Redesigning the secondary-tertiary interface

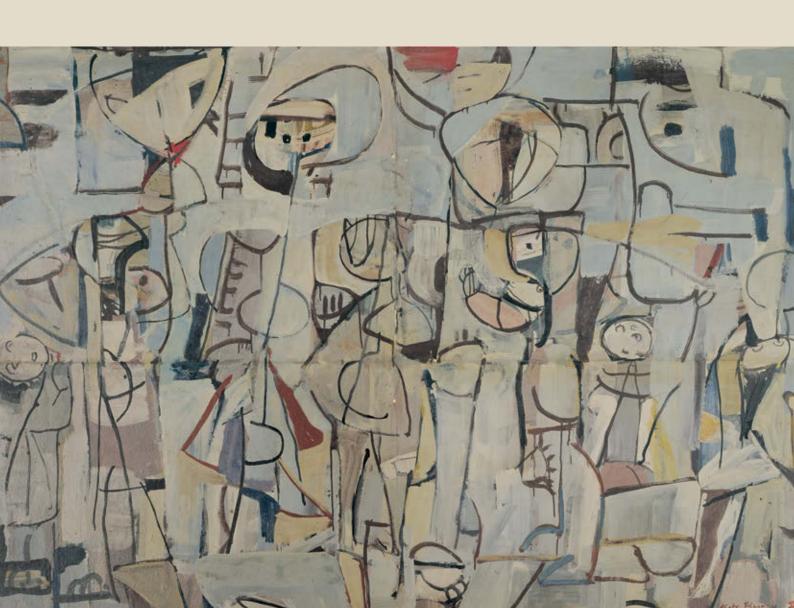
Queensland Review of Senior Assessment and Tertiary Entrance

Report submitted to the Queensland Minister for Education, Training and Employment

By the reviewers Gabrielle Matters and Geoff N Masters Australian Council for Educational Research

October 2014
Second Edition







Cover image:

Kite Flying Ian Fairweather, 1958

Queensland Art Gallery, Brisbane

Synthetic polymer paint and gouache on four sheets of cardboard on hardboard, 194 x 129.4 cm.

The graphic used in this report is by Ian Fairweather (1891-1974), considered a giant among Australian painters and revered by fellow artists.

Fairweather lived for twenty years in a hut on Bribie Island, Queensland, where this artwork was created.

A Scottish-born artist, Fairweather's work is shaped by European modernism. He was also drawn to Asia, living in Shanghai and Peking in the 1930s, and along with his study of Chinese writing, developed a distinctive linear style.

Kite Flying was chosen as a graphic for the Queensland Review of Senior Assessment and Tertiary Entrance. This work represents a modern piece steeped in history, distinctive in design and earthy colour tones, and by a renowned local artist with a global perspective.

It is an abstract artwork capturing the free-flowing adventures and childhood associations of flying a kite, which calls us to focus on the young adults, those in their final years of schooling, who experience senior assessment and seek entry to tertiary institutions now and into the future.

© Ian Fairweather/DACS. Licensed by Viscopy, 2014.

Redesigning the secondary-tertiary interface

Queensland Review of Senior Assessment and Tertiary Entrance

Gabrielle Matters and Geoff N Masters



2014 Australian Council *for* Educational Research (ACER) ABN 19 004 398 145 The Australian Council *for* Educational Research 1/165 Kelvin Grove Road, Kelvin Grove, Brisbane, 4059

Production by ToadShow Pty Ltd





The Honourable John-Paul Langbroek, MLA Minister for Education, Training and Employment Queensland

19 September 2014

Dear Minister

We are pleased to submit to you the Report of the Queensland Review of Senior Assessment and Tertiary Entrance, which was commissioned in July 2013. We have entitled the Report "Redesigning the Secondary–Tertiary Interface". A general conclusion of our Review is that senior secondary assessment and tertiary entrance in Queensland are in need of attention. Although the current processes have served Queensland well, we believe that they will be less adequate in meeting future needs and that the time has come for a redesign. Although the new design represents a fundamental shift from current procedures, it is relatively easy to understand and would be streamlined in practice.

The evidence base for our findings is immense. We consulted widely, gathered information in a variety of ways, made our own observations, built theories, and tested out our findings with key stakeholders, interested parties and technical experts. We also drew on advice from colleagues who are influential in the fields of assessment and tertiary entrance. We are, however, solely responsible for this report and its recommendations.

Thank you for the opportunity to carry out this challenging and significant piece of work. We are honoured to have been in the position to provide advice to Government on a new model of senior assessment and tertiary entrance that is built on the principles of validity, reliability, and transparency. We believe that a system built on our recommendations would deliver, at the one time, simplicity and rigour.

Yours sincerely

Dr Gabrielle Matters

Principal Research Fellow,

Casrielle Matters

Assessment & Psychometric Research

Professor Geoff N Masters, AO

Soff N Masters

Chief Executive Officer

Table of contents

Volume 1: Main report	
Acronyms Preface and acknowledgments Terms of Reference Additional considerations	vii ix xiii xiv
Chapter 1 The Queensland education landscape Context Historical snapshot Schooling in Queensland Changes in the tertiary sector Observations by reviewers	1 1 2 3 9 14
Chapter 2 Main themes emerging from the review Impressions at the beginning of the Review Submissions to the Review Identification of general topics Value of school-based assessment State of moderation Polarity of views on external assessment Bringing together results on internal and external assessments Rejection of testing key cross-curriculum capabilities Ambivalence about separation of responsibilities for senior certification and tertiary selection Scaling and construction of rank orders Main points	17 18 18 22 23 24 26 27 28 29 30 34
Chapter 3 Reflections, findings and recommendations General challenges Assessing and certifying student attainment in senior subjects Selecting students for admission to tertiary courses of study Review of current processes Assessing and certifying student attainment in senior subjects Assessment of cross-curriculum skills Input to the Review Our reflections Assessment activities Evaluating and reporting student performances Moderation processes Selecting students for admission to tertiary courses of study Input to the Review Our reflections A single rank order of school leavers? The separation of responsibilities	37 37 38 40 40 41 42 45 45 46 49 51 52 54 55

Transparency

The current OP system

Recommendations

58

58

59

	The separation of responsibilities	60
	Assessing and certifying student attainment in senior subjects	60
	Selecting students for admission to tertiary courses of study	69
	Planning and introducing change – senior secondary certification	73
	Planning and introducing change - tertiary entrance	76
Chap	ter 4 Envisaging a redesigned system	81
	inciples	81
То	wards fundamental change	83
	hat the new design means in practice	83
	New system architecture	84
	New Subject Result	85
	New assessment package	87
	New School Assessments	88
	New External Assessment	89
	New marking schemes for School Assessments	90
	New moderation model New assessment schedule	92 93
	New roles	94
	New certification	96
	New Tertiary Entrance procedures	96
	New times	96
Co	onclusion	99
Biblio	ography	101
Volu	me 2: Supplement to main report	
Pape	rs and research	
1	The present system in a nutshell	3
2	Analysis of selected major reports in Queensland 1970-1990	33
3	Overview of senior assessment and tertiary entrance in	
	Australia and other countries	51
4	Strengths and weaknesses of Queensland's OP system today	85
5		
	and moderation - A previously untold evidence-based narrative	113
Appe	endices	
Appe	ndix 1: Key Stakeholder Organisations	180
	ndix 2: Consultations	181
	2.1 Initial meeting of key stakeholders with ACER	101
2	12 September 2013	181
2	2.2 Key Stakeholder Forum: No change, some important	.01
_	changes, or fundamental change? – 13 March 2014	183
2	2.3 Emerging directions and details: Presentation by ACER	
_	reviewers and Q & A session – 29 April 2014	187
2	2.4 Closed consultation: ACER reviewers with CEO or equivalent	
_	of key stakeholder organisations – 18 June 2014	191
2	2.5 Schooling sector consultations	192
	2.6 Meetings of ACER reviewers with interested parties	201
	ndix 3: Public submissions	209
_		209
3	6.2 Collation of responses from key stakeholder organisations to eight focus questions	211
7	3.3 Level of support for proposals	231
	ndix 4: Stakeholder survey	242
	4.1 Analysis of survey responses	242
2	1.2 Survey instrument	256

