Proceedings and papers are presented from a seminar on "Learning and Earning: A study of education and employment opportunities for young people," a report produced by the Commonwealth Tertiary Education Commission of Australia. This report traces the recent rapid decline in the participation of young people in education and the work force. In the introduction to this collection of papers, the report's implications regarding the role of education (especially postsecondary), industry, and the work force in implementing changes to cope with problems and issues raised by the report are discussed. Seminar proceedings are also highlighted, including participant comments on the issues identified in the report and areas where potential solutions may exist. Implications of the report for schools, industry, and postsecondary education are summarized. Six papers presented at the seminar are then provided. Topics covered include: (1) an employer's reaction to the research and comments on the benefits of postsecondary education; (2) recent trends in educational participation, especially in technical and further education; (3) implications of the report for post-school education; (4) recent trends in work force participation of Australian teenagers; (5) a discussion of predictive and prescriptive questions surrounding participation rates in Western Australian secondary schools; and (6) implications of the report for the labor force. (YLB)
WESTERN AUSTRALIAN POST SECONDARY EDUCATION COMMISSION

LEARNING AND EARNING:

Papers and Proceedings of a Seminar held on 24 March 1983

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Printed for the Western Australian Post Secondary Education Commission
16-18 Stirling Highway, Nedlands, Western Australia, 6009
April 1983

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- Mr Lee Pegler - Research Officer, Trades and Labor Council of Western Australia
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WHY HAVE A SEMINAR?

The Commonwealth Tertiary Education Commission (CTEC), which is responsible for advising the Commonwealth Minister for Education on the provision of financial assistance to universities, colleges of advanced education and technical and further education institutions, recently released a report called LEARNING AND EARNING: A study of education and employment opportunities for young people.

The report traces the recent rapid decline in the participation of young people in education (both schools and post secondary education) and in the workforce, and raises issues which have implications for education and social policy generally, and more specifically for schools, post secondary education institutions, industry and the workforce.

Given the importance of these issues, the Western Australian Post Secondary Education Commission (WAPSEC) organised a one-day seminar on the report on Thursday 24 March 1983. Over 100 representatives of post secondary education institutions, schools, industry and other organisations with an interest in education and labour market matters accepted the invitation to participate in the seminar.

In conducting this seminar, WAPSEC was expressing its support for the purpose of the study. That is:

"... to stimulate an informed debate by placing the issues within the context of what is happening in educational institutions and in the workforce."

Specific aims for WAPSEC were twofold.

1. The seminar was seen as a vehicle for a sharing of ideas, opinions and experiences among the participants.

2. Information gained from the seminar would be of considerable value to the Commission and other interested parties for future planning. In the Commission's case, this would be in planning for the 1985-87 triennium, a task which is currently underway.

The seminar was chaired by Dr Bill Pullman, Chairman of WAPSEC. Various speakers commented on the implications of the report for education and industry. Copies of their papers are included in this publication.

The speakers were:

- Mr Colin Barnett, Economist, Confederation of WA Industry.
- Mr Don Brewster, Co-author, LEARNING AND EARNING, member of the staff of the Commonwealth Tertiary Education Commission.
- Mr Keith Coughlan, Chairman, Commonwealth Tertiary Education Commission.
- Mr Peter Grant, Co-author, LEARNING AND EARNING, member of the staff of the Commonwealth Tertiary Education Commission.
- Mr Harry Louden, Assistant Director-General of Education (Secondary), Education Department of Western Australia.
- Mr Lee Pegler, Research Officer, Trades and Labor Council of Western Australia.

These presentations were followed by group discussions, in which participants were given the opportunity to discuss their interpretations of the issues and perceptions of the implications of the report. These groups were chaired by:

- Mr Ken McKenna, Chairman, Public Service Board of Western Australia.
- Dr Wal Neal, Former Chairman, Western Australian Post Secondary Education Commission.
- Mr Alan Tough, Managing Director, Allied Eneabba Ltd, and member of the Western Australian Post Secondary Education Commission.
- Dr Bob Vickery, Director-General of Education, Education Department of Western Australia.
- Dr Haydm Williams, Former Director, Western Australian Institute of Technology.
LEARNING AND EARNING - The Report

As mentioned previously, the report has implications both nationally and at the state level for schools, post secondary education institutions, industry and the workforce. It has been written in the context of rising rates of youth unemployment for both males and females. There has also been a decline in the proportion of males remaining to the end of secondary education and a reduction in the number and proportion of young people enrolling for higher education courses. In addition, the decline in the transfer from school to higher education has been most marked among students with relatively high levels of attainment. Rather than moving from school to higher education to employment, these young people are opting to move directly from school to employment.

This means that competition for jobs among 15 to 19 year olds is fierce. Those with higher levels of attainment tend to obtain employment first, leaving unemployed a group of young people who have attained less, all of whom, according to the values of our society, have an intrinsic right to work.

The report, as a whole, raises the question of the focus of responsibility for changes to the existing systems of education and industry. Where should or can this focus be? Should the responsibility for change be shared? Can it? Can effective co-operation between education and industry be achieved?

Probably, because the report was initiated by the CTEC, its emphasis has been on the role education can play in implementing change. Again, because the CTEC is concerned primarily with post secondary education, the emphasis has been on the role of higher education and TAFE.

However, it is important to note that schools (particularly secondary schools), industry and the workforce are concerned with, and have a major role in devising and implementing the changes necessary to cope with the problems highlighted by the report.
WAPSEC's stance has been to recognise this interdependence. As a result the purpose in organising this seminar has been not only to provide an opportunity for people from schools, post secondary education, industry and the workforce to meet and discuss the issues raised by the report, but also to generate responses to the above questions.

LEARNING AND EARNING - The Issues Raised

Three major questions were raised in the report, and various issues concerned with these questions, identified. The questions were:

"... how can tertiary (and secondary education) courses be made more appropriate to the needs of young people?"

"... how can the benefits and advantages of tertiary education best be put to young people and their parents?"

"... how can financial, academic and social barriers to further education be reduced, if not removed?"

The issues raised by these questions were further categorised in the report into those affecting higher education and those affecting TAFE.

Issues raised by the report concerning higher education were:

the question of a target level for which Australia should aim regarding participation by young people in higher education;

the implications of significant changes in participation in higher education for higher education itself;

access to higher education for mature age students;

the balance between enrolments of new undergraduate and new postgraduate students;

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2 ibid: page 67
the development of requirements for entry into higher education which neither distort secondary education nor act as barriers to entry for some students;

the development of part-time higher education courses which are designed specifically for young people.

Issues raised by the report concerning TAFE were:

the development of programs attractive to those young people, who, in more buoyant times, would have received on-the-job training but who now lack such opportunities;

the clarification of the relationship between the roles of secondary schools and TAFE in the provision of education for adult life;

the access to TAFE vocational courses for females and people in older age groups;

the effect of the changing economic climate on the apprenticeship system;

the expansion of partnerships in vocational training which are established between TAFE and employment;

the role of governments in any widening of these partnerships.

For both groups, one further major issue was raised. This was the question of student assistance arrangements which could be seen as fair and equitable for both students and community. At present there are marked differences in the allowances paid to young people. Unemployment benefits, for example, are greater than the TEAS allowance and the different purposes of the two allowances are not clearly understood by the public.
LEARNING AND EARNING - The Seminar

The seminar was organised so that initial input came from the five main speakers. This was followed by two sessions of group discussions, and a plenary session at which the five chairmen reported on the comments made by participants in the group discussions.

In groups, the participants discussed the issues identified in the report, prior to looking for solutions or at least points where change could be implemented. The following comments are a summary of those made by participants during the discussion of these issues.

1. The principal issues raised in the LEARNING AND EARNING report are of major significance. They do not reflect normal cyclical developments and will not simply disappear over time.

2. The existing systems of secondary and post secondary education are probably restricted in their appeal to the wider community. Questions were raised as to whether the systems are:
   - relevant?
   - appropriate?
   - prone to inertia?
   - offering desirable curriculum prospects?
   - reactive rather than showing initiative?
   - catering to the diverse needs of individual students?

3. At present, barriers such as forced choice and compulsory examinations exist at the interface of secondary and post secondary education. These barriers may deter some able students from proceeding to post secondary education and for others may be unduly restrictive, requiring decisions to be made at an early stage - decisions which may restrict future options.

4. The requirements of industry in terms of skill development are changing, because of structural changes such as the shift from manufacturing to service industries and the impact of technological change.
5. There is a lack of communication between industry and education.

6. There is also a lack of communication among the various sectors concerned with post secondary education.

7. The attitudes, both for and against, of parents and their children towards post secondary education are of concern, as these attitudes are often developed from inadequate sources of information.

8. Politicians as well as educationalists and industrialists have a role to play in dealing with the issues identified in the report.

9. The sharp increase in the number of jobs lost, is seen as a striking long term trend where the cause should be addressed by politicians rather than being left to educators.

10. The levels of financial support available for different groups of young people discriminate against those who choose to undertake further study.

The notion of finding solutions on the day of the seminar was discarded by all groups, as being far too difficult given the constraints of time, complexity of issues and information. It was generally agreed that education alone is not responsible for, nor can it solve, the problems of youth unemployment. However, three general areas where potential solutions may exist were identified.

Firstly, research into the needs of educational institutions, industry and students would provide much needed information. Areas identified as needing research as soon as possible were:

- a comparison of institution and student needs;
- the effect of higher education entrance demands on the decision-making of young people;
- the value of generalist curriculum models;
- the reasons for student withdrawal from upper secondary school and post secondary education;
- the attitudes of parents towards the potential benefits of post secondary education for their children;
- the needs of industry which could be provided for by education;
the measurement of output from the education system (until now most of
the effort has been directed at measuring input into the system);
the quantification of the total demand for post-secondary education,
including the separate identification of those areas where vocational
opportunities exist.

Secondly, areas where extensive change is needed were discussed, more as an
exploratory exercise than an attempt to find solutions. This discussion
can be summed up in a few words. That is, the existing machinery available to
governments and the education system may be inadequate for dealing with the
rapid changes which seem to be occurring in society during the present period.
Industry on the other hand seems to have developed strategies which enable it
to respond to changing circumstances more rapidly. Those involved in the
planning and administration of education systems need more responsive
strategies.

Thirdly, there exist in society already, resources, the use of which could be
revised and/or extended and which could, as a result, provide some solutions.
Concentration of effort by concerned parties on some or all of these resources
could provide short-term solutions, at least to some of the more pressing
problems. Long-term planning should not be forgotten in this process.

A list of existing resources which could be extended to meet some of the needs
of young people follows in random order.

- The existing co-operation between industry and education, which for many
  years has been largely based on the apprenticeship system, has the
  potential for wide expansion.

- Counselling and guidance facilities in the community could be extended
to provide guidance to parents and children concerning post
secondary education and possible alternatives.

- Additional senior colleges, such as Tuart and Canning Colleges, could be
developed. The potential of such colleges is seen in the apparent
flexibility of the curriculum in terms of its ability to respond to
community needs. For some students they may also present an alternative
to the existing secondary school ethos.
Transition education programmes have great potential, again in the flexibility of the curriculum which can be offered.

Existing life-style alternatives in the community could be used as a basis for the development of new curriculum areas for secondary and post secondary education. Worker co-operatives are examples of these.

LEARNING AND EARNING - What to Do?

Community concern with the issues raised in LEARNING AND EARNING was illuminated by the response to the seminar. The active participation of those who attended provided opinions and information which should be of great use to people concerned with planning to overcome problems of youth unemployment in the community.

The collected information can be divided into three sections:
- that concerning schools;
- that concerning industry;
- that concerning post secondary education.

Schools

Historically secondary schools, particularly in the upper section, have provided a curriculum which prepares students for higher education. Students who chose not to continue to higher education have tended to leave school when it ceased to be compulsory and to pursue their careers elsewhere. Recently, changes have been made to the upper school curriculum in an attempt to provide alternative courses. These, however, have proved unattractive to students. With the current high level of youth unemployment which is likely to persist at least for the immediate future, certain implications for secondary schools become clear.

1. The curriculum, for the upper section in particular, will need to be developed to cater for a far wider range of students' interests and abilities than it does at present.
2. There is a need for attitude change in the community, concerning the benefits for students who extend their secondary education. Counselling and guidance to parents and students may aid in this attitude change; probably the major change needs to be made in current attitudes towards schools as desirable places in which to spend one's time.

3. Approaches used by teachers in secondary schools may need review. Young people in the age group under discussion would be considered adults in some societies and it is inappropriate and probably counter-productive to continue treating them as children.

Industry

The relationship between industry and the education system is inextricably linked, with the latter providing much of the training required by the former and the former affecting aspects of curriculum development. Increasingly, the education system has taken over some of the role of training from industry, with the result that there have been changes in the relationship between the two.

One of the major implications for industry identified at the seminar concerned the need to establish effective communication channels with educational organisations. The initiative for this needs to come from both industry and education. As well, industry was seen as having a role in the following areas.

1. The existing apprenticeship arrangements need revision to meet the needs of a changing emphasis in industry.

2. Industry needs to be conscious of the needs of society as well as its own more limited objectives. To fulfill its obligations to the society which supports it, industry may need to examine ways in which it can become more labour intensive.

3. Industry must communicate its needs in education to the appropriate bodies so that the lag which seems inevitable at present, can be reduced.
Industry also needs to encourage and provide more opportunities for work experience and sandwich courses.

Post Secondary Education

To those concerned in post secondary education this report can and should be of value, given its emphasis on this area of education. Issues raised in the report and at the seminar can provide a framework for planning by post secondary education bodies such as the universities, colleges of advanced education, TAFE and tertiary education authorities. Of major concern are those issues focussing on enrolments and academic requirements.

