Our Youth, Our Future



Post-Compulsory Education Review







Hon Alan Carpenter MLA Minister for Education 12th Floor, Dumas House WEST PERTH WA 6005

Dear Minister

We are pleased to submit to you *Our Youth, Our Future*, the report on the Review of Post-Compulsory Education. This report is the culmination of extensive consultation over the last three years with students, teachers, parents, education and training agencies, universities, and industry and community organisations in metropolitan and rural communities.

While we acknowledge that the existing post-compulsory curriculum system has considerable strengths, it does not cater adequately for the total cohort of students eligible for years 11 and 12. The overwhelming opinion from the consultation and research process has confirmed that change is necessary so that the courses available to students are relevant to their future and all young people have the opportunity to achieve improved education outcomes in the post-compulsory years.

Based on an examination of post-compulsory education systems in other States and in successful OECD countries, it is our view that the changes we propose will better enable schools and other providers to deliver teaching and learning programs of the highest standard and that all young people in Western Australia regardless of their post-school aspirations will be able to access world class courses of study in years 11 and 12.

We consider that our proposals for the reform of post-compulsory education are consistent with the Government's policy objectives of increasing retention rates to year 12; improving education standards, especially in literacy and numeracy; extending the use of learning technologies; maximising educational opportunities for students in low socio-economic metropolitan, rural and remote areas; and improving education outcomes for all students, especially those who do not currently complete years 11 and 12.

Because many of the changes that we propose will require further development, testing and evaluation before being introduced widely, we favour an adaptive process to implementation of the reform and a gradual phasing in of the changes. We also consider that there should be sufficient lead time for the introduction of the changes so that schools and teachers are positioned to implement the changes easily and that parents also have time to understand them.

It is our strong view that the success of our proposals will depend ultimately on the expertise of teachers, the readiness of schools and the availability of resources to support the changes. It is the Council's view that the proposals cannot be implemented successfully without additional resources and in this regard, we wish to foreshadow our intention to submit, as a part of the forthcoming budget process, cost estimates for implementing the changes that we propose.

Yours faithfully

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Chapter One

Review Scope and Process

Introduction

There is a renewed awareness among Western Australians that high-quality education is central to the future welfare of their children and that of the broader community.

The *Curriculum Council Act 1997* gives a clear mandate to the Curriculum Council to play a critical role in the future directions of education across this State.

It was within this mandate that the Curriculum Council embarked on a major review of post-compulsory education in May 1998. The principal aim of the Council was to ensure that students had the opportunity to achieve worthwhile outcomes in the post-compulsory years of schooling to secure their future.

The scope and terms of reference for the review were defined by specific provisions in the *Curriculum Council Act* and national imperatives, including agreements on VET in Schools and quality of certification responsibilities of State-based boards of study, for example the Curriculum Council of WA.

Curriculum Council Act 1997

Section 9(1)(g) of the *Act* requires that the Council set minimum requirements for graduation in reporting student achievement in accordance with the approved *Curriculum Framework*. The *Act* places a legal obligation on the Council to ensure that the Framework is an integral part of reporting in the post-compulsory years. The *Curriculum Framework* sets out the knowledge, understanding, skills, values and attitudes that students are expected to acquire (*Curriculum Council Act 1997*, section 4b) from kindergarten to year 12.

The *Act* introduces the term 'course of study' as a curriculum organiser. Section 12 requires that accredited courses of study be the basis on which students undertaking post-compulsory education may be assessed for purposes of certification. This obliges the Council to establish and put into effect procedures for:

- accreditation for courses of study;
- assessment of achievement of students undertaking post-compulsory education, and the proper conduct of that assessment, including school and external assessment for the purposes of certification; and
- ensuring the comparability of assessments of student achievement.

There is also a requirement for the Council to collaborate with all stakeholders involved in secondary education, vocational education and training and university education for the purposes of:

- determining the courses of study to be assessed for university entrance or as the prerequisite for vocational education and training;
- reviewing the effects of the requirements and procedures for admission to university and vocational education and training systems on current practices; and
- providing information on the achievement of students seeking admission to universities or to vocational education and training providers.

National imperatives

The national imperatives defining the review largely arise from the *Common and Agreed National Goals of Schooling in the Twenty-first Century* (MCEETYA, 1999), implementation of the National Training Framework, which affects recognition arrangements for Vocational Education and Training in Schools (VET); and the establishment of the Australasian Curriculum, Assessment and Certification Authorities (ACACA), which provides the means for national agreement on broad principles for quality certificates and practices in the certification of the achievements of students.

Common and Agreed National Goals for Schooling in the Twenty-first Century (April 1999, MCEETYA)

This statement of national goals for schooling provides broad directions to guide schools and education authorities in securing outcomes for students. It acknowledges the capacity of all young people to learn, and the role of schooling in developing that capacity. The achievement of the national goals for schooling will assist young people to contribute to Australia's social, cultural and economic development in local and global contexts. Their achievement will also assist young people to develop a disposition towards learning throughout their lives so that they can exercise their rights and responsibilities as citizens of Australia.

National Training Framework requirements

The Council is obliged to ensure that VET activity undertaken by years 11 and 12 students as part of approved post-compulsory study programs, is recognised nationally as entry-level training and that VET achievement is portable throughout Australia.

The obligation arises from the requirement of the Council to comply with the standards of the nationally developed and agreed National Training Framework, which provides assurance to industry regarding the quality of training providers and outcomes. Adherence to the standards is a mandatory requirement under the State's *Vocational and Education Training Act* and regulatory arrangements.