Table of contents v

Volume 1 Figures and Tables

Figure 1:	Timeline from 1970 to now, including key features	2
Figure 2:	Participation in senior schooling and university eligibility	3
Figure 3:	OP eligibility, 1992-2013	5
Figure 4:	Changes in Year 12 outcomes, 1992-2013	5
Figure 5:	OP-eligible students and students who sat the QCS Test, 1992-2013	6
Figure 6:	OP distribution, 1992, 2013	7
Figure 7:	University enrolments through QTAC, 2013	8
Figure 8:	Commonwealth supported full-time equivalent students, 1989–2017 (estimates 2013–17)	10
Figure 9:	University course selection, 1990-2013	11
Figure 10:	Percentage of Year 12 students seeking university entrance, 1992–2013	11
Figure 11:	Nature of Year 12 university applicants	12
Figure 12:	Year 12 university applicants	13
Figure 13:	Current processes for arriving at students' exit levels of achievement and SAIs	47
Figure 14:	Proposed process for arriving at students' Subject Results	49
Figure 15:	A marking scheme for a School Assessment activity	62
Tables		
Table 1:	Year 12 completers applying through QTAC, 2004 and 2013, by OP eligibility status	8
Table 2:	Percentage of individuals aged 25-34 with a university qualification, by jurisdiction	10
Table 3:	Applicants and offers, Year 12 completers, 1992, 2000, 2013	13
Table 4:	Key Stakeholder Organisations' support for 8 position statements	20
Table 5:	Comparison of tertiary selection arrangements across states and territories	30
Table 6:	Subject results and tertiary entrance results for selected non- Queensland states	32

Acronyms

V DC	Australian Duranu of Statistics	0044	Outpendand Curriculum and
ABS ACACA	Australian Bureau of Statistics Australasian Curriculum,	QCAA	Queensland Curriculum and Assessment Authority
ACACA	Assessment and Certification Authorities	QCE	Queensland Certificate of Education
ACARA	Australian Curriculum, Assessment and Reporting	QCEC	Queensland Catholic Education Commission
ACER	Australian Council for	QCIA	Queensland Certificate of Individual Achievement
	Educational Research	QCS	Queensland Core Skills
ACT	Australian Capital Territory	QCT	Queensland College of Teachers
ACTAC	Australasian Conference of	QSA	Queensland Studies Authority
AQF	Tertiary Admissions Centres Australian Qualifications Framework	QSPA	Queensland Secondary Principals' Association
ASAT	Australian Scholastic Aptitude Test	QTAC	Queensland Tertiary Admissions Centre
ATAR	Australian Tertiary Admission Rank	QTU	Queensland Teachers' Union of Employees
BSSS	Board of Secondary School Studies	QUT	Queensland University of Technology
CCE	Common Curriculum Element	RTO	Registered Training Organisation
CHC	Christian Heritage College	SACE	South Australian Certificate of Education
COAG	Council of Australian	SAI	Subject Achievement Indicator
	Governments	SAS	Study Area Specification
CQU DETE	Central Queensland University Department of Education,	SAT	Scholastic Assessment Test (USA)
	Training and Employment	SCU	Sunshine Coast University
EQ	Education Queensland	TAFE	Technical and Further Education
FAI	Field Achievement Indicator	TE	Tertiary Entrance
FP	Field Position	TER	Tertiary Entrance Rank
GAT	General Achievement Test	TES	Tertiary Entrance Statement
HA	High Achievement	TOR	Terms of Reference
HSC IB	Higher School Certificate International Baccalaureate	TQA	Tasmanian Qualifications Authority
ICPAQ	Isolated Children's Parents'	UAC	Universities Admissions Centre
IEUA	Association Queensland Inc Independent Education Union of	UMAT	Undergraduate Medicine and Health Sciences Admission Test
ICO	Australia	UQ	University of Queensland
ISQ	Independent Schools Queensland	USC	University of the Southern Cross
JCU KCCC	James Cook University Key Cross-Curriculum	USQ	University of Southern Queensland
	Capabilities	VC	Vice-Chancellor
K-12	Kindergarten to Year 12	VCE	Victorian Certificate of Education
LA	Limited Achievement	VET	Vocational Education and
LOA	Level of Achievement		Training
OAI	Overall Achievement Indicator	VHA	Very High Achievement
OP	Overall Position	VLA	Very Limited Achievement
QBSSSS	Queensland Board of Senior Secondary School Studies	WSM	Within-School Measure

Acronyms vii



Preface and acknowlegments

In July 2013 the Queensland Government announced that there would be a major independent review of the Queensland systems of senior assessment and tertiary entrance for students completing Year 12 (the "Year 12 completers"). The Australian Council for Educational Research (ACER) was commissioned to carry out this work; in particular, to consider the effectiveness of the systems and identify ways to improve, revitalise or reform them.

Preparing for the future

The Review is an opportunity to set directions for the future of senior secondary assessment and tertiary selection in Queensland despite the many positive features of the current assessment and selection processes. The challenge of this Review is to design a set of high-quality processes to meet the needs of future senior secondary students and future users of Year 12 results.

There are several reasons for reviewing current practices at this time.

Queensland's system of senior assessment and tertiary entrance, commonly referred to as the "OP system", has been in place since 1992. School-based assessment has been operating in a high-stakes environment since the 1970s. It has been over 40 years since public (external) examinations were abolished and 24 years since the most recent review of tertiary entrance in Queensland. Since the 1990 review there have been significant changes in the numbers of students participating in senior secondary schooling and seeking entry to university. To cater for the increasing number of students, schools now offer a broader range of vocational and alternative senior secondary courses. At the same time, there have been significant changes in the ways in which students enter universities. Many alternative pathways and points of entry have been opened up to cater for the much larger numbers of students now wishing to undertake university study. Added to that, under the demand-driven university systems, selection is now a non-issue in many courses and some institutions.

The nature of teaching and learning in senior secondary schools is undergoing change. The recently developed Australian curriculum has set new priorities for learning in the final years of school. These priorities continue to emphasise learning in the disciplines, but they also include the development of a broader range of skills and attributes considered necessary for life, study and work in the 21st Century – for example, solving problems creatively, managing information dynamically and communicating effectively.