1. Post secondary education institutions need to examine the relevance of their courses to the needs of young people. There is a need to examine the match between the values of the institutions and the values of young people. Are institutions meeting the perceived needs of young people?

2. The reasons for changes in enrolment patterns in post secondary education need to be examined at the same time.

3. The curriculum of post secondary education needs to be considered from two aspects. Firstly, there is the effect that this curriculum has on that of secondary schools where the requirements of the former determine to a large extent what happens in the latter. Secondly, post secondary curriculum needs to be matched against the needs of society. A more generalist approach may be more effective in meeting the needs of society than the emphasis on specialisation currently in vogue.

Future Actions

It is anticipated that these implications for schools, industry and post secondary education, as discussed above, will provide some basis for future action. This information can be added to that already existing to assist educational institutions and industry in future planning. This future planning should include increased communication between educational institutions and industry, as endorsed by participants at the seminar.

The publication of this document provides WAPSEC with the opportunity to express its intentions concerning the outcomes of the seminar.
One of WAPSEC's purposes in organising the seminar was to use the information gathered as a basis for future planning. In particular, the information will be used in refining plans for the 1985-87 triennium. WAPSEC also supports the notion of increased communication between educational institutions and industry and intends to take action to further this.

One strategy which WAPSEC will use, will be to organise a series of working parties, discussion groups, seminars and/or workshops to examine some of the issues which came out of the seminar. Another strategy will be to initiate research into some areas. A third will be to encourage and support other organisations in their efforts to come to terms with some of the issues raised in the seminar.

At this stage, the following issues are considered as appropriate for WAPSEC to pursue using one or more of the above strategies. These issues are seen as high priority, needing attention within the coming months.

The issues of concern to WAPSEC are:

- trends in enrolments in upper secondary schools as these affect flow on to post secondary education;
- participation in post secondary education;
- trends in applications for places in and in entry scores for higher education institutions and the related issue of the availability of places;
- the role of generalist courses in post secondary education;
- manpower studies in specific fields;
- alternative education/work experience programs;
- alternative education and industry relationships in providing education and training;
- counselling activities for parents and potential post secondary students;
- the articulation of credit transfers from one institution to another.
The seminar was conducted as part of WAPSEC's policy of maintaining and expanding interaction with the community. The inputs from those who participated were most valuable and WAPSEC would like to thank these people for their attendance at and their contributions to the seminar.

April 1983
PARTICIPANTS WERE INVITED TO THE SEMINAR FROM THE FOLLOWING ORGANISATIONS

Industry/The Workforce

- Australian Institute of Management
- Australian Trade Union Training Authority
- Chamber of Mines of Western Australia
- Commonwealth Department of Employment and Industrial Relations
- Commonwealth Employment Service
- Confederation of Western Australian Industry
- Department of Industrial, Commercial and Regional Development
- Department of Labour and Industry
- Department of Resources Development
- Department of Youth, Sport and Recreation
- Perth Chamber of Commerce
- Public Service Board
- Trades' and Labor Council of Western Australia
- Treasury
- Westrail

Post Secondary Education

- Commonwealth Tertiary Education Commission
- Edwards Business College
- Hedland College
- Kalgoorlie College
- Karraňha College
- Murdoch University
- Staff Associations
- Student Associations
- TAFE Counselling Service
- Technical Education Division
- Tertiary Institutions Service Centre
- University of Western Australia
- Western Australian College of Advanced Education
- Western Australian Institute of Technology
- Western Australian Post Secondary Education Commission

Schools

- Association of Independent Schools
- Board of Secondary Education
- Catholic Education Commission of Western Australia
- Commonwealth Schools Commission
- Education Department of Western Australia
- State School Teachers Union
- Western Australian Council of State School Organisations

Other

- Australian College of Education
- Commonwealth Career Reference Centre
- Commonwealth Department of Education
- Commonwealth Department of Social Security
- Commonwealth Youth Support Scheme
- West Australian Daily News

April 1983
LEARNING AND EARNING - AN EMPLOYER REACTION

Colin J Barnett
Economist, Confederation of WA Industry

At an earlier meeting to discuss the format of this seminar one of my fellow speakers, on learning that I was to present an employer's view, was overheard to say - 'Oh no, not the 3 R's again!!' Some days later a liaison officer with the Confederation of Industry told me that the most common complaint she heard from employers concerning the education system was the low standard of writing and arithmetic skills amongst school leavers. Apart from noting that many successful members of the business community also have, or had on leaving school, varying abilities in these areas, I shall say no more about the 3 R's.

The research documented in LEARNING AND EARNING emphasises the extent to which higher education has been rejected by Australian teenagers. There has been a decline of 18 per cent since 1976 in the proportion of young people proceeding to full-time study in either Universities or Colleges of Advanced Education (CAE's). This decline has been most apparent for males. The proportion of males continuing to upper secondary education has been falling over the last 10 years, while that for females has been increasing. Participation rates for females in years 11 and 12 are now reported to be above that for boys. The exception has been in the Technical and Further Education (TAFE) sector where the participation rates for both males and females has been increasing, with the increase being most marked for females.

Only those who have long awaited sexual equality in higher education may take some satisfaction from the above trends. The tragedy is that this apparent egalitarian trend in the sex composition of enrolments has been achieved more by the dropout amongst males than by the increasing participation of females. It is also possible that the rejection of education by males may in time be equally reflected amongst females.

Although LEARNING AND EARNING is primarily about participation in tertiary education, its contribution is as much in the attention it gives to the roles played by secondary and technical education and on the influence of labour market conditions on the educational decisions of teenagers.

The evidence on the link between labour market conditions and participation in higher education is of particular concern. With a continuing high rate of teenage unemployment (the seasonally adjusted rate for February 1983 being...
one would reasonably expect that the tranquil surroundings of higher education would offer an attractive refuge from the realities of the market place. Yet, LEARNING AND EARNING suggests that the relationship is opposite with many of the more able secondary students opting to enter the workforce rather than to pursue tertiary studies, or even to complete secondary studies. The motivation seems to be one of 'get a job while you can'. These more able students have the choice between work and further study. For those less able students, further study is often not a realistic option. They find themselves increasingly squeezed out of employment and onto the dole queue as their more able colleagues secure what jobs are available.

For the economy and society at large the implications of the above are a loss of productive potential amongst those who have opted out of education and a loss of work experience and personal development for those who face extended periods of unemployment.

The range of issues raised by LEARNING AND EARNING is extensive. The list can also be easily added to by going back and looking at other research such as that by Stricker and Sheehan on hidden unemployment in Australia.

All that I can attempt to do today is to make some more or less random comments on matters of particular importance to employers. In doing so I am skipping over the role of education in providing consumption services for the individual and concentrating on its role as an investment in the future.

Employers are of course the demander or user of the end product. However, in the area of trade training they are placed in the unique position of being both demander and supplier through their role in apprenticeship training. I shall begin with some comments on this area from an employer viewpoint.

It has always struck employers as being odd that society (i.e. Government) assumes the responsibility for professional and other training through the Universities and CAE's while employers are expected to bear the bulk of the cost of trade training. The imbalance is reflected by the Federal Budget figures for 1982-1983 which show that funding allocations for the Universities and CAE's combined outnumber those for the TAFE sector by a factor of 7 to 1. At the same time LEARNING AND EARNING tells us that ...... 'TAFE dominates the education options of recent school leavers for both males and females ...... and ...
that over 30 per cent of all 17-19 year-old males are enrolled in TAFE and over 15 per cent of 17-19 year-old girls are now students in TAFE. The imbalance may go further if one accepts a view common amongst employers that secondary education is directed too much toward higher education and neglects the needs of those whose immediate destinations are the workforce or trade training.

It is worth noting that in West Germany apprenticeship training has been closely tied in with the secondary school system and that apprentices make up some 6 per cent of total civilian employment. In Australia apprentices account for around 2 per cent of civilian employment.

Even after allowing for differences in industrial structure, there appears to be considerable scope for re-assessing the emphasis of secondary education in this country. Certainly it needs to better reflect the actual destinations of its output.

At present in Western Australia there are 109 distinct trades in which apprenticeship training can take place. Nearly all apprenticeships run for 4 years and usually involve a day a week (or sometimes two blocks of 3 or 4 weeks) at a TAFE college. There are presently some 12,600 apprentices within the system in this State.

The single most important obstacle for young people wishing to undertake apprenticeship training is that they must first get a job. At a time of severe recession that is no easy task. The intake of apprentices for the period from July 1982 to February 1983 is down by around 30 per cent compared with the same period a year earlier. This represents a drop this year of around 650 in the apprenticeship intake.

The recession has also taken its toll in the form of increasing numbers of employers who, faced with a severe shortfall in work, are applying to be released from their apprenticeship obligations. As of March 1983, 255 apprentices in this State have been suspended, 178 apprentices are continuing on a part-time basis only, and a further 137 apprentices are at risk of either suspension or transfer to another employer (assuming one can be found).

While I have always been sceptical of exercises in manpower planning and forecasting, it does seem strange that we trust skilled-trades training in this
country to a system which is almost guaranteed to be de-stabilising. If business cycles follow a pattern of around 3 to 4 years then it seems inevitable that we will cut down on the apprenticeship intake in a recession to produce a shortage in a following boom and that we will increase the intake in a boom to produce a glut of skilled tradesmen in a recession.

A further aspect of the recession is that with high unemployment the Apprenticeship Tribunal is understandably reluctant to suspend apprentices. Unfortunately, increasing numbers of employers (and often small employers) are finding that they are caught in the situation of having to continue to employ an apprentice while not having enough work for that person to do. These employers will rightly feel that they have had their 'fingers burnt' and will probably become disenchanted with the apprenticeship scheme and certainly reluctant to take on apprentices in the future.

Another problem with our present apprenticeship scheme is that with the increasing specialisation of industry an apprentice may not get a sufficiently broad training while he remains tied to a single employer. Group apprenticeship schemes provide a sensible response to this problem as they permit the apprentice to move amongst a number of employers and to gain a variety of work experience. For industries subject to cyclical upturns and downturns (such as the building industry), group apprenticeships provide for a continuity in training that might otherwise not be possible. These schemes also have the advantage of spreading the risk of taking on apprentices from the employers' point of view. In Australia there are presently around 400 group apprenticeship schemes. In Western Australia there is only one group scheme and that is the one conducted by the Master Builders' Association.

All of the above, combined with the high cost to employers, are placing increasing strains on apprenticeship training in Australia. I am not suggesting that a scheme which has been largely successful in the past be discarded, but I am suggesting that society at large re-think its commitment to skilled trade training.

In the short term there is an urgent need to reduce the cost of apprenticeship training for employers. To this end the Confederation will be advocating at the forthcoming Employment Summit that the State Government provide payroll tax exemptions (and possibly meet the costs of Workers' Compensation) for all
apprentices. Beyond that there is a role for the Federal Government in re-assessing the distribution of post secondary education spending in favour of trade training.

At a school level it is important that the curricula reflect the significance of trade training for its students and that an effort be made to enhance the status of the skilled trades in the eyes of young people. In this respect it is important that we do not ignore the impact of technology in demanding an increasing level of skill amongst the workforce in many areas. Perhaps some of the material that makes up the content of pre-apprenticeship courses should be available within the secondary school system.

There is also a need to re-think the structure of skills training in Australia so that a tradesman does not find himself 'straight-jacketed' into a particular trade and level of skill (and hence remuneration) for life. There is a greater role for TAFE in developing more broadly based initial periods of training that would be suitable for a number of allied trades. Greater emphasis also needs to be given to continued skill development throughout a person's working life and to facilitate the transfer of skilled people from one trade area to another according to the labour needs of the economy. In this respect it is worth noting the comments by Ford that 'there are very few organisations in Australia that have career policies for their manual workers ... ... and that for most employees ....... there is little monetary incentive for improving their skills'. A more highly skilled and flexible workforce in Australia requires not only educational innovations, but a more positive community attitude with respect to skills training and a considerable freeing up of industrial relations and other obstacles to the transfer of people between trades.

Certainly, developments such as the above are preferable to our continued reliance upon a 'beggar-thy-neighbour' immigration policy to meet the skill requirements of Australian industry. The development of career opportunities amongst the skilled trades may also do much to arrest the drift of already skilled persons away from their trades and into other vocations as they seek higher monetary and status rewards. It is appropriate to conclude this discussion of skills training with a further quotation from Ford:

'Derogatory and insulting concepts, such as 'semi-skilled' and 'unskilled' are barriers to understanding and developing the levels of skills needed to appropriately utilise new technologies. In the Japanese organisations which I have studied, people are more appropriately
viewed as skilled or underskilled, and a manager is carpeted if he has an underskilled person in his section.  

To this point I have concentrated on skilled trades training due to the direct role played by employers in that area. My comments with respect to secondary education have been mainly along the lines of redressing the existing emphasis away from a preparation for tertiary studies and toward improving the appeal and status of courses which are more clearly directed at employment and skills training: In this respect there is scope for extending existing work experience programmes for both students and teachers. Although I must confess, that a major constraint to further developments in this area is the willingness of a sufficient number of employers to not only support these schemes in principle, but also to give freely of their time and facilities.

With the proportion of 17-year olds attending full-time education in the USA and Japan being over twice that applying in Australia, there appears from the outside a strong case for re-examining the role of secondary education in this country.

In the area of tertiary education LEARNING AND EARNING raises the question as to whether we should take measures to arrest the decline in participation rates and perhaps aim to increase them? Being one who is normally disposed toward placing considerable emphasis upon market forces I can't help but feel that tertiary education could do well to be more sensitive to market forces and less prone to engage in the pursuit of its own objectives.