To ensure consistency, boards of study/Curriculum Councils are governed by a set of nationally–agreed principles designed to underpin the implementation of VET in Schools that have been endorsed by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA). These principles provide a coherent conceptual framework for accommodating VET within the new post-compulsory education system.

Boards of study/Curriculum Councils will:

- recognise VET in Schools where it is delivered by schools or other providers which meet the registration requirements under the Australian Quality Training Framework;
- recognise as VET in Schools only that which delivers national industry and/or enterprise competency standards (as outlined in Training Packages);
- ensure that VET in Schools contributes to the achievement of senior secondary certificates (such as the WACE) and articulates with further training, higher education and employment;
- ensure that VET in Schools also contributes to a VET qualification as defined by the Australian Qualifications Framework; and
- ensure that opportunities exist for all groups of students to participate in VET in Schools, particularly for those under-represented in education and training.

National agreement on post-compulsory school qualifications certification

The Australasian Curriculum, Assessment and Certification Authorities (ACACA), of which the Curriculum Council is a member, have agreed to a set of principles and standards that are to be applied by all States and Territories for the certification of students' achievements in post-compulsory schooling.

The broad principles for certification that govern the Curriculum Council's processes require that certification be backed by levels of open and transparent quality control/assurance, which are matched to the importance placed upon them by the students and the users of the results recorded on the certificate.

Accordingly, curriculum documents, assessment procedures, performance standards and monitoring of the currency, relevance and value of results recorded on certificates and the procedures and practices used in their production must be of the highest quality.

By meeting these principles, the ACACA agencies believe that certificates of senior secondary education will be widely recognised interstate and overseas.

The review process

Throughout the review, the Council invited Western Australians to participate in public discussion in order to contribute to the reform process.

Over three years, many members of the community in metropolitan and rural areas, representing schools (including students, teachers and parents), education and training agencies, universities, industry and community organisations, took the opportunity to contribute to the review. From the level of interest and engagement, it was clear that the broader community was committed to the tradition of strong educational provision in this State.

However, while it was acknowledged that the existing post-compulsory system had considerable strengths, there was a need to adjust the current arrangements to respond to the changing social, economic and technological environments and to prepare young people for their futures.

The Post-Compulsory Education Review Discussion Paper

The *Post-Compulsory Education Review Discussion Paper* was released in October 1999. The result of research and analysis, wide-ranging consultation with educationalists, teachers, students, parents and industry representatives, it provided a rationale for change to the existing post-compulsory education arrangements.

The paper detailed the curriculum, assessment and certification structures of post-compulsory education in Western Australia; it described pressures on, and shortcomings in, the current system in meeting the needs of the youth of today; and presented for community consideration three alternative proposals for change.

Some 5 000 copies of the *Discussion Paper* and an associated questionnaire were distributed at over 350 information sessions, meetings, forums and workshops. Community response to the paper was highly encouraging, with around 8 000 people across the State expressing their views.

The overwhelming opinion confirmed that some form of change was necessary to provide a new structure for post-compulsory education in Western Australia that would be inclusive of all students and would have sufficient flexibility to accommodate their diverse learning needs, interests and post-school aspirations.

Mixed views were expressed, however, about the extent of the change necessary. Many voiced concern that there was not enough detail to make judgements about whether some features of the proposals were feasible, while others argued that the Council should consider more thoroughly the impact of the proposals on schools.

The Post-Compulsory Education Review Position Paper

On this basis, the Curriculum Council obtained Ministerial approval to prepare and distribute a second paper: *The Post-Compulsory Education Review Position Paper*. This paper, released in November 2000, represented the next stage in the consultation process and was informed by feedback from the *Discussion Paper* and extensive research into educational systems in Australia and overseas. The *Position Paper* recommended specifications in relation to curriculum, breadth and depth of study, standards, assessment and certification.

This paper was circulated widely as a means of stimulating, but not limiting, further public discussion. Over 11 000 copies of the *Position Paper* and some 15 000 copies of a summary and associated questionnaire were distributed, enabling as many people as possible to put forward their views. The Council commissioned independent consultant, Dr Philip Deschamp of Precision Information Pty Ltd, to provide an analysis of the formal written submissions and completed questionnaires received. Full details of the report are available at: www.curriculum.wa.edu.au.

While the views of respondents generally indicated consensus on the broad directions of the recommendations in the *Position Paper*, significant concerns were expressed about a number of the key recommendations (see Chapter 3).

Cross-sectoral consultation

Throughout the process, the key education sectors worked collaboratively to develop a shared vision of education in the post-compulsory years. Meetings were conducted with all education sectors and organisations. In particular, the extensive internal

consultation processes conducted by the Association of Independent Schools, the Catholic Education Office, the Department of Education, TAFE colleges, the Department of Training, industry training councils, universities, community organisations and private training providers provided valuable data to inform and shape the decisions of the Council represented in this report.

The role of teachers and parents from across the education and training sectors in the consultation process was critical. They participated in forums such as syllabus committees, school meetings, focus groups, school councils, and Parents' Associations.

Local, national and international research

Consideration by the Council of the curriculum and assessment needs of students in the post-compulsory education phase has been guided by the rigorous analysis of research and current school practices. In particular, two major reports were commissioned.

The Curriculum Council engaged Professor Jim Tognolini (University of New South Wales), Professor David Andrich (Murdoch University) and Professor Sam Ball (University of Melbourne) to explore and analyse for the purpose of comparison education systems in Australia, North America and Europe (including the United Kingdom) and to provide expert analysis and synthesis based on the relevant literature on outcomes-based assessment. A summary of the Report of the Consultancy to Research International Best Practice in Outcomes-based Assessment Related to Post-compulsory Education can be found at: www.curriculum.wa.edu.au.

