAS subjects. It also appears that a small but increasing number of students are engaged mainly in Registered subjects and some others not certified by SSABSA.

7. These arrangements have developed over time without being intended or implemented by any one authority, and they are certainly not the result of a careful consideration of what constitutes a desirable educational program for young people. They may be criticised on both educational and on social grounds. The division of studies and students (or images of studies and students) into categories of academic/non-academic, together with over-specialisation within these broad areas, deprives all students of important kinds of learning. It also implies that students lack common interests and needs, and that their abilities differ in kind rather than amount or balance. These propositions are in part evidently false, in part lacking firm foundation. From a social point of view the stratification of curriculum reinforces divisions in the student body, and restricts options for work or further study. And since students' streams or levels are often linked to their family backgrounds, reflecting their social and
gender advantage or disadvantage, a strongly stratified curriculum is not consistent with equality of opportunity in even the simplest sense of the term.

Other problems in curriculum

8. Division of another kind altogether appears in the separation of Years 11 and 12. Until quite recently Years 10 and 11 were clearly structured as end-points of schooling. Students could leave school with a certificate and a sense of success, and go along established pathways into full-time employment opportunities, on- and off-the-job training or full-time study. As job opportunities for young people shrank and as more and more stayed to Year 12 these pathways were rapidly eroded. There is now no Year 10 or Year 11 certificate, and too often no sense of success, or job or apprenticeship either. Year 10 is now regarded as culminating the compulsory years, but Year 11 has become a kind of limbo, having no clear purpose of its own, and without clear links to either Year 10 or Year 12. There are strong social reasons for thinking of Years 11 and 12 as belonging more to each other than to the earlier years. These students have in common non-compulsory attendance at school, rapid personal maturation, a great capacity for intellectual exploration and excitement and a sense of reaching toward the adult worlds of advanced study or work. These social realities do not at present, however, correspond to the realities of curriculum.

9. While the range of subjects has derived from responses to the diversity in the student population the sheer number now available presents both central authorities and teachers and schools with unnecessary difficulties. Hundreds of separate subjects require an enormous outlay of energy to design, check, promulgate, evaluate, and revise. The PES/SAS division is especially costly since it requires near-duplication of a range of studies.

10. These problems of resourcing and organisation flow on to schools. Faced by limitations in the number of subjects they can offer, schools must choose before they allow students to choose. Even a limited range of options can be very expensive for the school to provide because class sizes are small and administrative arrangements complex. This means that they either exclude some students or offer them unsatisfactory choices. Most students nonetheless face important choices, often with an inadequate understanding of their educational purposes or their career and personal consequences.

11. These various problems in curriculum show up in a troubling level of student and teacher dissatisfaction with existing curriculum arrangements. Students in the PES stream complain about the aridity of much of their learning, and the excessive demands it makes on their time. Other students, too, show a lack of engagement with their studies. Almost all students believe that schools do not acknowledge their growing maturity. Some teachers support these views, and add other criticisms of the senior school curriculum.

Sources of problems in curriculum

12. An important source of difficulties in curriculum is confusion and uncertainty about the purposes of post-compulsory schooling. It is widely thought of as being merely a preparation for something else, where 'something else' is one of two quite different things, further study or work. This is to misunderstand what schools can and should do. Schools can do useful things in their own right and at the same time do a much better job of helping young people make the transition to work or tertiary education, and proposals are made below about how they might do this. But schools cannot be all things to all young people, and rapidly-improving youth policies are opening up programs such as the Australian Traineeships Scheme and others recently introduced in TAFE which, together with apprenticeships and the workplace, can do
things which schools can not do, or do them better. It will continue to be the case in
the foreseeable future as in the past that many young people will want to leave school,
and should do so. An important difference between the future and the past, however,
is that fewer and fewer of them will leave, and more and more of those who do will
return to study when they are ready to, many of them in schools.

13. The special and fundamental possibilities of schooling are (and it seems curious to
have to say it) educational. The view taken here is that with the provision of a longer
period of schooling we can contemplate making the broad outlines of our complex
intellectual, technical and artistic traditions available to a growing number of students.

14. The view of post-compulsory schooling exclusively as preparation also over-
estimates the differences between young people. It tends to divide them into those
preparing for work and those preparing for more study. Education and schools must
certainly meet the diverse needs and expand the potentials of individuals, and they must
do a better job of meeting the needs of the 'new' post-compulsory student. But schools
must also acknowledge that all individuals have in common the time and society in
which they live: democratic life demands that the greatest possible majority reach a
good level of understanding of society and have the capacity to think clearly about its
accomplishments, its failures and its unfinished business. It must be doubted
whether these responsibilities are being discharged by a curriculum so strongly
marked by diversity and hierarchy, especially where these diversities are related to the
social and occupational and gender determined pasts, and futures, of our students.
B: A general approach to curriculum change

Progress and problems

1. This brief survey of present arrangements suggests a number of general conclusions or principles which may guide the development of proposals in the following sections of the paper. We have necessarily concentrated on problems in post-compulsory curriculum, and it is therefore important to say that the proposals which follow are made in the knowledge that they will build on very considerable strengths. Expansion in the number and range of studies, and in the ways that students find to get into them, has now reached a point where there is a problem for students and schools. But that expansion has also been a very effective response to rapid increases in the number and range of post-compulsory students. Furthermore it provides us with a rich resource of content, teaching and learning and assessment methods, and approaches to the organisation and evaluation of curriculum. The Working Party's intention, in making a series of proposals below, is to capitalise on this resource.

Students and the curriculum

2. In the light of previous comments it is the Working Party's view, first, that it is now necessary to think of Years 11 and 12 as belonging together and constituting a distinctive stage of schooling. There are both educational and organisational advantages in thinking of the two years as a single stage. It permits a combination of flexibility and continuity of study which is not possible within a single year. Another justification is that circumstances and aspirations of Year 11 and 12 students have more in common with each other than with younger students, and this should be the starting point of a re-thinking of the nature and purposes of their curriculum. To argue the distinctiveness of the stage is not, of course, to argue that its tasks and characteristics differ altogether from those of earlier years. Thus, Years 11 and 12 should not be planned in isolation from what precedes them and should acknowledge experience during the junior years. Furthermore, students of this age and stage remain apprenticed rather than mature learners. They continue to change and grow personally, and socially, and many look to the school both to acknowledge and to assist them in this growth. Senior students also have responsibilities toward younger students and can make a very important contribution to the life and character of the whole school. For all these reasons the Working Party is of the view that Year 11 and 12 students can gain benefit from a strong affiliation not only with their immediate group but also with the school as a whole.

3. Such a view does not pre-empt the possibility advanced in the Enquiry's discussion paper of establishing one or two post-compulsory Colleges in appropriate areas, perhaps in association with TAFE. The Working Party would welcome additional comment on this matter.

4. This overall approach requires a re-thinking of the relationship of students to the patterning of curriculum, and to the school. In curriculum, there seems to be an odd combination of libertarianism and compulsion. Students make a big initial choice and must then comply with whatever follows. In many schools, moreover, the students' educational work is done in a social climate more like that of the junior school than the adult world which most 16 and 17 year-olds are reaching (indeed which many are inhabiting when away from school). As noted earlier, many students find this climate patronising and it generates a resistance which, to say the least, does not encourage a positive attitude toward their educational work. The Working Party is of the view that there should be two major changes in the student-school-curriculum relationship. First, there should be a much more systematic
acknowledgement and development of the near-adult personal status of students.

5. Students' relationship with their curriculum also needs major change. 'Choice' of subject and stream is too narrow (because it gives insufficient training in the complex learning of independent learning), and it is too wide (in asking students to make decisions for which they are not equipped). A great deal has been learned in recent years about how to engage students effectively in the decisions which shape their programs and their studies. These approaches should be developed and disseminated so as to involve all students in all courses. The implication is (second) that each student should be fully involved in the decisions about their curriculum at both the general level (subject and pattern decisions) and within units and courses of study. Such an approach is of the essence in producing fully mature learners - that is, young people who know how to learn, and want to.

The organisation of the curriculum

6. If Years 11 and 12 are to constitute a distinctive and coherent phase of schooling, and do a better job of meeting the needs of the more diverse population, the present covert and unintended structuring of curriculum must be replaced by a clear and considered framework for curriculum as a whole, and for the curriculum of any individual student.

7. A first step towards this structuring would be a revised approach to the grouping of subjects. At present the Education Department and SSABSA both use classifications of studies into Areas, the former to guide development of schools' curriculum policy, the latter as an organisational mechanism. Neither taxonomy is likely to be wholly satisfactory for the purposes we have in mind. Certainly the number of designated Areas should be kept as small as is consistent with these purposes. In sum, Areas of study should be made active in shaping students' curriculum patterns by requiring students to take studies from certain combinations of Areas.

8. Another important step in the direction of a considered and coherent structuring of curriculum should be via the abolition of the present distinction between PES and SAS subjects, a distinction which is tenuous, unhelpful and expensive. This could (amongst other things) make possible a considerable reduction in the number of subjects on offer. The matter is discussed more fully below.

9. The Working Party believes that while the post-compulsory curriculum should acknowledge the emerging diversity of interests, talents and futures of students, it should also acknowledge their common needs and humanity, and the special responsibilities of schools in the making and maintenance of a common framework of values, knowledge, and symbols. Curriculum patterns should therefore ensure that each student will continue to be able to specialise in one or more areas of study (including areas relevant to occupational or educational futures). But we should also ensure a much greater measure of breadth, balance, inclusiveness, and commonness than have usually been found in post-compulsory curriculum. These terms convey somewhat different meanings to different people: the Working Party would welcome discussion of them as features of post-compulsory curriculum patterns.

10. This does not imply or endorse a uniform or compulsory curriculum, of course, or one which neglects students' legitimate concern to explore and prepare for their post-school futures. The Working Party therefore endorses and would wish to encourage the growing practice of taking courses of study outside the school, and of engaging in other out-of-school activities as a part of the total program.
Approaches to teaching and learning

11. At least as important as the pattern of curriculum is what fills it out. Take, for example, "Mathematics". To most of us the label means a bookish study of very abstract calculations. But "Mathematics" may also mean an independent investigation into the history of thinking about number and space; a colloquium of people who actually use Mathematics in the workplace; or brainstorming different ways of representing in spatial symbols social relationships in the classroom. Much of the energy of curriculum reform in South Australia in recent years has gone into the successful development of approaches of the latter kinds.

12. There is an interaction between approaches to teaching and learning and the patterning of curriculum. For example, the first kind of Mathematics, the scholastic kind, will not cater to many students, and so other Mathematics units will have to be put into the curriculum pattern. Nor will it teach students very much about the history, sociology or philosophy connected with mathematics, and if we want students to study broadly we will have to make them take their history, sociology and philosophy elsewhere. The second kind of mathematics, on the other hand, would require fewer levels in the curriculum pattern (because it uses a more hospitable kind of teaching and learning, and will be able to engage and extend more students), and fewer subjects (because the breadth is in the subject rather than between the subjects).

13. The Working Party believes that, where this can be sensibly done, courses should be redesigned to become more like the second kind of Mathematics than the first. There should be, in other words, a higher degree of breadth, inclusiveness and commonness within subjects as well as in the combinations of subjects than is now generally the case. Further consideration of these possibilities would be welcomed.

14. The following sections of the paper sketch out ways of giving effect to these general principles and begin with the question of the organisation of curriculum.
C: The Building Blocks of Curriculum

Curriculum patterns

1. At the end of the day it is not the pattern of the curriculum on offer that really matters but the pattern of each student's curriculum. It is difficult to discuss that until we know more about the materials from which they will build. We will therefore spend some time in discussing these basic elements or building blocks of curriculum before going on (in Section D) to talk about ways in which students might design their learning programs. This will be followed (in Sections E and F) by a discussion of ways in which assessment and certification can function so as to guarantee curriculum approaches and decisions.

2. There are several ways of thinking about the constituent parts of curriculum. The categories used in the following discussion will be:

   > **Areas** (eg Maths and Sciences, or The Arts, or Humanities and Social Sciences)
   > **Fields of Study** (eg the Biological Sciences might be a Field of Study within the Area of Maths and Sciences)
   > **Unit of Study** (eg Human Sexuality might be a Unit of Study within the Biological Sciences)
   > **Study Sequence** (a coherent series of Units within a Field of Study).

We shall look at each in turn.

Curriculum Areas

3. There are two main schema of Curriculum Areas relevant to schools in South Australia. The Education Department's *Our Schools and Their Purposes* uses the following division of the curriculum:

   > Environmental Education
   > Health and Personal Development
   > Human Society
   > Language Studies
   > Mathematical Studies
   > Science and Technology
   > The Arts
   > Transition Education

Through these run the four specified priorities of literacy and numeracy, communication skills, skills for social living and problem-solving skills, to be emphasised in addressing each Area.

This division of content has less operational status in Years 11 and 12. SSABSA's broad division of the curriculum is:

   > Agricultural and Environmental Studies
   > The Arts
   > Business
   > English
   > Languages
   > Mathematics
   > Science
   > Social and Cultural Studies
As has been noted earlier, the SSABSA Areas are at present used only as a way of ordering the work of curriculum preparation and delivery and not as a way of shaping the studies of students.

4. But Curriculum Areas can be used to constrain or shape the way in which students construct their programs, by requiring them to take studies in certain combinations of Areas. The Working Party believes that any move toward a more considered set of requirements, and especially toward a broader, more balanced, and more common curriculum, will require the use of curriculum boundary lines to shape the decisions about course patterns made by students. Such an approach would require careful thinking about the number of Areas, their scope and content, and about rules governing students’ selections from them.

Defining general curriculum areas

5. A first step in this direction would be to settle the number of general curriculum Areas. A large number of Areas may imply an invidious choice: either each student takes a large number of small studies, or the diversity and specialisation of studies increases. Too small a number of Areas may mean the contents of each is too diverse to be helpful. The Working Party suggests that a better reconciliation of breadth and specialisation, and of commonness and diversity, may require a significant reduction in the present number of Areas. Comment in relation to this matter would be particularly welcome.

6. A second (and more complicated) step is in deciding what should go into each Area and to draw the boundaries between them. This task must begin with the academic disciplines, the main source of content of senior school curriculum. There are, of course, many ways of dividing up the vast domain of academic study, and the fewer the boundaries the more difficult the task becomes. Consider the implications in each of the following tripartite divisions, for example:

- (1) Maths, Science and Technology (2) Arts, Humanities and Social Sciences (3) Language Studies
- (1) Maths (2) Science and Technology (3) Arts, Humanities, Social Sciences, and Language Studies
- (1) Maths, Science and Technology (2) Arts, Humanities, and Language Studies (3) Social Sciences.

It is not possible, however, to settle either the number of areas drawn from academic knowledge or the boundaries between them without considering the place of other kinds of knowledge.

7. Academic knowledge remains the most important single source of the content of curriculum but can never be, of course, the only one. It is widely accepted that the performing and visual Arts are a central part of our cultural heritage and of the formation of young people, yet only one third of our Year 12 students have any contact with the area. The Working Party believes that it is very unlikely that more students will have contact with the Arts unless it is constituted as a Curriculum Area.
8. Knowledge generated through practice rather than formal enquiry has also long had a place in school curriculum, in the form of the crafts, the trades, and through knowledge generated in other vocations. One of the deficiencies of most Year 12 curriculum is that learning in these areas has been confined to students who are considered 'non-academic', thus depriving the 'academic' students, demeaning the 'non-academic', and mis-understanding the nature of human intellectuality. There is, prima facie, a strong case for constituting applied and vocational studies as a separate Curriculum Area. The Working Party is not convinced that this would be the best approach to the problem, however. It is arguable that the real curriculum problem here is not one of balance but of integration. From educational, social and intellectual points of view there may be much more to be gained by seeing that most or all studies include elements of the applied and the abstract, the practical and the cerebral, than by simply requiring that each student experience some of each.

> the need to inform young people about their post-school options, and their present educational implications
> the development of responsibility for oneself, both personally, and in formal study and learning
> the development of the capacity to work productively with extended groups, and in formal institutional settings
> the continued development of the same capacity in informal settings, and especially through family and community activities.

10. The Working Party suggests that all students should spend a significant proportion of their last two years of schooling in study and activities in these areas, and therefore proposes the introduction of a new Curriculum Area concerned with social and individual development. This Area would in some respects differ from others since much (though not all) of it would be concerned with school and classroom processes rather than 'content' in the usual sense of the term. Such an Area would offer an appropriate way of integrating into the curriculum out-of-school studies and activities, including the vocationally-based and with particular emphasis on those unpaid family, community and wider responsibilities which are such an essential part of the preparation of students for an integrated adult life.

11. If this general approach were followed, curriculum offerings would have a general organisation something like the following:

| Humanities | Social Sciences & The Arts | Social & Individual Development |
| Language Studies | Technology | Maths, |
| | | |

There are many possible examples of this kind of organisation: the Working Party would welcome comments on this matter.

**Fields of Study**

12. A Field of Study should be more than an aggregate of studies, more than a convenient sub-heading of curriculum Areas, and certainly more than a rationalisation for the school's organisation of Faculties. A Field of Study should be, first, an integrated body of knowledge, held together by core ideas and approaches, as well as by educational purposes.
13. A Field of Study should also be internally organised so as to offer students a range of ways of approaching its core ideas. Students should be able to make brief or extended acquaintance with the Field. They should be able to do so as raw beginners or as already experienced learners. They should be able to approach a Field with different kinds of interests in mind, and different aptitudes.

14. This approach is in fact generally accepted as appropriate up to Year 9 or Year 10. It is also generally accepted that there should be a very sharp change in approach after Year 10. Although not often carefully argued, the case rests on two related propositions, one about students, the other about knowledge. First, it is argued that students are approaching the end of schooling, and their futures should impinge much more heavily on what and how they learn. We have indicated earlier that this can easily overstate both differences in futures and the role of the school in preparation for them. We might add that well-designed curriculum can greatly reduce the extent of trade-off of the general against the individual, the common against the diverse.

15. The second argument, focussing on knowledge, is that in the later years of schooling the 'content' becomes more elaborate and specialised, and can make a very wide range of demands on students. The problem is sharpest in (for example) Mathematics, or Music, or the Sciences, where a good deal of knowledge is very strongly structured or cumulative. The Working Party is of the view that at least part of the problem is in the way in which these (and many other) fields of knowledge are conceived. There is a tendency, especially in the senior years, to assume that an organisation of knowledge constituted by and for research should automatically be taken over for the quite different purpose of educating young people. There has also been a related problem in the kinds of learning tasks set, and the way in which they have been assessed. Many classroom exercises do not permit common engagement at different levels of achievement, and the most frequently used forms of assessment are designed to string students out rather than to detect and encourage improvement.

16. In sum, the Working Party believes that it is possible to design Fields of Study which are both more inclusive and more demanding for all students than has been usual in the past. It will be the case, of course, that the needs and interests of students and the levels of their ability will vary considerably. It is impossible to give a formula which will dictate responses to these facts, but just how many different approaches will be needed within each Field of Study will be influenced by the way in which Units of Study are designed.

The shape of Units of Study

17. The basic building block of curriculum at present is the 'Subject', and most of these Subjects (including all PES subjects) run over the full academic year. In Year 12 five such subjects make up a full-time program with most studies extending over a year. The advantage of these arrangements is that students go into their studies in depth. The disadvantages are a lack of flexibility (once enrolled, students are committed to the study for the rest of the year) and reduced breadth. Shorter studies and/or a greater number of studies would overcome the problem.

18. It was proposed above that Years 11 and 12 be treated as a single phase. If this view is accepted it becomes possible to reconcile claims for specialisation and depth with the need for breadth and flexibility. Studies can be arranged on a semester basis, thus allowing for flexibility and breadth; on the other hand, they may in some areas be pursued for two, three or four semesters, permitting depth of study - indeed a greater depth than is possible at present. This might, in turn, make it possible to increase the number of subjects or units studied at any one time.
The definition of Units of Study

19. Traditionally, courses of study have been defined by two things only: the content, and assessment. A Syllabus outlined the ground to be covered, and often texts were prescribed as well. Assessment took the simple form of end-of-course, centrally-set examinations. By controlling each end of the educational process in this way, central authorities controlled most of what happened in between. Methods of teaching and learning, students' workloads, and what counted as 'learning' all followed inexorably from syllabus and exam.

20. As schools have struggled to broaden and deepen ideas about what counts as learning and to encourage new kinds of students to continue learning, so have they struggled against syllabus-and-exam curriculum statements. They have met with varying degrees of success. SSABSA is confined by its legislation to preparation and approval of 'syllabuses'. While the Board has interpreted the word in ways which are consistent with good educational practice some of its statements (especially in the 'hard' PES areas) are recognisable descendants of the old syllabuses, in the sense that prescriptions of content remain dominant. Others talk about every aspect of teaching and learning, and encourage (or even require) teachers to teach in new and imaginative ways and students to learn much more than content.

21. SSABSA syllabuses discuss subjects under these headings:

- Educational rationale
- Advice for students
- Aims
- Objectives
- Structure and organisation
- Content
- Methods
- Resources
- Assessment
- Moderation
- Implementation
- Assessment Exemplars

The Working Party is warmly supportive of the relationship between curriculum design (on the one hand) and teaching and learning (on the other) which lies behind the discussion of courses under headings such as these. It may be that the coherence of the curriculum could be increased by the use of a uniform and possibly simplified format across both Years 11 and 12. For example:

- Aims and objectives
- Rules for the conduct of the Unit
- Content to be covered
- Learning Tasks
- Teaching methods
- Assessment

Headings such as these could incorporate and perhaps streamline material currently provided for accredited year 12 studies. In addition, under these headings extra attention would be drawn to rules for the conduct of units and the description of learning tasks which are touched on below. The Working Party would appreciate discussion on these matters.
22. Assessment will also be commented upon below, in more detail, but two other of these headings require special comment here. First, the Working Party believes that the category of 'content' is misconceived in some existing approaches to curriculum design, but in two opposite ways. We have already mentioned that some subjects, and especially PES subjects, retain the old emphasis on content, and are dominated by it. 'Getting through the course' substitutes for whatever objectives curriculum designers had in mind. On the other hand, some more recently-designed studies (and especially those intended for the so-called 'non-academic' students) have suffered from the opposite deficiency, with all the emphasis on 'process' and with content being arbitrary or considered merely incidental. There is now, however, a growing body of knowledge about curriculum design which emphasises both process and appropriate and flexible approaches to content, and which in so doing puts priority on students' gaining access to, as well as some familiarity with, valuable knowledge. Well-developed Rules for the Conduct of the Unit may do much to help teachers and students to adopt these emphases consistently.

23. Second, the notion of 'Learning Tasks' is central to these proposals. A statement of Learning Tasks describes what each student must undertake and complete, describing (and perhaps exemplifying) what is expected of students, in kind, amount, and quality. The character and variety of these tasks goes a long way to determining the quality, accessibility and effectiveness of curriculum. Such a statement would do much to determine the amount and kind of preparation teachers will need to teach the course, and to shape their view of what good teaching and learning should look like. It also does much to define, promulgate and raise educational standards. The careful selection and description of Learning Tasks is arguably central to good curriculum design. In proposing the description of Learning Tasks we do not have in mind mechanistic approaches to rigidly prescribed activities of the various kinds well-known in the history of education. Rather we look for more substantial structural assistance to students and teachers in integrating a variety of approaches to learning within units of study. It follows, therefore, that the notion of learning tasks includes a very wide variety of possibilities, from reading, reflecting on and reinterpreting material within a defined domain, through preparing original material for desk-top publication, to budgeting and planning menus for a household for a specified period of time. An argument in favour of this approach is that curriculum change would be assisted by more specific linking of teaching and learning modes with desired outcomes. The Working Party would appreciate discussion of this matter.

24. The Working Party agrees that irrespective of the particular method or format of describing units, the same method or format be used for all units, in the interests of coherence, balance and a common approach to learning across all areas of the curriculum. We reiterate that this is not to say that teachers and students should work within a straight-jacket of central prescription. There is no curriculum until students and teachers bring it to life. Good curriculum description should encourage and shape engagement, not deter it. The Working Party does not believe that 'choice' (as between Units or parts of Units) is an effective way to encourage this engagement. Teacher and student engagement with curriculum descriptions should be more like a good argument than selecting an item from a shelf. And sometimes, of course, there should be no argument. Some things should simply be required.

The character of studies

25. One way of achieving the objective of a better balanced, broader, more common, and more inclusive curriculum is through its patterning. Students might be required to
take a mixture or package of different kinds of studies, some analytical, some practical, some academic, some vocational, and so on. The Working Party believes this to be a limited view of the problem, and likely to reproduce in practice the fragmentation and hierarchy in curriculum noted at the outset. It follows that the task of combining depth and breadth, theoretical and practical approaches, technical and contextual knowledge, begins within Curriculum Areas and Fields of Study within each Unit. The following principles should guide the future development of Units of Study:

- they should include a range of learning tasks
- learning tasks should be designed so as to extend the greatest possible range of abilities
- units should include, if possible, combinations of analytical and theoretical work with, if possible, practical and applied work
- units should include at least some discussion of the social origins and use of knowledge (whether that knowledge be as abstract as quadratic equations or as practical as weaving techniques).

The Working Party realises that it will be necessary to examine a group of diverse units from a wide range of fields of study to test the practicability of the above principles and would welcome comment on this matter.

Study Sequences

26. The risk in 'unitisation' is that learning becomes a process of adding up credits rather than the thorough digestion and cumulation of knowledge. It is therefore essential that all Fields of Study include carefully-structured Study Sequences, and that all students be required to engage with at least some of them. The length and number of Sequences should vary from one Field of Study to another, because the extent to which knowledge is structured varies from one Field to another.

27. With some shared understanding of the basic blocks or components of curriculum - Areas, Fields of Study, Units of Study, and Study Sequences - it becomes possible to consider the way in which each student's curriculum might be built.
General rules for each student's curriculum

1. Generally speaking there are two ways of setting out general expectations of students. One of these is "Core plus Options". The "core" contains all the things which everyone should study, the "options" the areas where students may differ. The apparent simplicity of the formula is deceptive, however. There may be options within each of the main core areas, for example, and they may be arranged in ways which make curriculum every bit as diverse, and hierarchical, as our present curriculum. The same effect may be achieved by making the core very small, or by putting in the core relatively trivial studies, so that the real heart of each student's curriculum is in the 'options'.

2. Another response to these problems is to make more comprehensive statements so as to set down a series of mixes or combinations of studies which will be acceptable. For the purposes of this paper, these will be referred to as certificate requirements. These would be specified in terms of Areas, Fields of Study, and Study Sequences, striking a balance in a specific way between commonness and diversity, breadth and specialisation. By taking the form of statements about specifics rather than general rules, certificate requirements can be flexible without losing sight of basic principles. Indeed it may well be possible to permit schools and students to propose modifications to those requirements which would encourage students to think of their work as a whole program (rather than as a mere aggregate of subjects), and would provide built-in feedback to central authorities about the appropriateness and popularity of such requirements. The Working Party suggests that student curriculum patterns be thought of in terms of certificate requirements of the kind described above.

3. The general approach taken here would, on the face of it, imply that students would be required, during Years 11 and 12, to take at least some studies from most or all Areas, and from a number of Fields of Study, so as to achieve greater breadth, and commonness. But much would depend on the design of Sequences and Units, the extent that they can include within themselves an integrated approach to learning, and on whether common studies were required:

Common Studies

4. The Working Party believes that the approach to curriculum sketched above would do much to increase breadth, balance, and inclusiveness in curriculum. But there is a case for commonness in another sense, through required participation in common Units or even Sequences of Study. Two areas in particular may be considered essential to each student, and as valuable places for schools to affirm their common humanity. The first of these is often thought of as a set of 'communication skills' and referred to as 'English'. Although the Working Party accepts much of the argument in favour of the special importance of competence in reading, speaking, listening, and writing, it would prefer a more generous conception of human communication than is often implied by the term 'skills'.

5. A second area which may warrant common study arises out of the shared need of students to understand the choices and futures which confront them, and to make good decisions in relation to them. This need underlies 'careers education', 'vocational counselling', and so on. These are rarely given much time, are often inadequately developed and often focus on the particular and the trivial. A more valuable and appropriate approach might be to set individual concerns in the context of a study of
the present and future circumstances of students, including the workings of the labour market, the nature of paid and unpaid work in society, and the relationship of the education system to these matters. It is striking that the school system includes study of almost everything except itself, and the present proposal may help to repair the deficiency. Students wishing to keep open the option of further study might also be required to take as a part of this common study a Unit which examined the tertiary education system and selection for it from both an individual and a social point of view. The Working Party would welcome discussion, then, of a proposal that there should be a second common study sequence, tentatively titled "Education, Work and Society".

Studies and activities outside the school

6. It follows from the view taken here about the personal maturation of young people that they can be expected and encouraged if necessary to seek out opportunities for study in other institutions and other activities outside the school. In some cases these activities may not conform to educational requirements, in which case they would be purely private activities, or such that the school will regard the student as enrolled part-time. In others the study or activity may be a recognised part of the student's educational program. This could provide a valuable way for the school to help students prepare for their futures, and to reflect on that preparation. The proposed new curriculum Area on individual and social development would provide a good way of achieving this integration.

7. Any approach to curriculum and any set of requirements of students must be guaranteed in some way. The two principal means available are assessment and certification. These matters are of mutual concern to the Working Party on Course Articulation, of course, but the present Working Party believes they are central to curriculum concerns and therefore should be discussed in this paper.
Assessment as guarantee, and servant, of curriculum

1. Assessment is often thought of as coming at the end of teaching and learning. Assessment is more accurately seen as an integral part of the whole teaching/learning process. In an important sense it can come first, too, in that prescriptions or perceptions about assessment can shape everything that happens in a course of study. Teachers teach, and students learn, what is to be assessed. Considerable progress has been made in the techniques of assessment since the days of the Public Examinations Board. It is a firm policy of SSABSA, for example, that what is assessed, the way in which it is assessed, and the use of the results of assessment should all derive from the educational objectives of a course. The Working Party strongly supports this view of the place and role of assessment.

2. This approach requires, first, that any learning task which is regarded as worth requiring of students should be assessed, and assessed in appropriate ways, even if assessment consists of nothing more than warranting that the task has been completed. It also follows that learning tasks should be designed so as to make possible a full and rounded assessment of the levels of achievement in all aspects of the course. If this is to be done a flexible and varied approach to assessment, of the kind now seen in many SSABSA Syllabus statements, is essential. Since learning tasks should be designed with a view to developing a range of skills as well as mastery of content, assessment must recognise and judge many different activities and products, from essays to multiple-choice tests, from a dance performance to a photograph, from a research project to a computer program, a diary or a portfolio.

Assessment as comparison

3. The essence of assessment is comparison, and typically teachers compare a student's work in three ways: with the work of other students; with the student's own previous work; and with standards or criteria of some kind. No one of these is superior to another. Each can serve some purposes and not others. In the past, the most common form of assessment has been a loosely norm-referenced one, where the achievements of students were being compared with one another. Because these comparisons readily became comparisons among students, often inappropriately, most educational groups have moved away from this procedure. The only formal norm-referencing now used in South Australia is that adopted by the higher education institutions when they scale achievement scores in order to produce scaled scores for selection purposes.

4. The second kind of comparison, of the student's present and earlier work, overcomes this problem, and is therefore often used by teachers not to sort students out but to encourage all of them to improve. This approach may be particularly effective when students are encouraged to work with the teacher to set goals or targets for achievement before the unit, or the exercise, is commenced. But this kind of assessment cannot make comparisons between different students' work, and may lead to an arbitrary set of standards.

5. The third approach addresses these problems by setting standards via 'promulgation' through descriptions or examples of different kinds of work accomplished at different levels. This approach can become a covert form of norm-referencing, because a certain 'standard' is taken to be the level of achievement of a certain proportion of the relevant group of students. This need not happen, however,
and standards can be expressed in ways which are helpful and clear both to student and user. This approach to assessment may offer the double advantage of stimulating an overall improvement in standards of achievement together with clear, understandable, public guarantees of outcomes.

6. There is now a fund of experience in South Australia in using and combining each of these approaches. The Working Party supports the view of SSABSA that any balanced subject will have many objectives, and work within subjects will therefore be of several kinds, each assessed in appropriate and usually various ways.

Representing the results of assessment

7. Comparisons, whether with standards, with the work of others, or with the student's own work, are often expressed on a scale. A teacher may say that a piece of work is 'satisfactory', or 'very good', or 'outstanding' or 'unsuccessful'. Scales may also be in the form of letters (A, B, C etc) or numerals. Scales may be very long (up to 500 points in some Australian end-of-school assessments) or very short (eg pass/fail). Two things should determine the length of scales: the purposes, and the technical characteristics, of the assessment. Long scales (eg 0-100) often imply a degree of discrimination between levels of achievement which can not be justified. Long scales are also often used where they serve no good purpose. In Year 12 shorter scales have recently been adopted in South Australia. Community Studies use a two point completed/not completed system and all other publicly examined and school assessed subjects use a 20 point/A-E scale. It should be noted, too, that in some circumstances assessment couched in extended prose rather than on a linear scale can give a more accurate, multilinear description of what a student has achieved.

Who should assess?

8. A final issue is perhaps the most controversial in a controversial area: who should assess? Plainly the great bulk of assessment is and must be done in the classroom by teachers and, to a lesser extent, by the students, since on-going assessment is a crucial part of teaching and learning. As noted above, however, teacher assessments are to some extent arbitrary, since each teacher is either unaware of the standards used by other teachers, or unable to keep those standards accurately in mind. Teachers may also be subjective in their assessment and influenced, consciously or unconsciously, by their knowledge of students or by their educational relationship with them.

9. These limitations in teacher assessment support arguments for systems of public assessment. Public assessments have usually (though not always) been conducted by means of examinations, but the two questions - the publicness of assessment, and assessment by examination - are quite distinct.

10. The case for publicness is very much more complete or universal than the case for examinations. Examinations or tests are only one of many forms of assessment exercise. Like most other kinds of exercise, tests have many forms, and their uses and drawbacks vary greatly according to the particular form, the occasion, and the course of study. Tests or examinations should be used (as should all other kinds of assessment exercise) when they are appropriate to the objectives of the course of study. The application of this principle would see examinations or tests used much less in some courses of study, and rather more in others.
11. The case for publicness in assessment is much less contested. Schooling is a public enterprise, and the public (as well as the students) are entitled to have a reliable testimony of its outcomes. Furthermore the educational process can be enhanced by the careful use of standards which go beyond one teacher or classroom or school. The achievement of publicness is, however, a more complicated matter. There are now many forms of 'moderation' of teacher assessments which ensure the comparability of standards. Some of these approaches permit that engagement with and shaping of the raw materials of curriculum which is essential to good learning, an advantage not always enjoyed by mass public examinations.

Assessment and a general approach to curriculum

12. Differences in methods, objects and recording of assessment are, at present, one of the main ways in which invidious distinctions between kinds of course and knowledge and students are established. The Working Party believes that the mix of assessment approaches used in any Unit or Curriculum Area should:

   > derive from the educational objectives of the Unit or Area of Study and not from the use to which the results of the assessment are put
   > be generally consistent across Curriculum Areas and Units and Sequences and not vary so as to imply or construct hierarchies of curriculum or students.
F: Certification and the use of certificates

Certification as guarantee of curriculum

1. The first functions of school certificates are to verify standards of achievement and to guarantee an educational program. We have at the moment something like the reverse of this, with certificates (and the lack of them) shaping powerfully the kinds of curriculum in the schools, and the standards of achievement of many students going without satisfactory warrant. The Working Party believes that a new certificate of education may be needed to guarantee the approach to curriculum outlined above, or, indeed any approach different from present arrangements.

Certification as symbol of achievement and transition

2. A second purpose of certificates is to symbolise achievement. The Working Party believes that its proposals for a coherent two-year phase of schooling require a certificate which would register success in that stage and recognise the completion of schooling as a whole. Such a certificate would mark graduation both from school and from one stage of life to another.

3. The curriculum framework proposed here would imply a certificate to be awarded to those students who have met minimum requirements in the equivalent of two years of full-time study, as laid down in certificate requirements.