Important changes are occurring in the delivery of teaching, learning and assessment as a result of advances in technology. These changes are likely to accelerate over the next decade. Universities are experiencing these changes in the form of open, online courses that can be delivered anywhere in the world. At the same time, technology is changing learning in senior secondary schools and

has the potential to fundamentally transform the ways in which learning will be assessed and monitored.

Leaders in education across the world agree that we are on the verge of a radical change in thinking and practice regarding assessment in school education. Advances in brain research, educational measurement and new digital technologies have the capacity to transform school assessment programs. How people learn, drawing on insights from developmental psychology, cognitive science and neuroscience, is at the heart of the emerging focus on evidence-based practice in education. New assessment technologies will provide capability to assess a much wider range of outcomes, including higher-order cognitive processes such as problem solving and creativity. New learning systems will align curriculum, pedagogy and assessment, and generate a constant flow of rich data to inform and promote student learning.

For all these reasons, the Review looked to the future rather than backward to assessment and selection arrangements that may have existed in the past. The opportunity exists to design new arrangements appropriate to the challenges of the 21st Century. In this context, technology-based assessments are likely to be more appropriate than paper-based, three-hour written examinations. And selection processes that recognise the diversity of course demands and the diversity of student backgrounds are likely to be more appropriate than past attempts to produce a single rank order of all Year 12 applicants to all courses in all universities.

A problem?

An interesting aspect of this Review is that there was no particular "problem to be solved". Most education reviews spring from public disquiet or pressure for change. This was the case in two major reviews in the past.

The Viviani Review of 1990 was required to solve the problem of a discredited TE Score. The recommended replacement was a three-part method of tertiary entrance: a student's OP, FPs (up to five), and QCS grade were to be used in turn until there was enough information for a selection decision to be made. The Radford Review of 1970 was required to solve the problem of university control of the senior school curriculum and challenges to the social and technical grounds for external examinations. The recommended change was the abolition of public (external) examinations and the introduction of school-based assessment. The legacy of the Radford and Viviani reviews is today's externally moderated school-based assessment and OP system.

For the current Review there was no statement of a problem to be solved but, rather, there is a question to be answered: Are current processes as effective as they might be in meeting the future needs of students, employers and universities?

The approach

The ACER reviewers ("we") relied on many different ways of engaging with stakeholders and interested parties in gathering and providing information. We received more than 2,200 responses to a survey, nearly 100 formal submissions, conducted four significant forums (involving almost 300 key stakeholders and interested parties), and participated in approximately 50 meetings with key stakeholders and their constituents and/or committees, either by invitation from stakeholders and interested parties or on request from ACER. We made numerous presentations at conferences and attended other key forums to gain insights and

discuss the progress and directions of the Review. This report is richer for the contributions of so many.

We maintained communication with the education community and the general public via a dedicated web presence on ACER's website that attracted almost 22,000 hits. Updates regarding the review's progress, background papers, discussion papers, and outcomes of consultation events were posted on this website. The multi-modal approach was considered an effective and efficient way of reaching thousands of people.

An advantage of our approach was that the deliberations of the reviewers were shared widely as the review progressed. With this in mind, we believe there should be no surprises in this report for key stakeholder organisations and their constituents.

The future

The Government will release its draft response to the review by the end of the year for public consultation. We would expect a Government decision at the beginning of 2015. In announcing this review Minister Langbroek stated that "there could be some change, there may be no change, or there may be significant change". Since then he has stated publicly that (if there is to be a new system) there will be no changes before 2016. Transition from the present system to the system proposed in this Report will require imagination, collaboration and a special constellation of skills in conceptualisation and implementation. One sensitive issue to be confronted – whether this Report's recommendations are accepted or not – is the potential loss of public confidence in current processes. By its very nature a review includes a critical element. The education community, the wider community and most importantly students presently in Years 10, 11 and 12 should be informed that the present system, although not sustainable into the future, is not broken. They can be assured of the fairness of Levels of Achievement and OPs for the next couple of years.

Momentum for change

This report contains the results of a principles-based and intensive 12-month review of senior assessment and tertiary entrance processes in Queensland, together with 23 recommendations for change.

An outstanding feature of this Review has been the spirited way in which people put forward their views. It is often the case that reviews are greeted with little enthusiasm from those who are change-resistant, tired of change, or sceptical about the genesis of the investigation. This Review, however, was generally greeted not only with keenness to contribute but also with acceptance and resignation and, at various times, advocacy – the time has come for change.

Acknowledgments

ACER wishes to acknowledge individuals and groups, without whom this Review would not have been possible:

- Dr Peter Hill, our international consultant, for his expert advice
- Bernadette Hanna, Project Review Manager, for her significant contribution to all aspects of the Review including this Report
- Yvana Jones (Yvana Jones Consulting), for her invaluable work in the role of Review Consultation Manager
- Dr Robert Lake (NovumAVI), for his expertise in educational analysis
- Andrew Walker and Michael Shephard (Department of Education, Training and Employment), for their unfailing good will and patience
- Moamar Nur, Senior Project Officer, ACER Brisbane, for his support and grace under pressure
- Key stakeholder organisations and interested parties, for their engagement and valuable insights
- QCAA, in particular Chris Rider and John McGuire, for responding to our many requests for data, information and opinions and for granting us access to QCAA staff and review panellists and chairs
- Dr John Griffiths and staff at QTAC, for handling our enquiries and meeting with us, and especially to Pat Smith for working with Ann Vitale on our behalf to explain aspects of tertiary entrance that are not so easily accessed and understood
- The universities in Queensland (Vice-Chancellors, registrars, and senior academic staff), for their time and constructive criticism
- The three schooling sectors in Queensland, for their constancy, openness and ideas
- Adjunct Professor John Pitman AM and Adjunct Professor Graham Maxwell, for their honest appraisal of some of our directions
- Professor Joy Cumming for her advice on the legal and equity implications of assessment processes
- David Kelly (ACER), for his informing paper, "Analysis of selected major reports in Queensland 1970–1990"
- Dr Doug McCurry (ACER), for his informing paper "Overview of senior assessment and tertiary entrance in Australia and other countries"
- The thousands of people who attended events, made submissions to the review, completed a survey and engaged in consultations with the Reviewers, for their part in shaping our thoughts throughout the Review.

Commissioned work

We paid particular attention to two pieces of work commissioned for the Review:

- Professor Claire Wyatt-Smith's research paper (working with Peta Colbert), "An account of the inner workings of standards, judgment and moderation: A previously untold narrative", would appear to be the first time that key insights into the inner workings of the moderation system have been made available. While existing published literature provides some positive commentary of the current system, much of it is outdated. We are not aware of any recently published empirical work that provides the direction-setting that Queensland has needed over the past decade.
- Dr Reg Allen's paper, "Strengths and weaknesses of Queensland's OP system today", is a deep and comprehensive analysis that, amongst other things, challenges the OP as a measure of overall achievement and points to the fact that some of the original assumptions about the system no longer apply. For example, almost 50% of Year 12 completers are considered for university entrance on the basis of criteria other than the OP, most notably a ranking of OP-ineligible students that does not take account of differences in subject difficulty or subject-group enrolments. He suggests a ranking based on an aggregate of points values of subject results in which all learnings can count beyond Authority subjects to Authority-registered subjects, VET, and IB.