The second major study sought to obtain detailed and accurate information on which to build new directions for the participation of Aboriginal students in post-compulsory education. In recognition of the failure of the current post-compulsory system to provide adequately for most Aboriginal students and at the request of the Curriculum Council's Aboriginal Advisory Committee and the Aboriginal Education Training Council (AETC is the peak policy advisory group to the State government), research was undertaken by AAAJ Consulting Group Pty Ltd. Summaries of the reports, *Post-Compulsory Education of Aboriginal Students in Western Australia* and *Consultation related to post-compulsory schooling of Aboriginal students in Western Australia* can be found at: www.curriculum.wa.edu.au.

Additionally, Australian and overseas experts were consulted and a number of studies and action research projects were undertaken to inform specific issues. These included:

- reviewing the proposed course of study list, associated course outlines and exploratory courses;
- examining VET in Schools issues;

- exploring the feasibility of developing scales of achievement for course outcomes;
- investigating trends and standards for English language competence;
- reviewing comparability of teacher judgements in external and internal assessment;
- investigating the feasibility of the proposed moderation process; and
- investigating the feasibility and implications of the course of study design on school management.

A summary of each project is provided at Appendix 2.

The directions contained within this report draw together the findings of the research and the feedback from the consultation processes.

While inadequacies were identified in current arrangements, the Council believes that there is much to be valued in this system. The review process has confirmed the strengths of the current consensus moderation approach, the quality syllabus guides available to teachers and the high level of involvement of all stakeholders in the decision-making process. It also confirmed the widespread confidence in the public examination system.

Principles for change

Within the context of its legislative obligations and guided by national agreements, contemporary research, feedback on the *Position Paper* and the general findings of the review, the Council has endorsed the following principles to underpin the new post-compulsory system.

- Post-compulsory education must prepare young people to move into adult life, including work, higher education and vocational education.
- Learning outcomes for students should be maximised through a seamless focus on outcomes from kindergarten to year 12, as expressed in the *Curriculum Framework*.
- Curriculum should be designed around learning outcomes that reflect general and vocational learning which can be achieved by all students to some extent.
- There should be flexibility to cater for the overall development of individuals; for different learning communities; and for recognition and valuing of diverse backgrounds and rates of learning.
- Opportunities for breadth and depth of learning should be embedded in a range of contexts and include the *Curriculum Framework* Overarching Learning Outcomes.
- Standards should be made explicit to students, teachers, parents and post-school
 destinations through scales of achievement for each outcome that provide an
 effective basis for assessment, evaluation and reporting.

- Assessment should be valid, reliable, fair, educative, explicit and comprehensive, as described in the *Curriculum Framework*.
- The award of a Western Australian Certificate of Education (WACE) should reflect broad and significant achievement in post-compulsory education.
- Structures should be designed to adapt to change.

In relation to these principles, it should be noted that the Council does not have a role in the way teaching and learning programs based on the courses of study are delivered in schools.

Overall, this report makes the case for adaptive reform of post-compulsory education, proposing the broad strategy of that reform and, specifically, the first steps.

SUMMARY: The post-compulsory education system

As required by the *Curriculum Council Act*, the Curriculum Council will provide a post-compulsory system that is inclusive of all students and has sufficient flexibility to accommodate the diverse range of learning needs, interests and post-school aspirations of all students.

To enable the Council to fulfil its obligations under the *Act* in relation to the *Curriculum Framework* and post-compulsory schooling and its commitments under agreements relating to the National Training Framework and the ACACA agreement on quality, courses of study will:

- enable students to participate more fully as adult citizens leaving school by providing further opportunities for them to build on their achievement of the Framework's Overarching and Learning Area Outcomes;
- enable students to pursue the achievement of learning outcomes in areas of study that will facilitate their transition to work, further vocational education and training or higher education on leaving school;
- provide a structure for assessment, moderation and certification for all students that meets national and State legislative requirements; and
- provide for the achievement of VET Units of Competency as an integral part of secondary certification as required under agreements between the Ministers of the Commonwealth, States and Territories.



Chapter Two

Imperatives for Post-compulsory Reform

The post-compulsory years of education, years 11 and 12, typically cater for students in the late adolescence/early adulthood phase of development.

The reforms proposed in this report, however, are also designed to accommodate mature age and returning students who are pursuing further education. This is consistent with the Council's commitment to a system that fosters lifelong learning.

The influence of education on the life prospects of young people

The future prosperity and well-being of young people and society as a whole will rely greatly on the skills, knowledge, understandings and values that students take with them on leaving school. Any decisions about the shape and direction of post-compulsory education must therefore ensure that the needs of students have priority over any other prevailing interests. Greater emphasis needs to be placed on equipping young people to develop a stronger sense of themselves as active players who have some responsibility for the direction of community life, and who can take a role in decision making about major social and environmental issues and the ethical implications of human activity and knowledge.

For most young people, post-compulsory education is associated with taking up career opportunities that include further education and learning throughout life, and gaining full-time employment and economic independence. Unfortunately, those young people who experience the poorest educational outcomes also run the greatest risk of experiencing a host of negative social consequences, requiring the intervention of social services, health, policing and other community agencies.

Patterns of achievement in Western Australia

A review of ten years' of data from the Department of Education's Monitoring Standards in Education project highlights patterns of achievement that are clearly indicative of the range of learning programs that need to be available in the post-compulsory years. By the end of year 10, there is a very wide range in the levels of student achievement and this gap has been gradually increasing throughout the compulsory years of schooling.