4. It has been argued that schools will be the main but by no means the only providers of immediate post-compulsory education. This implies the gradual extension of cross-creditation so that (for example) TAFE courses which were consistent with the general requirements of the new certificate could count toward it, and the continued development of arrangements for work experience and involvement in community activities. It should be emphasised that while these extra-mural studies and activities will make up a larger proportion of the program of some students than others, they should be seen as an essential part of the general education of all students.

5. There would be many students who would not complete or wish to complete the requirements of a certificate before leaving school. It would therefore be important to frame the certificate so that it could be completed at some later date, whether through full or part-time study, and to continue the present practice of providing School Leaver statements. Since these Statements can also record information about students' activities and accomplishments which would not be appropriate on the new certificate, these records should be available to all students. Consideration could also be given to ways of acknowledging the intervening experience of re-entry students in the certificate requirements.

Other users of certificates

6. A third purpose of an end-of-school certificate is to provide a bridge between school and work or further study. It is of course essential that certificates serve the legitimate purposes of employers and of other educational institutions. If certificates guarantee curriculum, then users guarantee certificates. This means, first, that both a new certificate and a school-leaver statement should record appropriate activities and/or studies undertaken outside the school, and make possible the provision of more detailed information than has been provided on most certificates in the past.
7. Post-school educational institutions would need to be assured that a new certificate would convey sufficient reliable information to assist them in admitting and selecting students. The Working Party is strongly of the view that this use of a certificate, though very important, should not be paramount. The Working Party believes that neither the interests of that majority of students who do not seek entry to tertiary education nor the wider educational and social needs of students who do go on to further study should be subordinated to the requirements of tertiary selection.

8. The Working Party also believes that there is no need for these different sets of interests to clash. In particular, the Working Party believes that it would be helpful to all parties if tertiary institutions were to distinguish clearly between four phases of selection for further study:

   (1) Ensuring that candidates understand the character and implications of further study, and have made a deliberate decision to attempt it. This might be accomplished by requiring success in the proposed new common study 'Education, Work and Society'.

   (2) Ensuring that candidates are generally well-prepared for higher academic work. This might be done by making successful completion of the new certificate a general academic pre-requisite for entry.

   (3) Ensuring that candidates have any necessary particular academic competence. This could be done by requiring success in certain specified Study Sequences.

   (4) Selection between candidates who have met each of the above requirements. This could be done in a variety of ways, including the use of non-academic information or specially-collected academic information, or by a comparison of academic profiles, or through sub-aggregation of scores in relevant units.

9. The Working Party believes that an approach such as this would protect the integrity of a new certificate, and the courses of study and approaches to assessment which they require, and would also meet the legitimate need of institutions to select from large fields of candidates. It may, indeed, be a more effective approach to selection than the present rank order system.

10. On the other hand, past and present experience would seem to highlight the difficulties of reconciling different sets of interests. One of the most complex tasks in defining the subjects and assessment and overall functions of senior secondary education is to balance out quite different sets of requirements of the various users - employers, higher education, TAFE etc. In the case of entrance to higher education this is a critical issue which, unless resolved, will continue to bedevil the senior secondary years. Thus entry requirements need to be resolved and cannot be left as "their problem".
1. The agenda sketched above is substantial, and would plainly require the outlay of a great deal of energy by a large number of people, most of whom are already very busy, and in a period when there are few new resources available. The Working Party does not pretend that there is a simple solution to the practical problems of change. It does, however, offer an observation, and a suggestion.

2. The suggestion is this: some parts of the changes proposed can be relatively quickly and easily accomplished, others require a great deal of work spread out over a period long enough to permit trial, error and re-trial. Generally speaking, structures and frameworks, the skeleton of curriculum, can be changed quickly. But change in the content or body of curriculum takes longer - certainly a period of several years. Thus, should some such change be acceptable, the Working Party is looking at a staged process of change, which could be accommodated at various levels over a period of time. Centrally important in this is that changes which occur in the frame of reference of senior secondary education, including, for example, the proposal that years 11 and 12 be seen together and students at that age be seen as incipient adult learners, attract adequate resources for teacher preparation. This will not be a small investment but it will be an important investment in Australia's future. The time scale adopted should reflect both the resources which can be made available and the need to plan thoughtfully their disposition.

3. The observation is this: change does not begin from scratch, or by pushing to one side all that now exists. The Working Party is strongly of the view that the main task of change is the improved organisation and deployment of the best of the curriculum resources - content, assessment approaches, new ways of teaching and learning - which have been built up over many years' innovation and experiment. The Working Party is equally strongly of the view that these very impressive resources are now very badly deployed and organised. There are already 184 subjects available to Year 12 students, and there will soon be more. The effort which goes into the design, approval, and promulgation of these courses is enormous. These courses are also very expensive to deliver, simply because so many of them are taught to small classes, and many teachers, especially in schools with small Year 12 cohorts, are required to teach across several areas of the curriculum. In short, much of our present effort goes into increasing the quantity of curriculum rather than into improving its quality. A more focussed effort could alter that balance.
REPORT TO THE ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION

FROM THE CURRICULUM PATTERNS WORKING PARTY

OCTOBER 1987
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FOREWORD

The Curriculum Patterns Working Party was commissioned in May 1987 by the Chairman of the Enquiry, Mr. Kevin Gilding, to advise him on the following Terms of Reference:

"In view of the rising numbers of students in senior secondary education, their diverse needs and unpredictable futures, the Curriculum Patterns Working Party is asked to advise the Enquiry on the following matters:

1. Whether it is desirable and practicable to specify a range of subject groupings and experiences and thereby a range of appropriate options for completion of senior secondary education.

2. Whether it is desirable and practicable to
   - regard the years of post-compulsory schooling as inter-related
   - associate certain TAFE courses with those available in the years of post-compulsory schooling as part of an interrelated post-compulsory stage

and the consequences for credentials of so doing.

3. The extent to which present curricular resources may be used to achieve the above aims.

4. The means of encouraging greater participation at this level with more equal opportunities and outcomes for groups who have not previously had educational opportunities at this level.

5. The educational and resource implications for schools, tertiary institutions and other agencies of any proposals relevant to the above.

In carrying out its functions the Working Party will

- take account of public responses to the Discussion Paper in the particular area with which it is concerned
- conduct or supervise investigations relevant to the area under consideration and consult with relevant interests and groups
- report formally to the Enquiry by the end of September and discuss progress with it in the interim."
Members of the Working Party are:

Ms Pat Thomson, Principal, Paralowie R-12 School (Chair),
Ms Judith Haigh, Department of TAFE (Deputy Chair),
Ms Kate Castine, Education Department (from September)
Dr Ian Davey, University of Adelaide
Mr Jim Dellitt, Smithfield Plains High School,
Dr Viv' Eyers, Senior Secondary Assessment Board of SA (to September)
Mr Kevin Gilding, Enquiry into Immediate Post-Compulsory Education
Ms Rosemary Gracanin, Office of the Minister of Education (from September),
Mr Brian Huppatz, Sacred Heart College,
Ms Jan Keightley, Education Department (to September)
Ms Janis Koolmatrie, Education Department
Mr Dean Kuhl, Department of TAFE,
Mr John Pederson, Office of the Minister of Education (to September),
Dr Kay Schaffer, SA College of Advanced Education
Dr Gary Willmott, Senior Secondary Assessment Board of SA (from September)

Mr Dean Ashenden acted as Consultant and Ms Ione Brown, the Enquiry's Executive Officer, as Executive Officer to the Working Party. Additional service was provided to the Working Party by the Enquiry's Research Officer, Ms Jane Delin, and the Secretary to the Enquiry, Ms Helen Payne.

The Working Party has met eight times. In the course of its deliberations it prepared a working paper, "Problems and Possibilities in Senior Secondary Curriculum" which formed the basis for a broadly based seminar in September 1987. The working paper and the discussions prompted by it have helped to inform this Report, in which the Working Party has pleasure in presenting its advice to the Enquiry.
SUMMARY OF ADVICE TO THE ENQUIRY

1. **Introduction**

The Working Party advises the Enquiry that it should address from first principles the desirable outcomes of education during the immediate post-compulsory years. The Working Party proposes the concept of balance as a central principle both in the desired outcomes of education and in the curriculum patterns which will help to bring them about. Elements in the balance to be sought in educational experience during the immediate post-compulsory years include:

- applied and theoretical knowledge
- vocational and general studies
- content and process
- individual differences and common features
- teacher direction and student direction
- science and arts

These elements should occur within all studies with varying emphases. ($1.8, §1.12, §1.17)$

2. **Years 11 and 12 as an educational phase**

The Working Party supports the notion of a single phase of immediate post-compulsory education extending ordinarily over the two years following compulsory schooling. ($2.8$)

3. **Curriculum Patterns**

A coherent and common set of pedagogical principles should inform all immediate post-compulsory studies. The Working Party believes that all studies in the immediate post-compulsory years should comply with the following principles relating to teaching and learning:

Studies during this period should:

1. relate to, recognise and expand students' skills and experience, generating awareness of cultures, experience and knowledge beyond their own and of the applications of skills and knowledge in their lives and in the life of the community
2. enable students to specialise in accordance with their interests and needs as well as deal with those issues which affect all young people

3. attach value to the experience of all groups and therefore include experience of those traditionally under-represented in the domains of official knowledge: women and bicultural and working class men and women

4. be so structured as to enable inclusive access for students from all groups

5. reflect defensible learning theories

6. combine a range of learning and teaching methodologies, including both theoretical and practical approaches which foster both high order thinking and skilful applications of knowledge addressed

7. create opportunities for inquiries which are broad-ranging and integrative as well as for research which is systematic and in-depth

8. involve students in the planning and timing of their course work and in reflection on their learning

9. be assessed in ways which contribute to realisation of their aims

(§3.3)

The Working Party finds universal support, which it shares, for

* an end to the distinction between year 12 subjects on the basis of the assessment mode adopted

* a move to reduce the number of subjects required for university entrance

* moves for the universities to spell out prerequisites for entry to specific courses

* the separation of what is required for tertiary entrance and what is seen as satisfactory completion of immediate post-compulsory education and the "essential learnings" for all young people

* an immediate end to discounting of scores in subjects accepted for higher education entry

(§3.27-3.28)
The Working Party recommends further discussions about the difference in approach between some of the major parties as to whether commonalities in curriculum patterns are to be found through essential learnings diffused throughout the curriculum or through required contact with specified domains of knowledge.

It further advises that in the resolution of these issues there should be an end to fragmentation of the curricula through the establishment of a common pattern for the immediate post-compulsory years and clear, not de facto, rules for students undertaking studies during this time. ($3.31-3.32)$

4. **Equity**

The Working Party advises that principles of equity should be built into the frame of reference for immediate post-compulsory education. ($4.5)$

It recommends that the Chairman of the Enquiry investigate further the needs and concerns of special needs groups, perhaps by testing recommendations with Aboriginal people, early school leavers and disabled people in particular. ($4.7)$

5. **A certificate of completion**

The Working Party is strongly of the view that a certificate of completion of secondary education should be introduced in South Australia under arrangements which both make the certificate worth having and make it attainable by the great majority of young people who seriously attempt it. ($5.9)$

6. **Who manages the curriculum development and certification?**

The Working Party recommends that the Enquiry address the matters of the legal charter of SSABSA in relation to its recommendations on curriculum patterns and appropriate approaches to communication of policy development in this area. Consideration should also be given to a review of the role of SSABSA in relation to the post-compulsory curriculum pattern and the timing of such a review. ($6.11)$

The Working Party further recommends that a small body advisory to the Minister of Education be established to monitor the implementation of immediate post-compulsory education, to provide short term coordination of the related activities of the interested parties, and to recommend for the longer term ways of continuing contact and coordination among the major parties. ($6.15)$
The South Australian Enquiry into Immediate Post-Compulsory Education is occurring at a time when technological and economic change are bearing heavily on young people and the institutions which educate and train them.

The Enquiry has been asked by the State Government to look at two major matters: the current impact of matriculation requirements on senior secondary education and desirable patterns of curriculum for young people between the ages of fifteen and eighteen.

Not only have some clearly quantifiable changes occurred in the education system, with currently 60% of the cohort remaining at school to year 12 as compared with only 15% twenty years ago. These changes in numbers reflect more profound technological and economic changes which have come to challenge many of the most basic assumptions governing education for the last generation.

The task of the Working Party has been to look particularly at desirable patterns of curriculum during the immediate post-compulsory years. In doing so it has proved necessary to look at the traditional ways in which knowledge is valued and learning organised for this period and to look for ways of reaching new agreements about what amounts to "good" education for young people about to enter adult life.

In these circumstances it has seemed to the Working Party that its advice to the Enquiry should be predicated on principle and, because curriculum is essentially intended to produce results of some kind in students' skills, knowledge and understandings, on statements of desired outcomes of education for young South Australians in the late twentieth century.

The Working Party holds the view that modern institutions of education and training should be preparing both young people and adults who return to formal learning for futures in a society which is increasingly reliant on technology and science and which at the same time stands in continuing need of the insights of the arts and humanities both for understanding itself and for enhancing the social uses to which technology and science may be put.

People who will be educated for the kinds of futures predicted in Australia will be skilled technologists and engineers who understand the social implications of their work and have the conceptual skills to articulate them; dramatists and artists with a grasp of scientific language and applications of science and technology;
technicians of many kinds with appreciation of the richness of Australia's multicultural heritage and their own; physicists who are conscious of the broader ecological side of nuclear fission; all with a preparedness to learn new skills, and in all cases people whose knowledge, skills and attitudes are geared to taking part productively and with humanity in Australia's social, cultural and economic life.

1.8 Briefly we suggest the concept of balance as a central principle, both in the desired outcomes of education and in the curriculum patterns which will help to bring them about.

1.9 The balance we speak of here is a broader concept than the traditional balance sought between arts and science as, for example, in the present matriculation rules.

1.10 We hold the view that requiring a drama student to choose "a science" at the age of 16 contributes less than it might to this process of gaining broadly-based skills and insights. The challenge is to bring together for 15-18 year olds knowledges which not only are treated separately at present but which are held in different value by different groups.

1.11 The distinction often mentioned between "hard" and "soft" disciplines and studies too often conveys a sense of contempt rather than a sense of respect, for example. Ultimately this challenge must be met and the barriers to wider understandings displaced. But at present there are contests within the curriculum debate about what kinds of knowledge are and should be valued by the wider community at a level which suggest that parallel integrated development should occur in curriculum rather than wholesale replacement of narrowly based subjects.

1.12 Elements in the balance to be sought in educational experience during these years include:

* applied and theoretical knowledge
* vocational and general studies
* content and process
* individual differences and common features
* teacher direction and student direction
* science and arts

These elements should occur within all studies with varying emphases.
1.13 Additional elements to be found in all studies are rigorous pursuit of valuable, useful knowledge and skills and expectation of and encouragement of effort from all students.

1.14 To place the concept of balance at the centre of immediate post-compulsory curriculum patterns for all students is to recognise the very substantial changes which are taking place in social and economic life in Australia and internationally and the accompanying changes in public opinion about desirable outcomes of education. Australia and South Australia can no longer afford to turn away from raising levels of skill formation and understandings in all our young people.

1.15 A broad general education for all, which incorporates vocational preparation in the widest sense, is rapidly becoming a social as well as an economic imperative.

1.16 The Working Party is of the view that few current programmes in the immediate post-compulsory years meet these criteria and we further reject the fragmentation of the educational experience of young South Australians which now characterises their programmes.

1.17 Accordingly THE WORKING PARTY ADVISES THE ENQUIRY THAT IT SHOULD ADDRESS FROM FIRST PRINCIPLES THE DESIRABLE OUTCOMES OF EDUCATION DURING THE IMMEDIATE POST-COMPULSORY YEARS AND THE WORKING PARTY FURTHER RECOMMENDS THAT ITS COMMENTS ABOVE BE SEEN AS A STARTING POINT IN SO DOING.
2. **Years 11 and 12 as an educational phase**

2.1 There is substantial agreement in the submissions, as there was at the seminar, that the immediate post-compulsory years, commonly years 11 and 12, should be seen as a distinct phase of education.

2.2 The Working Party shares the general view that these years should have a sensible articulated pattern, related to the students' vocational aspirations and needs and general "citizenship" requirements.

2.3 The arguments in favour of this position derive from the stage of intellectual, psychological and physical development common to young people in this age group, and from the complex nature of Australian society and economic life.

2.4 Among the representations made to the Enquiry the position taken by the Education Department differs somewhat from this. The Department would prefer to see year 11 as having some identity and purpose in itself. This position requires further discussion as the details are not clear from the submission. The Working Party therefore suggests that the Chairman of the Enquiry discusses the matter further with the Education Department.

2.5 In doing so it may be worth exploring whether the Education Department's concern relates to the departmental view of the school as "broker" acting in conjunction with other providers for this age group and whether the notion of a single phase of education for sixteen to seventeen year olds is seen to act against such development. We do not believe that seeing years 11 and 12 in clearer relationship with each other does carry this implication. It is also possible that the departmental concern stems from a worry that students who do not proceed to year 12 are offered worthwhile studies in year 11 and can gain credit for them. While we see years 11 and 12 as sensibly making up a single phase we stress that studies during year 11 should be important in their own right, not merely as precursors to a further year of study. We also see it as possible that immediate post-compulsory programmes might be composed of various blends of subjects now commonly separated as years 11 and 12.

2.6 In relation to the above it is important to recognise that the frame of reference contemplated for immediate post-compulsory education in this Report does not see schools as carrying sole responsibility for delivery of education in the immediate post-compulsory years. There is general agreement that arrangements for this phase of education should be flexible, allowing re-entry and part-time study and employment, and encouraging cooperation between agencies such as schools and Colleges of Technical and Further Education. The Working Party shares this agreement.
2.7 Bringing together the two years will require further discussions about the relative roles of schools and certifying authorities in relation to curriculum construction, assessments and certification. The SSABSA submission proposes a combination of school assessments (on a Completed/Not completed basis) at year 11 and a range of SSABSA-approved assessments at year 12. While some kind of combination may be sensible the resolution here should not reintroduce categories of subjects valued for their assessment mode rather than for what they teach.

2.8 THE WORKING PARTY SUPPORTS THE NOTION OF A SINGLE PHASE OF IMMEDIATE POST-COMPULSORY EDUCATION EXTENDING ORDINARILY OVER THE TWO YEARS FOLLOWING COMPULSORY SCHOOLING. The Working Party emphasises that its support for the concept of a distinct phase of immediate post-compulsory education rests not only on the logic of this position but also on satisfactory resolution of the questions of governance of curriculum development and accreditation addressed later in this Report.
3. **Curriculum Patterns**

3.1 This is the most difficult question, and the question most central to the Terms of Reference of the Working Party and of the Enquiry, which the Working Party has sought to address.

3.2 In this section we address the options the Working Party sees as being open to the Enquiry in relation to curriculum patterns in the immediate post-compulsory years and the outstanding matters of disagreement which we believe the Enquiry should seek to address.

3.3 The Working Party is of the view that three approaches to the matter of curriculum patterns are possible, of varying degrees of strength. The approaches can be summarised as follows:

(a) Set out a coherent and common set of pedagogical principles to inform all immediate post-compulsory studies.

(b) Identify common learnings to be acquired across the curriculum without imposing any compulsory studies or patterns of study (except perhaps studies in English).

(c) Specify a required pattern of subjects with either compulsory subjects or compulsory selection from designated areas of study.

3.4 We emphasise that these three approaches are not necessarily mutually exclusive. Indeed a resolution is likely to emerge which complies with the requirements of the first, while reflecting a mixture of the second and third.

3.5 There appears to be widespread agreement about the need for all year 11 and 12 studies to be built on a coherent set of pedagogical principles and for assessment procedures to be related to course objectives, but there appears to be widespread difference of opinion about what a "common" curriculum or indeed curriculum pattern might be.

3.6 In other words there is considerable support for, and commonality about, a set of agreed pedagogical principles for this phase of education, but there is less agreement about the structure within which the principles should be put into practice.

3.7 **A coherent set of pedagogical principles**

The extracts from the submissions of the SA Institute of Teachers and the Education Department of South Australia which appear as Appendix to this Report indicate the nature of the agreement on this matter.
3.8 The extracts shown relate primarily to methodological approaches to learning, that is to processes of learning rather than to the content of what is to be learned. A large number of submissions, and many comments at the seminar and in the Reference Groups, draw attention to the need for all subjects to be less content-oriented and teacher-centred and to represent a more sensible organisation of "book" and "applied" learning, of theoretical and practical approaches to the content of knowledge to be acquired, to the skills to be acquired, and to the processes through which those acquisitions occur. In the light of this body of opinion the Working Party notes that there are limits to the usefulness of the distinction between process and content. What are sought are ways of generating and enhancing the knowledge, skills and attitudes young people will take with them into adult life, which will necessarily involve linked judgments about what knowledge is worthwhile and about how it may be addressed.

3.9 Again we emphasise the need for balance. While in many traditional subjects the emphasis lies too heavily on transmission of stipulated content at present, it will be important to alter this in ways which expand access to worthwhile knowledge and its applications.

3.10 Relating assessment of student performance to course objectives is a matter which lies within the basic pedagogical principles which are the subject of this section. We draw them out at this point because, while there is widespread agreement in most quarters to this effect, there are still some influential voices questioning the relationship. The need to relate assessment procedures to what it is intended that students should learn, and how, was raised frequently in the submissions and the seminar. Criterion referencing, more rational use of examinations and abolition of ranking and scaling were all often mentioned.

3.11 An initial step towards acknowledgement of the relationship between assessment and course objectives would be to abandon the classification of SSABSA-accredited subjects into those which are publicly examined and those which are school assessed.

3.12 THE WORKING PARTY BELIEVES THAT ALL STUDIES IN THE IMMEDIATE POST-COMPULSORY YEARS SHOULD COMPLY WITH THE FOLLOWING PRINCIPLES RELATING TO TEACHING AND LEARNING:

STUDIES DURING THIS PERIOD SHOULD:

1. relate to, recognise and expand students' skills and experience, generating awareness of cultures, experience and knowledge beyond their own and of the applications of skills and knowledge in their lives and in the life of the community

2. enable students to specialise in accordance with their interests and needs as well as deal with those issues which affect all young people.
3. attach value to the experience of all groups and therefore include experience of those traditionally under-represented in the domains of official knowledge: women and bicultural and working class men and women

4. be so structured to enable inclusive access for students from all groups

5. reflect defensible learning theories

6. combine a range of learning and teaching methodologies, including both theoretical and practical approaches which foster both high order thinking and skilful applications of knowledge addressed

7. create opportunities for inquiries which are broad-ranging and integrative as well as for research which is systematic and in-depth

8. involve students in the planning and timing of their course work and in reflection on their learning

9. be assessed in ways which contribute to realisation of their aims

3.13 The structure of common learnings or of curriculum patterns

There are many dimensions to the debate about the way in which curriculum is constructed for this phase of education.

3.14 An important one is that of the tension between specialisation and general education. It has long been an article of faith among many educators that school-level education, however long it persists, should essentially be directed towards general education of young people, without confining their time to specialisations which may not permit the development of a broader base of social and cultural insights. The current matriculation requirement of at least one subject from the sciences and one from the humanities in a matriculating group of subjects derives from this thinking.

3.15 The Working Party notes that in the absence of any other description of desirable characteristics of student programmes in the upper secondary school the matriculation rules have the effect of providing a de facto curriculum pattern for many more students than intend to enter higher education. It has been said, and the Working Party is inclined to agree, that the year 12 course currently held in highest standing in schools and elsewhere is that in which students undertake Maths I and II, Physics, Chemistry and one Humanities subject for public examination and that this is in practice a specialised preparation.
for professional training in the Universities rather than a broad and general education suited to young people about to become full citizens, in spite of its compliance with the rules for a matriculating group of subjects.

3.16 Moreover, the scoring system currently in operation for higher education entry in providing a single aggregate score provides also a mechanism which powerfully discourages multiple, flexible and responsive programmes of general education for the rising numbers of senior secondary students.

3.17 In the absence of generally agreed approaches to immediate post-compulsory curriculum which can be applied to the whole of the age group there has occurred an excessive diversification of school programmes, in the ways in which knowledge is defined and addressed, which amounts to a serious fragmentation of the experience of young people. This situation has disturbing social and educational implications which in the view of the Working Party should be remedied by the forging of a new agreement about what it is important for all young people to experience during this phase of education.

3.18 The submissions to and consultations of the Enquiry suggest general agreement that the immediate post-compulsory years should provide a broadly based general education but that within those arrangements some specialist studies which begin the young person's preparation for employment are appropriate and should be included.

3.19 Exactly how this desire can be translated into practice is less clear. There is widespread difference of opinion about what a general education represented in a "common" curriculum might be. Is it a list of facts couched in centrally prescribed units? The working paper put out by the Curriculum Patterns Working Party in September was an attempt to reconceptualise the present organisation of knowledge into a small number of curriculum areas, within which could be described a variety of fields of study. From this a pattern could be stipulated, still allowing for student diversity.

3.20 At the point in the conduct of the Enquiry at which this Working Party is reporting more conversation is needed among the major parties, about ways to construct programmes based on the principles we have set out in this section and in the Introduction. From such conversation will emerge the structure of curriculum which can be expected to produce the desired educational outcomes for young people.

3.21 The submissions addressed the "subject" aspect of curriculum patterns in a number of ways. All emphasised the need for all students to be involved in English (under various names) at year 11. The
Education Department named this as the only compulsory subject as did the SA Institute of Teachers and the SA High School Principals Association.

3.22 Nearly all submissions had a list of things they thought students should know. The Education Department refers to these as 'essential learnings'.

"In post compulsory education, any division of the body of knowledge component of the curriculum should result in less than eight sections. Each section will be necessarily more comprehensive than the eight areas used by Our Schools and Their Purposes (Environmental Education, Health and Personal Development, Human Society, Language Studies, Mathematical Studies, Science and Technology, The Arts, Transition Education).

[Education Department submission page 21]

3.23 "No general compulsory curriculum pattern in terms of components of the body of knowledge at senior secondary school should be imposed on students of a post compulsory age. However, a list of skills, processes and other factors which apply across the curriculum and which would be regarded as essential learnings for all young people in the post compulsory age group should be determined. This list should include the skills of numeracy, literacy, communication, problem solving, decision making and social living and understandings of the world of work (paid and unpaid) and the Australian social context.

[Education Department submission page 22]

3.24 "It may be that 'English', 'English as a Second Language' or an 'Australian Community Language' should form a sizeable compulsory learning. Certainly SAIT supports school based activities to develop literacy among our students. In order to ensure that students are not 'terrorised by situations requiring quantitative or scientific reasoning' some scientific or mathematical learnings may be required.

Other curriculum groupings may include:

- the Arts (including Languages other than English)
- the Humanities (including current affairs and Australian studies)
- Maths/Science
- Technology (including Business Studies)
- Futures (includes work, leisure, relationships, parenting, career planning)."

[SA Institute of Teachers submission page 7]
3.25 SSABSA have submitted a schema representing patterns the Board proposes in the following way:

<table>
<thead>
<tr>
<th>Sem.4</th>
<th>English</th>
<th>Mathematics, Science, Technology</th>
<th>Focus studies (10 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>language</td>
<td>rich subjects (4 units) (4 units)</td>
<td></td>
</tr>
<tr>
<td>Yr12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sem.3</td>
<td></td>
<td>Australian society (2 units)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sem.2</td>
<td>Mathematics, Science, Technology</td>
<td>Arts, Humanities, Social Studies (4-6)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4 units)</td>
<td>(4-6)</td>
<td></td>
</tr>
<tr>
<td>Yr11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sem.1</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

3.26 While the Working Party is not able at this time to stipulate a recommendation to the Enquiry to resolve fully the issue of curriculum patterns it does note the following matters from submissions and consultations.

3.27 There is universal support for -

* an end to the distinction between year 12 subjects on the basis of the assessment mode adopted.

* a move to reduced the number of subjects required for university entrance.

* moves for the universities to spell out prerequisites for entry to specific courses.

* the separation of what is required for tertiary entrance and what is seen as satisfactory completion of immediate post-compulsory education and the "essential learnings" for all young people.

* an immediate end to discounting of scores in subjects accepted for higher education entry.

3.28 THE WORKING PARTY SUPPORTS THESE.
3.29 As can be seen from the extracts from submissions noted above the Education Department and the SA Institute of Teachers see a cross curriculum approach (warp & weft, patchwork), in which presumably schools could demonstrate how and where each student had learnt what was essential, as the desirable approach to ensuring that all students gain common benefit from the immediate post-compulsory years.

3.30 There is a major difference between the SSABSA position and these. SSABSA see the "common" in terms of categories of studies and units within them.

3.31 **THE WORKING PARTY RECOMMENDS THAT THE CHAIRMAN OF THE ENQUIRY HAVE FURTHER DISCUSSIONS WITH THE MAJOR PARTIES ABOUT THIS DIFFERENCE IN APPROACH.**

3.32 The Working Party further advises the Enquiry that in the resolution of these issues **THERE SHOULD BE AN END TO FRAGMENTATION OF THE CURRICULA THROUGH THE ESTABLISHMENT OF A COMMON PATTERN FOR THE IMMEDIATE POST-COMPULSORY YEARS AND CLEAR, NOT DE FACTO, RULES FOR STUDENTS UNDERTAKING STUDIES DURING THIS TIME.**
Equity

4.1 Another dimension of the debate surrounding curriculum during this phase of education is about the guarantee to be accorded to all students that they gain access to the kinds of important knowledge that will enable them to earn a productive living and take part with a sense of confidence in their own lives and that of their community.

4.2 One view in this debate argues that these basic understandings are the province of the compulsory years of schooling and that since education is not compulsory during this phase nothing should be specifically imposed on those who volunteer for it.

4.3 Another view asserts that leaving determination of their programs exclusively to young people of this age confines them to their own prejudices and those of their immediate surroundings, which may but may not mean they gain the background knowledge which can lead them into broader insights and longer term economic activity. Since these benefits are historically gender, race and class related, protagonists of this view hold there is room in public policy for requiring their spread to the whole of the age group.

4.4 The extent to which individual choice is allowed to determine student programmes during these years is not the only issue of equity arising. With the potential before us for a near universal full twelve years of education, the many practical financial and cultural barriers which confront young people for whom full-time education for this length of time is not a familiar, recognised and well-supported practice must not be ignored.

4.5 The Working Party has sought to build principles of equity into the frame of reference for immediate post-compulsory education and the principles it has set out in other sections of this Report. Nonetheless in discussing commonality and diversity it is too easy to focus on the ideal and not on potential barriers. Historically in South Australia the Public Examinations Board single certificate has presented a good example of a common and exclusive structure that we must avoid recreating.

4.6 Most reforms are two-edged in relation to equity issues and curriculum reform is no exception. A vigorous debate continues beyond the Working Party in relation to a certificate of completion, between those who see it as a potential guarantee of access for all to public recognition of achieved goals and those who see it as another, yet better developed, instrument for the exclusion of large numbers of young people from that very recognition. We address the matter of
certification in the next section. At this point we note only that there is a perceived dilemma between a standard which is worth having and a standard which all can achieve. It may be that multiple standards of recognised achievement are required on grounds both of equity and educational value. Challenges which cannot be met by those who are intended to learn from them cannot be described as educational in any real sense. Further discussion on these matters is essential to avoid new or continued exclusions.

4.7 The Working Party has not, in the time available to it, been able to consult adequately with special needs groups to gain their responses in a systematic way to the advice it is giving to the Enquiry. We express our concern about this and RECOMMEND THAT THE CHAIRMAN OF THE ENQUIRY INVESTIGATE FURTHER THE NEEDS AND CONCERNS OF SPECIAL NEEDS GROUPS - A TESTING OUT OF POSSIBLE RECOMMENDATIONS MAY BE THE MOST EFFECTIVE WAY WITH ABORIGINAL PEOPLE, EARLY SCHOOL LEAVERS AND DISABLED YOUNG PEOPLE IN PARTICULAR.
5. **A Certificate of Completion**

5.1 The Working Party has found substantial support for a certificate of completion of secondary education, with the exception of the Education Department of South Australia. There are concerns about equity in the Education Department's submission some of which we have hinted at in the last section but which need further exploration, especially because the Education Department has directed more attention towards this area of policy than have other agencies. It may prove possible to incorporate the concerns into operational guidelines for a certificate.

5.2 We have already noted that in the absence of more general certificate requirements those for matriculation have *de facto* provided for completion of secondary education.

5.3 The concept of a phase of education during the immediate post-compulsory years means little without some recognised aim and therefore pattern for these years, and neither the concept of a phase of education nor that of a curriculum pattern mean anything without some way of recognising when they are completed.

5.4 During the nineteen seventies the introduction of the Senior Secondary Certificate by the Education Department was intended to provide some credible recognition of their school experience for students who were not headed for higher education. The Senior Secondary Certificate (SSC) subjects were taken up by SSABSA on the inception of the Board in 1984 and formed the basis for many of the current school assessed subjects at year 12 level.

5.5 This period has also seen steps taken to improve the usefulness to employers and others of the reports all schools give their students on leaving school, their School Leaver Statements. These have become more descriptive of students' experience and more standard at the same time. A new School Achievement Record is being trialled by the Education Department at present which would incorporate more of these improvements.

5.6 The third development in reporting school achievement is that of the student portfolio. In this development young people are encouraged to keep their own record of achievement by building up a portfolio of work, including, for example, pieces of writing they have undertaken, or design work or craft work they have completed.

5.7 The Working Party notes and supports the developments of the School Achievement Record and the student portfolio. We note that the portfolio in particular carries strong support.
5.8 We believe that both these pieces of information about students' school experience and achievement are important but that neither plays the same part as an externally accredited certificate of completion of a publicly recognised educational programme.

5.9 THE WORKING PARTY IS STRONGLY OF THE VIEW THAT A CERTIFICATE OF COMPLETION OF SECONDARY EDUCATION SHOULD BE INTRODUCED IN SOUTH AUSTRALIA UNDER ARRANGEMENTS WHICH BOTH MAKE THE CERTIFICATE WORTH HAVING AND MAKE IT ATTAINABLE BY THE GREAT MAJORITY OF YOUNG PEOPLE WHO SERIOUSLY ATTEMPT IT.

5.10 It has been stressed in the submissions and in the consultations that a cumulative record should be introduced for years 11 and 12 possibly in some standardised school leaver statement. The certificate could come when the curriculum pattern is complete. Many of the submissions argue that the certificate should record what has been successfully completed. Provided the agreed pattern has been complied with the Working Party agrees.

5.11 The part to be played in public policy by a certificate of secondary education is set out in the working paper “Problems and Possibilities in Senior Secondary Curriculum” at pages 26 and 27. The concept of a generally applicable certificate of completion is integral both to guaranteeing worthwhile experience to all young people in the immediate post-compulsory years and to moving away from university entry requirements as the only valuable way to complete secondary education. The Working Party has observed moves in other States, notably Western Australia and Victoria, in which gaining a certificate of completion of secondary education is a necessary precursor to being considered for entry to higher education.

5.12 We emphasise, therefore, that certification of achievement, which may be in a single unit of study, differs from certification of completion, which must reflect completion of what is regarded as important during the immediate post-compulsory years. We emphasise also that while certificate requirements should ordinarily require two years of full-time study, undertaken during years 11 and 12, the time and places required for its completion must be flexible. The differences in the demands made on the time of young people at this age are such as to make it imperative that formal study can be concentrated into shorter periods or extended over longer periods as a fundamental aspect of universal access.
6. Who manages the curriculum development and certificate?

6.1 It is clear that a certificate saying something about both years 11 and 12 would require either the extension of the powers of the Senior Secondary Assessment Board of SA or a new organisation to replace the Board. At present SSABSA is empowered only to approve/accredit syllabuses in subjects and at year 12 level.

6.2 It is also clear that there is a considerable curriculum development task to:

* develop an agreed pattern, and

* classify and develop units in its support

which will take some years (despite general agreement on some common areas of learning).

6.3 There are several aspects to these matters.

6.4 In the first place, in view of the continuing uncertainty of how common learnings are to be formulated and embodied in immediate post-compulsory curriculum, it will be important for the Enquiry to lay out ways in which these matters can be taken up in the period following its Report.

6.5 Secondly, the question has been raised in the Working Party of whether it is appropriate, as occurs in the Senior Secondary Assessment Board, for the same authority both to prepare syllabuses and to accredit them. On balance the Working Party is of the view that curriculum development and accreditation should run together but it is also of the view that the issue of how these are to be controlled should be addressed.