With the abolition of tertiary fees and the introduction of TEAS allowances the 1970's saw a very substantial rise in tertiary sector enrolments. This is not surprising given the previously mentioned imbalance of public funding which is very much in favour of the tertiary sector. It may well be that at present we are simply observing a process of market adjustment as the burgeoning output of the tertiary institutions acts to depress the rewards of higher education and hence makes it less attractive to school leavers. LEARNING AND EARNING describes the effects of this increase in the supply of graduates in terms of 'occupational slippage'.

The question of tertiary fees is an emotive one that inevitably brings forth arguments for equality of opportunity in education. While that principle is
not in question, I am sure that most of us here today are well aware that the average university tutorial class is anything but a cross section of society. Students from upper and middle class backgrounds have a disproportionately high representation while those from working class backgrounds are more difficult to find. In the area of skilled trades training the situation is reversed, yet in this area we see a disproportionately low level of government funding. It is because of observations such as these that I am not easily impressed by the need for a universally free tertiary education system.

The majority of the benefits of tertiary education do accrue to the individual and thus there is scope for at least partial application of the principle of 'user pays'. Means tested benefits can then be used to concentrate support in the direction of the socially disadvantaged.

Given the disturbing trend of many of the more able secondary students rejecting tertiary studies, it is important to note the following comment from LEARNING AND EARNING on the relationship between financial support for students and the recognition of achievement:

'One of the factors which, in previous years, was a major influence on school leavers and their parents was the award of tertiary competitive scholarships to assist in meeting tertiary education costs ..... The abolition of tuition fees and the introduction of means tested allowances under TEAS replaced the previous arrangements. Gaining a financial benefit now depended on a means test, not academic attainment. .... The outcome, however, appears to differ from that envisaged.

...... A larger proportion of relatively able students are choosing not to transfer to higher education. ...... The receipt of a competitive award seems to have had an influence on students and parents beyond the direct financial assistance it provided. Students and parents were perhaps proud of the public recognition which such awards involved and tended to use them despite the fact that this imposed additional costs on the family'.

The challenge facing tertiary education is not so much one of increasing enrolments, but one of improving the content and relevance of courses and of
ensuring that it attracts the best students and that they are developed to their full potential. An emphasis on 'excellence' is of greater value to society than one on the 'numbers game' with all its associated wastage.

REFERENCES
2. Ibid., Page 70.
3. Ibid., Page 51.
10. Ibid., op. cit., Page 190.
12. Ibid., Page 60.
Today's discussion is focussed on education and employment options for young people - on learning and earning. In arranging it, Bill Pullman was kind enough to ask Peter Grant and me to set the scene; to describe the recent trends in education and workforce participation by young Australians as a backdrop to the contribution which each of you is expected to make later today when we debate the big issue - what should be done? I will deal with the trends in education and Peter with the labour market, and with the nexus between the two.

There had been a very long-term growth in the proportion of young Australians who completed a full secondary education - that is who persisted to the Final Year of Secondary School. However in the early 1970s this growth slowed; for males it reversed. The proportion of young Australians who complete a full secondary education is, by international standards, low. A lot of statistics may be thrown around today, but if there is one you remember, let it be this - only one in three young Australians reaches Year 12.

TAFE enrolments have expanded significantly in recent years. The expansion has been mainly in the area of full-time courses, and in the participation of women. But that is because part-time TAFE has long been a very popular option for young men; because it was linked directly with employment. Apprenticeships are of course the main avenue for such participation. Until recently, one in three young males found an apprenticeship a post-school destination which combined learning and earning. Peter Grant will describe the more recent trends in apprenticeship, but you will appreciate that there is great significance for youth in any sustained downturn in apprenticeship opportunities.

As I mentioned full-time enrolments in TAFE have risen. In fact the statistics may hide part of the growth: The definition, for statistical purposes, of a full-time student is one undertaking more than 540 hours of...
tuition. Even leaving aside those apprentices who are, in the other sense, full-time students for 6 or 7 weeks a year, there are other indications to the extent to which full-time attendance in TAFE has become a popular option for young people. Here is some recent data on the numbers of people who are commencing tertiary education aided by TEAS allowances. I have used TEAS allowances because they are restricted to students classified as full-time in the sense that their study normally prevents them from being able to work full-time. I have used commencing students because, in the case of universities and CAEs where courses last three years or more, students are counted again and again.

**NUMBER OF TEAS STUDENTS IN THE FIRST YEAR OF COURSES, 1981**

<table>
<thead>
<tr>
<th></th>
<th>UNI</th>
<th>CAE</th>
<th>TAFE</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>3600</td>
<td>3300</td>
<td>6700</td>
<td>800</td>
<td>14400</td>
</tr>
<tr>
<td>WA</td>
<td>900</td>
<td>1900</td>
<td>1600</td>
<td>300</td>
<td>4500</td>
</tr>
<tr>
<td>AUST</td>
<td>10400</td>
<td>14200</td>
<td>14500</td>
<td>2900</td>
<td>42000</td>
</tr>
</tbody>
</table>

These statistics are, at best, only a rough guide to trends in TAFE because eligibility for TEAS is dependent both on full-time status and parental wealth. But look at them. Firstly there are now more Australians commencing TAFE courses aided by TEAS than there are commencing university or CAE courses. In NSW, where the full-time TAFE system is more developed in a range of ways - secretarial courses for example - there are almost as many TAFE commencers on TEAS as universities and CAEs put together. In this it must be remembered that full-time students in TAFE (but not universities and CAEs) are often eligible for other forms of study support - transition and training allowances for the unemployed for example.

I have included NSW and WA in this table not because they are the only States which matter but because NSW represents one extreme - but I invite you to speculate on the balance of the education sectors in this State, if TAFE were to develop in line with NSW.

Before I leave this table can I mention one other interesting fact. The 900 TEAS students in universities represent 34% of total full-time students (excluding higher degree students who are not eligible for TEAS). The 1900
students in CAEs represent 57% of total full-time CAE students. A major factor in this very substantial difference will be socio-economic status. For one reason or another CAEs are attractive to students from a much wider SES background. There is data about this in LEARNING AND EARNING. The educational psychologists claim that in part this is because CAEs are less pretentious and threatening than universities. That is interesting speculation and it must concern those who see some CAEs adopting more and more the style (if not the title) of university. They may be destroying the very essence of their strength.

But I must return to education trends -

In higher education the pattern of youth participation is well known - there was, from 1975 to 1981, a substantial decline. For 17-19 year olds in full-time higher education the decline was 18 per cent. You will note that the trends are different between universities and CAEs. In universities, males dominated the decline in participation and the 1981 rate was as low as that which existed in the mid 1960s (when universities were only one half their present size). In CAEs, mainly because of teacher education, female participation fell. More recent statistics indicate that the decline in youth participation may have been halted - but I warn against undue optimism. Do not count the seats until all the votes are in - there has been no great landslide in the election for higher education. The reported upturn in interest in higher education this year is most welcome but they are only the early returns - the upswing comes, as Peter Grant will explain, at a time when the other options, even for more able young people, are perhaps at their lowest point in Australia's history.

An important factor in the decline of young people in higher education is that it is not the 'marginal' student who has decided against taking the risk. Generally it is well qualified young people who have led the flight from education - almost certainly because they are, or have been, fairly well placed to get jobs by comparison with their less well qualified colleagues. There is data in LEARNING AND EARNING which shows that 19 year olds from the bottom quartile of their school group have unemployment rates about 5 times higher than those from the top attainment quartile. The trend is not surprising but the magnitude of it must surely be a cause for concern. The fact that the decline in youth participation was led by the more able adds weight to the warning I gave a few minutes ago about jumping to early conclusions about a
sustained recovery in youth participation in education.

Against that background there are two related, but different lines of inquiry:

- first it is good for us (if not for those at Balaclava) to know the 'reasons why';
- secondly, it is useful to discuss the remedies.

Let me underscore the difference between these two factors – the remedies are not, they cannot be, the reverse of the 'reasons why'.

The causes of the decline in youth participation in higher education are a major part of the Commission's study. As the title of the study shows we believe a major part of the puzzle is the change which took place in the labour market and the response of youth to that change. But that is Peter Grant's territory. Let me stay for a moment in the land of the educational psychologist. He is on solid ground in asserting that the perceptions of young people and their parents of the value of higher education is a major factor in the decline. These perceptions are that in economic and social terms a degree or diploma is not worth as much as it once was. The economic argument is unassailable – one can PROVE that the wage margin of graduates has declined substantially and that graduates no longer have an almost assured job market. We will never return to the previous position. But the decline in social value – that is less easy to prove. Nevertheless the survey data point to some fairly clear trends. In the past scholarships were hard to get – jobs? any young person could get one. NOW tertiary education is 'free', TEAS is open to all. The getting of a job – almost any job – is for many parents a gold seal of approval on the diligence and success of their child rearing activities. For young people too a job provides for parental independence and this is of growing importance to young Australians.

In mentioning the increasing desire of many young people to be independent of their parents let me warn against any simplistic view that student allowances should be free of parental means test.

At present the TEAS scheme costs around $200m. A further $4-500m would be required to remove the parental means test, even if there were no more students admitted to full-time courses. Most of this money would go to students who would undertake the study in any case. It must also be remembered that, by international standards TEAS is a very comprehensive and relatively generous scheme.
The research evidence points to student aid as being a factor in decisions made by young people for, or against, higher education, but it cannot be claimed to be the decisive factor in most cases. In this context I am sure you will appreciate that there is no single factor, or set of factors, which is relevant to all students.

But enough of the 'reasons why'. Can I trespass for a minute on the remedies.

Those of you with a broad liberal education will remember that in Henry IV Part I Owen Glendower is explaining to Hotspur his extra-terrestrial birth signs and powers. The interchange has a particular relevance to those who seek to increase the participation of teenagers in full-time education.

Owen Glendower:    I can call spirits from the vasty deep.

Hotspur: Why so can I, so can any man; but will they come when you do call for them.

So it is with students.

There is of course, a range of options. At the Draconian end of that range lie proposals to increase the compulsory school leaving age or to prohibit unemployment benefits being paid to young people who 'ought' to be in education. At the other end of the range lies proposals to win the hearts and minds of Australia's youth; to demonstrate to them the long term value of education as a personal investment in what can be termed the 'Quality of Life' and as a hedge against unemployment not just now - but over the whole of their working lives. For the spectre of unemployment is not removed when a young person gets a first job - it may persist throughout one's whole career. Any comprehensive approach to the issue of increasing education participation - secondary or tertiary - must examine the whole range of such options. There will be no single miracle cure.

The benefits of education are argued in LEARNING AND EARNING. Discussion of them, and discussion of trends and attitudes in relation to education participation will, in itself, effect PERCEPTIONS of young people and their parents. But we must not overlook the other benefits of increased education - that is, it will reduce the number of teenagers competing for work and reduce unemployment. Until recently it was considered rather 'bad form' to take such a pragmatic view; to suggest that education may be a shelter from...
unemployment. LEARNING AND EARNING has been criticised for mentioning it, even in passing as a side-effect benefit. Education, it was thought, was for the dedicated - not the reluctant.

The man who is now Prime Minister had no such illusions when he opened a recent campaign. Let me quote:

"We cannot afford to waste the talents and destroy the hopes of our young people in the dole queues, we cannot afford to lose so many able students from our high schools, colleges and universities....

Australia has a low retention rate of young people in the 15 to 19 age group in education. Too many unskilled Australians are looking for jobs, and by doing so are increasing the size of the workforce when insufficient jobs are available....

In dealing with the general question of unemployment in the longer term, we will have to face up to reducing the length of the working life of the average Australian. A substantial impact will be made on this problem by policies designed to encourage young people to remain in education longer....

All sections of education will be required to acknowledge the pragmatic requirements of the present, quite disastrous labour market situation, and to adjust to it. But to describe that situation I had best make way for Peter Grant.
FIGURE 2.2
EDUCATION PARTICIPATION OF 17-19 YEAR-OLDS AND 20-24 YEAR-OLDS IN TERTIARY EDUCATION, 1975 AND 1980 (percentages of age groups)

17 to 19 YEAR OLDS

- SCHOOL
  - FULL-TIME
    - M
    - F
  - PART-TIME
    - M
    - F

- TAFE
  - FULL-TIME
    - M
    - F
  - PART-TIME
    - M
    - F

- CAE'S
  - FULL TIME
    - M
    - F
  - PART-TIME
    - M
    - F

- UNIVERSITIES
  - FULL TIME
    - M
    - F
  - PART-TIME
    - M
    - F

20 to 24 YEAR OLDS

Source: Appendix A, Table A.2.3.

FIGURE 2.1
EDUCATION PARTICIPATION OF 17-19 YEAR-OLDS(a) IN FULL-TIME HIGHER EDUCATION, 1961 TO 1981

(a) UNIVERSITIES
(b) ADVANCED EDUCATION

(e) HIGHER EDUCATION — SEX
(d) HIGHER EDUCATION — SECTOR

(a) Students aged 17-19 years as a proportion of the population aged 17-19 years.
Source: Appendix A, Tables A.3.
IMPLICATIONS FOR POST-SCHOOL EDUCATION

An Address by H.K. Coughlan,
Chairman of the
Commonwealth Tertiary Education Commission
to

WAPSEC "Learning and Earning" Seminar

May I begin by congratulating the organisers of this seminar. Gatherings like today's, which involve people from business, government and all the sectors of education can make a major contribution to our understanding of the issues surrounding participation of young people in education. It was discussions like today's that the CTEC hoped would be stimulated by the publication of its study.

In the study itself there was a brief outline of how the issues raised might affect post-school education. What I would like to do is to take some of these ideas a little further, paying account to what has occurred in the months since the study was completed.

To be meaningful, any discussion of the implications of a study of participation should recognise that changes in participation rates can take several forms. We can increase the participation of one group at the expense of other groups, with certain inherent tensions in such a process. We can plan on the basis that any increased participation by, say, young people, will be additional to existing levels of participation of other groups. We can seek to increase the participation of all relevant groups in the population. The resources will vary in accordance with the objectives we decide upon. In determining our strategy, therefore, we need to make some guesses about the economic and political climate in which we will be operating.