Figure 1 indicates that the mean level of performance of students up to year 10 is around Level 5. Further analysis of the data suggests that students above the mean experience greater progress from year 3 to year 7 to year 10 than students below. Additionally, there appears to be a plateau in performance from years 7 to 10 for many students.

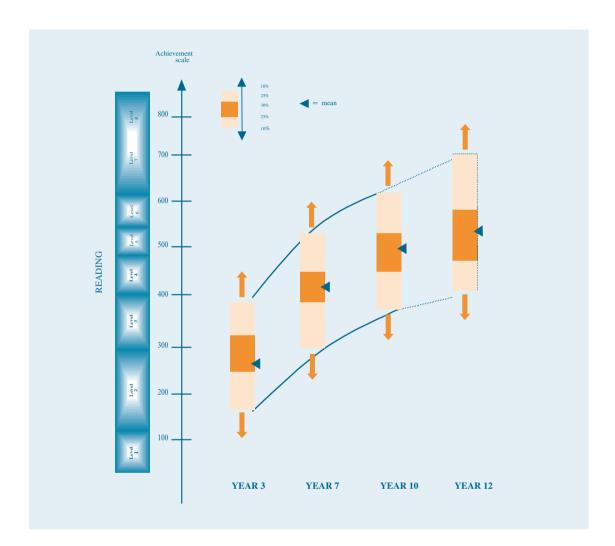


Figure 1: Progress in student achievement

This diagram represents students' achievement in reading in relation to the levels on the Student Outcome Statements as determined by the Monitoring Standards in Education testing conducted in years 3, 7 and 10 by the Department of Education in 1997. The performance of students as represented is indicative of the patterns observed across most curriculum areas. The trends in the results have been extrapolated to year 12, to suggest the range of achievement that might be evident for students in years 11 and 12, assuming that all students were retained to the end of year 12.

Given these patterns of achievement, it would appear that by year 12, the mean level of performance on an eight-point scale would be approximately Level 6. The range in achievement however, could extend from Level 3 to Level 8 and above.

School experience suggests that students aspiring to study the more difficult Tertiary Entrance Examination subjects are generally achieving at Level 6 or above when they complete the compulsory years of schooling and would be expected to progress one and a half to two levels during the post-compulsory years. Conversely, students at or below Level 4 who are building on a weaker foundation of basic skills, tend to make less progress unless they have the opportunity to be engaged in learning programs that address their particular needs.

Those students who leave school with lower achievement levels (such as those below Level 4 on Figure 1) are unlikely to be equipped with fundamental skills and may find it hard to gain secure jobs. They face a greater risk of exclusion from a society that requires active learning well beyond the school years. For this reason, the challenge is to retain such students in school longer so that they have the opportunities to develop greater knowledge and skills.

Retention of young people

At present, the overall apparent retention rate from year 8 through to the end of year 12 in WA is 67.0 percent, with the rate for girls 11.8 percent higher than that for boys and the rate for both boys and girls in non-government schools higher than the rate for students at government schools. The lowest rates are for boys in rural and remote areas (43.4 percent) and for Aboriginal students.

Information supplied by the Department of Education

This implies that the current system fails to capture the interests and aspirations of one third of students. Further, these students face bleak employment prospects without further education or training, because these are the students who very often leave with achievement levels at Level 4 or below as shown in Figure 1.

While the existing post-compulsory system is by no means inadequate for all students, the Council believes that a more strategic approach to the retention of students to the end of year 12, or its equivalent, is critical. This is consistent with the Government's commitment to increasing the number of young people retained in the education and training system.

New approach needed

A broader view of the purposes and clients of post-compulsory education must be adopted, together with greater systemic accountability for *all* students. These changes will demand that this phase of schooling more effectively engages *every* student in high-quality education and training that reflects emerging directions in research, industry and society in general, and enables every student to achieve to his or her maximum potential. This is consistent with the *Common and Agreed National Goals for Schooling*

in the Twenty-first Century, endorsed by all Commonwealth and State Ministers for Education and Training in April 1999.

All young people should have:

- employment-related skills and an understanding of the work environment, including varying values perspectives;
- career options and pathways as a foundation for, and positive attitudes toward, VET, further education, employment and lifelong learning; and
- focused academic attainments relevant to their chosen further education, and the
 opportunity of participating in an excellent general education that offers breadth of
 study, enhancement of values and development of generic capabilities.

Post-compulsory education needs to address the values that underpin citizenship in our society. The *National Goals for Schooling* emphasise the importance of each citizen having 'the knowledge, understanding, skills and values for a productive and rewarding life in an educated, just and open society' (MCEETYA, 1999).

The new post-compulsory arrangements must ensure that all students leave school with foundation skills for life and the capacity for, and inclination towards ongoing learning and adaptation.

The delivery of all these in one curriculum structure is a great challenge, and one that is being confronted everywhere. The Council has no doubt that now is the proper time for the reform of post-compulsory education.

Transition of young people from school to further study or work is central

The Council believes that post-compulsory schooling needs to be anchored by a clear purpose in which young people and their transition to post-school life are the central factors. It must emphasise the need to prepare young people for the renewal of learning throughout life.

The findings of two recent ACER reports, *Patterns of Success and Failure in the Transition from School to Work in Australia* (Lamb and McKenzie, 2001) and *The Pathways from School to Further Study and Work* (Lamb, 2001), indicate that young people whose central occupation immediately after leaving school was an apprenticeship, full-time employment, full-time study or part-time work and study were likely to experience successful employment pathways in their first seven post-school years. Those most at risk were engaged in part-time work (without study) or completely outside the workforce in their first year after leaving school.