6.6 In relation to the management of curriculum patterns considerable discussion occurred in the Working Party about whether the current management structures, and the earlier Public Examinations Board and Education Department structures, help or hinder the establishment of holistic approaches to knowledge as, for example, in combining social and physical sciences in single accredited units. Extensive consideration was given to this matter in the early days of the Senior Secondary Assessment Board, whose structure came to be governed to some extent by the legacy of traditional organisations of knowledge reflected in university faculties and departments and in school faculties and governance (subject seniors).

6.7 The Working Party notes the difficulties associated with the arrangements made for managing curriculum patterns, and with movement away from traditional categories of studies.
6.8 We note too that the setting up of these structures has to date been managerial of subject offerings and has not related to a holistic approach to desirable patterns of curriculum translated into student programmes. We conclude that moves to reform management structures should in due course emanate from the curriculum patterns adopted.

6.9 The Senior Secondary Assessment Board has taken important steps towards delivering a single certificate of school achievement during its brief period of existence. It has been hampered, however, by several factors, two of which have been identified by the Working Party viz its legal charter, which confines it to development and approval of syllabuses for single subjects at "year 12 level", and difficulty in communicating developmental activity at an early enough stage.

6.10 The Working Party considered whether a review of the Board would be an appropriate step to be taken at this time and a view was expressed that such a move may well further delay needed reforms unnecessarily.

6.11 THE WORKING PARTY RECOMMENDS THAT THE ENQUIRY ADDRESS THE MATTERS OF THE LEGAL CHARTER OF SSABSA IN RELATION TO ITS RECOMMENDATION ON CURRICULUM PATTERNS AND APPROPRIATE APPROACHES TO COMMUNICATION OF POLICY DEVELOPMENT IN THIS AREA. Consideration should also be given to a review of the role of SSABSA in relation to the post-compulsory curriculum pattern and the timing of such a review.

6.12 An additional set of tasks relates to the negotiation and coordination of activity among all the agencies which have some call and some impact on this educational phase: the institutions of higher and technical and further education, the Industrial and Commercial Training Commission, industry, SSABSA and the various schooling authorities.

6.13 The Working Party notes that the activities of the Enquiry during this year in bringing together people from the various interested agencies have frequently produced comment to the effect that the discussions so generated are long overdue. We have already noted that the time for the Enquiry is unlikely to allow satisfactory resolutions of some of the most difficult issues to emerge.

6.14 The size of the separation which currently exists between schooling and industry, schooling and higher education and schooling and TAFE means that while great efforts are made by the various parties to operate effectively they are relatively less successful than they might be for lack of coordination. This suggests that there should in the future be some mechanism to draw together the interested
parties to promote coordination, efficiency and effectiveness in the activities undertaken and to ensure that there is a coherent, organised approach consistent with government policy.

6.15 THE WORKING PARTY RECOMMENDS THAT A SMALL BODY ADVISORY TO THE MINISTER OF EDUCATION BE ESTABLISHED TO MONITOR THE IMPLEMENTATION OF IMMEDIATE POST-COMPULSORY EDUCATION, TO PROVIDE SHORT TERM COORDINATION OF THE RELATED ACTIVITIES OF THE INTERESTED PARTIES, AND TO RECOMMEND FOR THE LONGER TERM WAYS OF CONTINUING CONTACT AND COORDINATION AMONG THE MAJOR PARTIES.

6.16 Clearly careful attention should be given to the composition, terms of reference and powers of such a group. At the very least the Working Party would wish to see a post-compulsory education coordinating committee of the heads of the pertinent agencies and institutions and a continuing secretariat.
Appendix

SA Institute of Teachers Submission

"The rules for curriculum construction must include agreed aspects that will create coherence and reinforce common and cultural purposes. Whilst we are not prepared to detail these rules at this stage, the following suggestions are provided to indicate the nature and kind of these curriculum design rules.

Among these 'rules' or 'common features' might be:

- a consistent learning (and assessment) theory across all subject units
- a mixture of learning methodologies that is clearly specified and linked to assessment methods (eg theoretical/practical/conceptual/student initiated/teacher/education)
- constructed 'interdisciplinary tangents' leading the learning into the real world or community knowledges
- an agreed understanding of rigour; clearly defined for students, teachers and assessors
- a recognition of learning undertaken outside school
- a genuine striving for inclusivity, as a means of addressing some equity issues, ie the curriculum is inclusive of the experience of all the community. What is taught must include the often overlooked groups - girls, bicultural and working class people and relates to the everyday experience of ordinary people.
- an exploration where at all suitable of the relationship of the learning to Australian culture and society and its multicultural roots, including Aboriginal experience and overlooked groups (women, multicultural and class based groups)
- a broad vocational awareness (eg who works with this knowledge?)
- an orientation toward the adult world to reinforce the movement of the adolescent learner and the 'humanising' effect of learning."

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"Post Compulsory Learning Principles

As described earlier, the curriculum patterns of post compulsory education should not only focus on the structural aspects of the curriculum but should also address the methodological aspect of curriculum.

Students participating in post compulsory education are different from those who participated a number of years ago. Many individuals are young adults and as such have expectations of schooling to recognise their status and personal needs. These needs also include specific learning principles which are relevant to this group of young people.

The Senior Secondary Curriculum Project established to prepare socially and vocationally relevant curriculum for young people who did not wish to participate in higher education, identified five principles of learning which were regarded as being of particular relevance to the young people in the post compulsory years of schooling. These principles are:

- incorporate students experience into the courses
- involve students in planning the direction and content of their courses
- involve students in working with others to extend their learning
- use the community as a resource for learning
- involve students in documenting and reflecting on their courses

Additional principles underlying students' effective learning are:

- Clarify what is expected of them (establish a contract)
- Draw up plans of what they will do and how they will work within the non-negotiable expectations
- Communicate and discuss their plans
- Communicate about their progress and problems, and seek help when necessary
- Clarify the purpose of the work
- Identify criteria for determining if the purpose has been successfully achieved
Recognise when things are going differently than expected, and try new approaches to produce a better result or negotiate a more productive or realistic task.

Students must also be given opportunities and skills to use unstructured time so that they may become independent learners.

The learning principles of:

- incorporating student experience into the courses
- involving students in planning the direction and content of their courses
- involving students in working with others to extend their learning
- using the community as a resource for learning
- involving students in documenting and reflecting on their learning

are endorsed and should be seriously considered as learning principles which should be applied to studies at the post-compulsory level.
REPORT OF THE COURSE ARTICULATION WORKING PARTY

TO THE ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION

ISSUES AT THE INTERFACE

An analysis of the problems as students move from post-compulsory secondary schooling to further education and/or employment

AUGUST 1987
Course Articulation Working Party
of the
Enquiry into Immediate Post-Compulsory Education

Chair: Professor Colin Power

Members:
Ms Denise Bradley (SACAE)
Dr Chris Dawson (University of Adelaide)
Mr Kevin Gilding (Enquiry into Immediate Post-Compulsory Education)
Mr John Halsey (The Heights R-12 School)
Mr Don Jarrett (SA Institute of Teachers)
Ms Jan Keightley (Education Department)
Mrs Judith Roberts (Australian Council of Social Service)
Dr Robin Storer (Flinders University)
Mr Trevor Urlwin (Department of TAFE)
Ms Liz Watson (SA Institute of Technology)
Dr Gary Willmott (SSABSA)

Executive Officer: Ms Jane Delin

Research Assistant: Mrs Jennie Teasdale
ENQUIRY INTO IMMEDIATE POST-COMPULSORY EDUCATION

COURSE ARTICULATION WORKING PARTY

TERMS OF REFERENCE

In view of the rising numbers of students in senior secondary education, their diverse needs and unpredictable futures, the Course Articulation Working Party is asked to advise the Enquiry on the following matters:

1. Whether it is desirable and practicable to develop a generally accepted credential which marks the completion of secondary education for a wide spectrum of students.

2. Means by which such a credential might allow students to keep future options open with regard to employment and to further and higher education.

3. The relationship of such a credential to other forms of immediate post-compulsory education.

4. A range of approaches to both preparation and selection which can be used by employers and higher and further education institutions, including approaches prevailing elsewhere in Australia and also proposals by the Universities viz

   - to allow students to fulfil the educational requirements for matriculation at one or more than one examination (the two year option) under conditions approved by both the University of Adelaide and the Flinders University of South Australia; and

   - to vary entry requirements for the Universities, for example by including a number of subjects in a new Group 3

   - to introduce a demonstration of competence in English Expression

5. The educational and resource implications for schools, tertiary institutions and other agencies of any proposals relevant to the above.

In carrying out its functions the Working Party will

- take account of public responses to the Discussion Paper in the particular area with which it is concerned

- conduct or supervise investigations relevant to the area under consideration and consult with relevant interests and groups

- report formally to the Enquiry by the end of September and discuss progress with it in the interim.

10 June 1987
1. INTRODUCTION

The prime concern of the Course Articulation Working Party is to examine major issues which exist at the interface between senior secondary post compulsory schooling and further education and/or employment and then to suggest possible directions which can be taken to resolve these issues. It is impossible to discuss this point of articulation without carefully examining what immediately adjoins the interface. Hence, the paper takes into account the shape of post compulsory secondary schooling, the transition period between senior secondary schooling and employment and/or further study in the tertiary education sector, and the problems of assessment, certification and selection.

2. THE CURRENT SCENE IN SOUTH AUSTRALIA

2.1 Participation in Post-compulsory Education

There is a perceived need to increase participation in post compulsory secondary schooling. South Australian senior secondary years have a steadily increasing retention rate with about 60% of students now staying on until year 12. However, there is an expected overall decline in student numbers of over 38,000 in the next five years. At the tertiary level, the demand for places in many courses far exceeds supply, the constraining factor being funding.

2.2 Curriculum Patterns

In South Australia, as elsewhere in Australia, there has been a strong push in recent years by the state Education Department to change upper secondary curricula and assessment modes to accommodate the "needs" of those students who, in previous years, would have entered the workforce after year ten. As a consequence, the number of subjects available has
mushroomed, and with that the resources devoted to the upper secondary level compared to other levels have increased.

Historically, students who wished to enter the higher education sector chose PES subjects which were designed to meet their needs, while the SAS subjects were developed to serve the needs of students not wishing to follow that pathway. There are differences between most PES subjects and their SAS counterparts in objectives, content, level and, particularly, the mode of assessment. There are now 46 PES subjects, 48 full-year SAS subjects and 90 semester length SAS subjects and subject options. In addition, SSABSA has approved approximately 400 registered subjects. Most schools believe that SAS plays an important role in giving a new vision to students who have always seen themselves as average or below average in ability. Most PES subjects do provide preparation in a specific discipline area and demand the display of competence in assessment contexts of the type demanded by universities.

2.3 Planning of Upper Secondary Education

In addition to the problems created by the number of subjects being offered and the overlaps between them, there are problems arising out of the fact that the post-compulsory secondary years are neither seen nor planned as a coherent whole. The curriculum in state schools is officially under the control of the Director General of Education, assessment and certification of courses at year 12 are administered by SSABSA, higher education admissions are controlled by the universities and CAEs, while TAFE provides an alternative further education program for students during and after their post-compulsory school years.

At the upper secondary level, SSABSA has the advantage that all the major interest groups at the post-compulsory level are represented, but its
responsibilities are confined to year 12. The submissions to the Enquiry received thus far suggest that, in general, SSABSA has worked well: its structure, processes and products (courses, certificate etc.) are well regarded and widely accepted. Many of the specific problems which have been directed to the Working Party are being worked on by SSABSA. The Working Party believes that where a system is working well, we should be cautious about introducing new structures.

2.4 Certification

School Leaver Statements provide information on achievements in subjects studied, involvement in school activities and personal qualities. These are available from the school whenever the student leaves, but they do not provide a common credential of the type sought by employers and tertiary institutions. The SSABSA Year 12 Certificate is now the only form of public certification of achievement available to secondary students in South Australia. It records achievement in accredited subjects. There is no common "graduation" requirement as such.

2.5 Admission into Higher Education

Year 12 students seeking a place in a higher education course must lodge an application with SATAC by mid October. Applicants may list up to five course preferences, and can change their preferences (many do so once their SSABSA results are known). On behalf of the higher education institutions, Higher Education Entrance Scores are provided by SSABSA, upon request, on an attachment to the SSABSA Certificate. These scores are scaled aggregates out of 100 of the student's results in the best five subjects approved by the higher education institutions for admission purposes (each subject is scored on a 20 point scale). For admission to
either of the two Universities, students must obtain a Higher Education Entrance Score of at least 59 and include at least one arts/humanities and one mathematics/science subject. Students are allowed to add or repeat one or more PES subjects in the following year (the two year option). The requirements of the CAEs are similar, except that the SACAE, Roseworthy and SAIT (Associate Diploma courses) will accept up to 5 SAS subjects or a mixture of PES and SAS subjects. Within the SAS range, students may take up to 4 semester length courses. Where SAS scores (also out of 20) are used, these are currently reduced by 3 points for each subject. This practice has generated considerable criticism and is currently under review. The Universities and SAIT on the other hand are under pressure to accept some SAS subjects for admission purposes.

In the absence of any explicit requirement by SSABSA or school systems, the higher education admission requirements of the Universities constitute a defacto "graduation" requirement. Of the students completing Year 12, approximately two-thirds meet the general admission requirements for entry into higher education.

2.6 Selection for Higher Education

Meeting the admission requirements of a university or CAE by gaining a score of 59 does not mean that a student can enter any course or institution. Far from it. The demand for places far exceeds supply, selections are necessarily made and competition is inevitable.

Where there is a quota on the number of places in a course, selection is usually strictly on academic merit and is based on the aggregate scaled score. Offers of places are made by SATAC early in January and proceed through a series of rounds until quotas are filled. Students must compete for places and some make their final selections in a limited two to three
week period in January. As a consequence, some students enter courses other than their first choice, or select a course and institution in haste, under pressure, and without adequate information. The result may be that some school leavers lack commitment to the course which they enter and end up withdrawing.

The current assessment and selection schemes provide, for the most part, an appropriate means of screening out year 12 students who, even with reasonable additional assistance, probably could not cope with higher education (at this stage). However, their value in selecting among qualified applicants where there are restricted places, is often exaggerated — but so too is the value of the alternative selection schemes.

2.7 Technical and Further Education (TAFE)

The position of TAFE in the area of immediate post-compulsory education is a complex one. It is an alternative upper secondary provider for some post-compulsory students, provides secondary courses for adults, and also co-operates in the provision of vocational programs for a good many students completing years 11 and 12. Arising from the range of TAFE programs, there is a wide range of entry requirements. Selection is the responsibility of individual institutions on a program by program basis. However, the national TAFE Award Scheme has begun to have a major influence on entry requirements.

2.8 Transition from School to Tertiary Study or Work

It is widely alleged that the transition from school to tertiary education or work is difficult and conflicted. Students interviewed by the Enquiry consistently complained that school does not prepare them for the adult world of work, and in retrospect see a mismatch between study at
school and study in tertiary education. The Business Council of Australia (1) argues that a high quality education and training system aimed at raising the quality and performance of the workforce is an urgent national and state priority. It wants to see increased emphasis on: communication skills, problem solving and decision-making skills; learning to use and develop new technologies and helping students to apply these skills; a range of business/industry experience programs; modern management techniques and rationalisation of resources throughout the secondary system; a more rigorous curriculum for all students in years 11 and 12 with approved standards; and a continuation of external examinations and comparable credentials across Australia. Many of the larger employers have set up their own assessment procedures and make their selections before the SSABSA results are available.

The collapse of the youth employment market means that trying to enter the labour market is a difficult process: about one in four 15 to 18 year olds in the labour market are unemployed. Not surprisingly, employment is the predominant factor influencing young people's decisions about education. Of particular concern is the uneven distribution of educational and employment opportunities across various groups in society. The availability, distribution and changing nature of work are central issues in the development and implementation of youth policy. It should be noted that in the transition from school, a number of groups are especially at risk. In particular, the needs of girls, Aboriginal youth, students from non-English speaking backgrounds with English language difficulties, young people in rural areas, and the socio-economically disadvantaged should be given special consideration. Policies which are designed to generally improve preparation for tertiary education should be carefully monitored to ensure that they do not impact negatively on groups at risk, and positive
measures need to be developed to improve access to both tertiary education and employment.

Both the 1985 OECD review of youth policies in Australia and the Kirby Report (2) argue for a comprehensive youth policy in which education and traineeships are provided in conjunction with other elements (e.g. income support for disadvantaged youth) in the youth policy package. Knowing the uncertainties of employment and changes in the nature of work, those responsible for education and training tend to accept that a general preparation for working life requires an emphasis on transferable competencies, personal development and a general awareness of opportunities in further education and employment. What most young people (and many employers) seem to want is job-specific training. Herein lies the challenge for both those in the labour market and education sectors - to develop programs which meet both the general and the vocational education needs of young people.

Kirby suggested that an unnatural dichotomy has developed between education programs and labour market programs, and between education and employment. The "TAFE Participation and Equity Guidelines" represent one attempt to combine elements of a general preparation for work and living with more specific job-related skills and work experience, and the 1981 Swedish reform of upper secondary schooling set in place another based on a systematic and integrated work experience and education program. The linking together of employment, education and training in both State and Commonwealth ministries indicates the determination of governments to ensure a closer alignment of the education system and the labour market.

As well, the gap is widening between the higher education system and the secondary system leading to high first year attrition rates. The difficulties experienced by those leaving school suggest that adjustments
need to be made to all sectors of employment, education and training.

2.9 Structures

In South Australia, the system that has evolved is one with many conflicting parts which call out for integration into a more rational, planned and cost-effective whole. One result is that school leavers are moving out of secondary schooling a year younger than their counterparts in other states. A further structural dislocation exists between the style of our schooling system and that of our tertiary education institutions. The latter approximate the English model while our secondary schools are largely modelled upon a US comprehensive school pattern. The two systems are not easily compatible.

2.10 Multiple Pathways for School Leavers

Having completed senior secondary schooling there are several major pathways for school leavers. The Enquiry has as a major point of reference the development of ways and means by which students can move smoothly and confidently from one sector of education to the next, and from education into employment. The lack of co-ordination and explanation of this process causes confusion among many students (and parents), and often prevents appropriate choices being made. A further concern is that of cross-crediting between tertiary education institutions. While students are able to transfer credit and status from one institution to another, this process needs to be hastened. It is important then that the Enquiry

(a) seek to ensure that school leavers have multiple and flexible post school pathways;

(b) ensure that most students leave school with a sound general education, a clear view of the options open to them, and the
knowledge and skills needed to take up options in tertiary education and work;

(c) establish a framework within which an appropriate general certificate serving the multiple needs of school leavers, tertiary institutions and employers can be developed;

(d) provide advice on how employer and tertiary admission requirements can be modified to ensure that the balance between the students' general education and their specialised preparatory needs is maintained;

(e) assess the soundness of alternative admission and selection procedures;

(f) suggest ways in which the deeper structural problems of the system might be addressed so as to improve the quality of all sectors of education, and increase participation and productivity in both education and the workforce.

3. FUTURE OPTIONS: POST-COMPELLARY SECONDARY SCHOOLS AND CURRICULUM

3.1 A Functional Shape for Post Compulsory Secondary Education

The lack of cohesion between years 11 and 12 is particularly divisive to post compulsory secondary schooling. It is well known that there is a quantum leap in the workload and academic demand between years 10 and 11, and again between 11 and 12 for students moving into PES-type courses. Moreover, within year 12 there are great differences in the demands made by "high intensity" subjects like PES Art, German, Mathematics 1 and Physics on the one hand and some SAS and school registered subjects on the other. One must ask
whether the stress and the educational problems faced by year 12 students would lessen if students were better prepared for post-compulsory study. Changes in the structure, curriculum priorities, teaching, assessment, personnel and funding policies at both the school and the tertiary level would seem to be needed to reduce the articulation problems being encountered by many school leavers entering tertiary education.

The Working Party believes that at the post-compulsory secondary level years 11 and 12 should not be treated as separate entities. An integrated structure and curriculum plan should allow greater flexibility in terms of the length and form of post-compulsory secondary education.

SUGGESTION 1 - THAT POST-COMPULSORY SECONDARY EDUCATION BE PLANNED AS A COHESIVE, CO-ORDINATED ENTITY

3.2 Curriculum Patterns

Such a recommendation has an immediate implication for curriculum framework and content. Curriculum content and structure is more directly the concern of the Curriculum Patterns Working Party and reference should be made to their discussion paper. However, members of the Course Articulation Working Party suggest that:

(a) the post-compulsory curriculum should be planned as a whole;
(b) the orientation of that curriculum should be towards an overall broad general education for all students;
(c) some in-depth preparatory subjects be offered for those students who wish to move into tertiary education, and that other in-depth studies be available for students seeking to develop other talents or interests;

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(d) students be provided with an opportunity to select subjects from a number of subject clusters which overall gives them a broader based, more patterned and stimulating program of study;

(e) enrolments in several year 11 and 12 subjects are too small for them to be viable, particularly in small schools;

(f) an appropriate accreditation and assessment body for the post-compulsory years will be needed.

To equip school leavers for the many pathways they collectively take, we have tended to assume that most students will undertake the equivalent of twelve subjects in the years immediately following compulsory schooling. Moreover, we considered a study pattern approach based on clusters of cognate subjects with students required to select a balance of at least one general and/or in-depth subject from several of the clusters (one of which must be an English subject). At this stage, it is important that the merits and problems of possible ways of restructuring the curriculum be considered by all the parties affected before a final pattern is agreed upon. But in the end the pattern adopted must provide for a balance between general and specialised studies.

A suitable forum involving all interested parties (schools, tertiary institutions, employers, parents etc.) will be needed to agree on this balance, and a body will be needed to accredit courses and to be responsible for assessment in the post-compulsory years. Thus far, SSABSA has successfully accomplished the latter task at year 12 level.

SUGGESTION 2 - THAT THE POST COMPULSORY SECONDARY SCHOOL CURRICULUM SHOULD OFFER BOTH ELEMENTS OF GENERAL EDUCATION AND SPECIFIC IN-DEPTH SUBJECTS WHICH PREPARE STUDENTS FOR FURTHER STUDY AND EMPLOYMENT
3.3 **English Expression**

One recurring area of concern has been English Expression. Tertiary institutions, along with many other groups in the community, are concerned about the ability of students to reason and think clearly and to express their views orally and in appropriate written forms. In the view of most staff, too many first year students at tertiary level have difficulty doing this and, as a result, struggle. Hence the push for certification of competence in written expression. The Working Party is aware that a good deal of progress has been made by the SA Education Department in developing appropriate courses for secondary schools and in reaching a consensus about a workable system for accreditation and assessment by the Assessment of English Expression Working Party being convened by SSABSA. Assessment would be school-based, occur at the end of year 11 and be based on existing or recently developed year 11 English and ESL courses. To be acceptable to tertiary institutions for admission purposes and to employers, courses would need to be accredited and the assessments moderated by an appropriate authority (possibly SSABSA, but this would require a legislation change).

**SUGGESTION 4** - THAT ALL STUDENTS UNDERTAKE AN ENGLISH OR ESL COURSE UNTIL THE END OF YEAR 11 WITH COURSES ACCREDITED AND ASSESSMENTS MODERATED AT THAT POINT

3.4 **Responsibility of Sectors**

Within the senior secondary-tertiary education interface, particularly the secondary-TAFE area, there are a number of problems emerging which seem to reflect conflicting policy goals. These can be readily seen in two or three examples. While the Commonwealth Government has established a policy
of increasing retention to year 12 to 65% of the cohort, the current program at State level in apprenticeships for persons with pre-vocational certificates has the effect of pulling students out of school at the end of Year 11. In some country centres in particular, Year 12 numbers have been significantly reduced by these pre-vocational requirements.

At another level, there is an effort on one hand through the Youth Education Consultative Committee to establish a state-wide framework for secondary-SSABSA-TAFE cross-status articulation, and on the other hand encouragement for individual college-school connections with little if any framework of cross-accreditation. As alluded above, the YES Scheme and other Traineeship Programs have sprung up with little articulation with established TAFE programs and senior secondary courses. All of this indicates the need for consideration and articulation of the educational provisions and current arrangements which exist at the interface between secondary and tertiary study. Such considerations should embrace the relationships and scope for co-operation between the various accrediting and certifying authorities (SSABSA, ICTC, TAFE) as well as the educational providers. A particular concern is the need to set up arrangements which allow free movement (with portability of studies) between the sectors (secondary and TAFE, TAFE and Higher Education).

At the same time tertiary institutions and employers ought not to have to introduce programs better done in secondary schools, and schools not forced to provide specialised training which more properly is the responsibility of an employer or tertiary institution. It is important as well that the question of the cost-effectiveness and the inequities and imbalances created by attempting to maintain many small subjects be addressed. The current system is often unfair to students in years 8 to 10 in relation to class size and the unequal distribution of resources. An
overall review of the cost-effectiveness of the current system is necessary.

Responsibility for immediate post-compulsory secondary education should be retained by the schools or secondary colleges (if these are established). Whilst it does not have a key role, TAFE believes that it should be involved in providing traditional secondary level education to students who find the TAFE learning environment more suitable. It may be appropriate for the resources available to secondary schools to be used to meet the secondary education needs of adults who choose to attend a TAFE college while freeing the limited TAFE resources to fulfil its other stated aims relating to further education. The Working Party seeks comment on the most appropriate way to ensure each sector uses its resources to serve the educational needs of its target population.

SUGGESTION 5 – THAT POST COMPELLARY SECONDARY EDUCATION BE THE RESPONSIBILITY OF SENIOR SECONDARY SCHOOLS, CONTINUING ROLES BEING TAKEN BY TAFE AND INDUSTRY BASED TRAINING SCHEMES FOR THE MINORITY WHO OPT OUT OF SENIOR SECONDARY EDUCATION BETWEEN 15-18. SUCH ROLES SHOULD BE DESIGNED TO RELATE TO UPPER SECONDARY COURSES AS APPROPRIATE, AND THE PROVISIONS IN DIFFERENT SECTORS ARTICULATED TO PROVIDE PORTABILITY OF STUDIES BETWEEN DIFFERENT SYSTEMS

3.5 Increased Flexibility at the Upper Secondary Level

The rigidity of present structures within senior school makes it difficult or rather uncomfortable for school leavers to return to pursue further study, and certainly our present structures do not encourage mature age persons to become involved. A freeing up of the system is needed – movement between schools; increased interchange between TAFE and schools; year 12 classes conducted in the evening, at summer schools and other intensive programs; teaching in the distance mode for both young and older
adults; a methodology which encourages students to think and act independently (as opposed to teaching practices more suited to the primary or junior secondary levels); and curriculum structures and content providing a broad general education. Greater flexibility in provision would greatly enhance the senior secondary schooling within this state.

The Secondary College model has worked very well in the ACT and the new colleges in Queensland (which combine upper secondary and TAFE) also seem to be successful. Lessons can be learned from the failures of previous attempts to rationalize resources in SA and elsewhere (eg. attempts to close institutions or force amalgamations), and the successes (eg. clustering; Cabra-Sacred Heart as Senior Colleges; community involvement within a given framework in decisions about rationalization of resources in Victoria). There must be a rationalization, given the expected enrolment decline, the inequities created by small upper secondary enrolments in many schools, and the likelihood of significant budgetary constraints. For the sake of students, there must be increased flexibility and clear pathways between sectors.

It would seem appropriate for communities served by a number of high schools to be informed of the constraints on choice associated with small upper secondary enrolments, the consequences of declining enrolments and the optional ways in which the problem of keeping pathways open for young people in the community and resolving the demographic and funding problems might be resolved. Rather than a unilateral decision from some central authority, it is important that communities be given the opportunity to seek the solutions which best serve their needs (be it a co-operative arrangement involving several schools, a secondary college on the ACT model, or a Community College which incorporates year 12 courses, some TAFE
courses and possibly some off-campus higher education courses).

SUGGESTION 6 - THAT A DEGREE OF FLEXIBILITY BE MAINTAINED IN POST COMPULSORY SECONDARY SCHOOLING TO MAINTAIN REASONABLE CHOICE IN THE FACE OF BUDGET CUTS AND TO ENABLE SCHOOL LEAVERS OR MATURE ENTRANTS TO RETURN TO STUDY

SUGGESTION 7 - THAT A FRAMEWORK WHICH SETS OUT THE PROBLEMS FACING SECONDARY EDUCATION AND WAYS OF KEEPING STUDENT OPTIONS OPEN IN COST-EFFECTIVE WAYS BE DEVELOPED AND THAT COMMUNITIES BE INVOLVED IN DEVELOPING PLANS FOR SERVING THE EDUCATIONAL AND EMPLOYMENT NEEDS OF YOUNG PEOPLE LOCALLY PRIOR TO ANY ACTION ON THE PART OF CENTRAL AUTHORITIES

3.6 Equity Initiatives

The higher the family adversity (due to poverty, family breakdown, unemployment, socio-cultural discontinuity with current education system etc.) the greater the educational disadvantage. A key concern of the Enquiry relates to the problems encountered by "the children of adversity" who leave the education system with negative attitudes to school and low levels of basic skills. Most do not enter the post-compulsory stage.

The life pathways open to young people with such backgrounds are very restricted indeed. These tragedies lie deeply embedded in the structure and social fabric of the society. They cannot be solved by changing the post-compulsory education system alone. It is important, however, to ensure that pathways into year 12 studies, TAFE and higher education are created and that ways are found to provide the additional academic and financial support needed for these young people to gain a qualification and to gain entry to the workforce.

The first problem relates to the structure and style of schooling. In part, disadvantaged groups are under-represented in the tertiary education system and in the workforce because they lack the basic knowledge and
skills required for participation. The changes in the curriculum and in school structures and practice set in motion in recent years do seem to have helped, but much more remains to be done if those young people who currently leave school early are to want to continue and if they are to gain the knowledge and skills they need to obtain work or to qualify for further education.

At the post-secondary level, there are educational and social equity reasons for insisting that pathways be created and affirmative action taken to enable groups currently under-represented in courses and occupations to participate. For example, Bok (3) argues that universities should rationally prefer those minority students who are equipped to benefit from the education they receive and who are most capable of taking advantage of the opportunities they will have within the institution and in their chosen career if we are to build a more interesting and just society.

Unfortunately the competition for places in many TAFE and higher education courses (together with the introduction of the HEAC charge) has had the effect of restricting opportunities to participate in tertiary education for a number of under-represented groups, so that the gains in achieving equity initiatives over the past decade are now being seriously eroded. Moreover, not only is access to post-secondary education a problem, but also the very large classes and lack of adequate academic support services in several of the institutions mean that the risks of failure and withdrawal for several disadvantaged groups (particularly male school leavers from non-English speaking backgrounds) are high.

It is significant that the Victorian state government has funded an additional 1500 tertiary places this year. It may also be that the experience and expertise developed within the school system in designing programs and modifying teaching to meet the needs of groups hitherto
under-represented in post-compulsory education could be shared with tertiary institutions on a secondment basis. Finally, it is very important that young people and their parents in areas where participation is low come to understand better the nature of, and opportunities created by, participation in tertiary education. For this reason, a co-operative tertiary awareness program targeting years 8 to 10 in secondary schools serving low socio-economic areas should be established along the lines currently operating in the western suburbs of Sydney.

SUGGESTION 8 - THAT STATE GOVERNMENT AND EMPLOYER ORGANIZATIONS BE ASKED TO SUPPORT TARGETED PROJECTS INVOLVING SCHOOLS, TERTIARY INSTITUTIONS AND INDIVIDUAL EMPLOYERS AIMED AT IMPROVING ACCESS TO, AND SUCCESSFUL PARTICIPATION IN, POST-COMPULSORY EDUCATION AND WORK PROGRAMS

4. FUTURE OPTIONS: ASSESSMENT POLICY AND PRACTICE

4.1 Assessment Modes

The relative merits of alternative forms of assessment have been debated for some time. The criteria used in reaching a judgment about the form of assessment to be used should include reliability, validity, impact on students and schools, acceptability to various consumers, professional development, fairness and cost.

The case for the existing 50:50 pattern used in assessing PES subjects rests on its validity and reliability in assessing the objectives of the PES courses and as a selection tool, its cost-effectiveness, its fairness and its impact on students and schools. The McGaw Committee in Western Australia (4) and the recent Senate Inquiry into Assessment in the ACT (5) came to the conclusion that a combination of school and external assessment provides the most reliable and least expensive means of assessing students.
and moderating the results, and the most valid means of predicting tertiary performance. Investigations of the reliability and validity of several PES subjects undertaken by SSABSA and within the universities suggest that the procedures being used by SSABSA for the development of PES subjects are appropriate and the assessments arrived at are reasonably valid and reliable.

There is increasing pressure to reduce the role of public examinations in assessing PES subjects, if not to do away with them altogether, on the grounds that they induce competition, produce stress and have adverse effects on schools. However, any rigorous assessment system for entrance to higher education or skilled employment will inevitably involve a deal of stress for students and teachers. Whether any assessment mode has the desired educational impact on students and schools depends very much on its fitness for the purpose intended, and this applies equally to internal and external assessments.

A careful study of the fitness of purpose of existing assessment modes used in a range of SAS and PES subjects is needed - the modes used in both cases are more an artefact of the origins of the courses than the product of careful evaluations of their validity, reliability or cost-effectiveness. The studies being undertaken by SSABSA and others of the validity, reliability and cost of assessment by different modes in various subjects need to be extended. In the meantime, the evidence indicates that there is no good reason to depart from existing practice.

SUGGESTION 9 - THAT PENDING THE OUTCOME OF FURTHER RESEARCH INTO THE VALIDITY AND RELIABILITY OF MODES OF ASSESSMENT, THE CURRENT MIXED SYSTEM OF SCHOOL-BASED AND EXTERNAL ASSESSMENT MODES BE RETAINED

4.2 Improving Assessment

Unfortunately, as the Keeves Report (6) showed, most teachers have
received very little or no training in educational assessment. It barely features in either pre-service or inservice programs in South Australia. Some teachers do gain valuable experience in assessment as part of the SSABSA moderation procedure and SSABSA is keen to extend its efforts in this area. There is an urgent need for professional development programs in assessment for upper secondary teachers and Seniors, and for the inclusion of more systematic training in assessment in pre-service and inservice programs. The Working Party would value comments on how best to obtain resources for such professional development.

SUGGESTION 10 - THAT PRIORITY BE GIVEN IN PRE-SERVICE AND PROFESSIONAL DEVELOPMENT PROGRAMS TO THE PROVISION OF TRAINING IN EDUCATIONAL ASSESSMENT FOR SECONDARY TEACHERS, AND TO THOSE WITH APPROPRIATE PROFESSIONAL QUALIFICATIONS IN MAKING APPOINTMENTS TO LEADERSHIP POSITIONS IN SECONDARY SCHOOLS

4.3 295 and All That

One key issue which has repeatedly been the focus of concern in schools, tertiary institutions and the Enquiry has been the soundness of an aggregate scaled score of 295 as the basic, underlying entry criterion. Originally the score may have been the equivalent of passes at C level in five PES subjects and this may once have been considered appropriate for matriculation purposes.

The meaning of an aggregate score of 295 (or 59 on the new scale) has now become obscure given the complexity of the way in which it is calculated following the process of statistical moderation of school assessments and the iterative scaling process used to adjust subject marks. Branson's paper (7) points out that the mark is no longer relevant for higher level courses within institutions with quotas. Moreover, he points to the adverse social and educational consequences of using an aggregate scaled score of 295 as a basic university admission requirement. In the
end, Branson concludes "it is neither justified nor desirable".

While the tertiary entrance needs of students seeking places in interstate or overseas institutions cannot be ignored, there is widespread discontent with "295" as "a tertiary domain certification of secondary results" on the grounds that it is not based upon any set of curriculum principles, is harmful to the secondary system, is largely irrelevant for selection purposes, and weakens the right of tertiary institutions to set logically and educationally defensible entry criteria.