The new governments in both Perth and Canberra are committed to improving participation in education and are sympathetic to measures to that end. At the same time, those governments will be operating in an economic situation, which, for some years at least, will almost certainly mean that competition will be very keen for any extra funds available. There will be competition between education and other fields like health, social security, defence and
so on. There will be competition within education; between measures to improve quality and measures to increase participation. If we decide to increase participation, there will be competing programs for secondary education for higher education and for TAFE. This means that priorities will need to be determined with consequent discomfort in some places.

I turn first to higher education. Here the questions seem to be.

What should be our objectives?

Where is there best scope for growth towards those objectives?

Where is there a failure to make an adequate contribution to these objectives?

What sorts of changes are needed to make the best use of existing resources?

Where would the best use be made of any new resources?

Can we express our objective as a target rate of participation? Learning and Earning drew attention to the fact that in 1981, 13.6% of 19 year olds were in higher education, in 1975, 15.5%. It posed the question: was the 1975 rate a more desirable one than that of 1981? Most people would assume that the question was a rhetorical one and debate in recent months suggests that the general community view is that the present rate of participation is too low.

The choice of a more desirable rate is dependent to some extent on one's concept of higher education. We have now in Australia a range of institutions of higher education and (except among a few journalists) have moved from the view that the only worthwhile form of higher education is that provided in the traditional faculties of universities. There is no evidence that within the level of participation achieved in the mid 70s there were large numbers of young people in higher education who should not have been there.

It would be reasonable to expect that even in 1975 there was not a sharp dividing line between the intellectual capacity of those in higher education and those outside it. We know enough of the differential participation rates
between males and females, between states, between city and country and
between socio-economic groups to recognise that in 1975 there were probably
a large number of young people who could have benefited from an appropriate
kind of higher education but who were not participating. We recognise the
central role of the schools in determining who will and who will not move
to higher education and realise that increased participation in senior
secondary education is a pre-condition of the entry to higher education of
some groups in the community.

All this suggests to me that we could have a participation rate in universities
and colleges of advanced education higher than that of the mid-70s without any
threat to the concept or quality of higher education institutions. We have
a wide range of institutions with differing objectives and we should take
advantage of that fact. For practical policy making, therefore, we might have
as a medium term target, our 1975 rate. To get back to this by 1990 will
require 45,000 additional places in higher education (the difference between
that and the figure of 25,000 used in the Labour Party's policy arises from
the fact that the latter did not refer to the 20,000 places needed to cope
with demographic growth). It would not be unreasonable to suggest a longer
term target of, say, 20% by the end of the century.

In what kinds of studies would those extra places be located? The Australian
population will continue to grow. The latest projections are significantly
higher than those of a few years ago; in fact, they are now approaching the
projections upon which some of us in fields like education and urban development
were working in the early 70s and which, between 1976 and 1979 seemed too
high. Present projections suggest a population approaching 20 million by the
turn of the century. This suggests that we can support reasonable expansion
in a number of vocational fields of study and should be cautious about yielding
to pressures to impose drastic cuts in other fields, including medicine.

I think the argument put forward in Learning and Earning still holds,
however. The main scope for growth in higher education will lie in generalist
courses. There are good reasons for this. Many young people do not wish to
commit themselves to a specific vocation when they begin higher education,
but would, perhaps, find attractive a course that would be a useful base to
whatever career they eventually decide to follow. For many careers a general
education of the right kind would be a very appropriate base. There are
arguments for the thesis that it is now important to prepare people for a life
in which jobs will appear and disappear and in which employment will be a
smaller proportion of life. A generalist education could well be the best
preparation for the changing and fluid world of the future. It is probably unrealistic to expect an expansion and proliferation of specific vocational courses in higher education to the extent that would lead to a sensible preparation for all able young people and the number of new places we will be seeking.

The evidence suggests, however, that existing generalist courses are not sufficiently attractive to young people for them to become the location of that growth which will cause a significant increase in the rate of participation. Thus, if we examine the composition of recent entry to full-time arts courses, we find that in many universities the normally matriculated young student is in the minority. The cut-off mark for entry is significantly lower than the entry mark for most other courses. To a less extent, the same comments apply to the nature and quality of students entering the faculties of science.

The reasons for this are probably related to the downturn in teacher education. Most of our faculties of arts and science (and their equivalents) became large, not because of the intrinsic attraction of their courses, but because large cohorts of students were provided, until recently, by State departments of education. There are two elements to the change that has occurred. The disciplines are not sought by such large numbers of young people; and it is within those faculties that the major reduction in student support, exemplified by the disappearance of generous teacher education scholarships, has had its effect.

I stress that these remarks are not a questioning of the importance of the disciplines encompassed by the faculties of arts and science and their equivalent; such disciplines are at the core of the scholarship and research on which our civilisation is based. What I am questioning is whether these faculties, as they are at present, can reasonably be expected to attract such numbers of young people as to be a major focus for increasing the number of young people in full-time higher education.

This takes us to the question, what sorts of changes are needed to make the best use of existing resources in higher education as we move towards the objective of increasing participation rates. To some extent the answer is inherent in what I have been saying. The allocation of resources must take some account of the level of demand for various courses. Over a period of time we must be prepared to shift resources from courses no longer in strong demand to those for which there is a strong demand. This suggests that where demand has dropped
for existing generalist courses there are two options - to change the offerings to something which will attract more young people, or to reduce the size of faculties or departments affected and so free resources for other programs.

Is there scope for change? Are there possibilities by way of generalist courses that we have not yet tried? The answer to these questions must lie with institutions and we must be prepared for a deal of trial and error. My own view is that there are patterns of generalist courses which we have not yet tried and which could be worthwhile. Last week I spent some time with the directors and principals of the colleges of advanced education and suggested that there may be scope for some institutions to analyse more carefully the nature of that element of the cohort of able young people who are not entering higher education. Such an analysis might lead to a program designed to attract at least some of those who do not have a specific vocation in mind. I suspect that if such an exercise in curriculum development were to succeed, the resulting course would be down to earth, in the sense that it set out to meet the young people's needs for knowledge and skills rather than the scholarly interests of staff members. Those needs would be determined within the broad criterion of the knowledge and skills that a young adult should bring to life if he or she is to be regarded as educated. The core would probably be the higher skills in literacy, communication and numeracy which modern society demands. The latter would include an understanding of the new information technology. The other element would be study in depth of one or two other disciplines which would help the individual understand that society. There would be a minimum of electives, the emphasis being on a highly structured course which would be sufficiently demanding to give the student, at the completion of three years of study, a sense of achievement and a qualification which parent and employer would understand.

I admitted, when speaking to the principals, that what I was suggesting could be regarded as merely an extension of a traditional secondary education. Providing it were an extension which, because of its substantial academic content, imposed real demands on students, it would still be valuable. I reminded the principals that in recent years Harvard has been moving back to a more structured curriculum directed to the old fashioned objectives of producing educated men and women. I might have mentioned also the fact that many employers state that the main attribute they seek for many jobs is a sound general education.

If the option of experimenting with new curricula is chosen it may be that
the present departments or faculties are not the best location for new offerings. There may be a requirement for cross-disciplinary programs that present staff would prefer not to be associated with. There may also be questions of whether the new offerings should be developed in advanced education rather than in universities. We know that whatever is done will require time before success or failure can be determined.

My final question on the topic of improved participation in higher education was "Where would any additional resources be used?" The question assumes that higher education makes any necessary adjustments to enable best use of existing resources. The additional resources I am speaking of would be those which may be made available during the next few years to improve participation. We will need to work out our priorities carefully because the amount available is unlikely to be great and the competition for it will be keen. I suggest that the chief objective should be to attract back into full-time higher education as many as possible of those bright young people who at present prefer to enter the workforce. The mature age student, the student who has already obtained a first degree and wishes to do another first degree are all important, but during the next few years should receive a lower emphasis than the young first-time student.

Given such an objective a first priority would be probably an expansion of existing vocational courses for which there is unsatisfied demand and the products of which are likely to find worthwhile careers. In other words, manpower policy is an element in the way we encourage expansion. The next priority would be expansion of those generalist courses which demonstrate that they are attractive to intelligent young people, and are of value as they seek to enter the workforce. I doubt whether the resources available will allow us to go beyond this.

I shall speak more briefly with regard to TAFE because the facts outlined by Peter Grant speak for themselves. Here the basic issue is not that of encouraging young people to enter institutions but rather that of coping with the increased participation rate that appears to be inevitable. There are several factors contributing to the increased pressure on TAFE. TAFE has the strongest links with the labour market and is the most directly affected by changes in the labour market fortunes of the young. Indeed, a significant proportion of TAFE students are participants in TAFE precisely because of their labour market circumstances - whether as apprentices required to attend TAFE under the conditions of their apprenticeship or as unemployed young people who undertake TAFE courses to improve their basic skills and
longer-term employment prospects. How then will TAFE be affected by the latest slump in the labour market for youth to which our attention was drawn?

The downturn in apprenticeship numbers is unlikely to have a major, direct, impact on TAFE because of the pipeline effect caused by rapidly rising intakes into apprenticeship between 1978 and 1981 and the fact that the policies of both Federal and State Governments will almost certainly be designed to replace the loss of apprenticeships with other forms of training. Underlying such actions by governments is the long-term shift of responsibility for training effort from industry to educational institutions.

Changes within apprenticeship have had the effect of enlarging the TAFE component of total training effort, and proposals to extend apprenticeship-type arrangements to cover occupations other than the skilled manual trades will increase the load. Add to these factors the inevitable pressures which will be placed on TAFE to expand its more general access and transition-type courses, and there seems little doubt that total demands on TAFE resources will continue to increase. The nature of those demands, however, is already changing and will almost certainly change further, as the vocationally specific programs relevant to a 'resources boom' era yield ground to the more broadly-based programs demanded by a climate of uncertainty. A relevant and important development was the announcement by Mr Hawke that youth affairs would become part of the Education Portfolio.

The evidence is very strong, therefore, that TAFE has a major role in raising the level of participation of young people in tertiary education. As with higher education, however, the success of that role will be dependent to a large extent on TAFE's capacity to broaden its offerings by way of courses that are meaningful to young people. In doing this there will be two major issues to be faced.

The first is the increased importance of full-time courses. Five years ago TAFE was dominated by part-time courses. Don Brewster's comments on the growing importance of TEAS among TAFE students indicates a shift because TEAS is available only to full-time students. It seems inevitable that this trend will continue as the employment sector seeks higher levels of skill in young people before they enter a job. The shift to full-time education will continue to place demands for change on TAFE's staff and facilities. Staff will be dealing with a different kind of student; many TAFE colleges lack facilities appropriate to full-time students.
The second issue is the extent to which TAFE is able to devise and deliver the kinds of programs that will be demanded. As people in TAFE will argue, even in fields in which TAFE has been operating for many years, a full-time course is not merely a part-time course delivered to a different timetable. The partnership between TAFE and employment, inherent in most part-time courses, has to be rethought in respect of full-time courses.

But TAFE is being asked to move into fields into which it has not previously operated. In some of these, the Australian practice until now has been to leave the training to the employer. In other cases, TAFE is being asked to mount programs that until recently had not been thought to be needed let alone to be appropriate to tertiary education. The transition courses for the unemployed are a case in point.

TAFE, like the other sectors of education, can do little to reduce youth unemployment. The creation of jobs is the task of others. If the central objective of a national youth policy is the provision of expanded opportunities so that all young people are in education, training or employment, the TAFE role lies in expanding opportunities for education and training. Where does the scope for such expansion lie?

We might get some ideas about gaps in present Australian provision if we look at a country like Germany which has a long tradition of structured arrangements for vocational training that embrace the overwhelming majority of young people. There are important differences between Germany and Australia which prevent us regarding the methods the Germans use to achieve this result as having application in this country. I cannot envisage Australia establishing the formal linkages between the employers, union, and government organisations which provide the base for Germany's comprehensive apprenticeship system. What we can benefit from is an examination of the range of occupations covered by that system.

In Germany young people entering, for example, occupations in the catering, clerical or distributive industries undertake structured training through an apprenticeship. In Australia the past few years have seen the successful development of courses for entrants to the catering and hospitality industry but very little, as yet, for people wishing to enter the other industries I mentioned. There seems to be scope to develop training opportunities which have a vocational focus but a core
of more general studies which will be of value to young people in a changing world.

In tackling tasks like these, TAFE is faced not only with major effort in curriculum development and staff training. It will need frequently to work out its role in relation to the legitimate roles of employers (real and simulated) and manpower authorities. This underlines the importance of the early decision of the new Federal Government, not only to move youth affairs to the Education Portfolio but to give the Minister for Education a co-ordinating role with respect to programs with important implications for youth.

The central reason for increasing the participation of young people in post-school education is the belief that it is in the best interests of all to develop the talents of our young people to the greatest extent possible. We should be seeking a situation, therefore, where significantly more young people are attracted into our institutions because they are satisfied that the programs they will follow there are interesting and relevant to their future. For this to happen all three sectors - universities, advanced education and TAFE - must face the discomfort of change.
This is the third such seminar held on LEARNING AND EARNING since the publication of the study in October 1982. At the first seminar, held in Melbourne last December, I referred to the evidence of a major deterioration in the labour market for young people, reflected in the loss of 38,000 full-time jobs for 15-19 year olds in the 12 months to August 1982. The early signs of this deterioration had already been evident at the time of finalisation of LEARNING AND EARNING, and were the subject of a postscript in Chapter 4. By the time of the second seminar, held in Brisbane earlier this year, later labour force figures were available which showed that in the 12 months to December 1982 more than 69,000 full time teenage jobs had been shed. For this third seminar the results are available of the national labour force survey conducted in January this year; on this latest evidence, just on 80,000 of the full-time jobs held by teenagers at the beginning of 1982 have disappeared during the past 12 months. The labour market reversal for 20-24 year olds has been, if anything, even more dramatic. I stress that there is nothing seasonal or statistically quirkish about these figures: the trend they represent is real and unambiguous, and a sharp contrast with the relative stability of youth employment levels up to late 1981.

