

The case for an Australian Certificate of Education

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The Commonwealth Department of Education, Science and Training on May 2005 commissioned the Australian Council for Educational Research to investigate and report on models and implementation arrangements for an Australian Certificate of Education. There are ten different certificates currently available across the six states and two territories of Australia that provide a senior secondary school qualification. The first recommendation made by the Review is for national agreement on what should be taught in each school system. The second recommendation is for students across Australia to be assessed against the same standards. This requires the development of natural so-called 'achievement standards' in each subject assessed. A third recommendation is that students are required to demonstrate acceptable levels of achievement of a few key capabilities. A final recommendation is that further work needs to be done to explore how employability skills may be assessed in a consistent way as part of the Australian Certificate of Education. In conclusion, it is emphasised that there is need for a 'common currency' or common language for reporting all senior secondary subject results. There is also a need for national debate on what Australia senior secondary school students should be learning during their final years of secondary schooling, regardless of where they live.

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BACKGROUND

The desirability of greater national consistency in senior secondary arrangements was discussed by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) in July 2003. The following year, the Australian Government canvassed the idea of a nationally consistent Australian Certificate of Education (ACE) for the senior years of school and indicated its intention to work with State and Territory Ministers to begin implementing an ACE.

In May 2005 the Department of Education, Science and Training (DEST) commissioned the Australian Council for Educational Research (ACER) to investigate and report on models and implementation arrangements for an Australian Certificate of Education. Our report was delivered in December.

Our investigation included a desk review of existing and planned senior secondary curriculum and assessment arrangements. Currently, Australia offers nine separate senior certificates through eight awarding bodies as it is shown in Table 1. Each of the six states and two territories provides a senior secondary qualification and the Victorian Certificate of Applied Learning is available for students planning to undertake apprenticeships, study at TAFE or enter employment directly from school. A tenth certificate, the International Baccalaureate Diploma, is offered in a number of schools.

Most state and territory certificates have evolved over many years, usually from a set of final-year subject examinations conducted for university entrance. Current arrangements are the result of locally negotiated 'settlements' and reflect different state and territory histories, educational

philosophies, local schools of thought, and the influence of particular individuals and committees in each jurisdiction.

Table 1. Senior Certificates Issued in Australia

ACT	ACT Year 12 Certificate
NSW	Higher School Certificate
NT	Northern Territory Certificate of Education ¹
QLD	Senior Certificate ²
SA	The South Australian Certificate of Education
TAS	Tasmanian Certificate of Education
VIC	Victorian Certificate of Education Victorian Certificate of Applied Learning
WA	Western Australian Certificate of Education

The authorities awarding the nine senior certificates vary enormously in size and have vastly different resources at their disposal. The New South Wales (NSW) Board of Studies (which has significant responsibilities in addition to the Higher School Certificate) has an annual budget of \$94 million; the Tasmanian Qualifications Authority has a budget less than \$3 million. Some authorities are able to develop and maintain detailed syllabuses and annual examinations in dozens of subjects; others have no option but to leave curriculum development and student assessment in the hands of schools.

These historical arrangements have produced considerable divergence across Australia in such matters as the minimum requirements for the award of senior certificates, the level of detail provided in syllabuses and curriculum frameworks, and approaches to assessing and reporting student achievement. There is now a bewildering variety of accompanying terminology. Different terms sometimes convey subtle differences in approach or intentions, but often they do not. And the use of the same term (eg, 'English') sometimes obscures important differences.

Students living in some parts of Australia study centrally specified syllabuses. For example, students taking Biology in NSW complete a core consisting of three 30-hour modules (Maintaining a Balance, Blueprint for Life, Search for Better Health) plus a 30-hour option selected from: Communication, Biotechnology, Genetics, the Human Story, and Biochemistry. Students are required to undertake at least 35 hours of practical activities during Year 12 and to complete at least one open-ended investigation.

In contrast, teachers in the Australian Capital Territory (ACT) are given a Course Framework as a basis for developing their own Biology courses. This framework identifies key content, concepts and processes and requires teachers to use a mix of experimental investigation reports, assignments and tests in the assessment of student learning. But no course structure is provided and there is no external assessment.

Our investigation included national consultations with stakeholders. A widely held view among participants in our consultations was that, regardless of where they lived in Australia, students in the senior secondary school should have similar opportunities to engage with the fundamental knowledge, principles and ideas that made up school subjects. There was general agreement that students in different states and territories taking particular subjects such as Advanced Mathematics or Chemistry should be able to engage with those subjects in similar depth and with similar academic rigour. To date there has been very little analysis of what students were taught in different jurisdictions and even fewer attempts to identify essential curriculum content.