**SUGGESTION 11 - THAT THE HIGHER EDUCATION INSTITUTIONS NO LONGER RELY ON AN AGGREGATE SCALED SCORE OF 59 AS THEIR BASIC ADMISSION CRITERION**

4.4 Cross-subject Comparability (Scaling)

All educational institutions have a strong commitment to and interest in the principle of fairness. In a system in which there are many more applicants for places in some higher education courses so that justice in the selection process becomes a key issue, there must be some reasonably reliable and valid system for ensuring that assessments are comparable from one school to the next, from one subject to the next, and from one year to the next. Historically, scaling was introduced to address the problems created by variations in the abilities of students taking different subjects, in the difficulties of papers and in the standards employed by examiners and schools in assessing students.

Scaling to achieve comparability across subjects is used in all systems: in WA, ACT and Queensland using ASAT and in NSW, Victoria and SA using average performance in other subjects to 'adjust' other subjects in turn. The aim of the current SA procedure is to achieve comparability of marks between subjects which ensures that the choice of subject does not of
itself significantly affect the students' chances of gaining entry to higher education. A three stage process is used in which, first, raw scores in all large subjects are adjusted so that they have approximately the same standardised distribution, then distributions of subjects within "Arts", "Science" and "Centre" groups are adjusted using common candidature subjects, and finally relativity between these groups is sought in a similar way.

In all states norm-referenced assessment, scaling and the use of a single aggregate to rank all candidates for selection purposes have been under attack from school systems. In NSW last year, higher education institutions (except Sydney University) opted to use aggregate raw scores for selection. It soon became clear that raw scores do not take into account differences in the ability of candidates in different subjects and that the use of unscaled scores unfairly disadvantages students taking the more difficult subjects. All institutions have decided to revert to scaling.

The current system for scaling PES subjects has its advantages and its weaknesses. To begin with, it can be argued that whenever different subjects are being taken and the number of candidates exceeds the number of positions, adjustments in raw scores need to be made if selection is to be fair. Further, it can be argued that statistical scaling is defensible to the degree that there are common traits (one or more general academic abilities) underlying performance in tertiary entrance subjects and reasonable inter-correlations. This appears to be the case within the major groups of subjects (particularly the mathematics-science group), but is probably not the case between them. In practical terms, this means that sub-aggregates, based on cognate studies, make better sense than best five aggregate scaled scores.
The current scaling system does not work well for PES subjects with small enrolments and subjects which are performance-based (e.g., "community languages", Art and Music) — other procedures need to be developed to ensure that the standards employed in assessing students in these areas are fair and comparable with those in other subjects. The system also seems to over-adjust scores in subjects which are highly inter-correlated (at least when these are added to produce an aggregate score) thus resulting in a bias favouring mathematics-science students (predominantly male) in the selection procedure. The Grading and Scaling Sub-Committee of the Joint Matriculation Board and SSABSA have been investigating the problems identified and are in the process of developing ways of overcoming them. For the moment, the improvements suggested by the investigations under way should be made.

One refinement worth serious consideration would be to replace best 5 aggregate scaled scores with a set of two or three scaled sub-aggregates. Rather than the present iterative three stage process, scaling could be undertaken only within baskets of subjects which are logically and statistically closely related (this should remove the bias in the present system). Where this is the case, scaling and adding scores is more defensible. For example, Masters and Beswick (8), having investigated the problems with the ACT system, suggest that the current single aggregate TE score be replaced by selection indices constructed for different purposes using sets of indices ("Science", Humanities etc.) arranged to maximize predictive validity. In this respect, the considerable experience of agencies responsible for advising on college admissions in the US is likely to be of value.

The system used by the CAEs of automatically deducting 3 marks (out of 20) from SAS subjects put forward for admission purposes is crude, has
attracted much criticism, and ought to be abandoned. This does not mean that SAS marks ought not to be adjusted. In selection for CAE courses one must be fair to students taking either a full PES program or a hybrid SAS-PES course. Tempting as it might appear, it is not easy to find an alternative to scaling when selections do have to be made. For the moment, rather than an arbitrary adjustment, it might be worth investigating the possibility of accommodating large enrolment SAS subjects used for CAE entrance within a scaling process of the type proposed by Masters and Beswick (8) (In this case, marks in any SAS subject could be adjusted up or down depending on student performance in cognate subjects, and on the same basis as PES subjects).

Comparability between subjects is always a vexatious issue. In the discussion above, it has been assumed that given the current state of measurement technology, we will continue to need to take into account the differences in the academic abilities of candidates in different subject areas. Also we note the conclusion of the McGaw Report in W.A. (4) that "scaling cannot be abandoned unless a thoroughgoing adoption of criterion-referenced assessment becomes feasible". Power (9) suggests that this should be attempted but will not be easy. Whatever assessment mode is used, the issue will not disappear. Comparability between subjects will be an even greater issue in a criterion-referenced system, since there is no reason to expect the criteria and standards used by different subjects to be commensurable. The alternative to scaled aggregates in a criterion referenced system is profiling. That profiles can be produced is undeniable. Whether they are fairer to students and have the ability in practice claimed by their proponents is another matter.

The Working Party would welcome comments on the issue of how best to address the problem of cross-subject variability through adjusting the
present system (eg. scaling only within baskets of cognate subjects and using sub-aggregates), developing a criterion-referenced system, or some combination of both (eg. a criterion-based system in which information about performance in cognate subjects is used in making decisions about cut-offs and in refining criteria).

Finally, the experience in the USA and Europe in large assessment systems suggests that serious consideration should be given to the use of both criterion-based and normative procedures in adjusting scores and arriving at grade cut-offs within and between subjects.

SUGGESTION 12 - THAT A MORE EDUCATIONALLY AND SOCIALLY DEFENSIBLE BASIS FOR ENSURING COMPARABILITY BETWEEN SUBJECTS AS PART OF THE ASSESSMENT PROCESS BE ESTABLISHED

4.5 Cross-school Comparability (Moderation)

In South Australia three major forms of moderation are used to promote cross-school comparability of school-based assessment which conform to some common standard. These are visitation, grouping moderation, and statistical moderation against class performance in a public examination. The first two forms of moderation are used in the SAS subjects and with a few exceptions statistical moderation is applied in the PES subjects.

While group and visitation moderation produce some grade adjustment at the end of the year (or semester) the success of these methods lies in the processes of discussion, comparison and agreement about standards, and about assessment activities which occur during the teaching of the subject. This process operates under the expert guidance of the Chief Moderator, and individual moderators in each subject. While it could be argued that these processes in themselves do not ensure exact standards, and are costly to operate, they do have a direct influence on assessment activity; there is
professional scrutiny of comparative performances across schools, a built-in verification system, and moderation directly provides a significant degree of professional development for teachers.

By contrast, the school assessments in PES subjects are unverified and there is no real system by which teachers can gain a sense of the common 'standards' during the year. The result is that, prior to statistical moderation against the examination, these assessments show consistently higher means and lower standard deviations than the examination.

The current PES statistical moderation system, like the visitation and the group moderation system used with SAS subjects, has its strengths and limitations. It is a cost-effective and valid way of adjusting school assessments where the objectives being assessed internally and externally are similar and correlate well, and where class sizes are large enough to permit statistical procedures. There are problems in using statistical moderation in classes of less than ten students.

Where these conditions are not met, other means of achieving cross-school comparability of results and ironing out variations in the standards used in making assessments by schools are needed. Thus there is a case for introducing group or visitation moderation for those components of PES subjects for which statistical moderation is inappropriate.

There is considerable experience in South Australia in the design and management of group and visitation moderation systems including efforts to improve the reliability and validity of these procedures. Experience in South Australia and in the UK with procedures being developed for the GCSE suggest that the quality of moderation in each subject can be improved through the use of carefully developed training materials; the generation of rules about the types of work which can be submitted; the development of explicit criteria, grade-related benchmarks and exemplars; insistence on
independent judgements about cut-offs by teams of expert moderators (rather than simply ratifying grades); and reliability checks. The investigation of reliability and validity of non-statistical moderation systems used in South Australia is currently being undertaken by SSABSA.

Where group and visitation moderation are the most appropriate moderating device, it must be recognized that to maintain a valid and reliable system demands time, money and training. One possible way of improving the information base and reducing costs for some school-assessed subjects would be to use reference tests in the moderation process.

One of the significant trends in assessment has been the reaction against norm-referenced assessment and the accompanying move towards criterion-referenced assessment. A serious effort needs to be made to develop more adequate grade-related descriptions and profiles of student performance and to reduce the degree of reliance on statistical scaling in PES and the tacit knowledge of teachers and moderators in SAS so that the grades awarded in each subject more accurately reflect what students have achieved. A great deal of work remains to be done before a reliable and valid criterion-based system could be introduced. It is important that all parties recognize the importance of seeking to develop an assessment system which is more explicit about what students know and can do.

SUGGESTION 13 - THAT THE APPROPRIATE AUTHORITIES SEEK TO IMPROVE THE VALIDITY, RELIABILITY AND COST-EFFECTIVENESS OF ALL THREE MODES OF MODERATION AND BE SUPPORTED IN THE MOVEMENT TOWARDS A FLEXIBLE ASSESSMENT SYSTEM WHICH INCLUDES, IN THE LONG TERM, CRITERION-BASED ASSESSMENT

4.6 Certification

A great deal of confusion and difficulty has been created for students, parents, employers and tertiary institutions by the diversity of
certificates, records and modes of reporting achievement used by secondary schools and assessment boards. Recent reports such as those of the Quality of Education Review Committee (10) and the Schools Commission (11) therefore have argued for the concept of a single certificate to mark the completion of a full, general education. They also advocate the use of school records of students' achievements to be presented to those who leave before year 12.

The current system does allow for a good deal of flexibility within schools, and restricts the direct influence of higher education requirements to year 12 students. However, School Leaver Statements are often difficult to interpret and to use for the purposes of certification or selection. As a result, they tend to be ignored by tertiary institutions. The SSABSA Certificate does accommodate the needs of most year 12 students and most purposes. However not all students completing year 12 receive a SSABSA Certificate which documents their achievements and which is useful for employment purposes.

One possibility on which the Working Party would like comment is to expand SSABSA's role to include the accreditation and certification of all post compulsory secondary students and subjects. Students taking only SSABSA registered subjects or non-accredited alternative programs developed by systems could receive a SSABSA certificate which records the registered/non-accredited subjects, taken and achievements within them. Thus SSABSA would play a role in the certification of competence in English Expression at the end of year 11 as part of this move.

A major advantage of this system would be that it could be implemented with relatively little disruption to the existing mechanisms and structures. A common certificate may be an important way to give students a goal to work towards, to record their achievements during the
post-compulsory secondary period, and to attest their preparedness to enter post-school studies and employment. A common certificate implies the concept of a multi-purpose credential which is accessible and attainable by a significant majority of the school population within 12 years of schooling, yet still means something, is of value and is widely accepted and understood.

Rather than introduce a totally new system, it would make sense to build on, and adjust the structures already developed by SSABSA. A set of rules could be established to ensure that patterns of study are developed in such a way as to ensure that all students at the post-compulsory secondary level receive a balanced general education and to provide the degree of focus desired by students (see Curriculum Patterns Working Paper for further details).

The experience in Victoria suggests that the precise requirements for the Certificate ought not to be spelled out by the Enquiry, but should follow a period of public discussion and negotiation among the various interested parties (schools, tertiary institutions, parents, employers etc.).

The introduction of a more general certificate would have the effect of introducing a credential which would serve the needs of most students and users, and be more functional than a system where an aggregate scaled score of 59 has, by default, been seen as the mark of successful completion of secondary education. The issue of what constitutes an appropriate certification and its requirements is one on which the the Working Party seeks further opinion.
SUGGESTION 14 - THAT A SINGLE MULTI-PURPOSE CERTIFICATE WHICH CONTAINS A TRANSCRIPT OF STUDENT ACHIEVEMENTS DURING POST COMPULSORY SCHOOLING BE ISSUED TO A STUDENT UPON LEAVING SCHOOL

SUGGESTION 15 - THAT RESULTS PERTINENT TO THIS CERTIFICATE OBTAINED AT A LATER DATE BE ADDED TO THE ORIGINAL CERTIFICATE SO THAT STUDENTS CAN COMPLETE THE REQUIREMENTS OF THE CERTIFICATE AFTER LEAVING SCHOOL

4.7 In-depth Studies and Pre-requisites

For all students, a multi-purpose Certificate might provide a profile of the curriculum areas in which post-compulsory secondary studies have been undertaken and the areas in which studies have been undertaken at depth or at a more general level. The extent to which in-depth studies as a preparation for either an employment or a tertiary education pathway would be allowed or required would need to be negotiated by all the parties concerned. It would then be up to the users (universities, CAEs, TAFE, employers etc.) to spell out how many units in what range of areas need to be completed at what level in order to satisfy their requirements for both a sound general education and any specific requirements for in-depth studies.

At the moment, there are few direct subject pre-requisites apart from the university requirement that five subjects must be taken, including one from an arts/humanities basket and one from a mathematics/science basket (although there are specific requirements for Art and Music). This lack of prescription may appear liberal, but in fact students are well aware that there is a defacto expectation for science-based courses. The problems are compounded when the "arts" subject chosen to accompany this package is not an "Arts or English language rich" subject (eg. Accountancy). The introduction of a third basket as proposed by the universities may help, but it does not overcome the problem of ensuring a reasonably balanced
program of studies. The Working Party would like comment on whether this option should be investigated further.

It would seem reasonable to expect any student seeking to enter a science-based course to be required to complete in-depth preparatory studies during years 11 and 12 in approved mathematics and science courses, for students entering Economics-Business streams to have undertaken in-depth studies in appropriate courses (mathematics, economics, accounting etc.), for students entering primary teaching to have in-depth studies in English, mathematics and the social sciences, for students entering a TAFE Technology Associate Diploma course to have an appropriate science, technology and mathematics background, and so on. Wherever requirements are set out, they should be educationally defensible, encourage students to explore and carefully consider course and career options, and reduce the risk of failure on entry to a course or career pathway.

All students should undertake a balanced program of studies at the upper secondary level. Some of the subjects taken during the upper secondary years would be at a level appropriate for those seeking to be generally well educated (general studies) and some at a more specialised, in-depth level (the equivalent of many existing sequential PES courses) aimed at preparation for a university, CAE or TAFE course or a general vocational area.

It would be the responsibility of the tertiary institutions to spell out what these requirements are, to justify them, and to discuss them with other interest groups. It is envisaged that any new admission requirement would reduce the degree of specialisation possible under the two basket system and work within the framework of the new multi-purpose Certificate. There would necessarily need to be limits on the degree to which any single user could prescribe a pattern of studies (e.g. no more than half of a
student's program might be devoted to meeting the pre-requisites of a given course of study).

SUGGESTION 16 - THAT USERS OF THE CERTIFICATE SET OUT THEIR REQUIREMENTS WITHIN PRESCRIBED AND AGREED RULES ABOUT BALANCE

5. FUTURE OPTIONS: TRANSITION FROM POST-COMPULSORY SCHOOLING

5.1 Quality Preparation

Universities believe that the existing PES subjects are at a level appropriate for university entrance, and that any significant lowering of standards being demanded currently without altering the structure and length of degree courses, would create serious problems for school leavers entering higher education. The QERC Report (10) and the Schools Commission Report "In the National Interest" ('11) also have focused on the issue of quality and the need for courses and teaching to focus more explicitly on the development of a number of competencies. The ACT Schools Authority is exploring ways in which secondary colleges can be assisted to focus attention in both curricula and assessment on the development of competence or expertise in key areas or domains. The Business Council of Australia (1) has recently called for significant changes in school curricula and improvements in the quality of the preparation for work, as has the ACTU. The US National Commission on Excellence (12) also suggested ways in which the quality of teaching can be improved. In redesigning upper secondary courses and assessment systems, the recommendations of these reports do need to be carefully considered.

A recent study of first year tertiary performance by Power (13) suggests that secondary students best prepared for most university and
college courses are those who have taken, worked hard at and done well in subjects like PES Art, English, French, Modern European History, Mathematics 1 and 2, Chemistry and Physics while students taking the PES Biology, Economics, Mathematics 1S and SAS subjects are less likely to succeed in their course. The study points out that this does not necessarily imply the courses themselves provide any better or worse preparation for tertiary studies or work, but that the results suggest the operation of a form of streaming by perceived academic ability in schools. This defacto streaming in turn sustains a subject hierarchy within schools and leads to the unfortunate social labelling and denial of access to valuable knowledge and skills which flows from dividing young people into "academics" and "non-academics". It also exacerbates and confounds the PES versus SAS divide. The issue of how young people can have access to the courses which best meet their present and future needs, and best develop their interests and abilities, is an important one, and the Working Party would like further comment.

It is clear from the evidence on first year performance that a student who aspires to enter a science-based career will need more advanced studies in mathematics and the sciences than the student interested in the arts. Similarly, the evidence suggests that all young people seek and need to have a better understanding of the labour market and to be better prepared for work. To fail to teach pre-requisite knowledge and skills, be it for tertiary education or employment, would be in the interests neither of the students nor the nation.

In essence, the knowledge assumed of students entering courses and careers which involve the cumulative development of understanding and expertise demands a level of specialisation which conflicts with the demand for a more general, less in-depth education of the type offered by many SAS
subjects. The Working Party believes that it is critically important to adjust the system so that all students have a more balanced but sufficiently rigorous general and in-depth education. In particular, there is a need to improve the quality of programs taken by students seeking a place in the workforce on leaving school. The educational needs of these students ought not to be given a lower priority than those of tertiary-oriented students at the upper secondary level.

SUGGESTION 17 - THAT A CO-OPERATIVE WORKING PARTY INVOLVING ALL PROVIDERS OF POST-COMPULSORY EDUCATION BE ESTABLISHED TO EXAMINE THE RELEVANCE FOR SOUTH AUSTRALIA OF RECOMMENDATIONS RELATING TO IMPROVING THE QUALITY OF TEACHING PUT FORWARD IN RECENT REPORTS

5.2 Selection for Higher Education

Historically, admission to higher education has been officially based on the principle that places should be available to all those who are qualified by ability and attainment and who wish to enter. The principle implies that all groups of students selected should have a reasonable chance of success.

The growing gap between demand and supply and the frustrations this is causing has meant that selection is once more a major public issue. In the competition for a place in a quota a "game" is created which may well work against sound educational principles. Additionally, there are pressures on the selection system which stem from the quite proper concerns about equity and fairness.

In practice, many who are qualified for a place miss out, and some groups admitted are very much at risk. The standard practice for selection of school leavers has been to use the aggregate scaled score to rank order and then to select candidates. In general, aggregate scores are amongst
the best predictors of success in higher education. However, this varies considerably according to the type of aggregates utilised — specialised aggregates applied to chosen fields of study tend to have better predictive validity than general aggregates. It should also be noted that there are other means of selection which are only marginally worse than best 5 aggregates and, arguably, utilize other important selection criteria.

The present use of aggregate scaled scores may be administratively convenient, but its domination as a basis for selection has caused it to be considered as a rite of passage into many tertiary courses of study and employment situations. While aggregate scores are the best we have, the lower the correlation and the more scores bunched at a cut-off, the worse the problems of selection become. Moreover, the current scaling system leads to aggregate scaled scores which seem to be biased at the lower end in favour of males. There are pressures then to move away from best 5 aggregate scores.

The case for "best 3" in the selection process rests on the evidence in the McGaw Report (4) and a SSABSA study that there is little difference in the predictive validity of best 3, 4, or 5 aggregate scores, and that it is a more flexible system (to the degree that it allows SAS subjects to be included in a student's year 12 subject selection — though not necessarily included in the "best 3" aggregate). The latter is an argument in South Australia where year 12 is effectively partitioned into those students taking a "matriculation" program and those taking SAS or SAS/PES hybrid courses. The nub of the problem as seen by many schools is that SAS subjects are not accessible to students preparing for university. Other advantages of this system are that it takes pressure off the university to accept new "PES" subjects.

However there are disadvantages. The scheme is quite complex to
administer and requires a series of inter-connected decisions by students and schools to ensure that programs which satisfy requirements are available and taken. The pattern of pre-requisites which faculties have imposed, and the more general requirements, suggest that early subject selection decisions would be necessary, particularly where students wished to enter professional faculties. The extent of pre-requisites in some faculties (eg. Engineering) shows that, for some students, flexibility to select subjects is illusionary. Some small schools would still face pressure to give priority to offering Tertiary Entrance (PES) subjects and the patterns of flexibility in small schools would be limited. It is arguable that the 3+3 option allows students to take a 'soft-option' path to entry to general faculties and to focus on 3 subjects. Data on the actual impact on entrance patterns and university responses to the scheme in WA are difficult to obtain, but preliminary reports indicate that there has been a significant shift away from mathematics and physical sciences in schools and higher education.

The Enquiry recognises that such a model is complex and would welcome comment upon the WA system or some adaptation of it which could be applied in SA. Ultimately the aim is to select students who, given the present courses and modes of teaching in tertiary institutions and selected employment situations, have the best chance of success. But there are other criteria which should, as far as possible, also be satisfied. The selection system should allow and encourage the selection of the best prepared and most committed students for their chosen future activities and, importantly, the scheme should not distort the whole structure of senior secondary schooling in serving the interests of a particular set of institutions. Also, the selection system should provide safeguards and modes of selection which advance principles of equity and fairness. If one accepts this
framework, then one must look at more than an aggregate year 12 score. Other relevant criteria may include preparedness for a particular pathway, the degree of commitment to a course or career, a sound general education, as well as academic competence in appropriate subjects.

Wherever possible, selection for professional courses should be delayed until after entry to higher education, since this would reduce significantly the backwash effects of the current system on schools and make for more informed and defensible selection decisions on the part of both candidates and the institution. This has already happened with Law at Adelaide and to some degree is possible in Medicine at Flinders. If the structural changes canvassed later are put into effect, the emphasis could be shifted from the current pre-occupation with the problems of selection and multiple cut-offs to a more open admission. In the meantime, it is suggested that tertiary institutions consider seriously the possibility of a more open admission policy and delaying selection for professional faculties. This often was the pattern in Australian universities in the past and is common in other systems.

Ultimately, if a criterion or standards-based assessment system is developed, it should be possible to admit students on the basis of the degree to which their profile of accomplishments matches those most characteristic of successful graduates in a field. In the meantime, it would seem appropriate for employers and tertiary institutions:

(a) to accept the award of a new multi-purpose SA Certificate as evidence of a sound general education;

(b) to base selection mainly on final performance in pre-requisite year 12 subjects or, in the case of professional faculties, on performance during first year.
In so doing, institutions in selecting would give preference to students who are best prepared generally and specifically for a given course. In practice, selection at year 12 level could be based on sub-aggregates rather than best 5 aggregate score, as suggested by Masters and Beswick (7) and others. Sub-aggregates would be calculated separately for the mathematics-science cluster, the humanities cluster and perhaps one or two other clusters (depending on how subjects logically and statistically can be grouped). The data already are available to work out how each sub-aggregate score should be weighted so that the best prediction of success in clusters of courses is obtained (eg. science-oriented / humanities and social science-oriented / business-oriented courses).

The selection process should also take into account additional relevant information in choosing between candidates with the same predicted score. It is argued that this procedure would be fairer, more valid, make more defensible use of all the available information and be less likely to have the educational side effects associated with the current best 5 and best 3 systems.

SUGGESTION 18 - THAT TERTIARY EDUCATION INSTITUTIONS AND EMPLOYERS MOVE AWAY FROM RELIANCE ON A SINGLE AGGREGATE SCORE IN SELECTING AMONG CANDIDATES AND TOWARDS DEVELOPING A SELECTION PROCESS WHICH ACHIEVES A BETTER MATCH BETWEEN CANDIDATES AND COURSES

5.3 Smoothing the Transition

As argued earlier the senior secondary curriculum does not always adequately prepare a student for a smooth transition to further study or employment. Often subjects and courses of study undertaken at senior secondary level appear very dissimilar to the same subjects and courses at tertiary institutions. The pace, emphasis, methodology, style of teaching
and learning required, depth expected and even the content may be different. Similarly, the move from the school to the work environment brings with it a whole new set of expectations and tasks. However, the idea that education and schooling are coincident and coterminus is a deeply held one among teachers as well as their students. It is institutionalised in the arrangement whereby schools (and tertiary institutions) cease to exercise any responsibility for the student's education when they leave. A Schools Commission study (11) remarked on how few schools knew where their school leavers were. Schools (and tertiary institutions) can only evaluate their programs adequately if they know how ALL their students fare after they move into the adult world. The responsibility of educational institutions for the education of their students is more active than this: of all the possible agencies schools are the best placed to provide counselling and assistance as students start to engage in post-school roles.

A broad general education and post-school follow up should assist, but they cannot fully prepare students or accommodate all the demands of a new environment. All tertiary institutions have open days and an orientation program, but these are merely the beginning not the end point of the institution's responsibility to assist its new recruits to adjust to the social and academic demands of tertiary studies. Similarly, employers have a responsibility to provide an appropriate induction program aimed at assisting school leavers to adjust to the demands of the work environment.

SUGGESTION 19 - THAT TERTIARY EDUCATION INSTITUTIONS AND EMPLOYERS ALIGN THEIR ENTRY REQUIREMENTS MORE DIRECTLY TO THE PES AND SAS AND OTHER SUBJECTS STUDIED BY STUDENTS IN POST COMPULSORY SECONDARY SCHOOLING, AND PROVIDE MORE ADEQUATE INDUCTION PROGRAMS FOR SCHOOL LEAVERS
5.4 Improving the Admission Process

The Victorian Minister of Education has suggested that the relationship between schools and higher education needs to be re-considered in the light of policies aimed at increasing participation and the consequent competition for places in higher education this has generated. Specific proposals for improving admission and selection into tertiary education have been put forward by Ashenden (14) in papers presented at seminars organized by the Victorian State Board and the University of Adelaide. Ashenden outlines a carefully staged, two-way filtering process which seeks to encourage well formed and appropriate choices by students; to improve the validity, reliability, and fairness of selection; and to avoid restricting schools in pursuing their education objectives, particularly those relating to participation and equity.

The first stage of the admission process begins about June and seeks to answer the question: Is the applicant properly prepared for higher education? At this stage, the school might assess general academic preparedness, understanding of higher education and alternatives to it. In the second stage (about August), applicants specify up to five courses they would like to enter and provide information which enables the Tertiary Admissions Centre to judge whether the candidate is likely to meet the pre-requisites for particular courses. Next, applicants participate in activities designed to give them more information about particular courses of study and occupations related to them. Thus collection of further information is undertaken by both sides of the transaction. At the end of the year, assessments are completed and final selections are made as at present. The Ashenden paper sets out the advantages and difficulties associated with the proposal. There seems no good reason why TAFE and large employers might not consider a similar process. The Working Party would
welcome comments on the feasibility of such a process in South Australia.

Other possibilities include those of encouraging delayed entry and postponing selection for professional courses until after entry into tertiary education. There could be a mid-year intake for students needing the opportunity to coalesce course choices or the chance to remedy educational deficiencies (eg. to study a pre-requisite course not taken at school). It may also be that students qualified for admission but "at risk" might be advised to spend an additional semester at school or in the workforce and/or to enter a Foundation Course in second semester.

SUGGESTION 20 - THAT TERTIARY INSTITUTIONS SERIOUSLY CONSIDER EXTENDING THE ADMISSIONS PROCESS AND CO-OPERATING WITH THE SCHOOL SYSTEM IN THE DEVELOPMENT OF A PROCEDURE WHICH BETTER MEETS AGREED PRINCIPLES OF ADMISSION AND SELECTION

5.5 Counselling

At present, career counsellors do provide some general information but this is rarely part of a systematic program which provides the type of up-to-date information about course and career requirements and prospects (formal and hidden). In the most advanced education systems, school counsellors are required to undertake formal training in their field and have access to extensive computerised banks of information about tertiary courses, employment opportunities and conditions in the labour market. This ought to be the case in South Australia as well.

A Tertiary Awareness Program of the type available in the western suburbs of Sydney would be useful in raising the awareness of all lower secondary students to the possibilities opened by tertiary education. Full and extensive counselling by trained counsellors and involving input from tertiary institutions and employer groups should commence well before year 12. Many casualties in first year study or employment could be avoided if
preparatory counselling was an integral part of senior secondary schooling.

The Commonwealth Department of Education 1985 report on "Careers Guidance and Counselling in Australia" suggested that there was an urgent need for a training policy for careers guidance and counselling personnel and for the development, adaptation and dissemination of careers education and guidance materials and strategies. Another problem area is that of maintaining up-to-date information about requirements for careers and the tertiary courses available. Information about the structure and changes in the labour market is also difficult to obtain: there is no equivalent of the commitment evident in the USA, Germany and Japan to the free interchange of labour market and educational output information. Overseas there are a number of examples where this career pre-requisite information is available in a computerised bank which young people and counsellors can easily access. The initial cost of establishing such a system is high, but annual updating is relatively inexpensive.

SUGGESTION 21 - THAT MORE ADEQUATE COUNSELLING POLICIES AND SERVICES BE DEVELOPED FOR STUDENTS IN SECONDARY SCHOOLS AND THAT ADDITIONAL COUNSELLING BE AVAILABLE TO STUDENTS AS THEY MAKE DECISIONS ABOUT POST-SCHOOL PATHWAYS

5.6 The TAFE Interface

The TAFE-school and the TAFE-higher education interfaces are not clearly defined. TAFE provide a variety of accredited courses from which students should be able to move into tertiary study at colleges, the institute or universities. It is important that higher education institutions recognize accredited TAFE courses. For a number of years there have been complaints about the the problem of credit, and progress in this direction has been slow but steady (eg. Flinders recently decided that TAFE Associate Diplomates will be granted matriculation status). There is at
present a SAGE Working Party on Portability of Credit which is examining credit transfer among TAFE, CAEs and universities. Progress also has been made in accrediting SSABSA courses with TAFE.

The 1984 OECD review suggested that there is too little connection between vocational education training policies and labour market requirements and conditions, and that vocational training is not adequately documented and the competencies gained are not adequately evaluated and certified. The Myers Report (15) suggested that technological change would demand a more flexible approach to training, greater emphasis on retraining and recurrent education, and rapid provision of training in new areas. While TAFE seems to be generally aware of the need for an effective interface with industry, the process of consultation is costly and it is difficult for colleges to adapt quickly given the constraints of funding and opportunities for within-industry professional development.

SUGGESTION 22 - THAT A SYSTEMATIC PLAN FOR THE GRANTING OF CREDIT FOR COURSES COMPLETED FROM ONE SECTOR OF EDUCATION TO ANOTHER AND FOR RECOGNITION OF APPROPRIATE TAFE COURSES AS AN ALTERNATIVE MEANS OF ENTRY TO HIGHER EDUCATION BE INSTITUTED

5.7 School Leaver Competency in the Workplace

Some employer groups have claimed that many year 12 students lack the general competencies (listening skills, comprehension skills, spelling and grammar, reading, writing, oral skills, decision making skills, entrepreneurship etc.) needed to become productive in the workplace, and they lack the commitments expected by employers.

The OECD has also been critical of the ignorance of school leavers about the nature of work and has given particular attention to the interaction between education and structural change in the economy "with
particular reference to developing the capacity of individuals for continuous learning, creativity and self-reliance, thereby promoting their quality and flexibility in the labour market." It has called for more flexible combinations of education, training and work experience, improved relations between education institutions and industry, and greater emphasis on the role of schools and tertiary institutions in helping to create the conditions necessary for effective performance in the work place. The OECD has argued that the Australian education system has been designed on the premise that the labour market needs a small minority of professional and skilled trade workers and a large majority of unqualified and semi-skilled or unskilled workers who learn on the job. It argues that this premise is obsolete in a technological world and has called for a reorientation of the system to ensure that young people are qualified for the types of work likely to be in demand in the future. This is not to say that education and training should be geared narrowly to current skill requirements, but to a "training for stock" of flexible and generally well educated young people who have a broad range of well developed competencies. It mirrors too the commitment in countries like Japan and Germany to the belief that quality education is essential to economic competitiveness by raising the competence, flexibility and productivity of workers at all levels and of all types.

Work experience programs are increasingly providing invaluable experience for senior secondary school students. Perhaps students should be given more direction, more opportunity, and more credit for field experience in their senior school years. Tertiary institutions and employers could also give recognition and credit for work experience in relevant areas in their admission/selection process. In addition, the possibility of involving employers and unions more directly in the design of programs aimed
at improving understanding of the nature of work and factors shaping it and at assisting young people to make more informed educational and career decisions and to move more smoothly into productive work roles, along the lines operating in Sweden (16), ought to be seriously explored. Unquestionably young people would be far better prepared for employment and employer expectations if a more adequate program were implemented.

SUGGESTION 23 - THAT THERE BE A MORE SYSTEMATIC EXCHANGE OF INFORMATION AND DIALOGUE BETWEEN EMPLOYERS/TERTIARY INSTITUTION COUNSELLING STAFF AND SENIOR SECONDARY SCHOOLS LEADING TO MORE CAREFULLY PLANNED AND CO-ORDINATED WORK PREPARATION PROGRAMS

SUGGESTION 24 - THAT THE STUDY OF WORK IN MODERN SOCIETY AND EXPLORATION OF LIFE OPTIONS THROUGH STUDY AND ACTUAL EXPERIENCE IN THE WORKPLACE BE GIVEN HIGHER PRIORITY AND RECOGNITION IN SECONDARY EDUCATION

6. FUTURE OPTIONS: TOWARDS A NEW MODEL

6.1 Time at the Interface

Unquestionably, South Australian students do need more time at the secondary-tertiary/employment interface to mature, to prepare, to consolidate and to widen their experiences. Moreover, it is clear that students in SA are much younger and do not receive a very specialised and intensive preparation of the type achieved under the British A level system. This means quite simply that very few students in SA can achieve the level of competence expected of graduates in a field within three years. The British degree structure simply does not fit: trying to maintain it is creating increasing tension between the higher education sector and schools, great strains on young people in year 12 and during first year post
secondary, and wastage of scarce resources at the tertiary level. In the long term, significant structural changes will be needed leading to the development of a more comprehensive and rational tertiary system. Three models are suggested:

(a) A More Flexible Period of Upper Secondary Education
(b) A Four-year Degree Model on the US Pattern
(c) A Bridging Year Model.

(a) A More Flexible Period of Upper Secondary Education

A controversial but serious suggestion must be carefully considered: the introduction of a more flexible structure which may include an additional period of post-compulsory schooling. Post-compulsory secondary education should be a cohesive package which allows students to spread their post-compulsory schooling over, say, three less pressured years and/or to combine study with work, to take a fast track as at present, or to take some combination of both thus allowing them to explore options in tertiary education and work.

This model assumes that a number of the post-compulsory secondary students would take an additional period of time either at existing High Schools or at a Secondary or Community College entered after year 11. The latter would offer both year 12 courses and some introductory tertiary courses (such as TAFE Prevocational Courses and University Foundation Courses for which credit is given). The post-compulsory secondary years should have an integrated curriculum accredited by a single authority (eg. SSABSA). This curriculum would include both in-depth academic subjects (PES) and the broader or vocationally-oriented subjects described previously. It is not envisaged that there would be any raising of entry requirements to tertiary courses as a result of this more flexible
arrangement. Students who are capable of achieving the required standard for entry at year 12 would be free to do so.

An additional and more flexible period of post-compulsory secondary level study could enable the curriculum to satisfy demands of students, potential employers, the tertiary institutions and the community for a broad but useful education without increasing the pressure on students to achieve all these objectives in a single year's study.

The disadvantages of an additional period at High School are also obvious - there would be a substantial cost to the community (for the provision of more teachers and classrooms), to parents (to support their children for an extra year) and to the students, who may not wish to delay their entry to tertiary education for another year. These problems are not insuperable, given the projected declines in secondary enrolments. It should be remembered that most students graduating from high school and from higher education are almost one year younger than their counterparts in most other states, and two years younger than graduates in most of our major trading partners, and that it will be several years before the effects of changes in the entry to school have an impact.

The most serious objection to an additional period for many students is that of equity. Firstly, a significant number of young people from less advantaged families would not be likely to continue on beyond year 12 in order to improve their secondary educational qualifications. If young people from low income families are to have equal access to all forms of post-compulsory education, AUSTUDY would need to be extended and to be provided at a level above that currently available to secondary students.

Even with AUSTUDY many young people from disadvantaged families opt to leave school prior to the completion of a full secondary education. It would be essential for the more flexible structure and the arrangements for
the provision of AUSTUDY to accommodate the needs of those young people who wish to engage in a combination of work at study beyond compulsion, but who have difficulty in obtaining a secure, full-time job. This would require a more flexible structure and timetable and a more adult orientation in secondary schools at the post-compulsory level.