(1)

We have lived for so long in a climate of economic gloom that we might be forgiven for failing to recognise the full significance of these recent trends. But highly significant they are, both in the broadest social sense and in their direct implications for education. They mean, in short, that economic recovery, when it comes, or job creation schemes, beforehand, will need to provide an additional 140,000 jobs for the 15-24 age group alone if they are to restore even the same level of full-time employment which applied in early 1982. Not many would subscribe to that as an optimal target. Alternatively, large numbers of these young people will need to be provided with worthwhile and attractive options other than full-time work.
TABLE 1
FULL-TIME EMPLOYMENT OF YOUNG PEOPLE - AUSTRALIA, JANUARY 1979 - JANUARY 1983

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MALES</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-time Employment</td>
<td>Change on Previous Year</td>
</tr>
<tr>
<td>15-19 YEAR-OLDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 1979</td>
<td>306,900</td>
<td>47.1</td>
</tr>
<tr>
<td>Jan 1980</td>
<td>304,400</td>
<td>-2,500</td>
</tr>
<tr>
<td>Jan 1981</td>
<td>318,200</td>
<td>+13,800</td>
</tr>
<tr>
<td>Jan 1982</td>
<td>315,700</td>
<td>-2,500</td>
</tr>
<tr>
<td>Jan 1983</td>
<td>260,400</td>
<td>-55,300</td>
</tr>
</tbody>
</table>

| 20-24 YEAR-OLDS |
| Jan 1979 | 481,400 | 80.3 | 319,700 | 53.4 |
| Jan 1980 | 490,900 | +9,500 | 326,500 | +6,800 | 53.7 |
| Jan 1981 | 512,900 | +22,000 | 332,000 | +5,500 | 53.4 |
| Jan 1982 | 529,000 | +16,100 | 351,400 | +19,400 | 55.1 |
| Jan 1983 | 487,600 | -41,400 | 331,100 | -20,300 | 51.0 |

(a). Those in full-time employment as a percentage of the corresponding civilian population.

SOURCE: ABS LABOUR FORCE SURVEYS (CAT. NOS. 6202.0 AND 6203.0)
I would like to say something this morning about the relationship between educational and labour force participation by young people, and then perhaps to speculate a little on how educational institutions are likely to be affected by the severe downturn in labour market conditions to which I have just referred. But first to the LEARNING AND EARNING study itself.

While the study had its origins in the decline in participation by young people in higher education, it was recognised from the outset that the reasons for this decline would not be found exclusively within higher education itself; rather, that trends in higher education participation would need to be examined in the context of the total range of education and employment options available to the young. Why, though - among the large number of factors accepted to have a bearing on educational participation - was such strong emphasis placed in this study on those factors related to the labour market for youth?

The first reason is that, in terms of the activities and options available to most young people, the really major choice which they have to make from the age of about 15 onwards is whether to continue with their full-time education or to transfer to full-time labour force activity. This is not to play down the significance of the very rapid growth in part-time employment for youth which took place during the 1970s, nor the importance for many young people of part-time education concurrent with employment; rather, to restate the obvious fact that full-time education and full-time employment are, in a practical sense, mutually exclusive options, and that the more young people opt for one form of activity the fewer will be participants in the other.

The second reason for our concentration on labour market trends was the belief that, while vocational concerns are clearly only one of a large number of factors which influence the educational decisions of youth, young people are highly sensitive to information, publicity and their own perceptions about the state of labour market and the market value of the various forms of tertiary 'ticket'. The response of students themselves to the downturn in the teacher education market during the 1970s was but one example of that sensitivity. Indeed, I would personally go so far as to suggest that it is very difficult to make sense of recent trends in full-time educational participation by young people without resort to a very substantial emphasis on trends in the labour
market for youth. Let me outline the reasons for that statement by recalling the conditions which applied just 10 years ago, prior to the onset of economic recession in Australia.

As LEARNING AND EARNING reminds us, analysts of educational participation in the early 1970s were looking back on well over a decade of very strong and consistent growth at all levels of education — growth which far outstripped even the very considerable increases of that period in the size of the corresponding population. More importantly, there seemed every prospect that growth would continue unabated: even by the end of the 1960s, participation levels in Australia were considered low by international standards, and the easing of demographic pressures, it was thought, should pave the way for further increases in participation without intolerable strain on resources. Had foreknowledge been available of the severe economic recession about to beset Australia, and of the labour market consequences of that recession, particularly for the young, there seems little doubt that the growth predictions for education would have been even further strengthened: the downturn in labour market conditions would surely increase the incentive for young people to persist longer with their full-time education, not only to improve their future employment prospects but also to shelter somewhat longer from the present realities of a tight and highly competitive labour market.

In fact, of course, exactly the opposite happened, at least in the period covered by LEARNING AND EARNING: not only were there substantial decreases in senior secondary education (by males) and in higher education by young people of both sexes, but these decreases occurred as youth unemployment in Australia climbed to an all-time high. The explanations advanced for the trends of this period, therefore, must explain not only why educational participation fell sharply, clearly breaking the long-term trend, but more particularly why young people moved away from education in the face of a major downturn in labour market conditions.

How then to account for this apparently anomalous behaviour? Even limiting the discussion to an economic and labour market framework — and accepting that this is by no means the whole story — the explanation is far from a simple one. Indeed, it cannot be simple, given the wide variations in
participation trends which are evident at different ages in the youth population and, particularly, as between the sexes.

The study itself identified four competing forces which are likely to have influenced the educational decisions of young people in the period from about 1974 to 1981. The two positive forces are the long-term trend towards increased educational participation, reflecting the benefits of education in both personal and financial terms; and the operation of the 'shelter effect', whereby adverse labour market conditions may have encouraged some young people to defer their entry to the full-time job market and in the meantime to continue with their full-time education. The two negative forces are the decline in the real financial returns on an educational qualification, particularly for the marginal graduate of a higher education institution; and the effect of tight labour market conditions in raising the appeal of 'full-time worker' status relative to that of 'full-time student'. Particularly for many of those with the ability to proceed to higher education, the very shortage of full-time jobs would appear to have acted as an incentive rather than a deterrent to entering the labour market. For these young people the first priority in the climate of the time was to obtain full-time work - a goal which, given their good school records and abilities, they could usually achieve without major difficulty. One result of their actions, however, was to reduce even further the employment opportunities open to their less able peers.

While all four of these factors - and others - probably operated to some degree on any given group of teenagers, the available evidence suggests that the two negative forces had a much greater influence on males rather than females, on older teenagers rather than younger, and on high-ability rather than low-ability youngsters. These variations were directly related to differences in the level of employment demand, which was consistently stronger for males, for 18-19 year olds rather than 15-16 year olds, and for those teenagers considered able and competitive in the judgements of employers. For younger teenagers, however, and particularly for young females, the 'shelter effect' was probably the dominant influence, as full-time employment opportunities diminished substantially in number and also, probably, in quality. Unemployment was concentrated among those teenagers who, having rejected the refuge offered by school or further education, were least competitive in their quest for full-time work. As strikingly illustrated by the ACER survey data to which Don has referred, chief among these were young people of low school attainment to whom continued participation in post-compulsory education of the type still generally on offer was least likely
to appear an attractive or relevant option.

You will notice that I have used the past tense to refer to the developments described in LEARNING AND EARNING. I have done so intentionally, because, as Don has already mentioned, there are strong if preliminary indications that the decline in higher education participation by young people which gave rise to the study has now been arrested at least and probably reversed. The first signs of a turnaround appeared in preliminary data for 1982, and early indications for 1983 are of a substantial increase both in applications and admissions to full-time study in universities and colleges of advanced education. Perhaps even more significantly, most state education departments have reported a major increase over previous planning projections in the level of Year 11 enrolments in 1983. Nationally in government schools this increase seems likely to be between 10,000 and 15,000 on a base of about 95,000 in 1982. A strong upturn in applications lodged under the Secondary Allowances Scheme is but another part of a consistent picture.

What interpretation is to be placed on these latest developments? Do they mean, for example, that the LEARNING AND EARNING study was merely a timely coda at the end of an episode which many within the education community would prefer to forget? On the contrary, I wish to suggest to you this morning that the enrolment increases being registered in 1983 should have come as no surprise, that they are a logical consequence of the relationships described in LEARNING AND EARNING, and that these relationships are as relevant now as they were at the time that the study was commissioned; moreover, that when set in the context of recent developments in the labour market for youth, the levels of increase in educational participation being recorded in 1983 may be a cause for concern rather than relief.

Let us look in a little more detail at some of the changes which have occurred during the past 12 months in the availability of full-time work for young people. In distributional terms, firstly, the downturn has been most severe among those groups - males and older teenagers, in particular - which fared relatively best on the employment front in the period covered by LEARNING AND EARNING and which contributed most to the decline at that time in educational participation. Whereas the proportion of male teenagers holding full-time jobs had held approximately constant between 1976 and 1981, for example, young males have accounted for nearly 70 percent of the total job loss during the last 12 months, and the proportion of male teenagers engaged in
full-time work has slumped from 48.8 percent in January 1982 to 40.3 percent in January 1983.

An important factor contributing to this deterioration in the labour market for young males has been the sharp fall in the level of national apprenticeship intakes - down 25 percent in the first seven months of 1982-83 - and a rapid increase in the number of apprentices placed 'out of trade' by reason of the financial circumstances of their employers. These trends appear to have hit even harder in Western Australia than in the rest of the Commonwealth: apprenticeship intakes in this State in the current financial year are now running at only 51 percent of their corresponding level in 1981-82.

This downturn in apprenticeship marks a sharp break with the trend of the 1970s and early 1980s when, with substantial financial assistance from governments, the apprenticeship system provided the single major buffer to the general decline in full-time employment opportunities for young people. The vital question, though - given the significance of apprenticeship as an employment destination for one in every three young males - is whether the present shake-out is mainly a short-term phenomenon or merely a portent of things to come.

We may well hope for the former, but cannot afford to ignore the recent experience of the United Kingdom where, as a result of the rapid decline in activity in manufacturing industry, the number of apprentices employed in manufacturing has fallen from a peak of 236,000 in 1968 to less than 150,000 in 1980 and about 100,000 by early in 1982. A similar downturn in Australia would have really major repercussions unless compensating measures were taken to expand the availability of full-time work in other areas or to devise other work/training combinations similar to apprenticeship.

To return, though, to the aggregate level: what can we expect to be the response of young people themselves to the major decline in full-time employment opportunities which has occurred during the past 12 months, and what are the likely implications for education? The first thing to realise is that this downturn is without precedent in Australia for its magnitude and speed of action, and marks a fundamental change in the labour market circumstances facing young people. Whatever the perceptions of young people in the period up to late in 1981, the fact is that jobs were available to a high proportion of those who sought them, and that total full-time employment levels either rose somewhat, for young males, or in the case of females continued their long-term
but fairly gradual slide. By contrast, not only is the reduction of 80,000 full-time jobs for teenagers a massive decline in its own right - a job loss of 15 percent in a single year - but such an aggregate figure conceals the enormous problems which must be confronting the latest cohort of new entrants to the full-time job market. For many of these young people there must seem to be, almost literally, no jobs for which even to compete.

The context, then, has changed dramatically, and it should therefore come as no surprise that the balance between the four forces which I identified earlier should also have changed in sympathy. For all groups, I suspect, the 'shelter effect' has grown considerably in importance, and as one reflection of this, enrolments in all sectors of education have risen appreciably in 1983. It is worth noting in passing that the latest downturn in the teenage labour market had barely taken hold by February of last year, and that the educational decisions of young people in relation to the 1982 calendar year would generally have been made well before its implications could have been realised.

How well then is increased educational participation likely to fill the gap created by the latest slump in the job market for youth? Some broad figures will paint the picture.

(Table 2)

I stress that the education increases in this table are little more than guesses, based on the very broadest of preliminary estimates and intentionally pitched on the high side rather than the low. Even on these optimistic estimates, however, it is clear that education is fast losing the race to provide worthwhile alternative activities to young people at a time of severe labour market dislocation, and that the result of this will almost inevitably be a sharp increase over 1982 in the level of teenage unemployment. Indeed, such an increase is already evident in the latest labour force statistics, which show a rise from about 145,000 in January 1982 to 188,000 in January 1983 in the numbers of teenagers who are unemployed and seeking full-time work.

You will have noticed also how modest is the contribution of the higher education sectors towards the solution of these problems: this is not to criticise higher education, which by its nature caters for only a relatively small proportion of the total population of young people, but rather to suggest that the major burden of the educational response to current labour market conditions is likely to be shared jointly by schools and TAFE.
### TABLE 2


<table>
<thead>
<tr>
<th></th>
<th>JANUARY 1982</th>
<th>JANUARY 1983</th>
<th>CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MALES</strong></td>
<td>315,700</td>
<td>260,400</td>
<td>-55,300</td>
</tr>
<tr>
<td><strong>FEMALES</strong></td>
<td>224,500</td>
<td>199,700</td>
<td>-24,800</td>
</tr>
<tr>
<td><strong>PERSONS</strong></td>
<td>540,200</td>
<td>460,100</td>
<td>-80,100</td>
</tr>
</tbody>
</table>

**FULL-TIME EDUCATION:**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCHOOLS</strong></td>
<td>+20,000</td>
<td></td>
</tr>
<tr>
<td><strong>TAFE</strong></td>
<td>+10,000</td>
<td></td>
</tr>
<tr>
<td><strong>HIGHER EDUCATION</strong></td>
<td>+5,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>+35,000</td>
<td></td>
</tr>
</tbody>
</table>

Notional Increase in Full-Time Enrolments, 1982 - 1983
I should not leave this area without making passing mention of the 20-24 year age-group, for whom the labour market downturn, while relatively late in coming, has now taken hold with a vengeance. At least for teenagers the current increase in educational participation, while less than desirable, will ensure that the reduction in full-time employment opportunities is not matched by a corresponding increase in unemployment. For 20-24 year olds, however, the educational offset is likely to be almost negligible, with the result that the full force of any reduction in full-time employment levels - more than 60,000 in the past 12 months - will be felt within the labour market itself in the form of increased unemployment. Some statistics, again, will demonstrate the point.