Restrictions in the system

Until the 1980s, the main purpose of post-compulsory education in Australia was to offer a curriculum for those confidently expecting to gain access to university courses. According to many respondents, the system in Western Australia has been largely successful in delivering that option.

However, there are substantial anomalies: for example, for some students, the transition to higher-level studies and university is severely restricted by comparison with their counterparts elsewhere in Australia.

In Western Australia, a Tertiary Entrance Rank (TER) for university entrance is based on achievement in a narrow range of twenty-two Tertiary Entrance Examination (TEE) subjects, excluding subjects in Languages other than English (LOTE). In other jurisdictions, students are able to have their achievements across a much broader range of subjects recognised for tertiary entrance. For example, in Victoria students are able to access fifty-three subjects for the purpose of university entrance, and in New South Wales fifty subjects (both figures exclude LOTE). Western Australia stands out because of the small number of courses it permits to count for university entrance.

Meanwhile, by a process of accretion, a variety of excellent Vocational Education and Training (VET) programs has been developed. In addition, a wide range of Wholly School Assessed subjects (WSA) is available to meet a combination of aims of general education and transition to employment and technical education.

This development of three essentially parallel curriculum components (Tertiary Entrance Examination, Vocational Education and Training and Wholly School Assessed subjects) has led, however, to restrictions being placed on students' options for further education and training, including:

- a student selecting only Wholly School Assessed subjects will, no matter how able their performance, find it extremely difficult to access university courses;
- a student selecting TEE subjects will, if his or her performance is inadequate for university selection, often find that, despite the relative difficulty of the subjects attempted, selection into TAFE has been jeopardised; and
- a number of valuable disciplines (Economics, for example) and VET elements are inaccessible to many students.

Notwithstanding these restrictions, many students who do not proceed directly to university from school (45.2 percent in 2001) are able to meet university eligibility requirements through selection criteria other than the Tertiary Entrance Rank derived from Tertiary Entrance Examinations scores. Universities are using interviews, auditions and portfolios to select students for some courses or offering bridging units

alongside first-year university studies. Certificate IV TAFE qualifications can also be used for university entrance and to obtain credit for university units. This means that the singular importance of the Tertiary Entrance Rank as a means of accessing university has been significantly eroded. However, students who have limited awareness of these options may be disadvantaged in gaining access to the study pathway of their choice.

The Council believes that the current system and its restrictions has led to:

- a three-tiered system in which students are streamed into restrictive pathways;
- an inhibiting of post-school options;
- narrowing of the forms of assessment and recognition of learning;
- fragmentation of effort and resources; and
- a proliferation of subjects with the potential for decline in the direct management of their quality.

As a further consequence, the pathways chosen by young people in the post-compulsory years often lack coherence, purpose and direction. Many students select subjects in which they are likely to achieve the highest possible ranking for entrance to post-school destinations, rather than on the basis of their own interests or intended vocational, occupational or tertiary pathways.

It could be said that the system offers reasonable opportunities to those who, by the end of year 10, are sure of their ambitions, able to select a program of study that matches those ambitions and are capable of judging their own abilities so that they succeed in that program. For many students, however, this demands too much in terms of forecasting and self-knowledge.

Vocational Education and Training in Schools (VET)

The focus on transition provides a compelling case for the delivery of coherent VET studies as an ongoing feature of post-compulsory schooling.

VET plays a significant role for those students who are clear in their intention to move from school directly to the workplace and employment and for those who typically undertake school-based traineeships. Schools provide a structured environment in which students can prepare for the transition to work or further training.

As recognised by MCEETYA in its policy document *New Framework for Vocational Education in Schools* (2001), VET also provides for those students who want to explore a wide range of alternative pathways and benefit from the practical orientation of VET studies. For the many young people who are unsure of what may be suited or open to

them, the availability of VET studies in a range of formats is needed as a form of sampling of alternatives and opportunities. Further, there is often a flow-on effect from the motivation and success students experience in VET programs to their general educational outcomes.

Under the National Training Framework, students are given access to a broad general education with a VET focus. In 1999, WA post-compulsory students participated in one million hours of VET, and in 2000, nearly 1.6 million hours.

There is now substantial evidence to suggest that increased access to, and higher status for VET in Schools can significantly increase post-compulsory schooling retention rates (Ministerial Taskforce on Structures, Services and Resources Supporting Government Schools, 2001, p. 46).

Participation in school-based traineeships within WA is much lower than the level in other States, where traineeships tend to attract students who otherwise would have left school. Further investigation of this situation is needed.

It is the view of the Council that the new post-compulsory model must continue to deliver:

- nationally-recognised competencies and VET qualifications;
- integration of VET studies with the general education certificate (WACE); and
- career education outcomes (self awareness, awareness of the workplace and work opportunities, career development decision-making skills and skills in managing career transitions).

The Council endorses the more complete integration of VET into the whole post-compulsory schooling program through curriculum, assessment and certification arrangements so that a growing clientele can be accommodated. This means ensuring that the requirements to achieve VET Units of Competency form part of course development as well as being available as a course of study and in a stand-alone format.

Life beyond school as the key focus

The new system must equip young people with the appropriate knowledge, skills and values for post-school life, meet the competing needs of diverse student groups, and respond to the changing labour market and the changing needs of employers.

The new arrangements must provide greater flexibility for students to select courses according to likely destinations, with the option to modify and adapt their pathways as interests and aspirations evolve.

Global change and its impact on education

The current system is considered to be slow to embrace and react to the emerging contexts and accelerating challenges facing education.