SUGGESTION 25 - THAT A MORE FLEXIBLE PERIOD OF POST-SECONDARY EDUCATION BE INSTITUTED

(b) A Four-year Degree Model

A number of school leavers currently admitted to higher education do not seem to possess the level of knowledge or the maturity to cope with first-year studies in languages, mathematics and the natural sciences. Higher education institutions have responded to this problem in various ways (eg. general first year prior to admission to Law at the University of Adelaide; introductory and bridging courses; study skills programs etc.) A significant proportion of students (up to 60% or 70% in some courses) take more than the minimum time to complete a degree course. A move to a four-year degree would merely represent an official recognition of the defacto situation for many students.

There are many ways in which an additional year could be usefully incorporated into the degree structure, including spreading the progression from year 12 to graduate status over a longer period in order to reduce attrition rates and to broaden the outlook of students. Ideally, any structural change should retain the opportunity for those students able to do so to complete their studies in less than four years. The following model is suggested as one approach to solving this problem:

(i) Entry. The requirements of entry into a four-year degree could be relatively relaxed. Many students now excluded from higher education
because of an inappropriate choice of year 12 subjects or marginal academic performance could be accepted.

(ii) The New First (Foundation) Year. It is envisaged that courses would be redesigned so that the workload is more evenly spread. In the new first year students would spend a reasonable proportion of their time undertaking preparatory studies and developing their general tertiary skills, and some broadening their general education. At this point, some students would enter a professional degree program.

(iii) The New Second Year. This would be essentially the present first-year level group of topics. At the completion of two years' study at a satisfactory level of performance, students would be awarded a certificate (e.g., a Diploma of Arts or Sciences or Tertiary Education). Some would then enter the workforce, and some continue on to complete what are now the second and third years of a degree. The advantages of a four-year degree include the possibility of reducing substantially the waste and human misery created by the growing gap between the schools and higher education, of reducing the pressures on schools from the higher education sector, of postponing selection for professional courses until the end of first year, of encouraging higher education institutions to review their teaching, of providing an alternative qualification, and so on. The main drawback to this proposal is its cost. In the present financial climate, it would be difficult to convince the Commonwealth Government to provide the funds, although the costs may not be as high as many expect.

Despite the financial problems, the hidden costs associated with the mismatch between a US type-secondary system and a British degree structure are considerable. Sooner or later, structural changes will be needed.

Suggestion 26 — That CTEC be asked to investigate the advantages and costs of developing a more flexible degree structure.
(c) The Bridging Year

The two models described above would require substantial if not radical changes. Perhaps a less revolutionary immediate change is necessary, a change which builds upon existing systems and one that is implemented with careful consideration. For want of a better name, it can be called "A Bridging Year". As with the two previous models it aims at a more flexible time frame, but in a less specific way. Students would be given a number of options at the end of year 12 before entry to higher education.

(i) Some could spend an extra year at school (recall that a number already do), taking final year subjects over two years and combining such a program with work experience or preparation for tertiary study or becoming involved in personal extension or enrichment programs. Some may wish to combine school with part-time work, but some would need AUSTUDY support.

(ii) Others may enter a foundation or bridging program at a tertiary institution. Several tertiary institutions already offer such programs and these could be extended and developed.

(iii) Voluntary community work and youth employment schemes could be made available as an option.

(iv) Industries may provide work opportunities for school leavers which they could fund as part of a work-education package (a proposal along these lines has been put forward by mining companies).

In Sweden (16), additional credit is given in the selection process for relevant work or study experience. It is argued that applicants who have seriously explored a range of life options and who are more mature are more likely to succeed in higher education. Studies of first year performance in SA confirm that this is generally the case. Moreover, given the nature of the competencies and experiences one might hope to find in service
professions (teaching, social work, medicine etc.), it would make sense to give preference in selection to individuals who had undertaken voluntary community work and/or had relevant experience in the work force.

SUGGESTION 27 - THAT THE POSSIBILITY OF A BRIDGING YEAR OF GENERAL OR PREPARATORY STUDY OR WORK AFTER YEAR 12 BE EXPLORED BY STATE AUTHORITIES AND BY THE AUSTRALIAN EDUCATION COUNCIL

6.2 Establishment of a Post-compulsory Co-ordinating Committee

At the post-compulsory level, most countries are aiming for a co-ordinated and planned spectrum of courses which will meet the needs of all citizens in a changing world. These needs include the general educational and vocational needs of young people aged 15 to 18 and the particular needs of adults whose occupations are being transformed through changes in the labour market. Industries must become more productive and innovative if they are to survive without heavy tariff protection. The private sector's direct training and retraining effort must be upgraded to that of technologically advanced countries, both at the company level and in co-operation with formal education institutions. Governments and bureaucracies can do much to inhibit (through heavy handed regulation) or facilitate (through sensible funding policies) the efforts of individual institutions and companies.

There is also a need to foster co-operation and links among sectors of education and institutions. Given that resources are limited and the needs of all groups in the community should be given equal consideration, there will remain the need for co-ordination in the provision of courses and services. There is co-ordination and collaboration of a sort through SAGE and SSABSA. But there is still confusion and overlap of functions and courses, articulation and certification problems, injustices and
irrationality in the allocation of resources and so on. There are no effective mechanisms for bringing the interests, needs, priorities and resources of all sectors of post-compulsory education together in a co-operative way. The existing structures tend to be reactive to conditions that arise in the education sector and take relatively little cognizance of the rapidly changing community around them. A proactive stance is more appropriate. The executives of some of the major providers are linked and regulated through a variety of committees and authorities, but there is no co-ordinated state policy or mechanism to facilitate the adoption of such a stance by the post-compulsory system as whole.

One possibility on which the Working Party seeks comment would be the establishment of a South Australian Post-compulsory Education Committee along the lines suggested in an Education and Technology Task Force Working Paper by Power (17). The major functions of such a Committee might be:

(a) to identify the state's post-compulsory educational needs and establish state priorities;

(b) to review the adequacy of educational resources (facilities, equipment, staff and personnel) available in sectors and institutions (this would include an identification of areas of excellence, overlap and need); and

(c) to clarify and to co-ordinate policies, goals and functions of sectors and institutions.

Essentially the Committee envisaged is a small, independent policy advisory group charged with the responsibility for assisting the State Government in the formulation of policies designed to meet the present and emerging post-compulsory education needs of the community. It would be advised by, and co-ordinate inputs from, such groups as SAGE, SSABSA, the SA Education Department, DTAFE, ICTC, Catholic Education Office, ISB, SA
Department for Community Welfare, the Office of Employment and Training and the Office of Tertiary Education.

SUGGESTION 28 - THAT A POST-COMPULSORY EDUCATION CO-ORDINATING COMMITTEE BE ESTABLISHED TO ENSURE THE EDUCATIONAL NEEDS OF 15-18 YEAR OLDS IN SOUTH AUSTRALIA ARE MET

7. RESOURCE IMPLICATIONS

Many of the suggestions put forward in this paper have significant resource implications. Each will need to be costed. At the same time, there are areas listed where existing resources can be re-deployed, savings can be effected and/or wastage reduced.

8. CONCLUSION

The overall aim of the paper has been to "articulate", to perform "the act. of jointing" what exists together. In other words, the Working Party has tried to explore alternative ways of developing a cohesive, co-ordinated framework which facilitates a young person's move through senior secondary post-compulsory schooling into whatever post school pathway he/she chooses, and which keeps options open as long as possible.

Some of the changes suggested are revolutionary, but most are not. Generally the Working Party has tried to recognize the positive features of what already exists and build upon them. It would suggest as well that the transition from school is far from smooth and that there are times when tinkering with a defective structure will not solve the problems.
References


REPORT OF THE
JOINT WORKING PARTY OF THE REVIEW OF POST COMPULSORY EDUCATION AND
THE TAFE/SCHOOLS COOPERATION PROJECT

DECEMBER 1987
In today's society it is imperative that students be able to move easily between the various educational sectors in order that advantage be taken of the full range of educational opportunity. This is especially so for those people who made decisions early in life that appear to have either locked them into one educational pathway or excluded them from another.

The traditional boundaries that have prevented movement between the educational sectors need to be restructured to allow ready access to either higher or different forms of education with recognition being given to the studies previously completed. This is a simple description of the process or articulation.

The attached recommendations reflect the deliberations of the Working Party when it examined the possible processes for articulation between the Secondary School/TAFE and TAFE/Higher Education interface.

WORKING PARTY MEMBERS:

Dr. N. Thompson  SACAE (Chair)
Dr. G. Willmott  SSABSA
Ms. H. Sanderson  SA Education Department
Mr. R. Both  SA Education Department
Mr. J. McCarthy  DTAFE
Ms. G. Ottrey  DTAFE
Mr. D. Alfred  OTE (Secretary)
JOINT WORKING PARTY OF THE ENQUIRY INTO
IMMEDIATE POST COMPULSORY EDUCATION
AND THE TAFE/SCHOOLS CO-OPERATION PROJECT

SECTION 1 RECOMMENDATIONS FOR EARLY ACTION

YEAR 12 AS AN ENTRY STANDARD

1. TAFE to move progressively towards the establishment of completion of Year 12 as the "normal" entry point for Technician Training and Apprenticeship programs, but in the mean time the existing Year 11 entry to TAFE Certificate programs be maintained.

2. That whenever appropriate, and in accordance with agreed procedures, cross-status arrangements between Year 12 accredited subjects and TAFE Certificate courses be negotiated. Negotiations should include the areas of Business Studies, Health and Care, Hospitality, Art and Design, Agriculture and Technology. These cross status arrangements should specifically provide for:

2.1 The inclusion of vocational oriented Year 12 subjects, possibly in combination with TAFE subjects, as a package of subjects suitable for recognition in ICTC traineeship programs. Such programs should also accommodate part-time secondary students who are concurrently meeting entry requirements for Higher Education.

2.2 The offering of traineeship off-the-job programs in schools as another school based part-time work, part-time education program.

3. That the courses of pre-vocational training which are the responsibility of the Industrial and Commercial Training Commission have their content adjusted over time on the basis that completion of Year 12 should become the normal entry point. Such courses will then continue to reflect the first stages of post-school vocational training.

4. That the existing provisions for entry to Associate Diploma of "Satisfactory Completion of Year 12", or equivalent, be continued without specified prerequisites, but that TAFE gives schools broad advice suitable for counselling purposes on the desirable preparatory studies for the various Associate Diplomas.

YEAR 12 CURRICULUM CO-OPERATION BETWEEN SECTORS

5. That Schools, TAFE and SSABSA co-operatively engage in curriculum activity to develop appropriate programs for re-entry students. Such re-entry programs should link to established vocational pathways and accredited programs.

6. Co-operative program arrangements between Schools and TAFE need to be reviewed to take into account:

6.1 the changing needs of industry;

6.2 the Year 11 Work Education Units being developed by the Education Department;

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6.3 the differing needs of country and metropolitan students;

6.4 the changing nature of Year 12 re-entry programs.

7. Where a SSABSA subject is not available for a particular curriculum area or cannot be provided by a school, consideration be given to the provision of suitable TAFE subjects.

7.1 These TAFE subjects are to be accredited by SSABSA before provision to Year 12 students;

7.2 Such TAFE subjects be recorded on the Year 12 Certificate of Achievement and appropriate TAFE assessments indicated;

7.3 These TAFE subjects be made available by Distance Education modes and other modes as agreed to be appropriate.

CO-OPERATION WITHIN A SYSTEMIC POLICY FRAME WORK

8. That the development and continuance of local initiatives in TAFE/Schools co-operation be placed within a clear systemic policy framework. This framework shall include:

8.1 mechanisms which ensure appropriate status, recognition and/or accreditation for studies;

8.2 appropriate identification of needs and priorities for co-operative action;

8.3 mechanisms whereby arrangements can be provided which are equitable and which are broadly accessible to South Australian students;

8.4 mechanisms for appropriate funding;

8.5 a provision that such schemes meet with the needs of a post compulsory education curriculum.

9. That local initiatives of the linked curriculum kind developed between individual TAFE colleges and schools and co-operatively implemented, be given support provided they fit within a systemic policy framework for co-operative activity.

9.1 Arrangements such as those currently identified as the "Blackfriars Model" could be endorsed if they fit within the context of the systemic policy.

SECTION 2 RECOMMENDMENTS FOR FUTURE DEVELOPMENTS

10. That prevocational preparation, recognising the long-term needs and emerging trends in Australian industry for a multi-skilled workforce, be based upon the provision of a broad general education and give priority to the development of "generic vocational skills". This preparation:

10.1 Should not confine students to specific vocational pathways prior to the end of Year 12.

10.2 Should as far as possible be undertaken in schools although this should not exclude the possibility of other structural approaches to the delivery of such a curriculum. (eg Senior Colleges).
11. That the ICTC be asked to provide advice to schools and SSABSA on the content of vocational training programs in order to assist the development of appropriate curriculum.

12. An additional matter for review is the need for professional development/retraining of teachers in schools and TAFE.

SECTION 3 RECOMMENDATIONS - MECHANISMS FOR IMPLEMENTATION

13. That structures be established for co-ordination and co-operative planning between such bodies as ICTC, SSABSA, TAFE, the Education Department, Independent Schools Board, Catholic Education System, OTE, Employer Groups and Higher Education Institutions. The co-operative planning exercises to include:

13.1 A review of the current curriculum available in various "fields of study" in the schools/TAFE/ICTC areas;

13.2 Clarification, and where necessary, development of appropriate common or generic skills/learnings and pre-requisites for the various "fields of study" and occupational training families;

13.3 Making recommendations for the development of "common modules", available in either schools or TAFE, rationalisation of subjects where appropriate and development of new programs to fill obvious gaps;

13.4 Ensuring that curriculum developments are sufficiently flexible to allow students to qualify for entrance to the full range of tertiary education courses.

14. That clear cross-articulation, cross-credit and end-on arrangements be established between post-compulsory vocational education programs at the Certificate, Advanced Certificate, Associate Diploma, Diploma and Degree levels to allow students to progress between the awards, without prejudice and impediment and with appropriate credit for studies undertaken.

SECTION 4 RECOMMENDATIONS CONCERNING ARTICULATION IN THE TERTIARY SECTOR

15. OTE be directed by the Minister to conduct discussions with DTAFE, the Universities and the Colleges of Advanced Education with a view to developing state guidelines for the acceptance of relevant TAFE courses for admission and status in Higher Education courses.

15.1 As a first measure serious consideration to be given to the acceptance of appropriate DTAFE Certificate level studies as a minimum condition for being granted equivalence to a satisfactorily completed "Year 12" for admission purposes to Higher Education Courses.

16. That all Tertiary Institutions include in their curriculum processes, methods to improve mutual communication and co-operation, this may be facilitated by adding representative positions to course planning committees.

17. Funds be provided to OTE to initiate a research program to monitor the number of total applicants with TAFE qualifications who are admitted to the respective Higher Education Insitutions in comparison with other students and the success of the former TAFE students in relation to students selected on the basis of other criteria.
18. OTE establish a formal mechanism whereby, in conjunction with TAFE and the other Higher Education Institutions, credit transfer arrangements for TAFE students are regularly reviewed. These reviews, should aim to reduce duplication of courses at the same level between TAFE and higher education and aim at providing greater flexibility for TAFE graduates wishing to gain professional recognition.

8277C/NT:bmt
SUMMARY OF A SEMINAR CONDUCTED BY

Dr BARRY McGAW

OCTOBER 1987

Dr McGaw is currently Director of the Australian Council of Educational Research. Previously he was Professor of Education at Murdoch University (Western Australia) and has directed major educational enquiries into post-compulsory education and tertiary admission procedures in Western Australia and the Australian Capital Territory.
1. SELECTION

1.1 Dr McGaw provided information on some strategies for better accommodating the post-compulsory student population preparing for higher education. He reminded the group that the immediate post-compulsory student population has broadened and now consists of an increasing number of students not planning to undertake tertiary study. It is equally important to cater for these students as it is to prepare students who wish to pursue tertiary study.

1.2 Reference was made to the WA model where students undertake six subjects in their final year of post-compulsory schooling. Subjects are categorized into two sub-sets; those for tertiary entrance and those not for tertiary entrance. The tertiary entrance subject sub-set has been reduced by removing small subjects and only including subjects which are specifically relevant to tertiary study, thus leaving a broad spectrum of subjects within the non-tertiary sub-set.

(In NSW all subjects are ranked equally: "parity of esteem". In SA PES subjects are regarded as tertiary entrance subjects. Discounted SAS subjects are accepted by CAEs.)

1.3 In WA students must take at least one humanities subject and at least one science subject. If they wish to pursue tertiary study, they must choose at least three subjects from the tertiary entry sub-set and may choose more without penalty.

1.4 Selection is based on a system of sub-aggregates. The average of a sub-aggregate score of a student's best three subjects is one model of selection. To ensure that students don't concentrate solely on three subjects, an inbuilt requirement states that students should pass six subjects. Students also have the option of having the best average of three, four or five subjects being considered for tertiary entrance. This is particularly useful in more selective faculties. Such a framework gives a student greater subject options as well as providing incentive to succeed across all subjects.

1.5 The WA scheme is being monitored and in time researchers will produce useful retrospective data. Thus far two interesting trends are evident:

(i) tertiary bound students of high ability are taking more subjects from the tertiary entrance sub-set and still succeeding.

(ii) students not particularly wishing to pursue tertiary study are more readily undertaking subjects from both sub-sets.

1.6 Overall within this curriculum framework containing two major sub-sets, students have a greater freedom of subject choice and are under significantly less pressure when selection for tertiary entrance is based on the best average of a sub-aggregate rather than an overall single aggregate score.
1.4 Questions and Discussion

Q1: Has the WA system produced a decrease in the number of students doing science and engineering?
Answer: Yes initially, however 1987 figures indicate a return to earlier levels.

Q2: Are pre-requisites desirable?
Answer: Some, but not many. By formalising pre-requisites students are constrained in their subject choices. Tertiary education institutions have stated requirements, but need to act responsibly towards this issue employing a measure of goodwill about each other's requirements.

Q3: In WA students wishing to gain tertiary entrance are required to pass six subjects. Does this put pressure on markers to upgrade borderline marks? (ie "48%ers")
Answer: Yes; however recognize that most tertiary institutions award a concessional pass to such students. Why can't it be treated similarly at the post-compulsory secondary level?

Q4: Wouldn't there be pressure from individual institutions to include particular subjects in a sub-aggregate?
Answer: In WA the framework requires all institutions to use the best average of three, four or five tertiary entrance subjects.

In Victoria students calculate their own aggregates according to the faculty which they wish to enter (many subject variations).

Scaling is essential for this process to work.

Q5: How does a school system cope with additional subjects at year 12? (eg how would it move from 5 to 6 subjects?)
Answer: Realistic recognition that each subject has a "little bit less".

Q6: Can such a system operate over two years? (ie 6 subjects undertaken over two years).
Answer: In WA this varies from institution to institution (universities require one year; other institutions allow accumulation over two years).
Q7: Are subjects in the non-tertiary entrance category moderated?

Answer: Yes, by consensus moderation.

Q8: What comments do you have on the WA model?

Answer: 1. I have a personal dilemma concerning public examinations. In WA it seemed appropriate and right to have publicly examined subjects and yet in the ACT it seemed equally appropriate to dispense with public examinations.

2. It is important to continually review and assess situations so that changes can be implemented without dislocation. Major reviews (every 15 years) cause upheavals and antagonism.

2. SINGLE INDEX/PROFILES

2.1 An aggregate reduces everything to be said about a student to a single index. So much information is lost that moves toward a more comprehensive profile system are being considered by some authorities.

2.2 Dr McGaw described the process by which ACT researchers attempted to identify and eliminate gender-bias against girls in post-compulsory school assessment. He referred to a calibration designed by Daly to adjust both teacher bias and bias in scholastic aptitude tests.

2.3 Reference was made to the work of Masters and Beswick on bias favouring students who undertook maths/science subjects as opposed to a bias against humanities students. Scaling works well with the former and less well with the latter. These biases are frequently translated into a gender bias which suggests that girls do less well in maths/sciences.

2.4 In the ACT it is argued that the following two processes would enhance assessment procedures.

(i) The addition of an essay component in science subjects.

(ii) The scaling of similar subjects into two basic categories: "quantitative" and "verbal". By using two separately scaled aggregates under these categories, students could be selected for engineering, science, etc. on the quantitative score, whilst humanities would select on the basis of the verbal score. Economics, law, etc. would utilise both.
2.5 Profiles are preferred by many because aggregates provide only a single index. Requiring more relevant information is desirable, but the difficulty lies in determining what sort of profile provides optimal information in the most succinct form. Information over and above an aggregate has to be used sensibly and efficiently.

Questions and Discussion

Comment: The University of Adelaide is researching a computer based student profile system. (It has similar programs to those used in medical diagnosis.) Using the 1983 cohort of Adelaide University students, researchers are investigating what factors contribute to the successful completion of a degree in minimum time. From this data a "decision tree" is constructed for future students. Such a computer based profile might be appropriately adapted for Year 12 school leavers.

Responses: * Explore all variables and combinations of variables.
* Possibly drop some fixed variables (e.g. gender).
* Beware of covert rules of which students aren't fully aware.
* Small samples should be avoided.

Q1: With the introduction of a 100 point scale (in S.A.) institutions have great difficulty in selecting between students with tied scores. What can be done to relieve this situation?

Response: Smaller point scales throw away important information which lead to difficulties such as tied places. This can cause hardship, particularly for students at the boundary of selection. In fairness to students, a decimal point system simply acknowledges the imprecision of the scale and overcomes the problem.

Q2: How can we cope with the decimal loss? (SA no longer uses a decimal point system.)

Response: In this case other evidence has to be sought out to differentiate between students with tied scores. This must be done equitably and must not use variables of which students are unaware.

Q3: Some perceive the use of publically examined subjects alone for university selection as a problem. What is your view?
Response: A greater problem is to discern what is the best predictor of success in tertiary study. A measure of performance, with external controls, over a subset, together with a score from a student aptitude test is recommended. Mechanisms for scaling are essential in such a system. Semester units are desirable.

3. SCALING: YES/NO

3.1 "Scaling was introduced because of the problem of not scaling". Scaling addresses the unfairness of incompatibilities between subjects. It adjusts the scores achieved in one subject against the scores in other subjects so making them comparable. Whenever an aggregate is used scaling is essential.

3.2 Difficulties are particularly evident when scaling is applied to small subjects, to very specialized subjects and between essentially different subjects. These difficulties must be addressed.

3.3 State authorities have responded variously to overcome scaling difficulties.

- The Secondary Assessment Board in N.S.W. abolished scaling. However, some tertiary institutions (University of Sydney and others) chose to scale scores. All 1987 results of those seeking entry into tertiary institutions will be scaled by Sydney University.

- Western Australia removes the results of non-English speakers from scaling procedures and then puts their unscaled results back with scaled results.

- Victoria employs tri-lingual examiners to assist with scaling procedures (also South Australia).

3.4 Scaling Yes or No? To re-iterate: "Whenever an aggregate is used scaling is essential".

4. FORMS OF ASSESSMENT

4.1 A variety of assessment forms are practised in Australia. Some states have abandoned public exams while others retain them. Consensus moderation of school assessed subjects is another widely practised assessment mode. A conclusive answer to the question of how much external examination assessment is appropriate has not been reached.

4.2 Dr. McGaw described the Queensland system of consensus moderation. Queensland in the sixties and seventies
employed a seven point subject scale. Four individually assessed semesters of work contributed to a score out of seven for each subject. No external examinations were held. A normative distribution of results for each subject was determined, and each of ten regional areas within the state arranged their results to this pattern. District moderators in each area consulted with schools to reach consensus. A chief moderator co-ordinated the results.

Undesirable responses to this form of consensus moderation included -

(i) Teachers becoming advocates for their students and causing grade inflation.

(ii) The fixed normal distribution of results within a subject often preventing a student's real performance being recognized.

Currently Queensland uses school assessed subjects in association with appropriate student aptitude tests.

4.3 Comments and Questions

Q1: How much practice do students have with aptitude tests?

Response: All students should be given all relevant information on aptitude tests before attempting them.

Q2: Is South Australia's consensus moderation fundamentally different from that described in the Queensland model?

Response: Visitation moderation is conducted at the beginning, middle and end of the year in South Australia. Chief moderators are also able to adjust the final result.

South Australia appears to have a more controlled moderation system than Queensland, which is therefore less likely to be distorted.

Q3: How should the moderation of the 50% school assessed component in publicly examined subjects relate to the external exam? Some suggest that other forms of moderation (other than statistical moderation) would seem more appropriate.
Response: The external exam assesses the core. The school assesses the options.

Q4: Is there research to determine whether external exam results or results obtained from consensus moderation are the best predictors of success?

Response: No, because such schemes have not been run (and researched) concurrently and rarely does research conducted when a system changes from one form of assessment to another produce conclusive results. Both forms are acceptable.

Comment: South Australia is attempting to investigate this question using general adaptability tests, student aptitude tests, etc.

Response: Single global measures have problems, but measurement is necessary.

Q5: What other tests are useful for selection? Are tests of commitment more appropriate?

Response: The University of Newcastle medical facility has attempted measures in this area.

- Personality measures need to be treated cautiously; their validity can be questioned.

Comments: Undoubtedly special entry students have the greatest commitment.

- Swedish authorities suggest that work experience should be used in conjunction with an aggregate when selecting students.

5. CONCLUSION

Dr. McGaw believes that the most significant single change which could be made to ease the pressure of tertiary selection would be to delay selection until the end of a student's first year of tertiary study. He advocated a general first year across faculties within an institution and ideally across institutions. Cost cutting could be achieved by placing students in general facilities where established staff student ratios enable more students per staff member. Dr. McGaw
was not suggesting an extra bridging year nor a four year degree pattern, but a general first year within an existing degree structure.

6. THANKS

Mr. Gilding passed a vote of thanks which was unanimously supported by all participating in the seminar.

ENDNOTE

Since the Seminar, Dr Mc Gaw, in correspondence with the Director of SSABSA, Dr Vivian Eyers, made further comments on the magnitude of the scale on which individual subject results are reported. At the Seminar, he observed that a 0-100 scale implied a degree of precision that was not achieved in examinations but that a reduction to a 0-10 scale threw away information. Reducing the number of points on the scale meant that fine gradations which could not readily be discriminated were no longer presented as though they were different; however, potential errors of measurement were much greater at the smaller number of boundaries on the reduced scale.

The context of this discussion was not so much the reporting of individual subject results but the aggregation of those results to produce some overall achievement measure. Dr McGaw argued that the full 100 point scale, expressed either on a 0-100 scale or on a 0.0-10.0 scale - with the first decimal preserved - should be used to provide the results aggregated and not a reduced 10 point scale.

SSABSA's proposed practice is to report individual subject results on a 20 point scale but to produce the overall aggregate from the 100 point scale scores. This Dr McGaw says avoids the above problem. By reducing the aggregate scale to 100 points rather than an n x 100 scale the implication of fine precision in the aggregate is avoided while still providing a relatively fine grained score. There will still be a considerable bunching of students on single scores particularly towards the middle of the distribution. How these ties are broken is a matter of policy. One suggestion, however, is that such ties should be broken by appeal to more specific, relevant measures - like individual scores in prerequisite subjects - than by use of fine gradations in the aggregate itself.
SETTING THE SCENE

REPORT ON RESEARCH CONDUCTED BY THE COMMITTEE TO REVIEW TERTIARY ENTRANCE REQUIREMENTS

SEPTEMBER 1987
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SETTING THE SCENE
Report on research conducted by the Committee to Review Tertiary Entrance Requirements

OVERVIEW

Early in 1986, the Review of Tertiary Entrance Requirements undertook surveys of teachers and students to elicit their views of the then current one year matriculation arrangement and of the "two year option" proposed by the two South Australian universities. Another aim was to gain insights into why year 12 students chose particular subject patterns and the nature of the problems and stresses said to be associated with year 12 studies, matriculation in particular. Nearly 3000 year 12 students and 1826 year 12 teachers and administrators from 45 schools - Government, Catholic and Independent - participated.

Survey of year 12 teacher/administrators

In general the teacher/administrators and the students tended to complement each other in their responses. Teacher respondents, for instance, saw very much the same things wrong with matriculation as their students: too much content, too much stress and too little opportunity for recreation. Preparation for higher education was seen as an important function of year 12 but many teachers felt that students were inadequately prepared by it.

It seemed as if the teacher/administrators were not well prepared to implement the "two year option". Though in general positive they did not seem to have had sufficient opportunity to think through the implications of a two year matriculation and were undecided about, or unaware of, some of the issues mentioned in the questionnaires.

Certainly they seemed ready for change and most of them (85%) felt that there should be a wider enquiry to look at the relationship of secondary schooling and selection for higher education. With this they wanted the relationship of senior secondary education to junior secondary education to be investigated. Further, there was a feeling that the wider enquiry should use the needs of young people as a starting point rather than the requirements of tertiary education and the workforce.

Survey of students in years 11 and 12

The overall results give a picture of students choosing subjects from a mixture of pragmatism and interest. A closer analysis reveals quite strong differences between groups in motivation and needs and while assigning reasons for these differences will inevitably be speculative, it might nevertheless lead to useful principles.

The first group that emerged clearly were the students from non-English speaking backgrounds of whom many revealed an extreme pragmatism in their reasons for selecting subjects. They, more than students from English backgrounds, chose subjects because they were required for tertiary studies and high scores; they were less inclined to select a subject to keep options open or for interest and sought subjects that contained only a small written English component. These students seemed driven by the desire for qualifications and to have seen little of intrinsic value in their year 12 studies.

Girls, also a traditionally disadvantaged group in education, presented a rather different image. They were far more likely than boys to have selected a subject out of interest yet a quarter of them said that the acquisition of high scores was a very important consideration when selecting subjects. More girls than boys, however, reported that they had been excluded from subjects because they lacked the prerequisite skills or good enough grades. The tendency for girls to abandon mathematics and science is still strong.

Perhaps because of their isolation, country students were - compared with metropolitan students - more reliant on parents and teachers for information about the consequences of subject choices. They seemed the most restricted in their subject choices and aspirations and, within the sample, may have been the most disadvantaged group in terms of educational opportunity.

Popular prejudices regarding young people's literacy skills might find some support from the fact that a third of the students overall chose subjects to minimise the written English component. It
must be a major concern a third also of those doing PES subjects and of those going on to universities also sought to avoid extended written English. Further, there were strong differences between the education systems here: 31% Independent school students seemed doubtful of their written English skills as compared with 41% of students from state schools and 40% from Catholic schools.

The three main problems encountered by year 12 students were (in order of importance): stress; the fact that subjects were covered too quickly for students to take them in, and lack of time for recreation. Students taking Hybrid courses - that is a combination of publicly examined (PES) and School-assessed subjects (SAS) - reported being most severely affected on all these counts. It may be that these courses offer the worst of both worlds - SAS and PES - in that they constitute a heavy workload and involve examinations and continuous assessment.

Hybrid students and those doing SAS, Registered and other subjects, appeared to have been more restricted by timetables than PES students in their subject choices. More of these students than PES students reported being concerned about the eventual value of their subjects and of being excluded from subjects because they lacked prerequisites or good enough grades. They were also more involved in work at home and paid work outside the home than PES students.

The results indicate that year 12 as a whole may have become an increasingly hectic and educationally unsatisfying experience for many young people whether they attempt formal matriculation subjects or other supposedly less demanding courses.
INTRODUCTION

Background to the Enquiry

Towards the end of 1985, concerned about anxiety being expressed among school authorities about proposed changes to the universities' matriculation requirements, the State Minister of Education, the Hon Lynn Arnold, asked the Chairman of the Tertiary Education Authority, Mr Kevin Gilding, to head a Review Committee to look at the proposals.

The Review Committee's Terms of Reference were largely confined to examining the implications of their changes to matriculation statutes and rules being contemplated at the time by the two SA universities but they also included an invitation to recommend a further enquiry should the Committee find that appropriate. In the event the Committee found a degree of community concern about matters surrounding arrangements for matriculation and senior secondary education generally which it recommended should be addressed by means of a wider enquiry.

The Review Committee commented:

Questions about the most effective structure, content and organisation of post-compulsory education raise difficult issues at this time throughout Australia and elsewhere. Changes in economic and social structures brought about by interactive changes in the world economy, in technology, in lifestyles and in social attitudes, have undermined known patterns by which young people were inducted into adult life and the adult working world even a generation ago. In education, changing attitudes towards what is regarded as worthwhile knowledge for young people, possibly the most essential question in all our educational enterprises, are raising persistent philosophical and practical questions.†

The information which is reported in this Working Paper was gathered for the Review during the early months of the 1986 school year. Time and resources available to the Review Committee made it impossible to prepare all the information in an early form. Commenting on this, the Committee also commented on the importance of making the information available to the wider enquiry.

This Working Paper, therefore, is designed to make information gathered for the Review from Year 12 students and teacher/administrators readily available in the deliberations occurring in the Enquiry's various consultative and working groups. In the analyses following emphasis has been placed on those matters likely to be of interest to the Course Articulation and Curriculum Patterns Working Parties. The data which were collected before the nature of the present Enquiry was decided, are insufficient for a thorough investigation of the present issues, but the insights which they do suggest are in a number of cases important.

The surveys:

Early in 1986, the Review of Tertiary Entrance Requirements Committee conducted surveys of teachers and students to elicit their views of the then one year matriculation arrangement and of the proposed two year option. Another aim was to gain insights into why year 12 students chose particular subject patterns and the nature of the problems and stresses said to be associated with year 12 studies, matriculation in particular.

With the assistance of officers from the SA Education Department's Research Unit, Dr Michael Sullivan and Ms Jane Delin, lists of all schools in the three systems (Government, Catholic and Independent) having year 12 students were used to create a representative sample, largely by random selection. Forty-three South Australian Schools were selected and two from the Northern Territory Government system.

Agreement was gained from the selected schools. The questionnaire were trialled in one government school and modified. accordingly. Sufficient questionnaires were then sent to each school with instructions for administering them.

†Committee to Review Tertiary Entrance Requirements, Second Report, SA July 1986, p 31
The teacher/administrators

Administrators with a particular interest in year 12 - overall responsibility, timetabling, coordinating, counselling and the like - were asked to fill in the forms.

Response was on a voluntary basis, and though not generalisable was representative of a wide range of views. Respondents also availed themselves of the opportunity to write extensive comments.

In all, 186 teacher administrators responded.

The students

Questions were generated by the Committee itself, by researchers advising the Committee, from the secondary and tertiary system, and from the findings of preliminary interviews with year 12 and some year 11 students.

It was indicated to schools that the opinion of a few year 11 students would also be of interest, and some schools administered questionnaires to year 11 students.

All selected schools returned questionnaires, though it was clear that in some not all students of the year 12 group had completed them. In all, 2958 forms were completed and returned of which less than 200 were from year 11 students.
YEAR 12 TEACHER ADMINISTRATORS

What the teacher/administrators had to say tended to complement the perceptions of the students, with a rather clearer loss of confidence in current arrangements for matriculation both as preparation for higher education and as a mechanism for selection.

The questionnaire with details of the results is shown in Appendix A.

The teacher/administrator sample included:

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<td>Principals</td>
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<td>Teachers</td>
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<td>Deputies</td>
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There were 115 respondents from South Australian government schools, 8 from government schools in the Northern Territory, 39 from Catholic schools and 24 from Independent schools.

Purposes of year 12

The teacher/administrators felt strongly that preparation for higher education was one appropriate aim for year 12 schooling. Below other aims are listed ranked in order of importance. The percentage of respondents who rated the items as important or very important appears in brackets beside each one.

- Preparation for higher education (98%).
- Preparation for the workforce (91%).
- Preparation for adult life (90%).
- A broad liberal education (83%).
- Completion of secondary education (68%).

However, only 44% of teacher administrators felt that even the first aim was largely realised. More than half (56%) felt that the broader aims of preparation for adult life and a broad liberal education were barely or not achieved.