Terms of Reference

- 1 The Queensland Government is commissioning a review of the Queensland systems of senior secondary assessment and reporting and of tertiary entrance for students completing Year 12.
- 2 The review will consider the effectiveness of the systems and identify ways to improve, revitalise or reform them.
- With respect to the Queensland system of senior secondary school assessment and reporting, the review will consider:
 - comparability across schools of student standards of achievement in the same subject, including review and moderation processes;
 - the appropriateness, validity and reliability of various types of assessment instruments used for senior secondary school subjects;
 - · the adequacy of the current exit levels of achievement;
 - the form and content of reports to students and parents, including the Senior Education Profile; and
 - implications of the Australian Curriculum for the Queensland model.
- 4 With respect to the Queensland tertiary entrance system, the review will consider:
 - impacts of tertiary entrance processes outside the OP system being used by Year 12 completers and offered by the Queensland Tertiary Admissions Centre (QTAC) and tertiary providers;
 - the inclusiveness of the system for all students completing Year 12, including the full range of achievements recognised by the Queensland Certificate of Education and alternatives such as the International Baccalaureate:
 - the range of student achievement information provided as the basis of tertiary selection of Year 12 completers;
 - the effectiveness of the OP system in ranking Year 12 students for tertiary entry, including the use of Field Positions (FPs);
 - the role and effectiveness of the Queensland Core Skills Test (QCST) and the associated Common Curriculum Elements;
 - the potential usefulness and implications of more fine-grained ranking, and alignment with the ATAR; and
 - governance of the tertiary entrance process by the Queensland Studies Authority and the QTAC, and their respective roles and functions.
- 5 The review will also consider essential messages and effective strategies to improve the understanding of senior secondary assessment and reporting

The Terms of Reference are vast and some of the issues are universal or at least common to jurisdictions across Australia

Terms of reference xiii

and tertiary entrance procedures by parents, students, employers, the mass media and the broader community.

- 6 The scope of the review will not include revision of the Queensland Certificate of Education.
- 7 The review is to take account of:
 - issues and findings from previous reviews;
 - assessment, reporting and tertiary entrance models in other states and territories;
 - the cost efficiency of alternative models;
 - information from relevant agencies such as the Queensland Studies Authority and the QTAC;
 - impacts of relevant national and state initiatives and educational environments; and
 - The Queensland Government will engage an independent reviewer or reviewers identified through a tender process to undertake the review.
- 8 The review process will be finalised by 31 July 2014.
- 9 The review will engage in broad public consultation and may seek public submissions. Consultation will include the following:
 - State and non-state schooling sectors;
 - · Queensland Studies Authority;
 - QTAC;
 - Department of Education, Training and Employment;
 - Universities and other higher and tertiary education providers;
 - · Secondary school principals' associations;
 - Parents' associations; and
 - Teachers' unions and universities staff associations.
- 10 The review may call on technical research and advisory expertise.

Additional considerations

On 14 February 2013, the Queensland Parliament directed its Education and Innovation Committee to inquire into the assessment methods used in senior mathematics, chemistry and physics in Queensland schools. The committee's report was tabled in Parliament on 14 October 2013.

The report included six recommendations to be referred to this review. Three of them (recommendations 2, 4, 14) relate to external exams, scaling and moderation; two to standards and marking (recommendations 6 and 13); and one to inquiry-based assessment instruments (recommendation 7).

These recommendations send strong signals about external exams, statistical moderation, numerical marking, social moderation, expression of standards within syllabuses, content knowledge, and the worth of, and conditions for, investigations and research tasks. The referred recommendations from the inquiry committee follow.

Referrals from the inquiry into assessment methods used in senior mathematics, chemistry and physics referred to this Review

Referred from the Parliamentary Inquiry to this Review

Referred recommendation 2:

The committee recommends that an external exam count for 50% of a student's overall achievement mark in senior mathematics, chemistry and physics to:

- 1 ensure an appropriate focus on content knowledge which, of the three criteria for each subject, is the one most readily testable by an exam task (and what is tested, gets taught)
- 2 ensure an element of commonality in respect of content knowledge around the state, which makes comparing student scores more meaningful for employers and universities
- 3 promote confidence in the validity of all of a student's final mark for a subject by increasing the likelihood of consistent assessment practices against a common task.

Referred recommendation 4:

The committee recommends that the subject-based external exam for mathematics, chemistry and physics be used to scale school-based assessments, in recognition of the fact that exams provide a valid assessment of a student having 'the basic' content and procedural knowledge in the subject area and that the criteria relating to this knowledge should be a primary determinant of the student's achievement level in these subjects.

Referred recommendation 6:

The committee recommends the syllabus documentation be provided with more detail about standards of achievement against each criteria, to support teachers in their task of assessing students' standards of achievement against each criteria.

Referred recommendation 7:

The committee recommends that the syllabus prescribe that inquiry-based assessment tasks such as extended modelling, extended experimental investigations and extended research tasks, be completed in class time under teacher supervision, and that it specify a maximum number of hours that can be spent on these tasks.

Referred recommendation 13:

The committee recommends that in the context of standards-based assessment, numerical marking be strongly promoted in maths, chemistry and physics alongside more specifically defined syllabus documents (see Recommendation 6) that include mark ranges to equate to each of the five standards of achievement for each criteria, to:

- 1 increase clarity for students and teachers as to why particular standards of achievement are awarded
- 2 ensure an appropriate focus is placed on content knowledge along with the higher order skills (numerical marks readily allowing weighting)
- 3 reduce workload for teachers
- 4 enable employers and universities and importantly, students themselves to readily see what content a student knows and does not know.

Referred recommendation 14:

The committee recommends that a (reduced) mechanism to enable teachers to set and review school-based assessment tasks should continue to operate for senior mathematics, chemistry and physics, but that this mechanism not be used to moderate school-based assessments.

Recommendations are from the Parliamentary Inquiry referred to this Review

Terms of reference xv

External Examinations

Current external examinations for a specified candidature

The issue of External Examinations currently provided by QCAA is also under consideration. QCAA sets Senior External Examinations in 21 subjects for Year 12 students unable to access particular subjects at their school and for adult students (people of any age not enrolled at a Queensland secondary school) to meet TE or employment requirements or for personal interest. This apparent anomaly has historical roots not described here. The status of external exams is maintained until considered by the review.





Chapter 1

The Queensland education landscape

It is 24 years since the most recent review of tertiary entrance

There have been significant changes in social patterns and policy agendas in recent years

Context

Queensland's system of senior assessment and tertiary entrance, commonly referred to as the OP (or Overall Position) system, has been in place since 1992. School-based assessment has been operating in a high-stakes environment since the 1970s. It is 40 years since public (external) examinations were abolished and 24 years since the most recent review of tertiary entrance in Queensland in 1990. The timeliness of this 2014 review cannot be overstated.