Information and communication technologies are altering economic and social relationships on a local and global scale. They are having a significant impact on the organisation of knowledge and the way in which students learn.

Fundamental underpinning skills for the global environment

Education systems are increasingly being called upon to ensure that students meet worldwide standards. This continues to make access competitive and demanding. The job market too, is being globalised, with consequential heightening of demands. Australia and Western Australia have always managed to provide education and training that have served us reasonably well in this context, but the jobs now available in the Australian labour market require higher-level skills and education than once was the case. This is a global phenomenon. It creates a substantial challenge for post-compulsory education, which has become the primary pathway to a future of employment and personal satisfaction.

This context will require all school leavers to have generic capabilities as exemplified by the *Curriculum Framework's* Overarching Learning Outcomes (see page 60). Students will need to develop the necessary knowledge, skills and values to become lifelong learners, achieve their potential in their personal and working lives and play an active part in civic and economic life through pursuit of knowledge and commitment to achievement of potential, respect of self and others and acceptance of environmental responsibilities.

The capacity to thrive in the knowledge era will depend on developing students' cognitive skills to their highest potential. In turn, these are dependent upon adequate levels of literacy and numeracy and the opportunities provided by information and communications technologies.

Literacy

There is a need to lift levels of literacy (in particular, functional literacy) for all students and for the standards associated with literacy to be clear. In reporting on its International Adult Literacy Survey, the Organisation of Economic Development (OECD) has clearly identified that "differences in levels of literacy matter both economically and socially: literacy affects, *inter alia*, labour quality and flexibility,

employment, training opportunities, income from work and wider participation in civic society" (OECD, 2000). The importance of literacy cannot be underestimated. Australia ranks well in terms of the proportion of the population with high-level literacy, however, almost half of its adult population (44 percent) are at literacy levels that are considered below the minimum skill levels required to operate in the modern world.

If the proposed post-compulsory system is to prepare young people to move into adult life, including work, higher education and vocational education, it must provide for all students to achieve a standard of literacy that will enable them to function effectively.

The Council is of the view that experiences must be provided in the post-compulsory years through which high levels of language competence, including competence within the specialised language demands of particular fields of study, can be developed and demonstrated to prescribed standards. One such standard would describe an agreed level of literacy required for effective functioning and participation in society. Further standards would describe literacy requirements for entry into careers and further training or education.

Numeracy

Being numerate is about having the disposition and competence to use mathematics to solve practical problems outside mathematics and as a tool for learning beyond the mathematics classroom. It is an important fundamental, as identified in *The Report of the Numeracy Education Strategy Development Conference* (DEETYA, 1997), in which it is stated that "the identification of numeracy as a priority in school education across the country...is a recognition of the central role that numeracy plays in our personal, civic and vocational lives and, ultimately, to Australia's future economic and social prosperity" (p. 3). More and more jobs now require higher levels of numeracy. Moreover, students cannot progress through vocational education and training qualifications without substantial numeracy skills.

While the personal goals and anticipated educational and vocational destinations of young people vary, there is a need for all students to have attained a standard of numeracy that ensures the confidence and ability to apply mathematics in understanding, interpreting and solving the mathematical problems and carrying out the mathematical operations that pervade everyday life. Currently 91 percent of year 11 and 84 percent of year 12 students study mathematics, but feedback from industry and employers suggests that often students' levels of numeracy are not adequate for their purposes. This is a clear indication of the need to set and ensure that students achieve agreed standards of numeracy in the post-compulsory years.

While the importance of developing numeracy through the study of mathematics is acknowledged, opportunities to enhance numeracy skills should be available to students across the curriculum:

The Mathematics Learning Area takes a major, though not sole, responsibility for the development of students' numeracy. Students should learn to read, write and speak mathematics in a variety of contexts and forms so that they can interpret and convey mathematical ideas, interpret prose containing mathematical forms and continue to use and learn mathematics autonomously.

Therefore, it is most important that the post-compulsory system provides opportunities for students to access and develop numeracy skills across a range of learning experiences and contexts and to achieve these skills to a standard sufficient to support their continued success in destinations beyond school.

Information and communications technologies

Information and communications technologies (ICT) pose challenges for education, as well as opportunities. Given the nature and extent of technological change and the rapidly emerging developments in ICT and multimedia, a broader vision of post-compulsory education – one that maximises the potential for e-learning and on-line curriculum – must be forged. Further, the transformative potential of ICT must be recognised:

It is no longer appropriate to consider these technologies simply in terms of their instrumental influence on education. We must recognise that they are part of the infrastructure of the knowledge revolution, which is transforming the social and economic order.

(Stanley, 1999, p. 1)

(Curriculum Council, 1998, p. 179)

Given that ICT is bringing about changes in education, and society as a whole, of a magnitude at least comparable to those resulting from the industrial revolution, it is imperative that students develop facility with these technologies that will enable them to function effectively now and in the future.

The post-compulsory system must be further developed to provide flexibility for students to participate in learning through mixed modes and diverse pathways, to be able to use more efficient means of obtaining current and valid information, and to be provided with avenues for obtaining immediate response and feedback.

Standards for numeracy and ICT

As a guide to students and teachers, the Council proposes to identify standards for numeracy and information and communications technologies detailing what students should know, understand, value and be able to do to be considered functionally competent in these areas. The Council does not intend to make these achievement of the standards mandatory for the Western Australia Certificate of Education.

The implications of global change for policy setting

The implications of global change for policy setting in education and training are considerable. Education and training are the key vehicles available to Government and the community to prepare individuals for a rapidly-changing, unpredictable and demanding world of citizenship and work.