Current arrangements

The teacher/administrators were asked how they regarded the current arrangements with regard to higher education. While 93% agreed that the arrangements were clear, less than half (48%) believed that they were fair to most students seeking higher education. Fifty percent found the arrangements educationally unsound and nearly 60% held the view that they focus the attention too strongly on examinations. Only 22% found the arrangements socially responsible while two in three (66%) believed they generated unnecessary stress. Eighty-five percent held that current arrangements acted against the development of broad curriculum policies and nearly two thirds (64%) asserted that they had unfortunate effects on teaching and learning.

These responses suggest some loss of confidence in the matriculation arrangements among the group of professional adults with prime responsibility for organising those arrangements in the final year of schooling.

Other answers pointed in the same direction.

Nearly 8 out of 10 (77%) thought that matriculation students experience undue stress. Of these, large majorities believed that there was

- inadequate time for leisure and extracurricular activities (74%);
- too much content to each subject (66%);
• too much emphasis on high scores rather than understanding (79%);
• too much at stake/a "do or die" situation (86%);
• high pressure through examinations (83%);
• pressure to take certain subjects because they might yield high scaled marks (72%).

These were clearly all strongly believed by teacher administrators to be major causes of stress for year 12 students. Neither continuous assessment (33%), nor limited subject range (52%) attracted the same degree of agreement as causes of stress.

Other questions in this series related to the two year proposal put forward by the universities, under which students would have been allowed either to undertake five subjects in one year as now or to undertake six subjects over two years.

Two year matriculation

In general teacher/administrators felt that the proposed two year option had positive rather than negative aspects. Sixtyfive percent said that they would like their schools to offer matriculation over two years and the majority of these felt it should be available to both full and part-time students. A majority thought that it would give students a broader background for university and ensure a more general education for senior secondary students generally.

Relatively few felt that the two year option would increase student stress - 21%.

Interestingly, 75% of respondents felt that the sixth subject should be a school-assessed subject. Though only 40% had thought about what their two year matriculation programme might look like, a majority envisaged a course combining PES and SAS and a similar number saw their courses as including a mixture of PES and Registered and other subjects.

Respondents appeared not to have had sufficient time to work through the implications on programmes and schools of the introduction of the two year option and there were many "Don't Know"s and "Undecided"s to some questions. Issues on which there appeared to be significant agreement are given here with a percentage of respondents beside them.

• Some students will not be able to afford to stay on at school for the two year option (75%).
• At respondents' schools the two year matriculation students would be taught in the same class and with no more "intensiveness" than one year matriculation students (72%).
• The two year option reinforces the interest in discrete and separate upper senior schools on secondary campuses (70%).
• Some students would benefit from the two year option - mainly slow learning or late maturing students and part-time students (74%)
• More classroom space will be required (65%).
• There will be possible additional costs to students and parents (90%) especially to those in Catholic (94%) and Independent schools (92%). Only 63% of government school staff felt that there would be additional costs.
• There will be additional costs to schools (74%).

Conclusions

In general the teacher/administrators saw very much the same things wrong with matriculation as their students: too much content, too much stress and too little opportunity for recreation.
addition many seemed to feel that matriculation did not even prepare students adequately for higher education.

The results indicated that teachers were not well prepared to implement the two year option. Though in general they were positive they did not seem to have thought through the implications.

Certainly they seemed ready for change and most of them (85%) felt that there should be an Enquiry to look at the relationship of secondary schooling and selection for higher education. There was a feeling that the Enquiry should use the needs of young people as a starting point rather than the requirements of tertiary education and the workforce.
Students

Full details of student responses can be seen in Appendix B†. In the course of the present Enquiry some questions from the Student Questionnaire have been identified as being particularly relevant to the Enquiry's two working parties: the Curriculum Patterns Working Party and the Course Articulation Working Party. These questions focussed on the reasons why students chose particular subjects.

Ten factors were listed and students were asked to indicate how important for them each of the factors was in choosing any of their subjects. Three possibilities were offered: "Very important", "Important", "Not important". (Tables compiled from the data immediately follow this section.)

The factors are listed below. Table 3 shows overall figures in answer to this question.

a) It is required for tertiary level study
b) I thought it would be an easier subject for me
c) Teachers advised it
d) Parents advised it
e) It seemed to be an interesting subject
f) The school timetable forced choice
g) It would be easier to get a high score in it
h) It helped to keep options open
i) The need to write well in English is less than in other subjects
j) I didn't have the knowledge or grades required for some other subjects

The data obtained have been analysed using the variables below.

1 Student programmes

Among respondents to the questionnaire, 63% were doing 5 or more publicly examined subjects (PES students) 14% were doing a mixture of publicly examined subjects and school assessed subjects (Hybrid students) and 21% were doing no publicly examined subjects. These students could have been doing any mixture of SAS, SSABSA Registered subjects and or school-based studies not recognised by SSABSA (SAS/Reg/Other students).

2 Student study plans

Half the students (50%) were intending to go on to full-time study' 10% to part-time study, 27% intended to study but not immediately while 11% had no study intentions.

3 Where students hoped to study

Students hoped to go to tertiary institutions as follows:

University 41%
SA Institute of Technology 8%
SA College of Advanced Education 17%
Roseworthy College of Advanced Education 2%
TAFE 10%
Other 8%
- 14%

4 System

Fortyseven percent of respondents were in Government schools, 23% were in Catholic and 30% in Independent schools.

† The figures used in the analysis in this section were obtained from a later printout than that used for Appendix B, consequently there are small differences in numbers but trends remain the same.
5 Language background

In the sample 19% were from non-English speaking backgrounds and 81% were from English speaking backgrounds.

6 Location

A country metropolitan breakdown was done only for Government school students. Of these 1230 students 85% were in metropolitan schools and 15% were in country schools (as identified by the Education Department).

7 Sex

Of the sample 45% were male and 55% female.

Results

As indicated above, several factors were identified by the Review Committee as having an impact on students subject choices. Students were asked how far these considerations affected them. Overall results for this section are given in Table 3 while details of significant responses (< .01) are presented in Tables 4 - 13.

a) Required for tertiary level study (Table 4)

Students were asked whether they selected subjects because they believed they were required for tertiary study. For 3/4 of them it was an important (32%) or very important (46%) consideration. From Table 4 it can be seen that PES students, those intending to go on to higher education and those intending to go on to full-time study, were more inclined to select for this reason. Government students were more inclined to rate it as a very important reason (50%) than either Catholic (41%) or Independent school students (46%). Maybe the fact that students from non-English speaking backgrounds rated the factor more highly than those from English backgrounds (83% of the former said it was very important or important as compared with 77% of the latter) reflects greater motivation on the part of these young people. Similarly, the fact that country students in government schools were less inclined than their counterparts in metropolitan schools to say they chose subjects because they were required may indicate a relative lack of aspiration - or a greater realism.

b) Easy (Table 5)

Students were asked whether they took subjects because they were easy. Overall, 9% said it was a very important factor, 40% said it was important and 47% said it was not important. PES (51%) and Hybrid students (50%) were more inclined than SAS/Reg/Other students (44%) to admit they chose subjects because they were easy. Students who were hoping to go to SACAE or TAFE were more inclined than those going to other tertiary institutions to say easiness was not a factor. Independent (63%) and Catholic school students (49%) were more inclined than government school students (41%) to have selected easy subjects. This may be an indication of the fact that students from these schools mainly undertake matriculation courses while government students select from a range of SAS and Registered subjects for a greater variety of study and job destinations. A similar pattern can be seen in the responses of country and metropolitan government school students (33%, 42%). The hope of going to university is not as great in the country so the race for matriculation is possibly not as intense. Students from non-English speaking backgrounds also reported in greater numbers than English speakers that the easiness of the subject was a very important factor in selection (12%, 9%).

c) Teachers' advice (Table 6)

Overall, 60% of students rated teacher advice as important or very important. Hybrid students (68%) were more inclined than others (PES 61%, SAS/Reg/Other 59%) to have accepted advice. Those who intended to defer (64%) and those who intended to undertake further study part-time (64%) were more inclined to have accepted teachers' advice on subject choice. Possibly they felt a need for help while planning educational futures that were not as straightforward as their...
peers. Catholic and Independent school students also accepted teacher advice on subject choice (64% and 65%) to a greater extent than government school students (58%). Perhaps because of their remoteness, country students also were more dependent on teacher advice (66%) than metropolitan students (57%).

d) Parents' advice (Table 7)

Overall, 57% of students regarded parental advice as an important or very important factor. PES students seemed most independent in this regard: only 7% said it was a very important factor and 46% said it was important. On the other hand, of the SAS/Reg/Other students 19% rated parent advice as very important and 41% said it was important. Students who hoped to attend the Institute of Technology were least inclined to heed parent advice as to subject choice (43%), followed by intending university (53%) and SACAE students (57%). Interestingly parental advice was heeded strongly by TAFE students - 15% rated it as very important and 47% rated it as important. It maybe that parents are a richer source of information about TAFE courses and prerequisites than schools.

Independent school students reported that parental advice had influenced subject choice to a greater extent (60%) than Catholic (56%) or government school students (53%). This may simply mean that middle class Independent school parents have authority in the professions and more knowhow in higher education areas. Perhaps surprisingly, students from non-English speaking backgrounds were less inclined to have heeded their parents' advice (50%) than those from English speaking backgrounds (56%). Probably the parents in these cases did not have the appropriate information to advise. Country students, on the other hand, rated parent advice highly (57%) relative to metropolitan students (52%).

e) Interest (Table 8)

Most students (86% overall) said that interest was an important or very important factor in subject choice. This was most applicable to the SAS/Reg/Other students (88%) who were not bound by the requirements of subject groupings. They were followed by the Hybrid (85%) and the PES (84%). Those aspiring to study at the Institute of Technology were least affected by interest as a consideration when choosing their subjects (78%). Conversely, the students who wanted to proceed to TAFE courses were the most inclined to say that interest was a very important reason for choosing subjects (89%).

Catholic and Independent school students selected subjects for interest (90% and 88%) rather more than state school students of whom 80% said that interest was an important or very important reason for selecting subjects. Students from non-English speaking backgrounds also were a little less inclined (80%) than those from English backgrounds to select a subject for interest. Again, this may be cultural and reflect both the migrant parents' work ethic and their high career expectations of their children.

Country students seemed distinctly less interested in their subjects compared with their metropolitan peers: only 22% rated interest as a very important reason as compared with 34% of metropolitan students. It may be that the range of subject of offerings is relatively small in country schools so students have to select from what is offered than what is interesting.

There were significant sex differences in that girls seemed far more likely than boys to select subjects from interest: 89% of girls said that interest was a very important or important factor in subject choice as compared with 80% of boys.

f) Choice forced by timetables (Table 9)

Overall, most students rejected the tyranny of the timetable as a factor in their subject choice: 72% said that it was not an important factor. Within this scene, however, there were some significant differences between groups.

Those doing SAS/Reg/Other groups and Hybrid courses were rather more inclined than PES students to say that the timetable had forced their choice: 30% and 31% compared with 21% of PES students. The timetabling problem may lie in the fact that the courses are "hybrids": PES biology, for example, might take place at the same time as an SAS subject they might want to do.
Similarly, SAS subjects might clash with school-based subjects and thus restrict student choices.

Those intending to do no further study (29%) were more inclined than those doing full-time (22%), part-time (25%) to report that the timetable forced their choice of subjects. The possibility exists that this may, in fact, have been a factor in their deciding not to proceed with studies.

Government school students (27%) rated timetable constrictions as a factor in greater numbers than Independent (20%) and Catholic (24%) school students. School size may be an important factor since metropolitan state school students (27%) seem more restricted in choice by timetables than country students (24%).

**g) High scores (Table 10)**

About two thirds (67%) of students rated getting high scores as an important or very important factor in subject selection. PES students (71%) were more concerned than Hybrid students (61%) and SAS/Reg/Other students (60%).

Those who intended to follow the accepted path into higher education via full-time study were concerned with high score subjects (69%). Even more concerned were the students who wished to defer but needed to secure their places (72%).

Students hoping to go to the Institute of Technology seemed most concerned with high scoring subjects (76%) followed by those intending to go to universities (73%) and SACAE aspirants (71%).

Independent school students (76%) reported that they were more concerned with high scoring subjects than their counterparts in Catholic (71%) and state schools (59%).

More metropolitan students (62%) went for high scoring subjects than country students (45%) and more students from non-English speaking (71%) than English backgrounds (66%).

Unexpectedly, in view of other research related to ambition in girls, 25% of females as opposed to 19% of males came to rate the acquisition of marks as very important.

**h) Keeping options open (Table 11)**

Nearly all students (86%) reported that keeping options open was a major factor in subject selection. PES students were influenced by this consideration (88%) far more than Hybrid (81%) or SAS/Reg/Other students (78%).

Keeping options open was a priority for people intending to study full-time (86%); however, those who had no study intentions at all also wanted to keep options open (78%). University aspirants were the most concerned (90%), while those hoping to go to the Institute of Technology came second with would be SACAE students (both 84%).

Students from English speaking backgrounds (87%) were more concerned than those from non-English speaking backgrounds (80%) who may have been more concerned as a group with high scoring subjects.

The fact that country students were more concerned with keeping options open (90%) than metropolitan students (82%) perhaps indicates that they were conscious of how restricted their options were.

**i) Written English (Table 12)**

Overall, 35% of students chose subjects with some thought to minimising written English. Nevertheless there were some differences of opinion amongst them. For instance, half the SAS/Reg/Other students said it was an important (34%) or very important factor (15%) in selecting subjects. Nearly a third of PES students (32%) said they chose to avoid written English as did 43% of Hybrid students.

Those students who were hoping to go on to SACAE were more concerned with selecting subjects...
with limited written English requirements (44\%) than students hoping for places in TAFE (42\%),
the Institute of Technology (33\%), and the universities (32\%).

State and Catholic school students seemed more inclined to avoid written English (41\%,
40\%) than Independent School students (31\%). This could well be a class effect but may also
reflect the number of students from non-English speaking backgrounds in the state and Catholic
systems. Students from non-English speaking backgrounds, in fact, did tend to select subjects
with lesser demands for written English - 55\% of them. It may a matter for concern that 34\% of
students from English backgrounds reported avoiding written English, 7\% as a matter of priority.

Interestingly, more metropolitan students (42\%) said they avoided English than country students
(32\%). This may be explained by the more restricted number of subjects available in country
schools and the higher proportion of students from non-English speaking backgrounds in the
metropolitan sample.

j) Prerequisite knowledge and grades (Table 13)

While 50\% overall said they had chosen subjects because they lacked the knowledge or grades for
some other subjects more girls than boys were influenced in this way - 56\% as compared with
48\%. This imbalance may be partly explained by the still evident trend for girls to cut themseleves
off from mathematics and science in the earlier years of schooling only to find later that they have
also cut themselves off from certain courses in senior secondary and tertiary education.

Not surprisingly, SAS/Reg/Other students were the most influenced by this factor and 68\% said
they lacked appropriate grades and prerequisites for some courses with 24\% saying that it was a
very important consideration. Of the Hybrid students a large majority (65\%) said the same while
44\% of PES students reported that it was an important consideration.

Of those going on to full-time study 46\% said they had chosen some
subjects rather than others for which they had insufficient knowledge or grades. Many students
(60\%) with no further study intentions said their subject choice was determined in this way. It is
difficult to say why those who intended to go on to part-time study should have been the ones
apparently most restricted (68\%).

In relation to destinations, those intending to go to TAFE were the most likely to say that their
choices had been limited in this way (68\%), followed by intending SACE students (63\%).
People hoping to go to universities (41\%) or the Institute of Technology (45\%) were least likely to
have been excluded from subjects by lack of appropriate knowledge or grades.

Problems encountered by Year 12 students

Students were asked to rate a series of problems identified in discussions on a 3 point scale "No
problem", "Minor problem", "Major problem". These problems are listed below and the details of
the overall results appear in Table 14.

(i) Subjects covered too quickly for learning them properly as I go.
(ii) Forced choice of subject I did not want.
(iii) Lack of leisure time/social life.
(iv) Too much stress caused by study.
(v) The feeling that my subjects were not going to be of much value to me later on.
(vi) Family finances.

Here the data has been analysed using students' programmes - PES, Hybrid, SA/Reg/Other - as
variables. Detailed results appear in Table 15.

The biggest problem for most students appeared to be stress. Even SAS/Reg/Other students
(79\%) reported feeling stress compared with 86\% of PES students and of Hybrid students. It
could be that continuous school-based assessment causes as much worry as examinations.
Interestingly, more Hybrid students (50\%) reported stress as a major problem than either PES
students (47\%) and SAS/Reg/Other (42\%). With both examinations and continuous assessment
these students may have the worst of both worlds.
The problem rated second was that of subjects being covered too quickly for students to digest properly. Again, more Hybrid students (48%) rated it a major concern, followed by PES (41%) and SAS/Reg/Other students (40%). It has been observed - as a positive factor - that the workload of SAS subjects is as great or even greater than equivalent PES subjects - eg SAS English and Biology. A negative aspect appears not to have been noted, that maybe the content of all these subjects is too much. In fact, a candidate taking PES and SAS subjects may have an even greater workload than the straight PES candidate.

The problem rated third overall was lack of leisure time/social life with 85% of students saying it was a major or minor problem. Again, while more PES students (40%) rated this a major problem, the Hybrid students were not far behind (38%).

The other problems came very far behind the first three. Overall, 54% of students had some worries that their subjects might turn out to be valueless later. Among them, 21% of Hybrid and of SAS/Reg/Other students rated this a major problem as compared with only 14% of PES students.

Rated fifth was the problem of students being "forced" to do subjects they did not want. This appeared to be a problem which affected the Hybrid (46%) and SAS/Reg/Other (43%) students more severely than the PES students (30%).

Finance problems were rated last. These seemed to affect SAS/Reg/Other students more than others but even here more than half (53%) said there was "No problem" in this area.

Housework and part-time employment

No doubt students' problems were exacerbated by the hours that many spent in paid part-time employment. Interesting differences showed up in the number of hours worked by the different programme groups.

Of the PES students, 30% worked in part-time paid employment while 39% of hybrid students worked and 42% of SAS/Reg/Other students. This seems particularly heavy going for the Hybrid students who were also carrying a large study load. Table 1 below also shows a heavy commitment with many of them working 5 hours or more per week, about as many as the SAS/Reg/Other students.

Table 1: Number of hours worked by students in paid employment by programme

<table>
<thead>
<tr>
<th>Number of hours</th>
<th>&lt;5</th>
<th>5 - 10</th>
<th>10 - 20</th>
<th>&gt;20</th>
</tr>
</thead>
<tbody>
<tr>
<td>PES</td>
<td>38</td>
<td>45</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Hybrid</td>
<td>22</td>
<td>58</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>SAS/Reg/Other</td>
<td>24</td>
<td>49</td>
<td>27</td>
<td>0</td>
</tr>
</tbody>
</table>

Hybrid and SAS/Reg/Other students appeared to be also putting in long hours of housework on top of their studies, as Table 2 below shows.

Table 2: Hours of housework undertaken by students saying they did housework by programme

<table>
<thead>
<tr>
<th>Number of hours</th>
<th>&lt;5</th>
<th>5 - 10</th>
<th>10 - 20</th>
<th>&gt;20</th>
</tr>
</thead>
<tbody>
<tr>
<td>PES</td>
<td>52</td>
<td>31</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Hybrid</td>
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<td>22</td>
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<tr>
<td>SAS/Reg/Other</td>
<td>42</td>
<td>27</td>
<td>24</td>
<td>7</td>
</tr>
</tbody>
</table>
Conclusions

The overall results give a picture of students choosing subjects from a mixture of pragmatism and interest. A closer analysis reveals quite strong differences between groups in motivation and needs and while assigning reasons for these differences will inevitably be speculative, it might nevertheless lead to useful principles.

The first group that emerged clearly were the students from non-English speaking backgrounds of whom many revealed an extreme pragmatism in their reasons for selecting subjects. They, more than students from English backgrounds, chose subjects because they were required for tertiary studies and high scores; they were less inclined to select a subject to keep options open or for interest and sought subjects that contained only a small written English component. These students seemed driven by the desire for qualifications and to have seen little of intrinsic value in their year 12 studies.

Girls, also a traditionally disadvantaged group in education, presented a rather different image. They were far more likely than boys to have selected a subject out of interest yet a quarter of them said that the acquisition of high scores was a very important consideration when selecting subjects. More girls than boys, however, reported that they had been excluded from subjects because they lacked the prerequisite skills or good enough grades. The tendency for girls to abandon mathematics and science is still strong.

Perhaps because of their isolation, country students were more reliant on parents and teachers for information about the consequences of subject choices. They seemed the most restricted in their subject choices and aspirations and, within the sample, may have been the most disadvantaged group in terms of educational opportunity.

Popular prejudices regarding young people's literacy skills might find some support from the fact that a third of the students overall chose subjects to minimise the written English component. It must be a major concern a third also of those doing PES subjects and of those going on to universities also sought to avoid extended written English. Further, there were strong differences between the education systems here: 31% Independent school students seemed doubtful of their written English skills as compared with 41% of students from state schools and 40% from Catholic schools.

The three main problems encountered by year 12 students were (in order of importance): stress; the fact that subjects were covered too quickly for students to take them in, and lack of time for recreation. Students taking Hybrid courses - that is a combination of publicly examined (PES) and School-assessed subjects (SAS) - reported being most severely affected on all these counts. It may be that these courses offer the worst of both worlds - SAS and PES - in that they constitute a heavy workload and involve examinations and continuous assessment.

Hybrid students and those doing SAS, Registered and other subjects, appeared to have been more restricted by timetables than PES students in their subject choices. More of these students than PES students reported being concerned about the eventual value of their subjects and of being excluded from subjects because they lacked prerequisites or good enough grades. They were also more involved in work at home and paid work outside the home than PES students.

The results indicate that year 12 as a whole may have become an increasingly hectic and educationally unsatisfying experience for many young people whether they attempt formal matriculation subjects or other supposedly less demanding courses.
### Table 3: How certain factors influenced students' choices of subjects (Overall results)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Very important (%)</th>
<th>Important (%)</th>
<th>Not important (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) It is required for tertiary level study</td>
<td>46</td>
<td>32</td>
<td>19</td>
</tr>
<tr>
<td>b) I thought it would be an easier subject for me</td>
<td>9</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>c) Teachers advised it</td>
<td>10</td>
<td>50</td>
<td>36</td>
</tr>
<tr>
<td>d) Parents advised it</td>
<td>10</td>
<td>47</td>
<td>40</td>
</tr>
<tr>
<td>e) It seemed to be an interesting subject</td>
<td>37</td>
<td>49</td>
<td>11</td>
</tr>
<tr>
<td>f) The school timetable forced choice</td>
<td>9</td>
<td>15</td>
<td>72</td>
</tr>
<tr>
<td>g) It would be easier to get a high score in it</td>
<td>21</td>
<td>46</td>
<td>30</td>
</tr>
<tr>
<td>h) It helped me to keep options open</td>
<td>49</td>
<td>37</td>
<td>11</td>
</tr>
<tr>
<td>i) The need to be able to write well in English is less than in other subjects</td>
<td>8</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>j) I didn't have the knowledge or grades required for some other subjects</td>
<td>16</td>
<td>34</td>
<td>45</td>
</tr>
</tbody>
</table>

### Table 4: Were subjects chosen for tertiary requirements?

<table>
<thead>
<tr>
<th>Programme</th>
<th>Very important (%)</th>
<th>Important (%)</th>
<th>Not important (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 By programme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES (n = 1636)</td>
<td>59</td>
<td>29</td>
<td>9</td>
</tr>
<tr>
<td>Hybrid (n = 342)</td>
<td>28</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>SAS/Reg/Other (n = 547)</td>
<td>23</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>2 By study plans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time (n = 1344)</td>
<td>62</td>
<td>28</td>
<td>7</td>
</tr>
<tr>
<td>Part-time (n = 261)</td>
<td>32</td>
<td>39</td>
<td>26</td>
</tr>
<tr>
<td>Defect (n = 644)</td>
<td>42</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>None (n = 289)</td>
<td>8</td>
<td>23</td>
<td>62</td>
</tr>
<tr>
<td>3 By intended institution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University (n = 1066)</td>
<td>65</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>Institute of Technology (n = 219)</td>
<td>59</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>CAE (n = 443)</td>
<td>50</td>
<td>36</td>
<td>13</td>
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<tr>
<td>Roseworthy (n = 42)</td>
<td>29</td>
<td>48</td>
<td>23</td>
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<tr>
<td>TAPE (n = 254)</td>
<td>20</td>
<td>43</td>
<td>32</td>
</tr>
<tr>
<td>Other (n = 209)</td>
<td>37</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>4 By system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government (n = 1230)</td>
<td>58</td>
<td>27</td>
<td>19</td>
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<td>Catholic (n = 393)</td>
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<td>Independent (n = 773)</td>
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<tr>
<td>5 By language background</td>
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<td>English</td>
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<tr>
<td>Non-English</td>
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<td>12</td>
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<tr>
<td>6 By location (government school students)</td>
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<tr>
<td>Metropolitan (n = 1043)</td>
<td>51</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Country (n = 187)</td>
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<td>25</td>
<td>28</td>
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</tbody>
</table>
### Table 5: Were subjects chosen because they were easy?

<table>
<thead>
<tr>
<th></th>
<th>Very</th>
<th>Important</th>
<th>Not</th>
<th>Important</th>
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<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td></td>
<td>%</td>
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<tr>
<td><strong>1 By programme</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES (n = 1636)</td>
<td>11</td>
<td>40</td>
<td>46</td>
<td>3</td>
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<tr>
<td>Hybrid (n = 342)</td>
<td>5</td>
<td>45</td>
<td>47</td>
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<tr>
<td>SAS/Reg/Other (n = 547)</td>
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<td><strong>2 By study intentions</strong></td>
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<td>Part-time (n = 261)</td>
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<td>Defer (n = 644)</td>
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<td>44</td>
<td>2</td>
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<tr>
<td>None (n = 289)</td>
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<td>44</td>
<td>42</td>
<td>4</td>
</tr>
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<td><strong>3 By desired institution</strong></td>
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<td></td>
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<tr>
<td>University (n = 1066)</td>
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<td>48</td>
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<tr>
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<td>13</td>
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<td>CAE (n = 443)</td>
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<td>TAFE (n = 254)</td>
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<tr>
<td>Other (n = 209)</td>
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<td>3</td>
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<td><strong>4 By system</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Government (n = 1230)</td>
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<td>55</td>
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<td>Independent (n = 773)</td>
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<td><strong>5 By language background</strong></td>
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<td>English speaking (n = 2097)</td>
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<td><strong>6 By location</strong></td>
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<td>Country government (n = 187)</td>
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### Table 6: Were subjects chosen on teachers' advice?

<table>
<thead>
<tr>
<th></th>
<th>Very</th>
<th>Important</th>
<th>Not</th>
<th>Important</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td></td>
<td>%</td>
</tr>
<tr>
<td><strong>1 By programme</strong></td>
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<tr>
<td>PES (n = 1636)</td>
<td>8</td>
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<td>36</td>
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<tr>
<td>Hybrid (n = 342)</td>
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<td>37</td>
<td>10</td>
</tr>
<tr>
<td>Non-English (n = 495)</td>
<td>46</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>By location (government school students)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan (n = 1043)</td>
<td>48</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>Country (n = 187)</td>
<td>54</td>
<td>36</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 12: Were subjects chosen to avoid English?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th>Important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>By programme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES (n = 1636)</td>
<td>7</td>
<td>25</td>
<td>56</td>
</tr>
<tr>
<td>Hybrid (n = 342)</td>
<td>8</td>
<td>35</td>
<td>51</td>
</tr>
<tr>
<td>SAS/Reg/Other (n = 547)</td>
<td>15</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>By further study intentions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time (n = 1344)</td>
<td>10</td>
<td>27</td>
<td>53</td>
</tr>
<tr>
<td>Part-time (n = 261)</td>
<td>8</td>
<td>34</td>
<td>50</td>
</tr>
<tr>
<td>Defer (n = 644)</td>
<td>6</td>
<td>28</td>
<td>54</td>
</tr>
<tr>
<td>None (n = 289)</td>
<td>13</td>
<td>32</td>
<td>47</td>
</tr>
<tr>
<td>By desired institution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University (n = 1066)</td>
<td>7</td>
<td>25</td>
<td>56</td>
</tr>
<tr>
<td>Institute of Technology (n = 219)</td>
<td>9</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>CAE (n = 261)</td>
<td>9</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Roseworthy (n = 42)</td>
<td>8</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td>TAFE (n = 254)</td>
<td>10</td>
<td>32</td>
<td>52</td>
</tr>
<tr>
<td>Other (n = 209)</td>
<td>10</td>
<td>27</td>
<td>52</td>
</tr>
<tr>
<td>By system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government (n = 1230)</td>
<td>10</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td>Catholic (n = 593)</td>
<td>9</td>
<td>31</td>
<td>51</td>
</tr>
<tr>
<td>Independent (n = 773)</td>
<td>8</td>
<td>23</td>
<td>59</td>
</tr>
<tr>
<td>By language background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English (n = 2097)</td>
<td>7</td>
<td>26</td>
<td>57</td>
</tr>
<tr>
<td>Non-English (n = 495)</td>
<td>18</td>
<td>37</td>
<td>35</td>
</tr>
<tr>
<td>By location (government school students)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan (n = 1043)</td>
<td>11</td>
<td>31</td>
<td>47</td>
</tr>
<tr>
<td>Country (n = 187)</td>
<td>3</td>
<td>29</td>
<td>58</td>
</tr>
</tbody>
</table>
Table 13: Were subjects chosen because students did not have the knowledge or grades for other subjects?

<table>
<thead>
<tr>
<th></th>
<th>Very important %</th>
<th>Important %</th>
<th>Not important %</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 By programme</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES (n = 1636)</td>
<td>13</td>
<td>31</td>
<td>51</td>
<td>5</td>
</tr>
<tr>
<td>Hybrid (n = 342)</td>
<td>23</td>
<td>42</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>SAS/Reg/Other (n = 547)</td>
<td>24</td>
<td>44</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>2 By further study intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time (n = 134)</td>
<td>13</td>
<td>33</td>
<td>48</td>
<td>5</td>
</tr>
<tr>
<td>Part-time (n = 261)</td>
<td>20</td>
<td>48</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Defer (n = 644)</td>
<td>19</td>
<td>35</td>
<td>42</td>
<td>4</td>
</tr>
<tr>
<td>None (n = 289)</td>
<td>25</td>
<td>35</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td>3 By desired institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University (n = 1066)</td>
<td>12</td>
<td>29</td>
<td>55</td>
<td>5</td>
</tr>
<tr>
<td>Institute of Technology (n = 219)</td>
<td>9</td>
<td>36</td>
<td>45</td>
<td>10</td>
</tr>
<tr>
<td>CAE (n = 443)</td>
<td>20</td>
<td>43</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>Roseworthy (n = 42)</td>
<td>18</td>
<td>58</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>TAFE (n = 254)</td>
<td>22</td>
<td>46</td>
<td>29</td>
<td>3</td>
</tr>
<tr>
<td>Other (n = 209)</td>
<td>24</td>
<td>36</td>
<td>38</td>
<td>3</td>
</tr>
<tr>
<td>4 By language background</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English (n = 2097)</td>
<td>17</td>
<td>36</td>
<td>44</td>
<td>4</td>
</tr>
<tr>
<td>Non-English (n = 495)</td>
<td>15</td>
<td>34</td>
<td>41</td>
<td>9</td>
</tr>
<tr>
<td>5 By location (government school students)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan (n = 1043)</td>
<td>16</td>
<td>35</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>Country (n = 187)</td>
<td>15</td>
<td>35</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>6 By sex</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Males (n = 1167)</td>
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<td>32</td>
<td>46</td>
<td>6</td>
</tr>
<tr>
<td>Females (n = 1419)</td>
<td>18</td>
<td>38</td>
<td>41</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 14: Problems encountered in the course of Year 12 studies.

<table>
<thead>
<tr>
<th>Problem</th>
<th>No problem %</th>
<th>Minor problem %</th>
<th>Major problem %</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Subjects covered too quickly as I go</td>
<td>11</td>
<td>44</td>
<td>40</td>
<td>5</td>
</tr>
<tr>
<td>(ii) Forced choice of subject I did not want</td>
<td>60</td>
<td>22</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>(iii) Lack of leisure time/social life</td>
<td>15</td>
<td>42</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>(iv) Too much stress caused by study</td>
<td>10</td>
<td>41</td>
<td>45</td>
<td>4</td>
</tr>
<tr>
<td>(v) The feeling that my subjects were not going to be of much value to me later</td>
<td>42</td>
<td>37</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>(vi) Family finances</td>
<td>62</td>
<td>23</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 15: Problems encountered by students in the course of Year 12 studies by programme

<table>
<thead>
<tr>
<th>No problem</th>
<th>Minor problem</th>
<th>Major problem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>(i) Subjects covered too quickly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>9</td>
<td>46</td>
</tr>
<tr>
<td>Hybrid</td>
<td>10</td>
<td>39</td>
</tr>
<tr>
<td>SAS/Reg/Other</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td>(ii) Forced choice of subject</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>65</td>
<td>20</td>
</tr>
<tr>
<td>Hybrid</td>
<td>51</td>
<td>30</td>
</tr>
<tr>
<td>SAS/Reg/Other</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>(iii) Lack of leisure time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Hybrid</td>
<td>20</td>
<td>39</td>
</tr>
<tr>
<td>SAS/Reg/Other</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>(iv) Stress caused by study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>9</td>
<td>39</td>
</tr>
<tr>
<td>Hybrid</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>SAS/Reg/Other</td>
<td>14</td>
<td>37</td>
</tr>
<tr>
<td>(v) Subjects may be useless later</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>Hybrid</td>
<td>37</td>
<td>38</td>
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<tr>
<td>SAS/Reg/Other</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>(vi) Family finances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>66</td>
<td>23</td>
</tr>
<tr>
<td>Hybrid</td>
<td>63</td>
<td>23</td>
</tr>
<tr>
<td>SAS/Reg/Other</td>
<td>53</td>
<td>26</td>
</tr>
<tr>
<td>(vii) Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>31</td>
<td>40</td>
</tr>
<tr>
<td>Hybrid</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td>SAS/Reg/Other</td>
<td>42</td>
<td>12</td>
</tr>
</tbody>
</table>
QUESTIONNAIRE FOR YEAR 12 ADMINISTRATORS: SUMMARY OF RESULTS

INTRODUCTION

The same forty-five schools as those selected for the student survey provided responses to the questionnaire for year 12 administrators. Administrators with a particular interest in year 12—overall responsibility, time-tabling, coordinating, counselling or the like—were asked to fill in the forms. Response was on a voluntary basis, and though not generalisable was representative of a wide range of views. Respondents availed themselves of the opportunity to write comments which were made available to the Review Committee. Some of them have been analysed below.

Raw figures are given without brackets throughout, and percentages are given in brackets. Differences in responses between school sectors have been set out where p < .05.

SUMMARY OF RESULTS

SECTION A: BACKGROUND

1. Position on Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Raw Figures</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>117 (63)</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>68 (37)</td>
<td></td>
</tr>
</tbody>
</table>

2. How clear are you about the new proposals for the 2 year matric option?

<table>
<thead>
<tr>
<th>Clarity</th>
<th>Raw Figures</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite clear</td>
<td>71 (39)</td>
<td></td>
</tr>
<tr>
<td>Reasonably clear</td>
<td>97 (53)</td>
<td></td>
</tr>
<tr>
<td>Unclear</td>
<td>16 (9)</td>
<td></td>
</tr>
</tbody>
</table>

3. Here are some purposes or general aims of year 12 schooling. Please indicate how important they seem to you.

<table>
<thead>
<tr>
<th>Aim</th>
<th>Very Important</th>
<th>Important</th>
<th>Less Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation for higher education</td>
<td>97 (52)</td>
<td>85 (46)</td>
<td>4 (2)</td>
</tr>
<tr>
<td>Preparation for the workforce</td>
<td>62 (33)</td>
<td>107 (58)</td>
<td>17 (9)</td>
</tr>
<tr>
<td>Preparation for adult life</td>
<td>97 (52)</td>
<td>70 (38)</td>
<td>19 (10)</td>
</tr>
<tr>
<td>Completion of secondary education</td>
<td>55 (31)</td>
<td>66 (37)</td>
<td>58 (32)</td>
</tr>
<tr>
<td>A broad liberal education</td>
<td>80 (44)</td>
<td>71 (39)</td>
<td>33 (18)</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>19</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Notes

1. Government school respondents: 115 SA, 8 NT
   Catholic school respondents: 39
   Independent school respondents: 24

2. The year 12 administrators included:

<table>
<thead>
<tr>
<th>Role</th>
<th>Raw Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>25</td>
</tr>
<tr>
<td>Deputies</td>
<td>47</td>
</tr>
<tr>
<td>Student Counsellors</td>
<td>23</td>
</tr>
<tr>
<td>Seniors</td>
<td>35</td>
</tr>
<tr>
<td>Timetablers</td>
<td>1</td>
</tr>
<tr>
<td>Teachers</td>
<td>28</td>
</tr>
<tr>
<td>Year 12 Coordinators</td>
<td>19</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
</tr>
</tbody>
</table>
2. Please indicate how well you feel that the above purposes are achieved under the current arrangements and whether they will be better or worse achieved under the proposed arrangements.