¹ based on procedures of the Senior Secondary Assessment Board of South Australia.

² to be replaced by the Queensland Certificate of Education in 2008.

There is also very little information about how standards compare across Australia. Part of the reason for this is that there is no way of comparing performances in a subject such as Accounting across state boundaries. A mark of 85 in one state does not necessarily represent the same level of achievement as a mark of 85 in another. While some states report results as marks out of 100, others provide marks out of 50, and still others report in terms of a small number of achievements levels. Currently there is no way of comparing a 'Band 6' performance in NSW with a 'Very High Achievement' in Queensland or a mark of 40/50 in Victoria. Some employers told us that they find these differences confusing.

For students wishing to enter university, an attempt is made to provide nationally comparable tertiary entrance ranks (ENTER scores). But the process used to do this makes the assumption that students in each state or territory have the same overall distribution of achievement: a necessary but dubious assumption in the light of other evidence about interstate differences. Some university selection officers now believe that students from some states are less well prepared than their ENTER scores suggest.

NEW STANDARDS FOR SENIOR STUDENTS

Earlier this year the Australian Council for Educational Research provided a report to the Australian Government on options for the introduction of an Australian Certificate of Education (ACE) for the final years of secondary school. Our report and an opportunity to comment on it are available at www.dest.gov.au/ace.

The report proposes the introduction of an ACE based on national standards for what is taught in Years 11 and 12 and for how well students should be expected to learn what is taught. These standards are captured in three key recommendations.

Our first recommendation calls for national agreement on what should be taught. We argue that, regardless of where they live in Australia, students should be able to engage with school subjects in similar depth and with similar academic rigour. In individual subjects (such as Economics, Biology and Advanced Mathematics) we recommend the identification of a core of essential knowledge, skills, ideas and principles. These are the big ideas that all students taking that subject should have an opportunity to learn regardless of the state or territory in which they live. Except in some vocational subjects, no systematic attempt has been made to do this.

In making this recommendation, we were not proposing that the entire curriculum for a subject should be the same across the country. Schools must be able to respond to local needs and circumstances and there is value in a degree of diversity in what and how students are taught and in opportunities for experimentation and innovation. But we believe that in most senior school subjects, students should have guaranteed access to an agreed core of essential content. And we suggested a number of subjects for which this work should be commenced.

It is difficult currently to establish what is common across Australia because states and territories provide different levels of specificity in their syllabuses and curriculum frameworks. In smaller systems, which have limited resources for curriculum development and student assessment, teachers often are given only broad guides to what they should teach.

Our second recommendation calls for students throughout Australia to be assessed against the same standards. Currently it is not possible to compare achievements in a subject such as Accounting from one jurisdiction to another. There is no way of knowing whether a 'Band 6' performance in NSW represents a lower or higher level of achievement than a 'Very High Achievement' in Queensland, or a study score of 40/50 in Victoria. The different schemes used to

report student results and the current lack of comparability were described to us as confusing and unnecessary.

We proposed the development of a set of national ‘achievement standards’ for senior school subjects. For any given subject, there might be five such standards (perhaps labelled E to A) with each standard describing and illustrating the kinds of knowledge and skills that students would have to demonstrate to achieve that standard. Some states already report in terms of subject standards. Our proposal is that national standards be developed to provide a common format for reporting results and a level of comparability that does not currently exist.

We stopped short of recommending the introduction of national Year 12 examinations. If results in a subject are reported in terms of the same set of achievement standards, then a level of comparability across jurisdictions will follow. Of course, to the extent that states and territories share examination and other assessment materials in a subject, this level of comparability will be improved.

Our third recommendation is that, to be awarded the ACE, students should be required to demonstrate acceptable levels of a few key capabilities: the ability to write in English; to read with understanding; to apply mathematical concepts to everyday problems; and to use computer technology. We made this recommendation because of claims that some students being awarded senior certificates have only limited mastery of these skills and because of research evidence that failure to master these basics (especially reading and writing) is correlated with poorer employment, health and social outcomes.

The focus of existing senior certificates is on how well students have learnt subject matter. Except in Queensland, there is no direct assessment of basic skills that underpin school subjects and that are essential to learning, work and life beyond school. The Australian Chamber of Commerce and Industry and the Business Council of Australia have identified other so-called ‘employability skills’ such as the ability to work as a member of a team and to plan and organise activities. Our report recommended further work to explore how these skills also might be assessed in a nationally consistent way as part of the ACE.