(TABLE 3)

What then of the future? I have spoken so much of recent changes and their implications that perhaps I should mention some of the things I do not see as changing. For one, I believe that it will continue to be difficult to induce large numbers of young people to persist with their full-time education unless that education is judged to be attractive, relevant and in their interests. Secondly, I believe that any available jobs will continue to be keenly sought, and that young people generally will maintain a strong vocational orientation. One result of this competition for employment may be some further shift in the nature of the student body within post-compulsory education, with all that that implies for curriculum and staffing policies. Thirdly, I do not see any early change in the trend identified in LEARNING AND EARNING towards diminishing financial returns on an individual's investment in higher education.

Against this background, then, I would like to echo the warning which Don sounded earlier against regarding the current upturn in educational participation as a cause for comfort or satisfaction. Welcome it may be for those within the education community, but let us remember that it falls far short of compensating, in the wider social sense, for the savage decline in the other major alternative open to young people. Moreover, let the current increases in enrolments be seen for what, essentially, they are: not yet, at least, a response to any fundamental revaluation of the benefits of education, but rather the predictable and rational reaction of young people to a major re-assessment of their chances of success in the market for jobs. This being so, the permanency of the current return to education will depend not only on the future course of economic and labour market trends, but also very heavily on the extent to which educational institutions
### Table 3

**Changes in Full-Time Employment and Unemployment for Young People, January 1982 - January 1983**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Employed Full-Time</th>
<th>Unemployed, Looking for Full-Time Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19 Year Olds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>315,700</td>
<td>260,400</td>
</tr>
<tr>
<td>Females</td>
<td>224,500</td>
<td>199,700</td>
</tr>
<tr>
<td>Persons</td>
<td>540,200</td>
<td>460,100</td>
</tr>
<tr>
<td>20-24 Year-Olds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>529,000</td>
<td>487,600</td>
</tr>
<tr>
<td>Females</td>
<td>351,400</td>
<td>331,100</td>
</tr>
<tr>
<td>Persons</td>
<td>880,400</td>
<td>818,700</td>
</tr>
</tbody>
</table>

**Source:** ABS Labour Force Surveys (Cat. Nos. 6202.0 and 6203.0)
can help to recreate the conditions of an earlier period in which large numbers of young people saw it as both relevant and attractive to defer their entry to the labour market in order to continue longer with their full-time education. I do not make light of the magnitude of that task.

I am conscious of the pessimism which has pervaded much of what Don and I have had to say to you today, and would not blame you if you are wondering so far whether this is a seminar on learning and earning or on doom and gloom. Let me finish on a more positive note by quoting from paragraph 4.24 of LEARNING AND EARNING:

'These recent developments in the labour market for youth strengthen the likelihood that educational institutions will be asked to assume an even greater responsibility in future policies and programs for the young. They demonstrate also that the necessary increase in educational participation cannot be expected to occur spontaneously as a response to the problems already faced, or likely to be faced, by many young people in the labour market. Active policies are needed not only to increase participation in education and the responsiveness of education systems to the needs and interests of youth but also to integrate these educational responses into a coherent plan of activities and options for all young people.'

Could I leave you with the optimistic thought that there may well be a better chance now than ever in the past that policies of this kind will be developed and pursued. Certainly the need for them has never been greater.
Figure 3 - Annual Changes in the Levels of Full-Time Employment and Unemployment Among Young People

(A) Males Aged 15-19 (3-Monthly Moving Averages)
Figure 3 - Annual Changes in the Levels of Full-Time Employment and Unemployment Among Young People.


(a) Females Aged 15-19
(b) 3-Monthly Moving Averages

Employed Full-Time

Unemployed, Looking for Full-Time Work
Figure 3 - Annual Changes in the Levels of Full-Time Employment and Unemployment among Young People

(c) Males Aged 20-24 (3-monthly moving averages)
Figure 3 - Annual Changes in the levels of Full-time Employment and Unemployment among Young People


(d) Females aged 20-24

(3-Monthly Moving Averages)

- Employed Full-time
- Unemployed Looking for Full-time Work
INTRODUCTION

LEARNING AND EARNING is the latest addition to an impressive (albeit daunting) list of local and national reports which attempt to diagnose the state of health of Australian education. LEARNING AND EARNING is an important document for a number of reasons. Its comprehensiveness for example is impressive. Notwithstanding Mark Twain's remark about 'lies, damned lies and statistics', there are some important (and unpalatable) truths amongst the report's impressive array of statistics on youth, education and employment. In this regard, the report provides a salutary reminder of the complexity and, in some cases, the unpredictability of relationships between education and employment and between the various sectors within education itself. In seeking solutions to issues raised by the report, we will have to pay more than lip-service to these complexities.

LEARNING AND EARNING is a discussion document; no policy recommendations are explicitly made. However, throughout the report there is a strong implicit assumption that it is in the national interest to encourage young people to lengthen, rather than to shorten, their full-time education - especially at the tertiary level, but also in post-compulsory secondary schooling.

The Williams Report on Education Training and Employment (1979) broached the issue of whether policy should be directed towards an increase in school retention rates in quite a modest way.

In view of the high teenage unemployment rate, and the especially high rate among the earliest leavers, should policy be directed towards a further increase in school retention rates? And what changes in secondary schools would be required to bring a voluntary increase in retention rates and to provide a satisfactory education for the larger number of students and the greater range of abilities and interests? (Williams Report Volume 1, p.86).

*This paper was prepared with the assistance of Terry Werner, Faculty of Education WAIT, currently seconded to the Research Branch, W.A.Education Dept.*
The committee drew attention to unfavourable comparisons with retention rates in other industrialized nations (United States and Japan) but warned against the 'warehousing' effect; using schools to store young people away from the workforce. The Committee cited with approval the recommendations of the TEND Committee (Tasmanian Education Next Decade, 1978), involving structural changes to provide vocational and general education within the same institutions, changes in curricula to provide appropriate combinations of general and vocational education suited to students of different interests and maturities, and attitudinal changes to gain acceptance of the new approach to education.

During 1982 and 1983, the issue of increasing participation rates has become rather more prominent. Recent statements by the then Federal Minister for Education indicated that the current policy was to increase participation rates. (News Release, 15 December 1982). The Chairman of the Schools Commission, Professor Peter Tannock, stated in a recent public address (UWA Summer School, 25 January, 1983) that the Commission would be pursuing a full education policy over the next decade. He anticipated a participation rate of 70-75 percent in years 11 and 12 by 1990. The draft discussion paper, Schools and TAFE, prepared by the Commonwealth Tertiary Education Commission and the Schools Commission (November, 1982) also argued for increased participation rates and examined the broad implications for relationships between schools and TAFE.

I have not read or heard any arguments to suggest that increased participation rates will simply happen. What I imagine we will be dealing with are arguments about what new policies could be implemented to bring about increased participation rates. Before turning to those specific issues, I offer you a quotation from a recent paper on the effects of the new technology on school curriculum. It captures quite well some significant features of the enterprise in which we are engaged.

Attempts to discuss the future sit uneasily between prediction and prescription. In human affairs such unease is inevitable: whatever we say or do now may have the effect of making future events either more, or less likely. Hence we enter on our analysis of current trends in technological development and their possible effects on education and schooling in the knowledge that our efforts belong more to the realm of literature than that of science, and are guided more by visions of futures we might approve of than those which run counter to our values and assumptions. This we would see as appropriate to the discussion of a human enterprise, i.e. education, whose central goal is the connection of real with ideal and fact with vision.
FACTS AND REALITY

Let us begin our attempt to connect 'real with ideal' and 'fact with vision' by briefly summarising some relevant information about students and the courses they take in the post-compulsory years. This step is in line with the simple proposition that the development of rational policies to bring about increased participation rates depends on how much we know about the factors which influence young people's decisions. To control any phenomenon we need to understand it.

1. Students

Recent figures on the participation rates in Western Australia in the post-compulsory years indicated that four main groups could be identified:

A. The 25 per cent who either went directly to tertiary institutions (20 per cent) or did so subsequently (5 per cent).

B. The 15 per cent who completed Year 12 but did not proceed to tertiary education.

C. The 20 per cent who completed Year 11 but did not attempt Year 12.

D. The 40 per cent who left school at the end of Year 10.

The percentage figures are approximate and have been fluctuating over recent years. LEARNING AND EARNING has documented the fluctuations and recent trends in Chapter Two. The question now becomes, how can we explain these figures? To explain them is to provide some insight into how we could change them.

Martin Hayden points out in his paper in Volume 2 of LEARNING AND EARNING that there are two major explanatory frameworks discernible in the literature; the 'economic' approach and the 'social psychological' approach, though they are not mutually exclusive. Within the latter the factor that has received most attention over the years is academic ability.

Some insight into the extent to which the composition of the four groups outlined above can be 'explained' in terms of the academic ability of students...
in each group can be gained from a local study conducted by Blakers (1981) and the ACER Study of Youth in Transition. Blakers found that 16 of every 100 students in the top achievement quartile in Year 10 in 1974 did not complete Year 12 in 1976 and this number rose from sixteen to 21 for 1978-80.

The ACER figures (Volume 2, Appendix C, LEARNING AND EARNING) are based on achievement quartiles established by the national survey of fourteen-year-old students involved in the Literacy and Numeracy Study conducted by ACER in 1975.

The magnitude of the differences between quartiles was quite marked. Only 14.9 per cent of the lowest achievement quartile (Q1) group proceeded to Year 12, compared with 73.5 per cent of the highest achievement quartile (Q4) and more than 60 per cent of those in the Q1 group had never undertaken any post-school education (by the age of 19) compared with only 30 per cent of the high achievement group (Q4).

Apprenticeship is a significant destination for young males in all achievement quartiles: by age nineteen, more than 35 per cent of males in Q1, Q2 and Q3 had been (or were still) apprentices, and even in the top quartile, more than 20 per cent of young males had entered an apprenticeship. By age nineteen only about 44 per cent of the top achievement percentile had ever been students at a university or college of advanced education. (pages 177-178).

These studies underline the point made by so many others that whilst some measure of academic ability accounts for a good deal of the variation in educational attainment and retention, other factors must be considered to give a more complete picture.

A general indication of what other social and psychological factors are important in this regard is given in Hayden's summary of the major trends in the 'school leavers' studies which he surveyed:

In general terms those who remain at school longer are more likely to have positive parent and teacher encouragement with regard to their studies, friends remaining at school, higher occupational and educational aspirations and expectations, and a better than average family socio-economic status background. In addition, they are more likely to attend a non-government school, to find their school work interesting and relevant to their needs, to accept the authority structure of the school, to have good relationships with teachers and...
other students and to live in a metropolitan rather than a country area.' (Hayden, 1982, p.146).

Here we have it - an extended description of the typical Year 12 student. A stereotype that generations of teachers have come to know and love. We are much more likely to find one of them in the top quartile of ability than the bottom.

2. Courses of Study

If a student does return to school for Years 11 and 12 what kinds of subjects and courses are available? In Western Australia there are 57 two-year subjects approved by the Board of Secondary Education (BSE) for the Certificate of Secondary Education (CSE). Thirty-one are Tertiary Admissions Examination (TAE) subjects and 26 are CSE (General) subjects. The syllabuses for the TAE subjects are tailored to the requirements for entrance to higher education and selection aggregates are calculated from students' grades in subjects taken from this subgroup. CSE (General) subjects are practical/vocational in orientation. At present they are not formally taken into account for the purposes of selection for higher education.

Apart from this range of BSE-approved subjects, a student can choose an 'Alternative Upper-School' course. These courses are developed by individual secondary schools, are of a year's duration and are usually vocational in orientation.

On the face of it a student has a very wide range of choices available. Figures published by the Board of Secondary Education show that for those students who sat for examinations at the end of Year 12 in 1981, there was a total of 48,888 subject enrolments.

Ninety-six per cent (46,782) were in TAE subjects and four per cent (2,106) were in CSE (General) subjects. Of the TAE enrolments, science subjects accounted for 28 per cent, mathematics 19.5 per cent, English and English Literature 22 per cent, languages 2.2 per cent, social sciences 18.7 per cent and art and music 2.7 per cent. The mathematics/science/English/social sciences group of subjects (16 in all) accounted for about
88 per cent of enrolments.

The overall situation may be summed up in the following way: on one hand we know that there is considerable diversity (a) amongst students on psychological and sociological measures; (b) in terms of possible careers; and (c), in approved subjects. On the other hand, students overwhelmingly choose a fairly small subset of the academically-oriented TAE subjects.

The picture is a familiar one; it has not changed much over the years. And that point is important because these days most of the statements we read in the media and professional literature connecting the real with the ideal and fact with vision depict a different picture for the future.

VISIONS OF THE FUTURE

Secondary school teachers in Western Australia are quite opposed to raising the school leaving age so as to increase retention by compulsion. Most teachers, however, would fully support the view expressed by the authors of LEARNING AND EARNING.