<table>
<thead>
<tr>
<th>Current Arrangements</th>
<th>Purposes</th>
<th>Proposed Arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largely Achieved</td>
<td>Barely or Not Achieved</td>
<td>Better Achieved</td>
</tr>
<tr>
<td>a. 77 (44)</td>
<td>Preparation for higher education</td>
<td>77 (44)</td>
</tr>
<tr>
<td>b. 73 (42)</td>
<td>Preparation for workforce</td>
<td>73 (42)</td>
</tr>
<tr>
<td>c. 97 (56)</td>
<td>Preparation for adult life</td>
<td>97 (56)</td>
</tr>
<tr>
<td>d. 56 (35)</td>
<td>Completion of secondary education</td>
<td>56 (35)</td>
</tr>
<tr>
<td>e. 94 (56)</td>
<td>Broad liberal education</td>
<td>94 (56)</td>
</tr>
<tr>
<td>f. Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes

Question 2:

1. For this question the largest groups only have been shown for each item e.g. for the first stated purpose of education 77 people (44%) thought that preparation for higher education was largely achieved under current arrangements and would be better achieved under the proposed arrangements.

2. System differences on item b, "Preparation for workforce":

Government 54%
Catholic 24%
Independent 18%

(.0004)

SECTION C: CURRENT ARRANGEMENTS

1. The current matriculation arrangements for entrance to university

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Preparation for higher education</td>
<td>170 (93)</td>
<td>10 (5.5)</td>
<td>2 (1)</td>
</tr>
<tr>
<td>b. Preparation for workforce</td>
<td>86 (48)</td>
<td>73 (41)</td>
<td>20 (11)</td>
</tr>
<tr>
<td>c. Preparation for adult life</td>
<td>36 (20)</td>
<td>93 (50)</td>
<td>50 (28)</td>
</tr>
<tr>
<td>d. Completion of secondary education</td>
<td>108 (59)</td>
<td>58 (32)</td>
<td>16 (9)</td>
</tr>
<tr>
<td>e. Broad liberal education</td>
<td>40 (22)</td>
<td>74 (41)</td>
<td>65 (36)</td>
</tr>
<tr>
<td>f. Other</td>
<td>121 (67)</td>
<td>26 (48)</td>
<td>13 (7)</td>
</tr>
<tr>
<td>g. Focus attention too strongly on examinations</td>
<td>6 (3)</td>
<td>153 (85)</td>
<td>21 (12)</td>
</tr>
<tr>
<td>h. Are socially responsible</td>
<td>106 (64)</td>
<td>24 (20)</td>
<td>26 (16)</td>
</tr>
<tr>
<td>i. Are clear</td>
<td>118 (65)</td>
<td>51 (28)</td>
<td>28 (17)</td>
</tr>
<tr>
<td>j. Are educationally sound</td>
<td>136 (74)</td>
<td>61 (33)</td>
<td>16 (9)</td>
</tr>
<tr>
<td>k. Are fair to most students seeking higher education</td>
<td>145 (80)</td>
<td>52 (28)</td>
<td>16 (9)</td>
</tr>
<tr>
<td>l. Are socially responsible</td>
<td>104 (57)</td>
<td>52 (28)</td>
<td>32 (17)</td>
</tr>
<tr>
<td>m. Are clear</td>
<td>118 (65)</td>
<td>51 (28)</td>
<td>28 (17)</td>
</tr>
<tr>
<td>n. Are educationally sound</td>
<td>136 (74)</td>
<td>61 (33)</td>
<td>16 (9)</td>
</tr>
<tr>
<td>o. Are fair to most students seeking higher education</td>
<td>145 (80)</td>
<td>52 (28)</td>
<td>16 (9)</td>
</tr>
<tr>
<td>p. Are socially responsible</td>
<td>104 (57)</td>
<td>52 (28)</td>
<td>32 (17)</td>
</tr>
<tr>
<td>q. Are clear</td>
<td>118 (65)</td>
<td>51 (28)</td>
<td>28 (17)</td>
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<tr>
<td>r. Are educationally sound</td>
<td>136 (74)</td>
<td>61 (33)</td>
<td>16 (9)</td>
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<td>s. Are fair to most students seeking higher education</td>
<td>145 (80)</td>
<td>52 (28)</td>
<td>16 (9)</td>
</tr>
<tr>
<td>t. Are socially responsible</td>
<td>104 (57)</td>
<td>52 (28)</td>
<td>32 (17)</td>
</tr>
</tbody>
</table>

Notes
2. Do you feel that matriculation students experience undue stress under the current arrangements?

Yes 143 (77)
No (go to next question) 42 (23)

If YES here are some suggested causes of stress. Please indicate whether they seem significant to you.

<table>
<thead>
<tr>
<th>Stress Cause</th>
<th>Yes</th>
<th>No</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate time for leisure, extra-curricular activities</td>
<td>106 (74)</td>
<td>27 (19)</td>
<td>11 (8)</td>
</tr>
<tr>
<td>Too much content to each subject</td>
<td>95 (66)</td>
<td>35 (25)</td>
<td>13 (9)</td>
</tr>
<tr>
<td>Too much emphasis on high score rather than understanding</td>
<td>115 (79)</td>
<td>16 (11)</td>
<td>14 (10)</td>
</tr>
<tr>
<td>Too much competition for places in higher education</td>
<td>123 (84)</td>
<td>14 (10)</td>
<td>9 (6)</td>
</tr>
<tr>
<td>Too much at stake/ a 'do or die' situation</td>
<td>126 (86)</td>
<td>7 (5)</td>
<td>19 (9)</td>
</tr>
<tr>
<td>The high pressure of continuous assessment</td>
<td>47 (33)</td>
<td>76 (53)</td>
<td>21 (15)</td>
</tr>
<tr>
<td>The high pressure of examinations</td>
<td>119 (83)</td>
<td>13 (9)</td>
<td>11 (8)</td>
</tr>
<tr>
<td>Subjects bear little relationship to subjects students study at tertiary institutions</td>
<td>24 (17)</td>
<td>71 (48)</td>
<td>48 (44)</td>
</tr>
<tr>
<td>Pressure to take certain subjects because they might yield high scaled marks</td>
<td>103 (72)</td>
<td>31 (21)</td>
<td>10 (7)</td>
</tr>
<tr>
<td>Subject range narrow and constricting</td>
<td>73 (52)</td>
<td>45 (32)</td>
<td>21 (15)</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

SECTION D: EFFECTS OF PROPOSED MATRICULATION REQUIREMENTS ON STUDENTS AND THE CURRICULUM

In this section we are looking at possible effects of the proposed changes on curriculum and students. Please indicate whether you agree/disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Six matric subjects will give the student a broader background for university.</td>
<td>22 (66)</td>
<td>4 (22)</td>
<td>22</td>
</tr>
<tr>
<td>2. The sixth subject could be a school-assessed subject.</td>
<td>139 (75)</td>
<td>27 (15)</td>
<td>18 (10)</td>
</tr>
<tr>
<td>3. The 2 year option will ensure a broader general education for senior secondary students.</td>
<td>106 (57)</td>
<td>47 (23)</td>
<td>38 (20)</td>
</tr>
<tr>
<td>4. The requirement of a sixth publicly examined subject excessively penalises students taking the 2 year option.</td>
<td>26 (14)</td>
<td>131 (71)</td>
<td>28 (15)</td>
</tr>
<tr>
<td>5. Some students will not be able to afford to stay at school for the 2 year option.</td>
<td>139 (75)</td>
<td>20 (11)</td>
<td>27 (15)</td>
</tr>
<tr>
<td>6. The 2 year option will increase student stress.</td>
<td>38 (21)</td>
<td>96 (52)</td>
<td>51 (28)</td>
</tr>
</tbody>
</table>

Notes

Systems difference on item 5:

"Agree":
Government 71%
Catholic 79%
Independent 96%
Here is a list of possible outcomes for schools and programmes resulting from the proposed changes. Show whether you think that these will occur at your school and/or schools in general.

1. Most students will want to take the 2 year matric option.
   a. Likely at my school
      Yes 29 (16) No 85 (46) Don't know 70 (38)
   b. Likely at other schools
      Yes 29 (16) No 19 (10) Don't know 134 (74)

2. Most students would want to do only 3 PES subjects a year.
   a. Likely at my school
      Yes 66 (36) No 64 (35) Don't know 53 (29)
   b. Likely at other schools
      Yes 46 (26) No 16 (9) Don't know 116 (65)

3. Schools would tend to offer year 12 programmes of only 3 PES subjects a year.
   a. Likely at my school
      Yes 16 (9) No 131 (71) Don't know 37 (20)
   b. Likely at other schools
      Yes 17 (9) No 47 (26) Don't know 116 (64)

4. Schools would require full-time '2 year' students to take 5 subjects each year.
   a. Likely at my school
      Yes 17 (9) No 47 (26) Don't know 116 (64)
   b. Likely at other schools
      Yes 60 (33) No 71 (39) Don't know 133 (74)

5. Some students will study part-time and be away from the school for the rest of the time.
   a. Likely at my school
      Yes 91 (50) No 55 (30) Don't know 37 (20)
   b. Likely at other schools
      Yes 71 (39) No 6 (3) Don't know 103 (57)

6. The 2 year matric students will be taught in the same class and with no more 'intensiveness' than one year matric students.
   a. Likely at my school
      Yes 130 (72) No 19 (11) Don't know 32 (18)
   b. Likely at other schools
      Yes 67 (38) No 11 (6) Don't know 98 (56)

7. The 2 year matric option will widen the gulf between PES and SAS courses.
   Agree 75 (41) Disagree 74 (41) No opinion 32 (18)

Notes

System differences:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Government</th>
<th>Catholic</th>
<th>Independent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5a</td>
<td></td>
<td>66%</td>
<td>32%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>16%</td>
<td>39%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>No opinion</td>
<td></td>
<td>19%</td>
<td>30%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Agree</td>
<td>33%</td>
<td>61%</td>
<td>38%</td>
<td>58%</td>
</tr>
<tr>
<td>Disagree</td>
<td>45%</td>
<td>33%</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No opinion</td>
<td>22%</td>
<td>6%</td>
<td>29%</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>
IMPLICATIONS

If the 2 year option becomes widespread more matric students will be adults. What are the implications of this for schools? Please show whether you agree/disagree with the following statements.

1. More senior students will improve the school climate.
   Agree 113 (61)  Disagree 34 (18)  Undecided 39 (21)

2. There will be more effective student leadership with a larger proportion of older students.
   Agree 91 (49)  Disagree 45 (24)  Undecided 50 (27)

3. The 2 year option reinforces the interest in discrete and separate upper senior schools on secondary campuses.
   Agree 129 (70)  Disagree 23 (13)  Undecided 32 (17)

4. The 2 year option provides a good argument for senior secondary colleges on separate campuses (like Tasmania or ACT).
   Agree 90 (49)  Disagree 55 (30)  Undecided 38 (21)

Notes
System differences:

1. Agree Government 68% Catholic 56% Independent 29%
   Disagree Government 13% Catholic 18% Independent 50%
   Undecided Government 19% Catholic 28% Independent 21%

2. Agree Government 56% Catholic 44% Independent 29%
   Disagree Government 16% Catholic 23% Independent 50%
   Undecided Government 26% Catholic 33% Independent 12%

COURSES

The introduction of a 2 year matric programme is likely to affect the whole senior secondary programme. It is possible that in future years a 2 year option may become the norm at year 12. In this section we are looking for some indication of the range of courses schools might offer.

1. Have you considered what range of subjects a student might take in the course of a 2 year option at your school?
   Not yet (Go to next question)  110 (60)
   Yes  75 (40)

If YES please tick all variations that might apply.

<table>
<thead>
<tr>
<th>Full-time</th>
<th>Part-time (If applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All PES?</td>
<td>52 36</td>
</tr>
<tr>
<td>PES + SAS</td>
<td>67 33</td>
</tr>
<tr>
<td>PES + extra registered subjects or extra-curricular activities?</td>
<td>68 29</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>7 3</td>
</tr>
</tbody>
</table>
SECTION E: PROPOSED REQUIREMENTS AND SCHOOL ORGANISATION AND RESOURCES

This section looks at the administrative feasibility of a 2 year matriculation option.

1. Would you like your school to offer a 2 year matric option?
   - Yes
   - No
   - Don't know
     (go to next question)
   118 (65)
   32 (17)
   33 (18)

   If YES would you like to see the 2 year option as (tick one box only) *
   - a full-time course?
     25 (22)
   - a part-time course?
     8 (7)
   - both
     82 (71)

2. Can you estimate what proportion of your current senior students would be interested in a 2 year option for matric?

   0 - 25%     25% - 50%     50% - 75%     75% - 100%     Don't know
   58 (32)     32 (18)     12 (7)     0     80 (44)

3. If your school offered the 2 year matric option how many part-time students would wish to enrol in year 12 at your school?

   No change Less More Don't Know
   26 (14) 2 (1) 65 (36) 87 (48)

4. Are there any special groups of your students that would benefit from the introduction of the 2 year matric option?

   Yes 135 (74)
   No 23 (13)
   Don't know 25 (14)

5. Are there any groups of students you think would be disadvantaged by the introduction of a 2 year option?

   Yes 81 (45)
   No 62 (34)
   Don't know 39 (21)

Notes

1. System differences in answers to question 1:

   Yes    Government 73% Catholic 45% Independent 44%
   No     Government 9% Catholic 32% Independent 13%
   Undecided    Government 18% Catholic 4% Independent 13%

   If YES

   Full-time? Government 13% Catholic 31% Independent 80%
   Part-time? Government 9% Catholic 0% Independent 10%
   Both?    Government 78% Catholic 69% Independent 10%

   Main groups that will benefit:
   Low achievers/borderline/plodders (35 comments)
   Late matures (30 comments)
   Part-time workers/students (21 comments)
   ESL non-English-speaking (17 comments)

   Main groups likely to be disadvantaged:
   Poor/less well-off (47 comments)
   One year option students (12 comments)
   Bright students (12 comments)
In this section we are trying to gain some perception of the effects, positive and negative, of introducing the 2 year option into schools.

1. What do you think would be the main effects of the 2 year option at your school from an organisational/administrative point of view?

   A. Less displacement of staff  
      Likely: 51 (29)  
      Unlikely: 69 (38)  
      Don't know: 59 (33)

   B. More subject specialists will be needed  
      Likely: 74 (40)  
      Unlikely: 91 (50)  
      Don't know: 18 (10)

   C. Difficulty with timetabling full-time students  
      Likely: 63 (35)  
      Unlikely: 97 (53)  
      Don't know: 22 (12)

   D. Difficulty with timetabling part-time students  
      Likely: 95 (56)  
      Unlikely: 52 (29)  
      Don't know: 26 (15)

   E. Senior school will drain resources from junior school  
      Likely: 68 (38)  
      Unlikely: 92 (51)  
      Don't know: 19 (11)

   F. More classroom space will be required  
      Likely: 120 (65)  
      Unlikely: 56 (30)  
      Don't know: 8 (4)

Please comment on your major concern amongst those listed above.

Notes

Systems differences in answers to question 1:

   A. Likely  
      Government: 37% Catholic: 23% Independent: 4%
      Unlikely: 30% Catholic: 31% Independent: 61%
      Don't know: 12% Catholic: 14% Independent: 36%

   B. Likely  
      Government: 44% Catholic: 75% Independent: 59%
      Unlikely: 43% Catholic: 11% Independent: 5%
      Don't know: 21% Catholic: 14% Independent: 36%

   C. Likely  
      Government: 52% Catholic: 89% Independent: 92%
      Unlikely: 53% Catholic: 8% Independent: 8%
      Don't know: 5% Catholic: 5% Independent: 0%
2. Possible additional costs to parents/students?
- Yes 153 (90)
- No 17 (10)

Additional costs to school?
- Yes 116 (74)

SECTION F: COMMENT

1. Should there be a wider inquiry into senior secondary schooling and selection for higher education?
- Yes 148 (85)
- No 27 (15)

If YES what should be the focus of the enquiry? 

2. There is debate nationally in Australia at present about selection for higher education. If there were to be an additional year of formal education, in your view should those resources be spent in schools, or in universities and colleges of advanced education (e.g. on making a common first year the basis for selection for professional studies)? We invite your comments.

Notes

1. System differences in answers to question 2 above (additional costs to schools):
   - Yes  Government 63% Catholic 94% Independent 92%
   - No  Government 37% Catholic 6% Independent 8%

2. Section F Comment:
   There were a great many thoughtful and considered comments which cannot readily be summarised. As has been mentioned, they were all made available to the Review Committee. With that reservation, as a focus for the wider enquiry the administrators generally wanted to investigate the relationship of senior secondary education to junior secondary and to tertiary education. There was a call for a more student-centred approach to the whole topic.
STUDENT QUESTIONNAIRE: SUMMARY OF RESULTS

THE SURVEY OF STUDENTS

Lists of all schools in the three systems (Government, Catholic and Independent) having year 12 students were used to create a representative sample, largely by random selection. Forty-three South Australian schools were selected, plus two from the Northern Territory Government system.

It was difficult to estimate the number of year 12 students in the sample schools, and impossible to predict the success of schools in involving all students. Thus the accurate representation of the total population of year 12 students in the responses received could not be guaranteed. However, this is not vitally important to the picture drawn by the figures, and some correction can be applied if necessary (see the note on page 2 following).

Questions were generated by the Committee itself, by researchers advising the Committee from secondary and tertiary education sectors, and from the findings of preliminary interviews with year 12 and some year 11 students.

The questionnaire was trialled in one government school and one non-government school. A few minor changes were made to the pilot version.

Agreement was gained from the selected schools, and sufficient questionnaires were sent to each school with instructions for administering them. It was indicated to schools that the opinion of a few year 11 students would be of interest, and some schools administered questionnaires to year 11 students.

All the schools returned questionnaires, though it was clear that in some not all students of the year 12 group had completed them. The total return was 2958 questionnaires.

SUMMARY OF RESULTS

Results are given in percentages throughout, unless otherwise stated.

1. What is your sex? Male (66) Female (54)

2. What course are you studying? (circle one number which is the best description)

| Year 11 for the first time | 89 |
| Year 11 repeating | 6 |
| Year 11-Year 12 combination | 54 |
| Year 12 for the first time | 202 |
| Year 12 repeating | 271 |
| Other | 16 |
| No response | 8 |

Notes

1. The figures refer to 2958 returns. Breakdowns are as follows (failures to add to totals or to 100% are due to missing data):

<table>
<thead>
<tr>
<th>Boys</th>
<th>Year 12</th>
<th>Year 11 or mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government: Metropolitan</td>
<td>1252 (46%)</td>
<td>116 (4%)</td>
</tr>
<tr>
<td>: Country</td>
<td>1058</td>
<td>72</td>
</tr>
<tr>
<td>: Total</td>
<td>1228 (45%)</td>
<td>174</td>
</tr>
<tr>
<td>Catholic</td>
<td>594 (22%)</td>
<td>4</td>
</tr>
<tr>
<td>Independent</td>
<td>771 (28%)</td>
<td>1</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>158 (6%)</td>
<td>4</td>
</tr>
<tr>
<td>Language: English</td>
<td>2349 (85%)</td>
<td>164</td>
</tr>
<tr>
<td>Language: non-English</td>
<td>395 (14%)</td>
<td>17</td>
</tr>
</tbody>
</table>

2. Most of the figures given in this Summary refer to the 2751 students undertaking year 12 courses only.

3. The year 12 sample is about 20% of the total year 12 population. However, it is not balanced in terms of gender (there is a slight excess of girls compared with the total) or school system (there is an excess of non-Government school students). Cases can be weighted to make corrections to figures. Generally the figures are sufficiently coarse to gain little from such corrections. In relation to some of those questions in which significant differences in responses for different groupings may have important implications, some additional mention is made in the Notes. There is considerably more information available than can be presented in a Report of this kind, which should be available to the recommended further enquiry.
3. How many Year 12 subjects are you studying? (Put numbers of subjects of each type)

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PES (Publicly Examined Subjects)</td>
<td></td>
</tr>
<tr>
<td>SAS (School Assessed Subjects)</td>
<td></td>
</tr>
<tr>
<td>Registered Subjects</td>
<td></td>
</tr>
</tbody>
</table>

4. Is English the language that your parents mostly speak at home?

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>85</td>
<td>14</td>
</tr>
</tbody>
</table>

5. What are your study plans after completing Year 12?

<table>
<thead>
<tr>
<th>Study Plan</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time study</td>
<td>50</td>
</tr>
<tr>
<td>Part-time study</td>
<td>10</td>
</tr>
<tr>
<td>Study, but not immediately</td>
<td>27</td>
</tr>
<tr>
<td>No further study</td>
<td>11</td>
</tr>
</tbody>
</table>

If you expect further study, where do you want it to be?

<table>
<thead>
<tr>
<th>Institution</th>
<th>Yr11</th>
<th>Yr12</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>(22)</td>
<td>(39)</td>
</tr>
<tr>
<td>Institute of Technology</td>
<td>(8)</td>
<td>(10)</td>
</tr>
<tr>
<td>College of Advanced Education</td>
<td>(11)</td>
<td>(17)</td>
</tr>
<tr>
<td>Roseworthy College</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Department of TAFE</td>
<td>(10)</td>
<td>(16)</td>
</tr>
<tr>
<td>Other</td>
<td>(9)</td>
<td>(9)</td>
</tr>
<tr>
<td>No Response</td>
<td>(22)</td>
<td>(14)</td>
</tr>
</tbody>
</table>

6. There are many factors which lead students to choose a subject at Year 12 level. Indicate how important for you each of the reasons below was, in choosing any of your subjects

<table>
<thead>
<tr>
<th>Reason</th>
<th>Very Important</th>
<th>Important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) It is required for tertiary level study</td>
<td>46</td>
<td>32</td>
<td>19</td>
</tr>
<tr>
<td>(b) I thought it would be an easier subject for me</td>
<td>9</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>(c) Teachers advised it</td>
<td>10</td>
<td>50</td>
<td>36</td>
</tr>
<tr>
<td>(d) Parents advised it</td>
<td>10</td>
<td>47</td>
<td>40</td>
</tr>
<tr>
<td>(e) It seemed to be an interesting subject</td>
<td>37</td>
<td>49</td>
<td>11</td>
</tr>
<tr>
<td>(f) The school timetable forced choice</td>
<td>9</td>
<td>15</td>
<td>72</td>
</tr>
<tr>
<td>(g) It would be easier to get a high score in it</td>
<td>21</td>
<td>46</td>
<td>30</td>
</tr>
<tr>
<td>(h) It helped to keep options open</td>
<td>49</td>
<td>37</td>
<td>11</td>
</tr>
<tr>
<td>(i) The need to be able to write well in English is less than in other subjects</td>
<td>8</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>(j) I didn't have the knowledge or grades required for some other subjects</td>
<td>16</td>
<td>34</td>
<td>45</td>
</tr>
<tr>
<td>(k) Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes

1. The mixture of pragmatism and interest which seems to guide subject choice may in fact be brought about partly by the different aspirations of students. Later, more detailed analysis will test this hypothesis.

2. Part (j) gave an expected result:

<table>
<thead>
<tr>
<th>&quot;English&quot; background</th>
<th>Very Important</th>
<th>Important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;English&quot;</td>
<td>7%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>&quot;Non-English&quot;</td>
<td>26%</td>
<td>35%</td>
<td></td>
</tr>
</tbody>
</table>

This is statistically highly significant (p<0.0001)
7. (a) Is it clear to you how students are selected by universities etc. for higher education?  
Yes (57)  No (42)
(b) Did you have adequate and clear information to help you to make subject choices for Year 12?  
Yes (80)  No (19)
(c) If yes, where did you get your information from?  
(Circle the number which indicates the importance of the source of information)

<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Important</th>
<th>Minor</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>your parents</td>
<td>(26)</td>
<td>(32)</td>
<td>(62) S E</td>
</tr>
<tr>
<td>your sister(s) or brother(s)</td>
<td>(12)</td>
<td>(17)</td>
<td>(71) E</td>
</tr>
<tr>
<td>teacher</td>
<td>(53)</td>
<td>(20)</td>
<td>(26) S L</td>
</tr>
<tr>
<td>school counsellor</td>
<td>(35)</td>
<td>(17)</td>
<td>(48)</td>
</tr>
<tr>
<td>university, college of advanced education etc.</td>
<td>(22)</td>
<td>(18)</td>
<td>(60) S</td>
</tr>
</tbody>
</table>

(d) If you answered 'No' to (b) what sort of information did you lack?  
Yes (19% of total)  No (81%)

1. what is needed to enter courses of higher education  
(1) Yes (14)  No (5)  S L
2. what would be suitable for you  
(11) Yes (6)  No (6)  S L
3. what you would need to have studied before Year 12  
(11) Yes (7)  No (4)  S L E
4. what you would be likely to succeed at  
(11) Yes (7)  No (4)  S L E
5. how hard Year 12 would be  
(11) Yes (7)  No (4)  S L E
6. other (specify)  
(11) Yes (7)  No (4)  S L E
de (e) Is it important that any of this information is given before Year 11 starts?  
Yes (91)  No (6)  G
(f) Was some of the information given to you too late?  
Yes (51)  No (41)  S L E

(g) Which year should the earliest information have been made available to you?  

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-year</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>1-year</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>Undecided</td>
<td>29%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Note:
These figures will be of particular concern to schools, but clearly the tertiary bodies have an interest in helping to provide information to students.

8. Are there any subjects you would like to study at Year 12 level?  

(a) that are not available at your school?  
Yes (63)  No (33)  S L G E
(b) that are available but you were not able to take?  
Yes (23)  No (67)  S L

Which subject(s)?
(a)...........................................................................
Which subject(s)?
(b)...........................................................................

9. Please read ALL the answers before circling a number
If you are planning to go into higher education, next year or later, indicate which of the following choices you would make, or would have made, if they were available.
I would choose to do 3 PES subjects in one year.  
(26)
I am not sure which choice I would make.  
(37)  S L G E

Notes:
1. Question 9 was a central one in relation to the two-year option. Ninety-three percent of students replied to it, which is more than the number intending to go on to further study.

Overall responses were:
To choose to do PES subjects in two years 26%
To choose to do all in one year 37%
Undecided 30%

2. The Year 11 group was largely from government schools, and its response pattern was nearest to the government-country group of year 12. Patterns were:

<table>
<thead>
<tr>
<th>Country-year 12</th>
<th>Year 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-year</td>
<td>36%</td>
</tr>
<tr>
<td>1-year</td>
<td>24%</td>
</tr>
<tr>
<td>Undecided</td>
<td>29%</td>
</tr>
</tbody>
</table>

Actually being in year 12 may not, therefore, make much difference to the choice made.

3. Comment on responses to the two-year option can be found in the final document of Appendix 4 of the first Report of the Review Committee.
10. Indicate whether these possible reasons for making a choice (given below) would be important in your case. Answer either part A or part B, whichever is appropriate.

A strong reason  Not a strong reason  (49% of total)

A. I would choose to do the two year option if I had the chance ... because ...

(41)  (8) S L
(25)  (23) L S
(34)  (15) S E
(45)  (4) S G E
(49% of total)

It would help me to get a higher score.

I would be able to do other subjects that I like.

I would have more time for other things besides school work.

There would be less pressure on me.

Other reason (describe)

B. I prefer the current system of doing 5 subjects at Year 12 ... because ...

(34)  (20) S G E
(18)  (35) S L G
(43)  (11) S L
(54% of total)

I would feel I had had enough time in school.

I would not want my family to support me for another year.

I would like to get Year 12 studies out of the way as quickly as I could.

Other reason (describe)

11. At your school, are SAS subjects available?

Yes  No  (93)  (5) S L G

Have you been given information about them?

Yes  No  (84)  (14) L G E

Are you interested in studying any of them?

Yes  No  (41)  (55) S G E

Notes:

1. Some students replied to both parts of question 10, presumably because they had not made a choice between the alternatives. This group can be excluded from the figures, but its opinions do have value.

2. The strongest reasons for choice are practical rather than educational. Thus the 2-year choosers tend to think that getting a higher score and relieving pressure are more important than doing other things, and many 1-year choosers want to finish school studies as quickly as possible.

This pragmatism by students is, of course, natural and expected. It is further reflected in the ways they would spend one or two years at year 12 level. Four times as many students would prefer to have a free choice of five subjects as would be content with the present system of two groups for choices. By far the most popular choices if two years were the norm involve the minimum number of courses in each year.

12 A If you could spend only one year in year 12, which of the options below would you choose, if all were possible?

(a) Five PES subjects, in any combination which suited my wishes
(b) Five PES subjects, with at least one having to come from each of two groups, as at present
(c) Four PES subjects and one SAS
(d) Three PES subjects and two SAS
(e) Some other combination equal to five subjects

In the 1st Year  In the 2nd Year

(53)  (13) S G E
(3)  (8) S C
(19)  (20) S L G
(23)  (11) S L
(9)  (4) S G E

12 B If you were spending two successive years on Year 12 studies, and could choose from the options below, which would you choose?

(a) Three PES subjects only
(b) Three PES subjects plus one or two other subjects (PES or SAS)
(c) Three PES subjects plus one or two non-assessed but interesting subjects (eg drama, photography, school newspaper etc.)
(d) Less than 3 PES subjects

In the 1st Year  In the 2nd Year

(46)  (29) S G E
(13)  (1) S L G
(11)  (1) S L
(4)  (4) S G E
(19)  (36) S L G

Notes:

1. It is interesting to speculate on the reasons why 17% of students expressed their options for 1 year only in 12B.

2. The combinations chosen for 2 years are of interest. For options (a)-(d) or (0) as above, the most popular combinations were:

(a)-(0) or (a)-(a), 36%; (c)-(0) or (c)-(a), 11% (b)-(0) or (b)-(a), 9%; (a)-(d), 8% (b)-(c), 7%; (a)-(b), 6%; (a)-(c), 5%; (b)-(b), 5%

Thus most students would take a line which was less demanding on them rather than taking the opportunity to broaden their interests.
13. Do you have part-time work?  
   Yes  (35)  No  (65)  S L E

14. If so, about how many hours/week? (Put just one number – a rough average if necessary)  
   Work  N=932  House  N=2071  Hours
   (29)  (50)  1-5  
   (48)  (31)  6-10  
   (21)  (15)  11-20  
   (4)   (5)   20+

15. How many hours a week on average do you help at home e.g. shopping, cooking tea, other housekeeping, in ways which prevent you from studying at the same time.

Notes:
1. The proportions of students undertaking part-time work were in balance with the total gender split, but boys tend to work longer hours.

2. There were no gender differences for work in the house.

3. The range of demands placed on students outside the school is extreme. It is clear that the term "full-time student" does not describe the same way of life for all. The principle of equal educational opportunity for all year 12 students is very much weakened by such factors.

16. During your Year 12 studies, which of these are/were problems for you?

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<th>(ii)</th>
<th>(iii)</th>
<th>(iv)</th>
<th>(v)</th>
<th>(vi)</th>
<th>(vii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects covered too quickly for learning them properly as I go.</td>
<td>Forced choice of subject I did not want.</td>
<td>Lack of leisure time/social life.</td>
<td>Too much stress caused by study.</td>
<td>The feeling that my subjects were not going to be of much value to me later.</td>
<td>Family finances.</td>
<td>Any other problems, including family pressures (describe).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No problem</th>
<th>Minor</th>
<th>Major</th>
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<tr>
<td>(11)</td>
<td>(44)</td>
<td>(40)</td>
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<td>(11)</td>
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<td>(17)</td>
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<td>(11)</td>
<td>(22)</td>
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</tbody>
</table>

Notes:
1. A number of "other problems" were referred to, but most of these were described as "no problem" for the student responding. The most likely cause for these contributions seems to be that students were trying to be helpful in drawing attention to difficulties experienced by others; the whole tone of the questionnaire responses indicated this.

2. Some of the problems and pressures for many students are hinted at in questions 7 and 13-16. Apart from about 1 in 5 feeling that they had not been adequately informed about subject choice, and 2 in 5 being unclear about selection methods, there are non-school demands on most students. About one-third have part-time work, and nearly 2 in 5 work 6 or more hours in the home each week. Major problems for about 2 in 5 are the speed of school work, the lack of leisure time and stress caused by study.
FACTS, FIGURES AND COMMENTARIES ABOUT SENIOR SECONDARY EDUCATION

A background paper prepared by the
Enquiry into Immediate Post-Compulsory Education

DECEMBER 1987
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SECTION I

INTRODUCTION

CHAPTER 1 : The Data Gathering Programme

Following preparation of its discussion paper of May 1987, the Enquiry sought advice from its Reference Groups and its Working Parties about data which should be gathered to give some appreciation of the current position in immediate post-compulsory education, in addition to that which could be expected from submissions. A Research Management Group of highly qualified educators was convened whose particular function was to consider this advice and to advise further on research methods and approaches to be used (see attachment 1).

In the work done to focus issues for the discussion paper it had been established that some of the concerns centred on the proportion of the fifteen to eighteen year old age group remaining in formal education, while some centred on the nature of the experience of those who stayed in school and some on the nature of the experience of those who did not remain there.

It was decided that quantitative and qualitative data would be needed to give the Enquiry a data base which showed participation in statistical terms and indicated what that meant in terms of the experience of young people. Information about curriculum was regarded as being particularly important, both in terms of experience in school and of its usefulness thereafter.

Quantitative data

Existing sources of statistical information for senior secondary school curriculum were found to be the Senior Secondary Assessment Board of South Australia (SSABSA) and the Education Department of South Australia (the Education Department). SSABSA, whose brief is accreditation and assessment at year 12 level, holds records of candidates for SSABSA certificates, who must enrol as SSABSA candidates early in year 12. This means that SSABSA has records indicating both the percentage of candidates taking particular subjects and the subject combinations undertaken by individual candidates, from all schools, government and nongovernment, preparing students for SSABSA certificates. SSABSA data do not extend to year 11 nor to non-SSABSA courses in year 12.
The Education Department's curriculum statistics are routinely gathered subject by subject for each year of secondary school from all departmental schools with secondary classes. These records can indicate what percentage of students are taking any particular subject. They do not disclose subject combinations undertaken by individual students. The Department's figures, however, ordinarily do not extend to returns from nongovernment schools. In view of the limited time and budget available to the Enquiry it was decided that both sources of information should be drawn upon to the greatest extent possible, rather than pursue major additional statistical data collection about curriculum.

After a preliminary trial with the cooperation of the Education Department and a nongovernment school, all nongovernment schools with senior secondary classes were asked to complete the same 1987 curriculum statistics return for years 11 and 12 as that completed routinely by departmental schools. This gave a directly comparable data base state-wide for subject-by-subject curriculum statistics for the senior years. It was agreed that attempts would be made to gain some indication of common curriculum patterns in student programmes at year 11 through the qualitative data gathering.

Qualitative data

The qualitative data were gathered by structured interviews held with groups of six to eight young people in a wide range of environments. Interviews were also held with teachers and administrators in most of the environments. The interview programme was directed by an Education Department Research Officer, in consultation with the Enquiry Chairman and staff and with advice from the Research Management Group. Interviewers, all of whom had tertiary qualifications, worked from a common set of instructions which had been the subject of a briefing discussion and returned their findings through debriefing meetings and notes kept during the interviews. The notes were subsequently analysed in detail by an experienced research assistant. Interview groups were in years 10, 11 and 12 at school, or doing courses in Universities, Colleges of Advanced Education or Colleges of Technical and Further Education. Others were with the Community Youth Support Scheme, in full-time employment and in Education Bridging Courses (see attachment 2). The young people were mainly in their first year or their third year out of school though some were a little older.