In the course of our work we found ourselves asking many questions about current senior secondary arrangements. For example, does Australia, with a smaller population than some American states, really require nine different senior certificates? Do we need seven distinct syllabuses or curriculum frameworks in a subject such as Physics, especially when these syllabuses are designed for essentially the same group of tertiary-bound students? At a time when the states of the European Union are working to make their qualifications more compatible and more comparable to increase the international competitiveness of European education, to encourage mutual recognition and to facilitate student mobility, can Australia afford to have senior secondary arrangements which are becoming increasingly disparate?

YEAR 12 RESULTS? WE NEED A COMMON CURRENCY

And the situation is becoming worse. With proposed changes in a number of states, including Queensland, South Australia (SA) and Western Australia (WA), senior secondary arrangements in this country are about to diverge further. Across the country there are bewildering variations in terminology, requirements that make it harder to achieve a certificate in some states than in others, and as many different schemes for reporting Year 12 results as there are agencies responsible for doing this as is shown in Table 2.

In all this variety, the states and territories are staunch defenders of their own systems. Each appears to consider its Year 12 arrangements superior to those of the rest of the country, that are

variously described as lacking in academic rigour, unresponsive to local and student needs, too rigid and bureaucratic, based on narrow and limited forms of assessment, and captured by educational fads. It seems that a number of states would support a national approach if it meant others adopting their arrangements. In reality, there is a very limited basis for accepting any claim to superiority.

Table 2. How Year 12 subject results are reported

ACT	a grade (A, B, C, D, E)
NSW	a mark out of 100, placing the student's result in one of six 'bands' (Band 1 to Band 6)
QLD	an 'achievement level' (Very Limited, Limited, Sound, High, Very High Achievement)
SA/NT	currently: a score out of 20, placing the student's result in one of five grades (A, B, C, D, E) proposed: seven grades (A+, A, B, C, D, E, not yet achieved)
TAS	an 'achievement level' (Preliminary, Satisfactory, Commendable, High, Exceptional Achievement)
VIC	a score out of 50
WA	currently: a grade (A, B, C, D, E) proposed: a 'level' (3, 4, 5, 6, 7, 8) and a 'band' (first/medium/high) within that level

Source: ACER (An Australian Certificate of Education: Exploring A Way Forward)

Contrast this with what is happening in Europe where the states of the European Union are collaborating to enhance the consistency and comparability of their educational qualifications. The aim is to increase the international competitiveness of European education, to promote mutual recognition of qualifications across nation states and to facilitate student mobility. Under the so-called 'Bologna Process', considerable progress has been made towards the development of more consistent higher education arrangements and qualifications.

There was a glimmer of hope at the meeting of Commonwealth, State and Territory Ministers of Education in Brisbane in 2006 where it was decided to establish a working party to examine the feasibility of developing a common scale for reporting all senior secondary subject results. This proposal, led by Victoria, is a welcome development if it leads to a common language for reporting Year 12 results.

But a common language (such as A to E grades) is only a first step. The bigger challenge – and one that the ministers appear to have taken up – is to ensure that it is just as difficult to achieve an 'A' in, say, advanced mathematics in NSW as it is to achieve an 'A' in WA. This level of consistency requires agreement on how much knowledge, understanding and skill students need to have, and the quality or depth of understanding they need to demonstrate, to receive an 'A' in each state and territory.

And this highlights the next difficulty. Money is money, whether measured in dollars, euros or yen. But can Chemistry results be compared meaningfully from one state to another? The answer to this question depends on how similar Chemistry curricula are across Australia. To the extent that Year 12 curricula vary from one state to another, any attempt to introduce a common reporting language and to compare grades or marks across the country is likely to be of limited value.

Surprisingly, very few attempts have been made to investigate what students are taught in the final years of school in Australia. To what extent are students in different states and territories taught the same facts, principles and skills in a subject such as Economics? Is there a body of fundamental knowledge and big ideas to which all students taking Economics should be exposed, regardless of where they live in Australia? Questions such as these have not been addressed in any systematic way.

Earlier this year, the Australian Government initiated an investigation into what is being taught in senior school English, Mathematics, Physics, Chemistry and Australian History courses. This

investigation can tell us whether curricula in these subjects are sufficiently similar to permit the kind of consistency in reporting that the ministers are seeking. It also will provide a basis for thinking about what should be taught, and especially what core content all students taking a subject should have an opportunity to learn. On this question there is bound to be vigorous debate, as there should be in relation to curriculum matters.

As other countries work to break down unnecessary barriers to communication and to teacher and student mobility, it is time for Australia to adopt a more consistent language and common currency for reporting Year 12 results. It is also time for a national debate on what Australian students should be learning in the final years of secondary school, regardless of where they live.