'... policies which encourage young people to lengthen, rather than shorten, their periods of full-time education are in the national interest. But such policies should apply not only to young people with high levels of intellectual ability. The objective should be to foster education across the whole spectrum of attainment and potential in intellectual, manual, technical and artistic skills.' (p.66).

We know from the analysis so far that the whole spectrum of attainment is not well represented in current statistics pertaining to post-compulsory education and employment. The pattern of upper-school enrolment figures suggests that whilst intellectual skills are being fostered, manual, technical and artistic skills are not. Leaving aside for a moment the question of what policies will achieve increased participation, what explanation can be given for the situation as it stands?

High-school principals, who are close to the situation, explained the problems through their Association's 1980 policy statement:
Less than half of the students in upper school classes will enter tertiary institutions but, because they feel a pressing need to keep their options open, most of them will pursue courses that are structured to meet tertiary entrance requirements.

They have no assurance of employment; in many cases they do not know what they want to do; they cannot be certain that they will qualify for tertiary study.

Keeping options open in the upper school entails being tied to approved subjects which will accrue to the aggregate. The result of students selecting subjects in which they have very little interest is frequently a mismatch of aspiration, ability, needs and subjects, which leads to student alienation, boredom, frustration and despair.

Upper school subjects have one other unfortunate restriction: they span two years of study. This has the effect of locking students into a course from which escape is difficult. The experience of schools is that students entering Year 11, despite considerable counselling, because they have been unable to decide their ultimate career aims, do not really know in many cases what is the best combination of subjects to take. Many require the opportunity to make changes but the current system denies them this chance. Many find themselves taking units beyond their capacity but from there is no honourable way out. (A Case for New Directions, W.A.H.S.P.A., 1980, pp.31-32).

Why do students make the choices they do? Unfortunately, surprisingly little research has been done on the decision-making of 15 year olds in this regard. We can, however, make some informed guesses about the forces that are at work.

Upper secondary school programmes and the attendant examination procedures have traditionally been associated with the needs of the 'white collar' workforce, in particular with the need for tertiary-trained professionals. Students, teachers and the general public understand this linkage very well and this is reflected in their attitudes and values.
But these same attitudes and values in the community obscure an emerging linkage between upper school and work of other kinds. The success of initiatives taken by the Education Department (some dating back to the mid 1960's) in the areas of counselling, career education, work experience, employment of youth education officers, prevocational workshops and alternative courses has been limited because of the high status attributed by the public to achieving entry to tertiary institutions and the low status attributed to upper school students who 'don't make it.'

The emerging linkage between school and work has both positive and negative aspects. The positive aspects can be discerned in statistics tabulated in LEARNING AND EARNING. For example, many very able students are now attracted to TAFE programmes as an alternative to university or college of advanced education programmes. The number of apprentices holding Year 12 certificates has risen from about 7 per cent to 13 per cent in recent years. The negative aspects of the emerging linkage between upper school and work become apparent when one realises that academically-able Year 12 graduates are displacing the less able Year 10 graduates from one of their traditional vocational options - at a time when the number of apprenticeship vacancies seems likely to contract even further. A similar phenomenon is apparent in other areas of work. Across the board the rising level of youth unemployment has exacerbated the problem of 'creeping credentialism'. Employers who, a few years ago, would have quite happily taken on a Year 10 student with a good Achievement Certificate, are now able to secure the services of students with Year 12 certificates. Whilst it is true that new technologies require different and in many cases, higher levels of skill, there does seem to be a trend towards unwarranted credentialism which cuts across many of our efforts to re-orient educational programmes towards the needs of all students. The remarks made by Professor Tannock on this point during his address to the UWA Summer School are apposite:

'Unless parents accept full education as a legitimate policy it will be unattainable. Similarly, community attitudes, especially those of employers and unions, must be attended to, e.g. attitudes to credentials which do not bear the imprimatur of higher education entrance; attitudes to non-traditional 'non academic' subjects; attitudes to their own obligations and responsibilities to assist with the training and induction of young people into adult working life.'

(Tannock, 1983, p.7)
The results of the National Educational Survey commissioned by the Williams Committee included information which is also relevant to this discussion. The responses from tertiary students to the question 'when was your choice of vocation or career made?' are shown in the table below.

<table>
<thead>
<tr>
<th>'WHEN WAS YOUR CHOICE OF VOCATION OR CAREER MADE?'</th>
<th>Univ.</th>
<th>CAE</th>
<th>TAFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. While in primary school</td>
<td>5.3</td>
<td>7.6</td>
<td>6.6</td>
</tr>
<tr>
<td>2. In the first few years of secondary school</td>
<td>10.0</td>
<td>12.4</td>
<td>11.5</td>
</tr>
<tr>
<td>3. In the last year or two of secondary school</td>
<td>27.6</td>
<td>27.6</td>
<td>22.6</td>
</tr>
<tr>
<td>4. At the time of completing secondary school</td>
<td>18.4</td>
<td>18.4</td>
<td>22.6</td>
</tr>
<tr>
<td>5. After being unable to get into a field of first choice</td>
<td>6.2</td>
<td>6.5</td>
<td>10.9</td>
</tr>
<tr>
<td>6. After a year or two of study in a relevant course</td>
<td>9.8</td>
<td>3.9</td>
<td>2.7</td>
</tr>
<tr>
<td>7. Not until a year or two of another course</td>
<td>4.5</td>
<td>4.3</td>
<td>2.1</td>
</tr>
<tr>
<td>8. Not until after one or more year's working</td>
<td>12.2</td>
<td>16.9</td>
<td>17.8</td>
</tr>
<tr>
<td>9. No choice as yet</td>
<td>6.0</td>
<td>2.5</td>
<td>3.4</td>
</tr>
</tbody>
</table>

(Source: Education Training and Employment. Vol. 1 p.113)

On these figures, less than 20 per cent of students in each category had made definite career or vocational choices at the time they were making choices about upper-school courses of study which would bind them for the next two years. This provides a measure of objective evidence in support of the high school principals' diagnosis of the situation quoted above.

To what extent could a 15-year-old's uncertainties about appropriate vocational and educational choices be resolved by guidance and counselling? The question of guidance and counselling is a vexed one, especially in a climate of debate in which equality is a fundamental principle and in which psychometric tests are imperfect predictors of future academic performance and career choice. Whilst it is quite easy in retrospect to identify the four broad bands of student which were outlined on page 4 of this paper,
it is not easy to assign students to the categories in advance.

Counsellors have neither the power nor the right to stream students into particular courses of study. Given the limited predictive power of psychometric tests, counsellors can only give advice to parents and students within fairly broad limits. This is not to say that guidance and counselling services cannot make an important contribution towards resolving the problems of mismatch of aspiration, ability, needs and subjects. But it is important to realise that apart from the factors mentioned already, there are many other contextual factors which circumscribe any guidance or counselling situation. The analysis provided by Tannock gives a good account of what some of these factors are and how they are inter-related:

'The analysis provided by Tannock gives a good account of what some of these factors are and how they are inter-related:

Our secondary school system as a whole and especially in the last two years, has been geared far too much, in its approach to teaching, curriculum and assessment, to higher education entrance requirements and selection into restricted faculties.

I acknowledge, of course, that it is vital for our society to ensure that there is a continual flow of young people into our institutions of higher education. It is extremely foolish however, and indeed counter-productive for both our society as a whole and our higher education institutions in particular to virtually confine upper secondary education to this narrow instrumental function.

In many cases teachers are neither trained nor attitudinally oriented for other approaches than those which produce the present limited participation in education by young people. Secondary schools tend to concentrate on tertiary oriented academic subjects and are often organised into faculties, reflecting the subject focus of most teachers. The over-riding aim in the upper secondary school is on preparation of tertiary entrance examination candidates, success being often the prime index of the teacher and certainly a mark of his or her professional standing.

There remain significant restrictions on educational choice for too many students and their families. This takes many forms. Most obvious are curriculum choices within schools. These restrictions may be dictated by external examination requirements, resource limitations or the devaluing of particular subjects by teacher and peer attitudes or a combination of each. Students and their parents are also often restricted in choice
of institutions to zoning regulations to the cost of school fees to prohibitive transport costs to ignorance about what alternatives are available.

Financial problems and disincentives are probably an important factor in the decision of many young people to leave school prematurely. Many families, particularly the increasing number of those with single parents, find it difficult to support their children into the post-compulsory years of schooling, even with the available educational allowances. This problem will undoubtedly increase in response to the economic difficulties facing many families in Australia at present.

The Tertiary Education Assistance Scheme (TEAS) provides more support for TAFE students than does the Secondary Allowance Scheme (SAS) for those remaining in secondary school. Paradoxically, the most generous form of support of all to the 16 to 18 year olds comes from unemployment benefits.

These factors seem to me to be prime contributors to inadequacies in educational attainment for many young people in our society. It is important to recognise their interconnected nature and the fact that they cannot be tackled in isolation.

(Tannock, 1983, pp.5-6).

Apart from the broad factors identified by Tannock, there are other, more specific factors which can further restrict a student's choice. No school in Western Australia is in a position to offer all 57 BSE subjects and alternative upper school courses. School staffing size and teacher expertise are obvious limiting factors and any classroom teacher can give you an account of the inherent vagaries of the timetable. When all factors are taken into account, it is very difficult to sustain the argument that fundamental changes will be achieved solely through improved guidance and counselling procedures. The problems lie much deeper and, in some cases, are beyond the control of school systems.

TOWARDS THE IDEAL

The Education Department fully supports the general principle that increased participation in post-compulsory education should be encouraged.
Although schools will bear the main burden of increased participation, it is likely that other institutions, notably TAFE colleges and the recently established Senior Colleges, will have an important supportive role. Post-compulsory schooling need not necessarily be done in the 'straight-through, full-time' mode. In this regard the recently published Schools Commission paper Schools and TAFE is an important document. Based on the assumption of increased participation rates, this paper invites the reader to pause, reflect and reassess the nature of the relationship that could (or should) exist between schools and TAFE. The paper takes the central function of education to be the development of individuals who can adapt to social and economic change.

Historically, with respect to the educational structures which serve this basic function, it is pointed out that schools and TAFE have evolved with established and different roles, clientele and staffing profiles - almost to the point where the two sectors are isolated from one another.

Paradoxically, as the two sectors have sought to adapt their programmes to rapidly changing social and economic circumstances, they seem to have converged with respect to the skills, knowledge and values which they seek to develop in young people. Whilst this is, in itself, encouraging, it raises some problems of overlap and competition between the two sectors. Schools have developed vocationally-oriented programmes - traditionally a TAFE concern, and TAFE has begun orienting programmes more towards generic skills, basic school subjects and personal development, an area which it has not typically emphasised. To avoid unnecessary competition and overlap, and to achieve healthy co-operation, the two sectors must be brought together and new relationships worked out.

There is increasing competition for places in TAFE certificate and diploma courses. LEARNING AND EARNING statistics illustrate some important trends in TAFE; for example, many very able students are now attracted to its programmes as an alternative to university or college of advanced education programmes. This is not necessarily a bad thing given the present opportunities for recurrent education. Expansion of the present rudimentary system of giving credit towards TAFE certificates and diplomas for courses completed in the upper school level is a policy matter which could fruitfully be explored in the current climate.
As Tannock and many others have pointed out, the relationship between higher education and secondary education is a crucial one. The new Minister for Education in this State has recently announced the composition of a working party to report on the current procedures for selection of students to tertiary institutions in Western Australia and the influence of those procedures on the educational programmes being offered in secondary schools. Without wishing to pre-empt the findings of the working party, the major issues which require clarification would seem to include the following:

(a) the influence of current tertiary examination procedures on the process of subject and course selection by students in Years 11 and 12;

(b) the type of preparatory education needed by upper secondary school students who intend to proceed to tertiary education;

(c) the extent to which current methods of determining students' aggregate marks for tertiary entrance:
   (i) constitute a valid representation of students' capacities to succeed in tertiary studies;
   (ii) provide equitable access by students to tertiary institutions;

(d) the extent to which opportunities should be provided for students in Years 11 and 12 to change subjects during those years.

Reform of post-compulsory programmes is likely to entail changes to K-10 schooling as well. A student's attitude towards further non-compulsory education is, as pointed out earlier in this paper, conditioned by many factors. In particular, the student's experiences of the first ten years of schooling - successful or unsuccessful, pleasant or unpleasant, relevant or not relevant will influence his thoughts in significant ways.

The students who leave school at the end of Year 10 (40 per cent) are likely to include a significant number of disaffected young people. The provision of a caring environment for all school students must be seen as an important priority in any attempts to increase participation rates.

'Caring' in a school context is defined in terms of the provision of an environment which will maximise the possibilities of each person associated
with the school achieving feelings of self worth and a sense of community.
A caring school environment is to be understood primarily in terms of the
quality of the interpersonal dimensions of school life. I think Professor
Geoffrey Bantock located one of the fundamental barriers to the provision
of a caring environment for all students when he argued that:

'What we have today is both the wrong sort of hierarchy and an
impulse towards the wrong sort of equality. The equality we need
is that which reverently accepts the essential nature and uniqueness
of every human being; the hierarchy, one which recognises different
levels of intelligence, consciousness and sensitivity and recruits
itself on this basis.' (Education in an Industrial Society, 1963,
p.224).

Torsten Husen, arguing from quite a different philosophical position,
arrives at a similar conclusion on this point:

'How do we establish at the secondary level a system of plurality
of excellence, that is to say, a variety of career paths in formal
schooling leading to different types of high-level competence other
than academic ability? What changes in the reward system outside the
educational sector are called for in order to achieve this and to
alleviate the mounting credentialism?' (The School in Question, 1979
p.180).

CONCLUSION
Attempts to discuss the future do indeed sit uneasily between prediction and
prescription. Predictions may be made, based on descriptive and inferential
statistics and our understanding of the variables elaborated by the economic
and social psychological research models. One cannot predict with certainty
but, by and large, one feels fairly comfortable with this procedure in
principle. However, a statistical prediction based on the status quo is not
necessarily a description of a future ideal.