Twenty schools took part in the interview programme. The schools were chosen to give as broad as possible a range of perspectives, taking into account criteria of size, system, locality, cultural composition, gender/s of enrolment and extent of course offerings. Groups within schools reflected a spread of cultural backgrounds and abilities. Similar efforts were made to ensure as broad as possible a representation in the post-school interview groups.

The interview information was sought to fill out the statistical information about curriculum, to give additional insight into the meaning of the figures. The findings from this data cannot be regarded as definitive or comprehensive. The findings are, however, clearly indicative of how many young people perceive their senior secondary school experience.
Particular attention was paid during the gathering of qualitative information from schools to the learning and teaching of mathematics in years 11 and 12. To ensure that the kinds of questions to be asked would reflect accurately current concerns about mathematics education a steering group of people with interest and high levels of experience and expertise in mathematics education was drawn together to shape a specific programme of interviews on mathematics (see attachment 1). From discussion in the steering group of concerns about mathematics a structure of questions for students and teachers emerged. These questions guided the mathematics interviews, which were conducted by four members of the group. Seven schools involved in the general interview programme took part in the mathematics interviews. Groups of students interviewed in this part of the total programme were all undertaking mathematics of some kind in the senior school, either in year 11 or in year 12. Teachers interviewed taught maths at this level. Following their visits to schools the maths interviewers took part in a general debriefing with the other interviewers, to hear the information about mathematics brought forward in the general programme, and they met together to share the specific information they had gathered.

The findings from the mathematics interviews are outlined in detail in attachment 3, organised under the same major headings as those which guided the interviews.

In the reports of the interview data from both the general programme and the maths programme the observations reported were all noted by at least two of the interviewers and, unless otherwise indicated, were consistent with the other interviews.

In the next chapter some indication is given of the changes which have occurred in retention rates into senior secondary schooling during the last twenty years and those which are projected into the nineteen nineties. Attention is also drawn to changes in the take-up of year 12 certificate studies since the advent of the Senior Secondary Assessment Board in 1984.

The second section of the paper describes how the young people, and the teachers who were interviewed, perceived school experience and its relationship with what happened subsequently in the young people's lives.
Participation in post-compulsory education
S.Aust 1975-1986

Year

Source: SSABS A
PARTICIPATION AND RETENTION

Past, present and projected retention rates into the senior secondary school indicate the measure of changes in the school population which have occurred over the last 20 years. While 19% of year 8 students remained at school for year 12 and 48% for year 11 in 1967, in 1986, 55% remained for year 12 and 85% for year 11. By the year 2000 virtually all students are expected to complete year 11 and an estimated 90% will remain for year 12.

Participation in technical and further education has risen considerably during the same two decades. For example entry to apprenticeships increased from about 2000 in 1966 to almost 4000 in 1985, with increasing numbers entering from year 12 and year 11 rather than year 10.

The number of year 12 leavers going into higher education has not risen commensurately. Indeed, as the Figure on the preceding page shows, over the past few years the number of people going into higher education has stabilised and they form a decreasing proportion of the year 12 population.

Thus the traditional users of senior secondary schooling, the institutions of higher education, have not received proportionally increased members of young people during this period. For many young people staying at school the purposes of senior secondary education are not the traditional purposes of preparing to enter university.

In other words the trend of the last two decades has been towards universal education for the two years immediately following the age of legal compulsion to attend school, and the main institutions delivering educational service to 16-17 year olds are the schools, with some overlap with institutions of TAFE.
The only current rules about curriculum patterns in senior secondary schooling are those set out in the matriculation rules of the SA Universities. The rules were established for entry to university in 1965, at a time when South Australia was embarking on the State's second university, when entry to the teachers' colleges (the precursors to the South Australian College of Advanced Education) was from year 11, and when youth unemployment was yet to be experienced in any large dimensions. The matriculation examination, which was conducted by the Public Examinations Board until 1984, is usually taken by school students at the end of year 12.

In order to matriculate students must sit for five university approved subjects in one year. All the subjects approved for matriculation contain 50% of their assessment by public examination. Indeed, the category of "PES subjects" (or publicly examined subjects) is the same as the category of subjects approved for matriculation. Approved subjects fall into two groups, broadly classified as humanities and sciences and matriculants must take at least one from each group. (Introduction of a third group of subjects was proposed by the Universities in 1985 but has not proceeded pending the outcome of the Enquiry.)

Students' matriculation scores are calculated as a single figure by aggregating scaled results in their five, or five best, subjects. From 1989 candidates who have undertaken five subjects in one year may repeat or add subjects for the purpose of improving their score in the following year.

As senior secondary school enrolments began to rise from the nineteen sixties, curriculum development was undertaken to provide alternatives to the Public Examinations Board matriculation courses for students not intending to go on to higher education. These courses were acknowledged in the Senior Secondary Certificate issued by the Education Department. In 1984 the Senior Secondary Assessment Board of South Australia (SSABSA) replaced both the Public Examinations Board and the certifying function of the Education Department, with a charter to issue a single certificate at year 12 level. Four categories of year 12 subjects for SSABSA certificates are now commonly recognised in schools: publicly examined (PES), school assessed (SAS), community studies (which are also school assessed but rather differently) and registered subjects.

Since the inception of SSABSA the numbers of students enrolling for year 12 certificates who take school assessed subjects only or hybrid combinations of publicly examined and school assessed subjects has risen considerably. The number undertaking a matriculating group of subjects during this time has remained relatively constant.
In 1987 SSABSA has over 90 accredited subjects listed for certificate purposes, some with multiple choices within them. (All these categories of publicly examined subjects, school assessed subjects and community studies are accredited.) These syllabuses have been through an extensive development and approval process and student performance in them is examined or moderated by the Board. In addition the Board has registered some 400 subjects and includes reports of performance in these subjects on the certificate without requiring the full approval process of accreditation.

While SSABSA recorded approximately 14,500 enrolments in certificate studies for 1987, a small proportion of which are likely to be from composite groups of year 11 and 12 students, Education Department records suggest that there were about 15,500 students enrolled in year 12 throughout the State. While it must be recognised that a number of students leave school during the early part of year 12 and have many reasons for doing so, these figures imply that SSABSA-approved courses do not yet pick up the whole of the cohort remaining in school.

Coding for Education Department curriculum statistics allows more than 150 entries for year 11 subjects, some of which contain more than one subject title. Similarly there are approximately 130 code entries for year 12.

Material is available in this data which indicates time commitment to various subjects and also makes possible gender and some socio-economic breakdown. Detailed investigation of the data was not possible for the Enquiry at this time but would be of considerable assistance in the implementation of its recommendations, especially those for curriculum reform.
As could be expected, an interview programme of the dimensions undertaken by the Enquiry produced a wealth of complex information. Some hypotheses were confirmed: for example, the importance of teachers to students, and some myths were challenged: for example, that the larger the school the larger the perceived range of choices for individual students.

The summary contained in the following section of the paper gives an overview of the data obtained. It reports the major common themes in the findings and draws attention to the absence of commonalities where they were observed. It does not fully report the extent of the complexity in the data.
CHAPTER 3 : Curriculum

CURRICULUM PATTERNS

Curriculum Patterns within student programmes

One interviewer reported explicitly that the students she spoke with, in higher education, had difficulty in comprehending the concept of a course of study or a pattern of studies in senior secondary school. Analysis of the data from interview notes in these terms also proved difficult. What did emerge was the students' view that every senior secondary teacher thought of their own subject by itself, rather than as part of a student's total programme. "Each teacher thinks we only have his/her subject to do," and "Every teacher wants their subject to be the highest priority".

A related theme, apparent in the research for the 1986 Review of Tertiary Entrance Requirements and again in the 1987 interviews with year 12 students, was the total volume of work expected of full-time students in year 12, especially those undertaking courses for higher education entry. Programmes of publicly examined subjects and of school assessed subjects alone or combined attracted similar complaints about excessive work load. In 1986 84% of respondent students had commented that covering subjects too quickly for learning them properly was a minor or a major problem for them, with 86% complaining of too much stress caused by study. In 1987 the year 12 students continued to make comments about the work load such as "too hard", "impossible", "too much crammed into year 12". The work was not seen as inherently too difficult. There was, the students held, just too much of it.

1 Setting the Scene, Report on research conducted by the Committee to Review Tertiary Entrance Requirements, Enquiry into Immediate Post-Compulsory Education, 1 September 1987.

2 At this time only subjects with a public examination component in their assessment are available for university entry, though school assessed subjects can be included in an aggregate score for entry to the SA College of Advanced Education with a certain discount.
Many students also commented that preceding years had not prepared them for the year 12 work-load, while year 11 students found a big jump from year 10 as well. These comments, taken together, suggest a picture of fragmentation within the young people's educational experience: that within the programme of an individual student a number of subjects are studied during the senior secondary years, with little connection between them. Those young people who were aware of the matriculation grouping rules, currently the only required pattern of senior secondary studies, regarded their value with scepticism.

Curriculum Patterns across student programmes

Experience was rather similar in relation to investigating whether any commonalities exist currently in senior secondary programmes, especially at year 11. The statistical material suggests that during year 11 100% of students study something specifically involving some aspect of English, (ie under codes either of English, English as a Second Language or Developmental or remedial English or Reading) with apparently 95% undertaking a subject coded specifically as English. It proved to be impractical in the interview programme to gain information more precisely about what is contained in schools' English programmes at year 11, or, indeed, prior to that time, or about how much there is in common among them. This is an area of investigation which appears to warrant more attention.

In Mathematics the differences are more apparent. There are eleven codes for mathematics-based subjects in the curriculum statistics, taking Maths 1 and 2 as a single code. Added together, again on the assumption that no one student is enrolled in subjects involving more than one code, these figures suggest that 91% of students in year 11 are doing something called mathematics of some kind. The interviews, however, indicated that the degree of common experience within these subject labels was less apparent to the young people themselves than were the divisions in status between those doing publicly examined subjects, school assessed subjects, and studies in neither of those categories. "Social maths" meant something very different from "Maths 1 and 2". While students generally reported they gained more satisfaction and could see more point in Business and Applied Maths than in Maths 1 and 2, some of those who commented in this way also said that they would have done Maths 1 and 2 had they been able to do so. (For detail about the mathematics interviews see Attachment 3.)

Senior secondary curriculum as general education or preparation for life

Across all groups of young people opinion was consistently expressed that what they did as students in school had little or nothing to do with what they saw as real life. The sense of purpose of those young people who had gone on or who firmly intended to go on to higher education seemed to be associated with gaining points for higher education entry. "The whole of year 12 is geared to passing exams." School was seen as "irrelevant
except as a ticket". Others not in higher education nor intending to go there found little point at all in their studies in the senior school. While some were at school because they liked it, many saw staying at school as a necessary precursor to getting a job or an alternative to being on the dole and having nothing to do. A year 11 student wanted to learn to read to avoid "going on the streets". "You have to have education to get a job".

In a group of higher education students the question of whether their senior school experience amounted to good preparation for life was greeted by puzzled looks. "I have not got to life yet," one young woman finally responded. Another respondent, in a group of young people engaged with the Community Youth Support Scheme, answered the same question somewhat differently: "Mum prepared for life - school made it worse for her - giving in to kids - kids don't know what's good for them - need guidance" the interviewer's note recorded.

The nature of these responses suggests very different expectations not only of what schools will do but of how long adult life may reasonably be delayed by continued participation in formal education. The comments illustrate an aspect of the diversity to be found among young people and their families in South Australia today.

The general view appeared to be that school should have something to do with life outside the school environment. Improvements suggested in the discussions were often, though not always, work oriented. They included broadly based vocational studies in the school curriculum, to be chosen after exposure to career education in years 8 and 9; more work experience (strongly and widely supported); a deliberate break in schooling at age 16 with return a year later; "making all subjects relevant to young people and their interests"; and "visit gaol not museums and study the rights of citizens". There was a clear call for school knowledge to have more applied character with practical work and practical experience running in closer alignment with theoretical studies. "English, maths and practical stuff" were recommended by one group and another interviewer noted a desire for "more practical lessons and excursions - less theory".

Senior secondary curriculum as preparation for work and/or further study

Responses here came again with rather different emphases. With some important exceptions1 most of the higher education students found the curriculum content they had encountered in years 11 and 12 to be adequate preparation for their further study with some, mainly in high information faculties, finding it good. Some students did criticise closely structured school studies as inappropriate preparation for self-directed study in

1 The most important exception was in journalism, where both students and staff found inadequate preparation of students in English language use. Other tertiary staff also expressed concern about these skills in their students.
preparation for their further study with some, mainly in high information faculties, finding it good. Some students did criticise closely structured school studies as inappropriate preparation for self-directed study in higher education, which was reflected in the comment from an academic staff member that "students taught to cram facts have no other strategy for learning. (Senior secondary schooling) should go for quality rather than quantity." Teachers in another faculty reflected that the students' expectations of large volumes of information helped to drive lecturers to provide more than might be strictly necessary to the professional training in hand. Other comments from students related to the inadequacy of information about what higher education involved. "There are not many ways of finding out what uni will be like when at school." Suggestions for visits to schools from higher education students and staff were made several times.

Attempts were made to ascertain the extent to which "assumed knowledge" recommended by some faculties in institutions of higher education was perceived by students as being necessary preparation for their further studies. The scope of the interviews proved to be too broad and the data not sufficiently fine grain to report specifically on this matter. There were indications, however, from some higher education students, that these questions would merit more specific investigations on a course by course basis. For example, it appeared that the maths required for some courses of higher education is the subject of preliminary coursework in order to pick up those entrants who did not do Maths 1 and 2 for matriculation. This caused some first year students who had done Maths 1 and 2 in year 12 to wonder what preparation might have been more useful to them in preference to repeating the mathematics.

A large majority of those not in higher education found their school experience contributed little to their subsequent training. Antagonism equally to the content and the methods of curriculum was reported. The experience of school was described as "not satisfying and sometimes unbearable", a "waste of ten years" and "all the stuff they teach you that you never use".

Interview notes recorded a College of Advanced Education course counsellor remarking that "secondary schooling does not provide adequate preparation for the future unless a student is already academically confident. While secondary school reinforces academic aspirations many students complete year 12 without adequate skills in areas necessary for success in tertiary education." Examples given were literacy and literary skills, analytic skills, and the capacity to distinguish subjective and objective perspectives.

This view was echoed in different terms in the plea of a hairdressing apprentice to be taught "English grammar, how to speak properly, how to take notes, how to write a technical essay."

Suggestions for improvement in the preparation of students for work or further study could not readily be separated from those related to preparing them for life which have already been described. Much of the orientation of the young people interviewed was towards their imminent or eventual emergence into the adult world of work, although this was less apparent among higher education students than other groups. Thus one student in
the third year of higher education had regarded work experience as unnecessary and a waste of valuable time at school, and had indeed not taken part in it. By contrast another student in the first year of higher education regarded absence of work experience, also the result of pressure of time at school, as a matter of disadvantage.

English Expression

The interviewers were aware of the Enquiry's particular interest in proposals for a compulsory assessment in English Expression for university entrance (Term of Reference (4)) and were asked to canvass this matter without putting undue emphasis on it.

The overall response from students was that they would like to be confident of using English accurately. Spelling, punctuation and grammar were all the subject of comment. Most students did not believe they were taught these things in secondary school though at least one commented that having been taught grammar in primary school it would have been helpful to have had it reinforced during the secondary years. A number remarked critically on coursework in literary English for which they could see no point.

Tertiary teachers, as previously mentioned, expressed substantial concern about the language skills of students.
CHAPTER 4 : The Role of Teachers

TEACHING STYLE

All student groups interviewed showed substantial interest in and reliance on their teachers in senior secondary school. For some of the highest scoring matriculants, which teachers were assigned to subjects had helped to determine their subject choice for the matriculation year. While this level of sophistication was uncommon, the theme of teachers recurred consistently throughout the interviews. "The teacher's attitude and ability to teach make or break a subject," was a summary statement made by a post-school student.

Students preferred teachers who cared about whether or not the students were learning and who gave them the attention the students felt they needed. Ideal teachers were described as those who "love the job, are willing to explain, go out of their way to show it to you, treat you as adults". Empathetic, understanding, caring, helpful and protective all figured as qualities appreciated in teachers. Inadequate qualifications, poor classroom control, preoccupation with administration and unavailability for assistance were among matters of concern.

There was some difference in responses from those who had done or were doing well at school and those who had been or were being less successful. Young people in the latter category were more likely to be critical of the teaching they received. For example "Maths teachers in particular don't understand what it's like not to understand" came from one frustrated student. These students commented frequently that teacher attention was given more readily to students who grasped new work more quickly and that slower students were disadvantaged as a result. A CYSS client made the comment that she gained teacher attention "only when doing something wrong", while a group of apprentices felt they had been "punished for not understanding". Another school student commented that teachers did not understand when the family could not afford required materials: "they put you down if you can't provide gear".
In view of the very considerable changes which have occurred in senior secondary education during the last 2 decades, the changed population and purposes of this phase of education and the need for higher levels of skill formation throughout the Australian workforce, the students' views suggest that careful consideration should be given to strengthening the capacity of schools and teachers to respond constructively to the educational needs of these nontraditional senior secondary clients.

COURSE AND CAREER COUNSELLING

Another dimension of teacher influence became apparent during the interviews in discussions about choice of subjects. Teacher recommendation in some schools is a powerful determinant of what students undertake in the following year. The recommendation is commonly based on grades achieved in the previous year of study, rather than on what students may have in mind for their careers. While in departmental schools the teachers' recommendation can be overridden by determined parents, relatively few students or parents appear to be aware of this or perhaps they would not wish to override a strong, professionally based, recommendation of this kind.

Making subject choices dependent on a student's previous grades has the effect of excluding those who for whatever reason were unsuccessful in the junior secondary years from a number of options, particularly higher status options, in the senior secondary school. Asked why so few of them were doing any maths, a group of year 12 students, mainly girls, replied "We're too stupid - we were told so in year 8". This process of exclusion was described as "a particular problem if you have a career in mind" to another interviewer. "You must do subjects we consider suited to your ability not according to your interest or career goals" was the schools' message according to students in another group, and a group of apprentices believed they were considered "rejects" by their schools who "only wanted the best students for matric".

Thus in some schools it appears that the students who are perceived by the school to be less able have less scope for choosing subjects which interest them or which may be of use to them subsequently. There appeared to be little opportunity for students to take longer over subjects which might be important to their futures or for teachers to offer students ways to approach such studies other than those in which they were unsuccessful. Interviewers had not been asked to explore such opportunities for redemption but few were spontaneously elicited.

In other schools course counselling was seen to be a more open process, with the decision about what to do next lying primarily with the student. There was little spontaneous evidence about opportunities for redemption in these schools either.
No comparison is possible of the outcomes of the two approaches, as to whether apparent emphasis on student choice or teacher recommendation permits more students to be more successful in gaining desired benefits from schooling. It seems likely in any event that teacher advice, based on students' previous performance, is a persuasive mechanism for excluding students from higher status studies. The relative absence of more determined approaches to raising levels of educational achievement especially through variable use of time in learning and teaching makes changing direction during secondary school very difficult for students.

It was also noted that teachers felt this pressure too: "All the while PES [the high status course of publicly examined subjects] is teed to Uni's there can't be progress," is an example of a commonly expressed opinion.

Career counselling appeared frequently to be seen to be quite separate from the advice or decisions which determined academic programmes, with the effect that some students had wholly unrealistic impressions of occupations which would be open to them from the courses they were undertaking. "I found out at the end of my schooling that the subjects I did weren't useful for the career I wanted - it was too late then."

For those students for whom schools are an essential source of information about career possibilities and requirements, the availability and quality of career and course counselling seemed to be a key factor. Comments as to the effectiveness of counselling of this kind varied very widely, from appreciation to a felt need for better service.

An additional aspect here which some interviewers noted was the difference in maturity between students in years 10 and 11 and again between those in years 11 and 12. At just fifteen many young people appeared unready to make irretrievable decisions about their future lives, which suggests studies should both be suited to the stage of development and also allow choices as to futures to be made gradually with skilled counselling and good information.

TEACHERS' PERSPECTIVES

The interviews with teachers showed very different perspectives. The picture here was of people often well-qualified in particular subjects dealing with young people with whose lives they have little in common. Many of the teachers interviewed showed considerable commitment to young people but found strong factors acting against what they believed should be happening. Among the factors were the selection of students for high status studies, "we set (the others) up to fail", the distinction between publicly examined and school assessed subjects; the discounting of scores from the latter, and the perceived loss in flexibility in school assessed subjects from their origin as secondary school certificate subjects designed for less academically inclined students. "At years 11 and 12 Maths 1 and 2 are too difficult for many so they do Maths 1S and get very little from that...SAS Maths would be better but (is) not viable at this school where university entrance must be kept open."
The current arrangements for publicly examined and school assessed subjects were commonly regarded as providing two separate educational streams, in descending order of status. A third stream was advocated, for young people who could not cope with the current construction of either publicly examined or school assessed subjects. Teachers also commented on the difficulty they found in achieving a successful balance of theoretical and practical approaches.

A mixture of commitment, stress and cynicism were clearly evidenced among the teachers and school administrators interviewed.

There seemed to be few meeting grounds between how young people saw their world and how their teachers saw it. "Students see teachers as people who live totally different lives" (Interviewer). "Having your own say is answering back" (Student). "There needs to be sufficient time and flexibility to allow kids to mature. They arrive and leave very young" (Teacher).

THE ORGANISATION OF SENIOR SECONDARY EDUCATION

Interviewers had been asked to explore views about the organisation of senior secondary schooling and, should the discussion move in that direction, to find out what groups thought about the concept of senior secondary colleges.

There was a generally held view among students that in the senior secondary years they should be regarded as young adults and their relationships with teachers should differ from the more custodial relationships of earlier years in the secondary school. Students gave rather different indications of how well their schools managed this change in relationships, with some complaining more strongly than others of being denied responsibility and being treated like children.

Teachers and school administrators were on the whole opposed to a structural change between junior and senior secondary school while students had very mixed feelings about it. A group of apprentices, arguing that "year 11 and 12 students should be treated more like adults" also noted that moving to a different institution would discourage many young people from remaining at school: "there needs to be continuity in a high school."

"The environment has already been established, a change would be disruptive, although it would be 'good preparation for uni'", were further comments noted by an interviewer from a group of school students.

Country teachers were concerned that consolidation would act against girls continuing their education, especially those from cultures which do not allow girls to live away from the family, and that larger centres for senior secondary education would lose the flexibility and the "commitment to children" smaller schools were able to provide.

With the many dimensions of and perspectives on this organisational question the comment of a year 12 teacher may offer something of a summary: "It wouldn't work for this school. It could be a positive move but you'd need wholehearted support for it."
CONCLUSION

In all, perhaps the most significant single feature of the interview findings was the large number of young people who felt they were not taken seriously as learners and who felt they had gained little or had little to gain from senior secondary education. These young people were asking for serious consideration as students, as emergent adults, and as future participants in the adult world of work.
ATTACHMENT 1

MEMBERS OF THE RESEARCH MANAGEMENT GROUP

Ms J Blackburn, Women's Studies Research Centre, University of Adelaide
Mr M Caust, Education Department of South Australia
Dr I Davey, University of Adelaide
Mr K R Gilding, Chairman, Enquiry into Immediate Post-Compulsory Education
Professor C Power, Flinders University
Dr A J Shinkfield, St Peters College
Ms P Thomson, Paralowie R-12 School

MEMBERS OF THE MATHEMATICS STEERING GROUP

Professor B Abrahamson, Flinders University
Mr J Baxter, SA College of Advanced Education
Mr P Luscombe, Christies Beach High School
Mr P Nolan, Scotch College
Dr J Noye, University of Adelaide
Mr R J Stunell, Education Department of South Australia
Mr V Treilibs, Senior Secondary Assessment Board of South Australia
Mr M Wheal, SA Correspondence School
SCHOOLS PARTICIPATING IN THE GENERAL INTERVIEW PROGRAMME

Banksia Park High School*
Christies Beach High School
Cleve Area School
Coober Pedy Area School
Elizabeth West High School
Marbury School*
Marion High School*
Minlaton High School
Morphett Vale High School
Murray Bridge High School*
Paralowie R-12 School
Port Adelaide Girls High School*
Sacred Heart College
Salisbury High School
St Aloysius' College
St Peters College*
Strathmont High School
Thebarton High School
Urrbrae Agricultural High School*
Woodville High School

* participated also in the mathematics programme

OTHER PARTICIPATING GROUPS FROM THE FOLLOWING INSTITUTIONS

SA Institute of Technology
(Women in Engineering and Resident Students of Non English Speaking Background)

SA College of Advanced Education
(Aboriginal Studies and Teacher Education Centre)
(School of Journalism and Communications)

University of Adelaide (Physics Department)
Flinders University of South Australia (Medical School)
Croydon Park College of Technical and Further Education
(School of Automotive Engineering)
(School of Health and Care)
Department of Technical and Further Education (Education Bridging Courses)
Community Youth Support Scheme
SA Gas Company
State Bank of SA

# In many, but not all, cases groups of teachers, administrators and supervisors were interviewed as well as groups of students. The young people were mainly in either their first year or their third year out of school.
FINDINGS FROM THE MATHEMATICS EDUCATION INTERVIEWS

I. REASONS FOR CHOOSING/NOT CHOOSING MATHEMATICS

1.1 It is clear that mathematics is the one subject taken by large numbers of students who have little interest or competence in the subject (as it is presented in schools).

1.2 Almost every mathematics student interviewed gave one or more of the following three reasons for choosing the subject

(i) having 'mathematics' improves job prospects

(ii) the mathematics course chosen is a 'pre-requisite' for intended further studies

(iii) taking 'mathematics' leaves more doors open.

Only a handful of students

(i) claimed that they took the subject because they liked it

(ii) chose not to do any mathematics at year 11 level [many school timetables preclude this anyway].

1.3 Amongst year 12 PES mathematics students a significant number believe that taking the subject is likely to improve their tertiary entrance scores.

1.4 Business Mathematics (year 11 and especially year 12) is generally well regarded by those students who take it. It is seen as relatively interesting, practical and a marketable credential.

1.5 There is considerable evidence that mathematics teachers and their programs do much screening/sifting of students into ability streams and that usually there is little chance of a student moving up to a more advanced level course - i.e. this process typically limits the options of students. This is shown by the students' (and teachers') perceptions of a hierarchy of mathematics courses:

Ma 1 & 2 > Ma1S > Ma Applied > Tech. Ma > Social Ma > no Ma.

Students then choose their mathematics course from as high on this list as they are allowed, rather than according to their needs and ambitions.
Typically, mathematics teachers and counsellors seem to have much more say about which mathematics course a student may take than is the case with other subjects.

2. PERCEPTIONS OF MATHEMATICS

2.1 Most mathematics students seem to exhibit a resigned acceptance of the traditional 'PES-style' approach to mathematics "boring" is a frequent description of mathematics.

2.2 The level of interest in a mathematics lesson is much more teacher-dependent than content dependent.

2.3 Mathematics is seen as irrelevant to the real world, at best an abstract study. Students often mentioned the need for a range of applicable topics - some mentioned statistics, business mathematics ...

2.4 Mathematics 1 & 2 at year 11 is seen as being both much harder and much more work than mathematics at year 10; similarly the jump from year 11 to year 12 double mathematics is seen as large (unless some of the year 12 course is taught in year 11). There also appears to be a shift in learning style, from occasionally co-operative to exclusively competitive as students move into senior secondary levels.

2.5 The 'academic' courses are seen as having a lot of 'hack work' and 'sameness' about them.

2.6 Some more able students said that they liked the challenge and the logical deduction involved with solving the more difficult problems.

2.7 Many students taking SAS-type courses seemed to find mathematics much more interesting and enjoyable, and preferred the methodology of those courses - but would have done PES-type courses if they could have!

2.8 The interviewers found no student who could discuss the nature of mathematics in terms other than "problems with number, money, measurement and algebra". (A few SAS course students offered "solving open-ended problems".)
3. CLASSROOM PRACTICE

3.1 Except in SAS courses, classtime is spent almost exclusively on
(i) teacher 'talk-and-chalk' - mainly example solutions; and
(ii) working on exercises from the text/notes.

3.2 The above methodology is also used in courses such as year 11
Technical Mathematics, for which it is most inappropriate.

3.3 Most students report that mathematics lessons are very consistent
in their format, much more so than in other subjects.

3.4 Students stressed the need for a good teacher if one is to be
successful in mathematics. Good teachers are seen to be those
who are:

- demanding and critical
- give good explanations to the class
- don't expect students to take notes and listen
  at the same time
- sympathetic
- good disciplinarians.

3.5 Interviewers recorded several persistent complaints.
(i) the practice of pushing on through the syllabus regardless
  of the level of understanding
(ii) class sizes of 25-30 seem to preclude the possibility
     of individual help
(iii) the practice of 'lockstepping' - some students complained
     of being held back, others of not being able to keep up.

3.6 The student workload in mathematics is seen as

- excessive - yr 11 Ma 1 & 2, yr 12 Ma 1 & 2; Ma 1S
- moderately heavy - yr 12 SAS Business Ma, Applied Ma
- light to average - "non academic" year 11 courses

The workload in years 8-10 is seen, with the benefit of hindsight,
as light.
4. ASSESSMENT

4.1 In most cases, limited-time tests and trial examinations are the only assessment instruments used.

4.2 Redeemability is almost non-existent, as is formative assessment.

4.3 The prime purpose of assessment is seen by students (and presumably teachers) as the ranking of students.

4.4 Marks are seen as very important by students - even in schools with non-competitive or work required assessment practices. Test marks are always taken to be a valid measure of achievement.

4.5 Midyear and trial examinations are widely used and heavily weighted in school assessments, but typically students are given little preparation for them.

4.6 In year 12 SSABSA subjects there is considerable confusion amongst students and teachers over

(i) school assessment and how it should be conducted

(ii) the moderation procedures for school assessment

(iii) the effects of grading and scaling to produce a tertiary entrance score

(iv) the effects of grading and scaling on optimum subject choice and a lack of understanding of the need for the SACAE to discount SAS scores across all subjects. Many students fail to see any logic in the arithmetical manipulation of marks that is carried out by SSABSA, TEASA, SACAE ...

5. CONCLUSIONS

The paragraphs below resulted from the findings of the interviews, some directly from students, following further consideration in a final meeting of the full steering group.

1. 'Academic' mathematics courses should incorporate significant components of

   (i) SAS-type content and methodology

   (ii) applications, especially statistics and business/financial mathematics.
2. Shortage of time is a major problem in the double mathematics courses (MA 1 & 2). Placing less emphasis on a wide range of content and more emphasis on a smaller range and its applications is seen as a desirable step towards improving the quality of mathematics learning.

The "PES methodology" can only be changed by a reduction in the dominance of the year 12 examinations and their influence through the statistical moderation of school assessments.

3. A year 12 PES mathematics single subject should be available to students with a single subject year 11 background.

4. SAS mathematics subjects should count without discounting towards higher education entry for students who are proceeding to University/SAIT studies other than mathematics.

5. Inservice is needed for mathematics teachers to enable them to develop an understanding of the nature of mathematics and its application.

6. Changes of any kind (methodological/content) should allow adequate resources for additional non-classroom-related work for teachers.

7. There is a great need for genuine avenues for students to be able to return to the preferred mathematics courses after they have faltered or made bad choices or if circumstances have changed. These opportunities should be provided at all levels and at intervals more frequent than once per year.

8. There should be reconsideration of the choice of mathematics studies at upper secondary level.
RESULTS IN THREE, FOUR OR FIVE SUBJECTS AT YEAR 12

Report to the Review of Tertiary Entrance Requirements

This paper was written at the request of the Review of Tertiary Entrance Requirements (ROTER). It is reproduced here because it contains material relevant to the present Enquiry's thinking.

MARCH 1986
RESULTS IN THREE, FOUR OR FIVE SUBJECTS AT YEAR 12

Report to the Tertiary Entrance Review

Introduction: SSABSA was asked to consider the effect on candidates' rank order if their aggregates were to be calculated on their best three subjects or their best four subjects rather than their best five subjects as at present.

Method: All students who had a matriculating group of subjects in 1984 and 1985 were included in the study. This involved all students who presented at least five subjects, including at least one from each of the specified sets, regardless of their scores.

Students' best three combinations were derived by taking their best Group 1 subject and their best Group 2 subject and then adding the best result of the remainder. The best four aggregate was obtained using a similar procedure. We then calculated correlations between the different aggregates and examined the rank changes resulting from the different scores.

Results:
1. Correlations between three, four and five subjects

The intersubject scaling process devised for, and in conjunction with the Universities, aims to take into account candidates' performance in all subjects, so one would expect that their results in any set of subjects would be closely related. We found this to be the case. Table 1 shows that the correlations between the best three or four subjects and the actual five subject aggregate were uniformly very high. Students who scored highly in five subjects did so in three or four, and vice versa. This confirms our earlier examination of inter subject differences for this committee.

<table>
<thead>
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<th>Year</th>
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<th>3 and 4</th>
<th>4 and 5</th>
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<tr>
<td>1985</td>
<td>.9771</td>
<td>.9922</td>
<td>.9938</td>
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2. Stability of the distribution and effects on matriculation

We tested the stability of the distribution by dividing the 500 mark aggregate into nine ranges containing about ten per cent of the candidates in each, with 15 per cent in the two end ranges. Candidates' results for their best three and best four subjects were lineally translated to a 500 point scale. Students had higher equivalent aggregates when only three or four subjects made up the aggregated mark, as might be expected when the worst of their subjects were not included. However the differences were not great, suggesting that results in all subjects after scaling tend to fit in a relatively narrow band for most students. Slightly more than ten per cent more students reached the equivalent of matriculation level when three subjects were considered than with five (see Table 2), and a similar proportion received more than the equivalent of 395 points (see Table 3). The distributions were very similar in 1984 and 1985. We found much the same results using four subjects (see Table 3).
TABLE 2: Proportion of students matriculating

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<td>Four subject aggregate</td>
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<tr>
<td>Five subject aggregate</td>
<td>68.53</td>
<td>67.62</td>
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</table>

TABLE 3: Proportion of students in aggregate ranges

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<tr>
<td>0-249</td>
<td>7.26</td>
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<td>250-277</td>
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<td>7.89</td>
<td>8.36</td>
<td>10.20</td>
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</tr>
<tr>
<td>278-294</td>
<td>6.55</td>
<td>5.96</td>
<td>7.55</td>
<td>7.13</td>
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<td>19.20</td>
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3. Rank order changes

Student selection for university undergraduate courses is done principally by aggregate ranking. We investigated the effect on ranking of using the three and four subject aggregates. We did a linear transformation of the 500 and 400 point aggregates to 300 points and compared the students' ranks with those on the 300 point scale. Slightly over 90 per cent of the students moved upwards in the ranks; the majority moved from 5 to 20 ranks (see Figure 1). This was also an expected result as the worst subject result(s) was being eliminated from the aggregate. The practical result of this would be an increased tendency to 'bunch' at the higher scores. About 15 per cent more students would be in the equivalent range of 350-500 (see Table 2).

Conclusion: We recognise, as does McGaw (Ministerial Working Party on School Certification and Tertiary Admissions Procedure, p.50) that the results for three of four subjects when students are compelled to study five may differ from those obtained if candidates were only required to study three or four. These differences are not predictable from our data, and there are no results from Western Australia to date following their adoption of this system. However the evidence was suggestive enough for that state to adopt the change. The relationships between the scaled subject results for individual students are strong. These results may be related to those in the Western Australian study which examined the relationship between student aggregates of three, four and five subjects at Year 12 and first year performance at the University of Western Australia. Although the correlations were only moderate, there was no practical difference in the correlations based on various aggregates. If a similar study to the Western Australian one was carried out here then similar results could well be obtained - the correlations between aggregates of three, four or five subjects and first year results would be very similar.
FIGURE 1: Distribution of the Rank Shifts
Three subject aggregate compared to five subject aggregate

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<tr>
<th>SHIFT NO</th>
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References:


Western Australia, Ministerial Working Party on School Certification and Tertiary Admissions Procedure, Assessment in the Upper Secondary School in Western Australia, 1984.