Since the 1990 review of tertiary entrance, there have been changes in social patterns, policy agendas and patterns of student participation. Significant changes that have affected senior assessment and tertiary entrance include:

- greater participation in the senior secondary and tertiary phases of education, and the strong commitment of Australian governments to this direction
- proliferation of senior phase pathways, in particular, vocational education and training
- introduction of the Queensland Certificate of Education which recognises a greater range of these pathways as well as other learning
- implementation of the Australian Curriculum in Years K-10 with further development for senior secondary
- increasing proportions of Year 12 graduates opting to enter tertiary education through alternatives to the OP system
- intensified public reporting and scrutiny of school outcomes
- adoption of the Australian Tertiary Admission Rank (ATAR) for university entrance across Australia except in Queensland
- introduction of the demand-driven funding system for universities
- increasing use of technology in everyday life and education with the capacity to expand and enrich learning
- a changing national context with respect to curriculum, assessment, and tertiary entrance.

o undertake a
e principles and
Queensland's systems of

Queensland's systems of senior assessment and tertiary entrance are long established and they have served Queensland well. Even advanced systems need periodic review of their principles and practices, and of the context in which they operate. Reflection often leads to rejuvenation. Hence the time has come to consider the effectiveness of current processes and identify ways to improve, revitalise or reform them.

It is timely to undertake a review of the principles and practice of senior assessment and tertiary entrance in Queensland because the context in which those systems operate has changed

Note to the reader

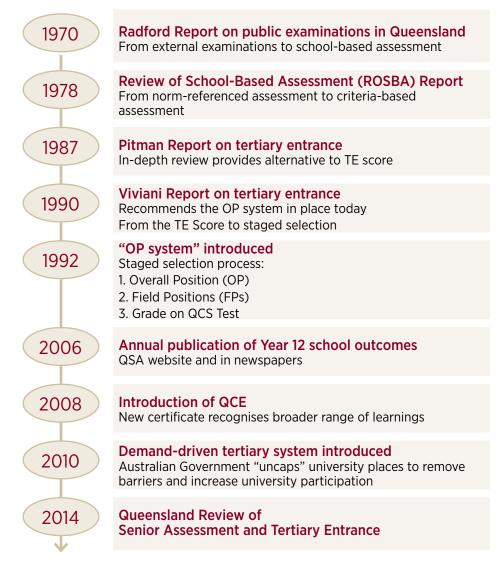
The utmost care has been taken to ensure the accuracy, completeness and reliability of the information provided in this report. The data came from a variety of sources, including other agencies. However, there may be some discrepancies due to different collection methods.

Historical snapshot

Four major reviews and other events from 1970 to the present influenced the formation of the current system of senior assessment and tertiary entrance in Queensland. Volume 2 Papers 1 and 2 of this report detail the history and procedures in other places. Figure 1 is a snapshot of these significant influences.

Figure 1: Timeline from 1970 to now, including key features

Major events in education over previous decades



Schooling in Queensland

Participation in the senior phase of learning has increased over the past two decades, in line with the strong commitment of Australian governments to this direction. In 2009, the Council of Australian Governments (known as COAG) brought forward its 90 per cent Year 12 or equivalent attainment rate target from 2020 to 2015.

Broad social and education reforms have altered the nature of schools

Over this time broad social and education reforms have altered the nature of schools. Reforms include moves toward school autonomy and increased accountability, increasing differentiation and personalisation in the curriculum, national minimum standards in key areas, implementation of the Australian Curriculum in Years K-10 and further consideration for national consistency at the senior secondary level.

Powerful and transformative interactive digital technologies will redefine how learning takes place

Increased technology in everyday life has already influenced education. It is widely believed that the increasing availability of powerful and transformative interactive digital technologies will redefine how learning takes place in schools in the near future.

Senior school participation

Schools have responded to drivers from both state and national agendas intended to increase retention rates through to Year 12, strengthen outcomes and provide alternative pathways for study and transitions beyond school.

As a result senior school participation rates, patterns and pathways have changed substantially from previous decades. In 2013 Queensland had 47,910 students completing Year 12 and Queensland's retention rate through to Year 12 has increased from 77.3% in 1998 to 85.2% in 2013.

Year 12 participation has grown from 31.8% of the 17-year-old population in 1977 to 75.7% in 2013 Over the longer term at a population level, since the 1970s Year 12 participation has grown from 31.8% of the population in 1977 to 75.7% in 2013. Not surprisingly, over the same period the proportion of Year 12 students who are considered eligible for tertiary entrance has declined substantially.

Figure 2: Participation in senior schooling and university eligibility



Introduction of the QCE announced in 2006 signalled recognition of broad learning options

Annual publication of Year 12 outcomes has generated intense scrutiny and public comment on senior schooling outcomes

Since 2008, in tandem with the gradual decline in the proportion of OP-eligible students, the proportion of Year 12 completers with VET certificates continue to increase

Introducing the Queensland Certificate of Education

The introduction of the Queensland Certificate of Education (QCE), announced in 2006, provided a new qualification for eligible students completing Year 12 from 2008. It signalled recognition of broad learning options and provided flexibility in what, where and when learning occurs with the aim to generate a stronger link between school and career.

This milestone reflected a heightened focus on providing tailored pathways and placed greater value on vocational education for students in senior secondary school.

Year 12 outcomes reporting

Commencing in 2006, the annual publication of Year 12 results by the Queensland Studies Authority (QSA) is compiled from the achievements of graduates from all Queensland secondary schools. At the time, this represented historic Government reforms to the way schools reported to parents and the wider community about their achievements and the outcomes of students.

The information released about schools includes OP eligibility and distribution as well as the numbers of QCEs, Vocational Education and Training (VET) qualifications, school-based apprenticeships or traineeships and the International Baccalaureate (IB) Diplomas awarded.

Since its inception, publication of Year 12 outcomes has generated intense scrutiny and public comment on senior schooling outcomes with publication in *The Courier-Mail* and regional newspapers annually. More recently the use of OP results as a marketing tool is evident with some schools' results being displayed in school reports, websites, on public signage and marketing materials.

Changing trends in Year 12 outcomes

Bolstered by Government reforms, Year 12 participation and achievement trends have also shifted to provide greater pathways to cater for the growing population completing secondary school.

Analysis of Year 12 outcomes shows study options and pathways have shifted over time, with an increasing proportion of senior school students undertaking VET qualifications. Since 2008, in tandem with the gradual decline in the proportion of OP-eligible students, the proportion of Year 12 completers with VET certificates continue to increase.

Consideration of OP (or Tertiary Entrance) eligibility over time shows the proportion of OP-eligible students now just outnumbering those OP-ineligible at 54.0% in 2013, down from 80.4% in 1992.