A dynamic and responsive approach to the education and training of young people is needed, underpinned by an understanding of the current trends and changes.

To achieve this, the approach must change the perception of the school as the sole teacher of young people and prepare students to learn critically and creatively from a range of institutions and media.

The Council is determined, therefore, to introduce change in an open-minded, receptive and adaptive fashion, so that even what appear now to be imperatives and solutions are subject to review, reconsideration and input from all stakeholders.

Community demand for explicit educational standards and greater transparency

Research shows that when students are aware of what they are expected to achieve, they strive keenly to achieve it, and must have their achievements recognised and rewarded. This is consistent with the international trend toward making expected standards explicit and judging students in relation to those standards.

The Western Australian community must be able to have confidence in the information provided about the performance of students. There is a demand for explicit standards against which student achievement is measured, thus enabling clear reporting of what students know, understand, value and can do.

This means that students should be aware of the expected standards during the course of their studies. Teachers must know clearly what is required of their students. Schools and systems must be able to account for the performance of their students from year to year. Parents should have sufficient information to be able to form judgements about how their child's achievements compare with expected standards or with similar students around the State.

This requires a shift by students, teachers and parents toward planning in the context of explicit standards, against which student achievement will be measured and reported. The standards must be the focus for improved teaching and learning.

Western Australian context

In Western Australia, the outcomes in the *Curriculum Framework* detail what every student should know, understand, value and be able to do as a result of their school education from kindergarten through to year 12. The *Framework* details thirteen Overarching Learning Outcomes and sixty-six learning area outcomes categorised into eight learning areas. These outcomes represent what has been agreed by the community is essential for all students to achieve at increasing levels of complexity as they progress through schooling.

The Western Australian Department of Education has developed progress maps as part of its *Outcomes and Standards Framework* (1998) that identify performance standards in relation to the *Framework* outcomes at eight levels. These include descriptors and work samples that illustrate clearly student achievement at each standard. Progress maps containing similar achievement standards are also being trialed by the Catholic Education Office of Western Australia. The Curriculum Council is working in collaboration with school sectors and systems to develop Council-endorsed progress maps based on these maps. These will provide a framework of standards for use in all Western Australian schools from K to year 12. A process is in place to revise and validate empirically the comparability of the levels in terms of difficulty.

The *Framework* outcomes with their progress maps will form a standards framework, which will be the starting point for the development of the outcomes and scales of achievement for the proposed courses of study (see Chapter 6). The progress maps and the more specific course scales of achievement have the same characteristics.

Strengthening the curriculum

There is a need to strengthen the curriculum in the post-compulsory phase to ensure that it is relevant and interesting, particularly for those young people whose needs are not being met by the present system.

The McGaw Report (1996) identified a declining interest among students in studying at an advanced level in New South Wales. There is evidence of a similar decline in Western Australia.

There must be a considered approach to raising expectations of students by maximising the opportunities for them to study and succeed in more demanding courses that interest and motivate them. This requires the improvement of curriculum through the implementation of clear and stringent guidelines for course design and development. As part of the development process, the structure and demands of courses and their rigour need to be considered. Existing assumptions in relation to rigour as a function of a field of study or discipline need to be challenged.

McGaw (1996) identified the same issue in New South Wales in the review of the Higher School Certificate. In this report it is argued that rigour is not a function of the field of study or the discipline involved, rather a function of the structure and the demands of a particular course. Whether particular subjects are thought of as 'rigorous' depends on the role they play and the status they are accorded at any particular time.

Ideally, every course of study should offer the opportunity for achievement of significant learning outcomes across a range of levels, demanding high standards of all students, and hence be included in the calculation of a university entrance score, or TAFE entry.

Assessment and reporting against standards

Young people, their families, employers and further education and training providers must have access to clear reporting on student achievement.

The Council recognises that whilst norm-referenced scaling procedures in assessment have their place (particularly in assisting universities to rank students for selection), the allocation of students' scores according to a pre-determined distribution does not indicate the students' actual achievement against pre-determined public standards.

The Council accepts that in post-compulsory education a judgement about the level of student achievement must finally be made wherever certification and selection are the requirements. Typically, greater emphasis is placed on the assessment and reporting of student achievement at important stages, such as for TEE, than on the equally-important formative or developmental role of assessment.

Formative assessment is the monitoring used by teachers to identify current weaknesses, provide feedback and indicate strategies for development. The need for teachers to use formative assessment as part of ongoing quality teaching and learning is critical. Students need to gain an understanding of the extent to which they are progressing against explicit outcomes, rather than only comparison to other students.

Summative assessments have their own important places. The Curriculum Council recognises the increasingly competitive environment in which young people operate. The community must have confidence that the Western Australian Certificate of Education reports accurately on explicit educational standards and has credibility at the State, national and international levels. In addition, there must be ways of transforming each student's many school-based and external assessments across all of their outcomes into a fair and reliable measure (or measures) for university and TAFE selection – and this measure must have considerable power in predicting students' subsequent success.

Improving the levels achieved by Aboriginal students

The current post-compulsory education system does not provide adequately for the interests, aspirations and needs of many Aboriginal students.

While Aboriginal students accounted for 6.39 percent of all students in years 8-12 in 2000, they made up only 3.16 percent of the year 11-12 population.

It is clear the current system continues to fail to:

- recognise the knowledge and strengths that Aboriginal students bring to learning;
- provide sufficient integration of Aboriginal perspectives;
- capitalise on the strengths and attraction of VET for Aboriginal students;
- make available an appropriate range of assessment methods; and
- enable the construction of more flexible learning pathways.