As a matter of logic, prescriptions cannot be derived directly from
descriptions or, for that matter, predictions. What students ought to be
doing in schools is a matter of fine judgment and careful justification
against ethical principles which will carry the burden. For example, the principles underlying entrance requirements to higher education are not, in themselves, likely to stand the weight of a justification of secondary school programmes. It was never intended that they should. And yet, according to analyses such as those provided by the W.A. High School Principals' Association and Professor Tannock, entrance requirements, de facto, are used in this way by parents, teachers, employers and children.

It is crucial that prescriptive questions be recognised as such and kept separate from predictive questions. It has been argued in this paper that the nexus between higher education and secondary education involves questions of both kinds. The prescriptive, or values, question revolves around the notion of 'excellence', and our current notion of excellence is embedded very deeply in community attitudes. To turn Husen's point around, what we have is a system of 'singularity' of excellence. It seems to be the case that a review of higher education's entrance requirements is one necessary but not sufficient condition for the establishment of plurality of excellence and increased participation rates. Is there any reason why plurality of excellence could not encompass subjects and courses of an applied or integrated nature as well as subjects based on the traditional forms of knowledge? Can we overcome the attitude that excellence is only associated with performance in TAE examinations and, perhaps, in sport? One also wonders whether those with the highest academic potential, to whom all doors are potentially open, should be provided with opportunities while still at school, to explore their individual interests and aptitudes more fully. Time within the school programme would have to be found for this.

As LEARNING AND EARNING points out, the attainment of increased participation rates in education is not a task for schools alone. Parents, community leaders, employers, unions, universities and colleges of advanced education must all accept due responsibility. The schools sector is doubtful about the prospects of success of any campaign to increase the retention of secondary students in Years 11 and 12 artificially. In any genuine co-operative attempt to increase participation rates, the secondary education system will be a willing participant.
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THE LEARNING AND EARNING REPORT
IMPLICATIONS FOR THE LABOUR FORCE AND DEVELOPMENT

Paper presented for the WAPSEC Seminar on 24th March, 1983
by Lee Pegler, Research Officer, Trades and Labor Council of
Western Australia.

INTRODUCTION

The LEARNING AND EARNING report comes at a time when Australia is experiencing
the effects of a severe international recession and massive levels of
unemployment. The report is a response to this; it is an inward looking
exercise designed to promote debate on what should and can be done in the
educational field. It is hoped that through seminars such as this two main
questions will be closer to resolution: Why the findings the report notes
have occurred and what should and could be done about them.

The links between secondary school, tertiary studies and labour force
participation are complex.

A similar degree of complexity exists between the societal, economic and
psychological factors which combine to decide a person's labour force
and educational participation preferences.

That is; not only the type of education (and employment), but when and how
much.

Therefore, by necessity, the report attempts to canvas all these areas and
isolate the main factors responsible for the participation trends that it
notes.

My contribution to this debate concerns the implications for the labour force.
The points I will make relate to -

(a) Segmentation of the labour market;
(b) the level, type and structure of skills; and,
(c) the adaptability of our skill base.
However, as noted earlier, such a discussion necessitates a broad view across the total educational field, the labour market and economic policy overall.

I conclude my paper by noting some policy options both in general areas and in more specific areas of education and the labour market.

Education serves two main purposes.

* It is a tool for creating a general societal training and awareness for our youth. Also, socialisation and basic skills such as literacy, numeracy and expression are important for all.

* It provides the opportunity to gain more specific education, vocational and specific skills.

The choice made by individuals and their families, particularly during the period of secondary education, on the level and type of schooling undertaken will determine that person's future on-the-job training options (either specific or general) and this choice will largely determine their future employment and income situation.

That choice in turn is a function of:

* the individual's income level (and income opportunities) and socio-economic background;

* the effect of family, societal and peer group attitudes towards the value of the different educational and workforce options;

* the amount of government assistance available;

* the state of the labour market and perceptions of that person's/group's probability of success in that climate;

* the amount of information on the options available to, and known, by that person/family; and,

* ability as measured by standard educational tests.

Some combination of these factors, and others, help to form a person's time horizons and attitude to risk. The effect will be different education and
employment responses because different groups and individuals weigh the costs and benefits of the options differently.

Divergent responses by different groups is one of the most striking findings of the report and readers can find a useful review of surveys on these economic, social and psychological factors in Appendix B of Volume Two of the report.

Two implications of these surveys are; ability is only one, and not necessarily the most important, of a series of factors affecting educational participation and future labour market prospects; and, ability as measured by standard tests is not solely innate but is a function of these other factors also.

Before developing my arguments on implications of 'LEARNING AND EARNING' for the labour market, I will note briefly the findings of the report on which my comments will be based.

FINDINGS OF THE REPORT

1. The participation of males in years eleven and twelve has decreased while the proportion of females has increased.

2. The transition rate from year twelve to higher education has fallen. The rate of transition of females is lower than males, however, there are now almost equal numbers of males and females commencing higher education.

3. In TAFE -
   (i) total participation has increased substantially;
   (ii) males, particularly in apprenticeship training, make up the largest part of TAFE enrolments but females as a proportion of the total are rising faster;
   (iii) there are an increasing proportion of apprentices who have undertaken year twelve.

4. In CAE's and Universities, while total enrolments are increasing, there has been a dramatic decline in the number of young people who proceed to full-time higher education. Males have dominated the decline in Universities and females in CAE's.
These people have either entered the labour market full-time, chosen part-time study and work or chosen shorter term technical type courses. Also as noted on p.70 of the report: 'The decline in transfer from school to higher education has been most marked amongst students with relatively high levels of ability. These are school leavers with a relatively wide range of options open to them in both further education and the workforce.'

Another important finding of the report is the decline in the real rate of return to an educational qualification. Yet this may merely imply the effect of credentialism.

All of these trends have occurred at a time when the demand for teenage labour has fallen dramatically. Not only has the public sector declined both absolutely and relatively as a source of employment opportunities for the young, but blue collar opportunities, both skilled and unskilled, have suffered sharp declines also. As well, the percentage of females unemployed continues to be higher than males.

My comments in the later parts of this paper take both these factors and the findings of the report into account.

IMPLICATIONS FOR THE LABOUR FORCE AND DEVELOPMENT

1. Labour Market Segmentation

One major effect of the trend towards reduced higher education participation by certain young people has been, and will be if it continues, that people who at one time might have received these jobs that are taken are 'pushed further down the job ladder'.

'It appears likely that some people, who for some combination of reasons chose not to pursue further education because the perceived costs outweigh the benefits, have their employment option reduced further due to similar actions by others.

From the above point alone it might be argued that it is in the interests of society to induce these young people into higher education areas where they might have gone before. However, this should not be done just for its own sake; these people have reasons for their actions and it may very well be that the training and education systems may have to adjust to better suit their changing aspirations and changing market conditions.
For the second group measures may be needed to increase their employability. This might involve job creation schemes which include a large training component, other policy measures to increase their demand in the market or incentives to induce them into further education. If not done, the labour market may become more segmented. That is, a continuation of these trends may skew further the distribution of opportunity to acquire, and distribution of, skills and on the job training, unless other policy action is taken. Other effects will be lower levels of skill and less adaptability of skills.

Another aspect of this discussion is 'job crowding'.

The over-representation of women in particular occupations is a well documented fact. These occupations include many part-time and less career-ladder type jobs which offer little on the job training.

Much of the reason for this representation may be due to lesser desired labour market attachment and preferences, but on the other hand much of it may be due to practices and attitudes based on this belief. In this way, perceived labour market opportunity dictates to a large extent educational choice. The different participation responses for women versus men noted in the report seems to highlight this. For example, the rate of growth of female representation in years eleven and twelve is high and growing, but transition rates directly to higher education are relatively low.

It is possible that a continuation of these trends, both in education participation and in the labour market, may further increase job crowding unless policy action is taken.

2. The Level, Type and Structure of Skills

Another implication arising from the findings, and from my previous observations, is that these trends may help to continue to reduce Australia's position in the international balance of skills (in Professor Bill Ford's terminology).

Professor Ford, of the Department of Organizational Behaviour, University of New South Wales, argues that the countries who have fared best in the current climate are the ones who have paid most attention to skills development and re-development.

Technical change, changing tastes and relative prices, both domestically and internationally, require adaptability of skills. However, this does not
necessarily imply some idea of multi-skilling. To me it implies the need for more retraining options, different apprenticeship funding and organizational relationships, a tripartite co-operative approach and some form of industrial democracy.

Industrial relations concepts and practice require greater attention if we are to cope with the task of skills development, redevelopment and recovery. Present organizational behaviour (for example in planning and in relation to technological change) tends to ignore the effect on people, hence the effect on our future balance of skills and ability to adapt.

The effect on the balance and type of skills is heightened further by occurrences such as:

* the reduction in manufacturing sector employment. This implies lesser opportunities for apprentice training and skills development that combines theoretical learning and practical application very effectively.

  The implication of this is that there is a need for more retraining options and job creation in this area and a more 'human resource' approach to development, the introduction of technology and organizational behaviour in general.

* the relatively high growth in service sector employment, which is often transitory, without discernable career options and lacks much training or continuity of training.

  On the point of career ladders, most blue collar workers do not have such either, and industrial democracy may be one method of achieving this.

* public service staff ceilings which have reduced 'on the job' training options for many white collar employees.

My point is not that the trends noted by the LEARNING AND EARNING report have caused these effects by themselves but that together with other trends, these effects have been accentuated.

POLICY IMPLICATIONS

The broad policy implications of the LEARNING AND EARNING report is that there are changes that can be put into effect through the educational system and through other government policy which can prevent, arrest or alleviate the
above outcomes.

By necessity the report deals with issues in all levels of the education and training systems as well as with attitudes, perceptions and other factors affecting participation in education and the labour market. Equally so, responses to the findings and to other market conditions necessitates extensive discussion of all these areas and of possible policy responses from all levels of government, trade unions, employers and other interest groups.

In this regard, because of the multi-faceted nature of the issues, co-ordination of educational policy with other policy areas is vital at all levels. As part of this, human resource policy and planning could be developed on a more comprehensive basis both at the firm level and on the macro scale. Such a policy does not imply inflexibility and it may permit a more effective information base and allocative mechanism for the matching of skills demand and supply.

Another vital element is the need to increase the demand for labour generally, and particularly in the trades area.

Changing perceptions of the value of education may necessitate some adjustment in the educational system and/or policies designed to give particular groups the incentive to take on further education. This last point refers not only to those young people (noted by the report) who formerly would have been expected to undertake higher education but haven't, but also for those groups whose original perceptions of the gains from education did not favour such a choice. Minority and disadvantaged groups are over-represented in this last category.

Earlier I mentioned a number of beneficial industrial relations changes. That is, if industrial democracy were introduced it would provide a career path option for tradespeople and promote a more conciliatory industrial environment which may increase our propensity to adapt to change. Related to this, and part of such a scheme, is the idea of a true tripartite, more co-operative approach by management and unions, particularly in relation to technological change.

SPECIFIC POLICY IMPLICATIONS

1. Secondary and Further Education

One option for increasing the transition to tertiary education and for increasing male participation rates in years eleven and twelve may be to
increase the range of subjects which qualify as TAE subjects. While a person's trade preference does not imply less ability, for this proposal to work further education must be more flexible and relevant to that person's aspirations.

Another option and one which is very popular overseas is to increase the opportunity for young people, whether in secondary school or not, to participate in work experience and study/work programmes. This applies to all types of occupations. However, in the area of graduate employment, preparation in one area coupled with work experience, say in the information area, would increase options, employability and increase course relevance, both perceived and actual, to potential entrants.

A general finding of the report that many young persons are shying away from more formal full-time, larger courses to shorter term practical courses seems to imply that this is an area that requires attention.

2. Trade Training and Apprenticeships

Based on official figures for 1982, probationary intakes, registered indentures and apprentice employment, are all well down on 1981 levels. Not only does this mean high youth trade unemployment but also a reduced level of skills in the future.

My view is that, in general, our present apprenticeship system is a very good one and that the ITAC and other bodies facilitate a useful continuous review of the system. It produces skilled tradesmen of a very high calibre. However, this does not mean it cannot be improved to better suit our changing environment.

For example:
(a) potential trades persons could be given better information on their potential careers through wider-ranging short term learning and training programmes and more extensive career information sessions;
(b) because processes are becoming more complex to understand, the technical college component could be increased where needed;
(c) Instead of allowing apprentices to be indentured to specialised employers (in many cases), they could be indentured to a central body. More specialised training could be achieved by rotation of these apprentices between smaller employers with a proportionate payment made to the central body by the employer and the specific employer paying the apprentice while with him;

(d) Retraining and refresher courses could be subsidised and developed along the same lines as (c) by employers and government.

These measures would permit a greater flexibility of training and adaptability of skills within the present apprenticeship system. They would also contribute to a more efficient matching of skills supply and demand and promote a higher level of skills.

Other options include the extension of an apprenticeship type system to non-traditional trade areas, especially for technological and computer skills development, and for group apprenticeships. However, one of the most important ingredients needed for success in achieving these ends is employer co-operation and participation.

CONCLUSION

Private enterprise and free market incentives do not take account of the social costs of unemployment or of many of the adverse changes in the nation's overall skill level or structure. For this we need three basic elements.

* We need to create the incentive for firms to tackle these areas.

* More effective tripartite structures.

* Of fundamental importance is the role of government, particularly through its education policy, to facilitate a better environment for all groups in skill and educational development of all types, employment opportunities and equitable growth.

In conclusion I recommend the LEARNING AND EARNING report to you as a constructive attempt to promote more informed debate on these issues in the area of educational policy.