Proportion of OP-eligible students just outnumbering those OP-ineligible at 54.0% in 2013, down from 80.4% in 1992

Senior schooling study options and pathways have shifted over time, with an increasing proportion of senior students undertaking VET qualifications

Figure 3: OP eligibility, 1992-2013

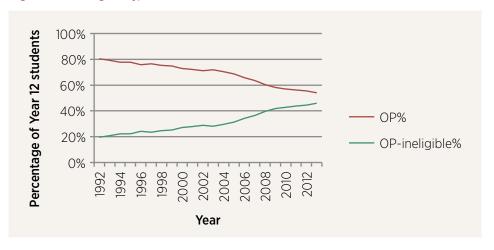
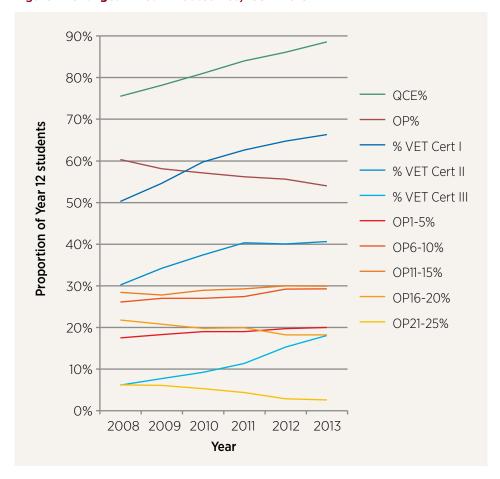


Figure 4: Changes in Year 12 outcomes, 1992-2013



Key insights regarding Year 12 outcomes over time:

- Rapid increase in the proportion of students gaining VET qualifications at Certificates I, II, III and higher
- Declining proportion of OP-eligible students
- Shifting OP distribution increasing proportions in the OP 1–5, 6–10 and 11–15 bands and a declining proportion in OP 16–20 and 21–25 bands

QCS participation

Along with the declining proportion of OP-eligible students, fewer students are completing the Queensland Core Skills (QCS) Test. In 1992, 89% of Year 12 students completed the QCS Test compared with 58% in 2013. It would appear that OP-ineligible students choose not to sit for the QCS Test even though their individual grade (A–E) is reported on their Senior Statement as a measure of overall achievement in the senior curriculum, a worthwhile piece of information that employers or Queensland Tertiary Admissions Centre (QTAC) might choose to use at some time in the future.

The primary function of the QCS Test, however, is to provide group results to be used for scaling in the calculation of the OP. A student's OP (and up to five FPs) is recorded on a Tertiary Entrance Statement. To be eligible for an OP a student must satisfy various requirements including completion of the QCS Test.

100% Percentage of Year 12 students 90% 80% 70% 60% 50% 40% OP-eligible % 30% QCS % 20% 10% 0% 2002 2004 2006 2008 2010 2012 Year

Figure 5: OP-eligible students and students who sat the QCS Test, 1992–2013

Students are choosing not to sit for the QCS Test or schools are encouraging students not to sit for the QCS Test

It would appear that the individual result has lost value amongst those who are OP-ineligible. They can compete for university places on the basis of a QTAC Selection Rank despite the fact that their QCS grade can be used to "moderate upwards" on the QTAC ranking.

There are other possible explanations for the reported trend. Students and schools deliberately choose the OP-ineligible pathway based on a belief that it delivers a better chance of university entrance. Schools encourage students to become OP-ineligible and therefore not sit the QCS Test based on a belief that this will deliver more of the higher OPs to that school. Such "gaming" has been reported by the schools themselves, even though, in terms of the statistical underpinning the scaling to QCS group results it is likely to have nil effect on the final OP.

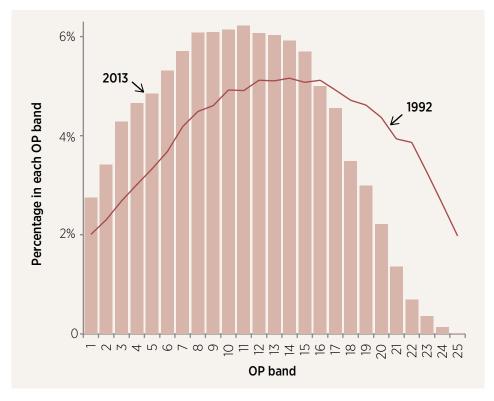
Shift in OP distribution

There has been a shift in the OP distribution over time. In 1992, the top 2.01% of students were awarded OP1. In 2013, the top 2.75% of students received OP1.

The proportion of students in each OP band was intended to remain constant over the years and expressed as a percentage of the OP-eligible population. In 1992 the distribution was roughly symmetrical with an inverted "U" shape. Over time the distribution has been allowed to become skewed towards the OP1 end.

In 2013 only three students received an OP25 and 2014 is likely to be the first year in which no student receives an OP of 25.

Figure 6: OP distribution, 1992, 2013



The shape of the OP distribution has changed over time. This means that OPs are not comparable from one year to the next

A possible explanation for the OP distribution shift is that the less academically able students are choosing not to be OP-eligible, as indicated by the reduction in the proportion of Year 12 completers receiving an OP.

Of interest here is that the OP distribution unlike the TE Score or ATAR distribution is referenced to the eligible population. The distribution of ATAR Is referenced to the cohort population, in which case the lowest rank assigned can differ from year to year, decreasing as the eligible population increases.

According to QCAA, basic year-to-year comparability of OPs is achieved through an equating process. A consequence of this process is a variation in the proportion of students in each band, which uses comparative QCS data. Between 1992 and 2013, the proportion of OP1s changed from 2.0% to 2.75% while the proportion of OP25s changed from 2.0% to less than 0.01%.

Pathways to university

Of the almost 33,000 people who enrolled through QTAC in 2013, nearly half (47.1%) were Year 12 completers. This reinforces the significance of the tertiary entrance processes used in assessing and assigning students to university courses.

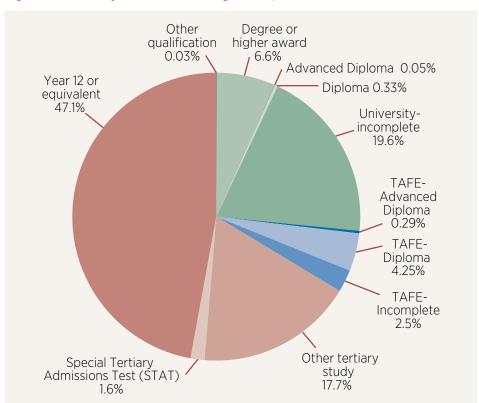


Figure 7: University enrolments through QTAC, 2013

An alternative to the OP is a QTAC Selection Rank which is translated into an OPequivalent In 2013, a record number of Year 12 OP-ineligible students, 3,052 students or 12.3% of the total number of Year 12 applicants, were offered a university place. In 2004 only 980 OP-ineligible students (or 4.4% of the total number of Year 12 applicants) were offered a university place. This indicates a rise in the number of Year 12 students following non-traditional paths to university. An alternative explanation is that schools encourage students to render themselves ineligible for an OP in the mistaken belief that reducing the number of less capable students with OP eligibility will automatically produce more OP1s.

The ever-expanding pathways through senior studies include VET qualifications such as certificates, diplomas and school-based apprenticeships or traineeships (SATs), through TAFE, school-registered training organisations or private providers. As a consequence an increasing number of Year 12 completers now seek to enter university via alternative means.

The alternative to the OP for OP-ineligible students is a QTAC ranking, which is based on unscaled results and then translated into an OP-equivalent. There is no such binary system in other states.