(Butorac, Alderson and Figgis, 2001)

It is the view of the Council that improved educational outcomes for Aboriginal students must be a priority. Education in the post-compulsory years must engage Aboriginal students more effectively, enabling each young Aboriginal person to make

decisions about post-school life, including bridges to their community, employment and further education and/or training.

The role of enterprise education and VET studies in providing for many Aboriginal students at the post-compulsory level, as well as for many other Aboriginal students, needs to be recognised and further facilitated, as recommended in the *Post-compulsory Education of Aboriginal Students in WA* report (Butorac *et al*, 2001). In particular, there also needs to be the opportunity for Aboriginal students to pursue more enterprise-oriented studies that would facilitate their involvement in local communities.

Further, to maximise the participation of Aboriginal students in post-compulsory education, there must be a stronger emphasis on the application of Aboriginal knowledge and perspectives across the curriculum, where appropriate, and greater flexibility in the organisation, delivery and assessment of post-compulsory education to suit individual needs.

The Council acknowledges that encouraging Aboriginal students to participate in post-compulsory education is only the first step in improving achievement levels of Aboriginal students. Successful achievement of outcomes at increasing levels of difficulty is essential to making a difference to the prospects of young Aboriginal people.

Improving the levels achieved by students with disabilities and learning difficulties

In terms of accessing a diverse range of post-school options, post-compulsory education should be as valuable to students with disabilities and learning difficulties as to any other students. However, the current post-compulsory education system does not adequately meet the needs of these students, including those who require specialist and education support facilities.

The Council is committed to providing a post-compulsory education system that assists all students to raise their competence and confidence and equips them with the skills to function in integrated post-school employment, recreation and leisure, and home and community living environments.

For students with disabilities and learning difficulties, the post-compulsory system must provide the same rigour and breadth of study with an emphasis on functional skills and the flexibility to pursue chosen pathways that is available to other students. Equally, the recognition of their achievements must be credible and valued, and monitored against progress maps.

For some, the appropriate solution will be sensitive integration into the mainstream curriculum. For others, this may not be the best option, and they may require greater flexibility in curriculum.

A system underpinned by a kindergarten to year 12 focus on outcomes

The Council is committed to maximising learning outcomes for students through a seamless focus on outcomes from kindergarten to year 12, as expressed in the *Curriculum Framework*. The requirement to implement the *Curriculum Framework* and therefore its focus on outcomes, has significant implications for post-compulsory education.

This means clearly stating what students should know, understand, value and do rather than focusing on what systems and schools have provided and what, how and when teachers have taught. It means identifying what students should achieve and focusing on ensuring that they do achieve. For post-compulsory schooling, this represents a fundamental change in curriculum policy, practice and evaluation.

The importance of an outcomes focus has been recognised widely through a world-wide trend in such countries as Canada, US, UK and New Zealand as well as in Australia. This is further demonstrated by its adoption in the development of competencies by industry and TAFE.

The agreed outcomes represented in the *Curriculum Framework* form a common core of achievement for kindergarten to year 12, thus enabling students to progress smoothly through their education, avoiding major disjunctions between the stages of schooling and providing the basis for continuity and consistency in education.

Many schools in Western Australia have been using or moving toward an outcomes approach for some time. While the implementation of the *Curriculum Framework* has advanced this process in all schools, the changes seen in the compulsory years have yet to extend to the post-compulsory years.

This is not only a matter, however, of following on from the introduction of an outcomes focus in the compulsory years. The outcomes approach should better enable:

- all students' programs to be more responsive to their ability, progress and interests;
- all students to have knowledge of what they are expected to achieve, both in general terms (the outcomes) and in order to gain a particular level (the descriptors or standards);
- all students' learning and the associated teaching to be more clearly focused;
- all students' assessment to be related clearly to criteria;

- all students to have their generic skills and values developed through attention to Overarching Learning Outcomes;
- all students to have access to workplace-related competencies; and
- all students to construct their own knowledge, largely through problem-oriented learning.

The outcomes approach has had encouraging beginnings in the compulsory years. As teachers focus on the outcomes they want students to achieve when planning learning experiences, they are increasingly adopting the learning, teaching and assessment principles of the *Curriculum Framework*. As these are selected with the learning needs of their particular students in mind, there is evidence of greater responsiveness, diversity and flexibility in what is provided.

The Council is of the view that the approach has a clear relationship to present and future needs of students in post-compulsory education.

SUMMARY: Imperatives for post-compulsory reform

The future prosperity and well-being of young people and society as a whole will rely greatly on the skills, knowledge, understandings and values that students take with them on leaving school. The review has highlighted concerns with the current system of post-compulsory education, which it is acknowledged have arisen as a result of attempts to adapt the system to changes over the past decade. These include:

- the failure to capture the interests and aspirations of one-third of students who
 leave school early and often face bleak employment prospects without further
 education or training;
- an insufficient emphasis on the transition from school to further work or study and in developing a capacity for, and inclination towards, lifelong learning and adaptation;
- de facto streaming of students into narrow pathways, inhibiting post-school options and restrictions on subject choice for students studying for university entrance in comparison with their counterparts elsewhere in Australia, and
- the slowness of the system to embrace and react to the emerging context and accelerating challenges facing education as a result of global change;
- an exclusive curriculum for those confidently expecting to gain access to university only;
- an absence of explicit and public educational standards, clear reporting of student achievement and transparency;
- an assessment and reporting methodology that allocates students' scores according to a pre-determined distribution rather than on the basis of their actual achievement.

The Council is committed to maximising learning outcomes for students through a seamless focus on outcomes from kindergarten to year 12, as expressed in the *Curriculum Framework*.