Table 1: Year 12 completers applying through QTAC, 2004 and 2013, by OP eligibility status

Admissions Period	Year 12 cohort	OP-eligible applicants	OP-ineligible applicants
2004	56.6%	95.6%	4.4%
2013	51.3%	87.7%	12.3%

National curriculum and outcomes of this Review will influence the nature of senior

assessment

Introduction of a national curriculum in senior secondary

In addition to implementing a national curriculum from Kindergarten (or Prep in Queensland) to Year 10, states and territories are presently working towards national consistency in senior secondary (Years 11 and 12). While the Australian Curriculum, Assessment and Reporting Authority (ACARA) is responsible for the development of content and achievement standards for agreed senior secondary subjects, the Queensland Curriculum and Assessment Authority (QCAA) is responsible for the structure and organisation of senior secondary courses in Queensland and for determining how they integrate the Australian Curriculum content and achievement standards into their courses. QCAA also determines the assessment and certification specifications for their courses that use the Australian Curriculum content and achievement standards and any additional information, guidelines and rules to satisfy local requirements.

Queensland's approach and timeline for integration and implementation of the Australian Curriculum into senior secondary courses will be influenced by the ongoing deliberations nationally and the outcomes of this Review.

Enrolment in the International Baccalaureate Diploma program

The International Baccalaureate (IB) Diploma, which is recognised globally, is designed for secondary school students aged between 16 and 19. Students who complete an IB Diploma receive a score out of 45, which in Queensland is converted to a QTAC Selection Rank. Despite the enhanced profile of the IB over recent years, only 327 (0.7% of Queensland's Year 12 completers) qualified for the diploma in 2013. The IB Diploma course is offered in three Queensland Academies and various state and non-state schools.

Changes in the tertiary sector

The last decade has seen an unprecedented expansion in the university sector in Australia with reforms to increase participation and remove barriers to student entry.

In response to the 2008 review of Australia's higher education system (known as the Bradley Review), the Australian Government implemented major reforms through a student demand-driven system and associated funding reforms. A target to increase the proportion of 25 to 34-year-old Australians with a qualification at bachelor level or above to 40% by 2025 was established.

The move to uncap the allocation of university places for domestic students resulted in increased uptake of Commonwealth support places and increased expenditure. The partial uncapping of places in 2010, and the full deregulation in 2012, has seen the number of Commonwealth-supported places increase from about 469,000 in 2009 to an estimated 577,000 students across Australia in 2013.

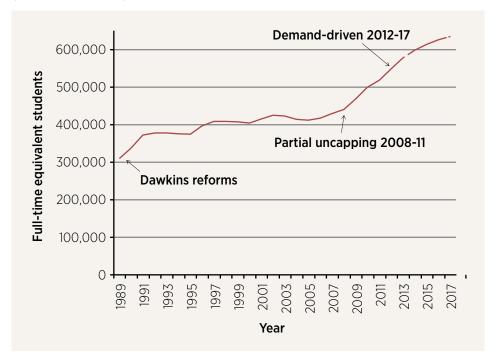
While it should be noted this system is presently under review by the Australian Government, in a demand-driven model it is pertinent to consider the relevance of processes for managing competition for entry to university for school leavers.

A small proportion of Queensland students take the IB Diploma course

There has been unprecedented expansion in the university sector in Australia

In a demand-driven model it is pertinent to consider the relevance of processes for tertiary selection

Figure 8: Commonwealth supported full-time equivalent students, 1989–2017 (estimates 2013–17)



Source: Norton, A. (2013). Keep the caps off! Student access and choice in higher education. Pg 22. Grattan Institute, Melbourne.

University qualifications in Queensland

The last decade has seen growth in the population of university-qualified individuals, with growth rate increasing since the deregulation of 2010. ABS data show progress towards the national target of 40% for people in the age-group 25–34 with a bachelor degree or above, with national figures at 35.2% in 2013.

Table 2: Percentage of individuals aged 25–34 with a university qualification, by jurisdiction

NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia
38.1	42.2	26.8	26.9	29.7	26.8	29.0	49.4	35.2

Queensland lags behind all other states and territories in terms of university qualifications, with the exception of Tasmania which is on par, and where only 26.8% of the age-group possesses a university qualification.

Proliferation of tertiary education on offer in Queensland

Since 1990, there has been a six-fold increase in the number of courses offered by Queensland institutions through QTAC. In 2013, QTAC offered places in 1,939 courses compared with 326 courses in 1990.

Over the same period, the number of institutions through QTAC doubled from eight in 1990 to 16 in 2013.

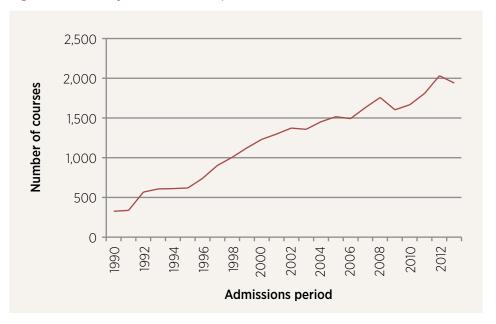
Queensland lags behind all other states and territories in terms of university qualifications, with the exception of Tasmania which is on par

There are almost six times as many university courses on offer in Queensland in 2013 than there were in 1990

Over the same period, the number of institutions through QTAC doubled

Despite more students completing Year 12 in Queensland than ever before, fewer students are applying for university today than in 1992

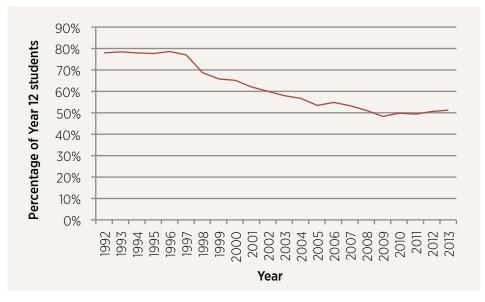
Figure 9: University course selection, 1990-2013



Trends in Year 12 university applications

Over the same period that course offerings increased, there was a decline in the proportion and number of Queensland Year 12 students applying for a university place. Only 51.3% (24,716) of Year 12 completers in 2013 applied for university compared with 77.9% (27,025) in 1992.

Figure 10: Percentage of Year 12 students seeking university entrance, 1992–2013

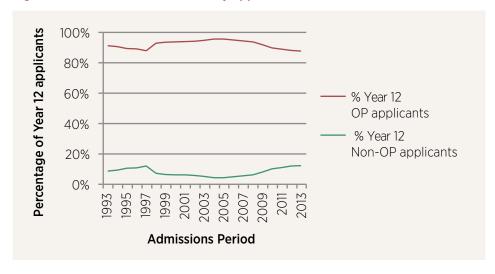


The path that students follow from school towards university is also changing. From 2008, there has been a steady increase in the proportion of Year 12 completers who are OP-ineligible but seek entry to university via a QTAC ranking.

This trend reflects the increasing numbers of students undertaking VET courses and qualifications in senior school also seeking entry to university, as opposed to the traditional OP pathway.

Pathways to university are broadening with a steady increase in OP-ineligible students seeking entry

Figure 11: Nature of Year 12 university applicants



An ATAR places eligible students on a national rank

The ATAR in Queensland

The Australian Tertiary Entrance Rank (ATAR) is the primary device for selecting Year 12 completers for entry to undergraduate courses in Australian universities. Introduced in 2009–2010, it was taken up by all states and territories except Queensland. An ATAR is a percentile rank reported between 30.00 and 99.95 in intervals of 0.05. It is based on an aggregate of individual subject scores. ATARs are calculated in different ways in different states and territories – for example, eligibility rules and scaling model are not the same across jurisdictions.

QTAC uses students' ATARs in the selection process when Field Positions and QCS grade do not differentiate between students with the same OP who seek entry to the same courses. In Queensland Year 12 completers who are OP-ineligible are able to obtain an ATAR via the QTAC Selection Rank. This is not the case in other jurisdictions: Year 12 completers who are ATAR-ineligible are not able to obtain an ATAR.

Nature of university offers

The number of offers and enrolments reveal some important insights regarding university entrance in Queensland.

A higher proportion of Year 12 students applied to enter university in 1992 than in 2000 and 2013 (77.9% compared with 65.2% and 51.3% respectively). The retention rate to Year 12 is a partial explanation for these proportions: those who stayed on at school two decades ago were likely to see themselves as tertiary bound. In terms of individuals, however, far more young people missed out on a place in 1992 (11,885) and 2000 (4,036) than in 2013 (393). The gap between the "ins" and the "outs" has decreased in absolute terms. What these data illuminate is the use of a sophisticated selection mechanism which eliminates those unlikely to gain tertiary entrance, in 2013 this was less than 400 individuals (or 1.6%).

The critical question then is the relevance of such selection mechanisms within a demand-driven university entrance system.

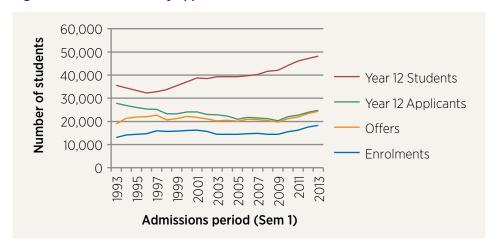
In 2013, 393 Year 12 students who applied for a place missed out on an offer

The critical question is the relevance of sophisticated selection mechanisms within a demand-driven university entrance system

Table 3: Applicants and offers, Year 12 completers, 1992, 2000, 2013

Admissions Period	Year 12 students	Year 12 applicants	Applicants as % of students	Year 12 offers
1992	34,675	27,025	77.9%	15,140
2000	37,032	24,133	65.2%	22,097
2013	48,205	24,716	51.3%	24,323

Figure 12: Year 12 university applicants



Increased competition and special entry

The demand-driven system and a drive for increased qualifications have spurred competition among university for enrolments. Whereas once students were selected they are now, except for the high-demand courses, sought. Although relevant figures are not in the public domain, there is evidence of increased provision of bridging courses, offers of scholarships, special or direct entry programs, and in some cases removal of OP or rank cut-offs from previous years as an indicator to prospective applicants. All of these phenomena point to an ease in enrolment restrictions and the availability of entry mechanisms that are alternatives to the OP.

Despite the increase in supply over recent years there remains, nevertheless, serious competition for some courses at some universities and, equally, competition among universities for the highest-calibre students. The resolution of this competition has "backwash" effects on the senior curriculum — on what students do in senior secondary studies. Designing a tertiary entrance system has to take into account possible backwash effects. The system has to meet the needs of students and universities for fair, transparent and efficient selection processes.

Whereas once students were selected they are now, except for the high-demand courses, sought

University entrance requirements, particularly in highly competitive courses, inevitably have "backwash" effects on the senior curriculum Criteria for the design of a tertiary entrance system include fairness, transparency and efficiency

We question the relevance of the Australian notion of a queue of university applicants from the Year 12 completer population

We question the relevance of sophisticated selection indices in a demand-driven system

We question the sense of having the school sector devise rankings of students for use by the university sector

Observations by reviewers

While it is properly a university decision, we believe the time has passed for trying to place all applicants from Year 12 in the same queue, regardless of course or institution. The reality is that there are now multiple pathways, multiple entry points and multiple criteria for ranking and selecting students into particular courses. Added to that, under the demand-driven university systems, selection is now a non-issue in many courses and some institutions.

The critical question is the relevance and expense of sophisticated selection mechanisms within a demand-driven university entrance system when these mechanisms appear to identify the small proportion of students who are "out" whereas once they identified the proportion of students who were "in".

We also believe that selection is properly the responsibility of universities. It is a peculiarly Australian practice for universities to expect the school sector to rank their applicants for them. Universities around the world control the criteria for selecting their future students including whether prerequisites are to operate, if and how school results are to be used in the selection process, and they decide how evidence will be weighted. It is not usual to expect schools to do any of these processes for them.





Chapter 2

Main themes emerging from the review

This review required ACER to consider the effectiveness of the systems of senior assessment and tertiary entrance (the "OP system") and identify ways to improve, revitalise or reform them As set down in the Terms of Reference, the Queensland Review of Senior Assessment and Tertiary Entrance (the "Review") required the Australian Council for Educational Research (ACER) ("us") to examine key aspects of senior assessment and tertiary assessment (the "OP system").

Key aspects of senior assessment to be examined were:

- Comparability
- Moderation
- Assessment instruments
- · Exit levels of achievement

Key aspects of tertiary entrance to be examined were:

- Overall Position (OP)
- Field Positions (FPs)
- · Queensland Tertiary Admissions Centre (QTAC) Selection Rank
- · Queensland Core Skills (QCS) Test
- Australian Tertiary Admission Rank (ATAR)

The Terms of Reference specifically required broad public consultation with state and non-state schooling sectors, QCAA, QTAC, DETE, universities and other higher and tertiary education providers, secondary school principals' associations, parents' associations, and teachers' unions and universities staff associations.

We have engaged with the education community, and the general public. We received more than 2,200 responses to a survey, 91 formal submissions, conducted four significant stakeholder forums (involving almost 300 key stakeholders and interested parties), and participated in approximately 50 meetings with key stakeholders and their constituents at our request or by invitation. We made presentations at conferences and attended other key forums to gain insights into the way people were thinking about senior assessment and tertiary entrance in Queensland and to share our deliberations with them. The workings of many of these activities are provided for reference in Appendices 2 to 4 in Volume 2 of this report.

We have thus acquired serious and rich information about the views of key stakeholders and interested parties.

Those views are the basis of our discussion of the Review's major themes.

More than 2,200 responses to a survey, 91 formal submissions, 4 significant stakeholder forums (involving almost 300 key stakeholders) and approximately 50 meetings of stakeholders and interested parties at ACER's request or by invitation

Impressions at the beginning of the Review

No alarming issues – no particular "problem to be solved" as in previous reviews

Acceptance that the time for change had come – dramatic changes in context since 1990

Some strong opinions about aspects of present system

There did not appear to be any alarming issues regarding the current arrangements. Nevertheless, there was a level of acceptance that a review of senior assessment and tertiary entrance is overdue, particularly in light of the time that has passed since the current systems were introduced. The time had come for change, the OP context having changed dramatically since 1990 and the theoretical basis of the OP becoming increasingly difficult to translate into practice. There is a sense of inevitability about the introduction of an external assessment and a clear signal from the universities that the use of an ATAR for selection purposes is an imperative for them.

Opinions were stated repeatedly and strongly about the value of school-based assessment, the state of moderation, the place of external assessment, and the use of indices such as rank order lists for selection of Year 12 completers for university courses.

Submissions to the Review

Submissions to review were framed by eight focus questions

Lack of understanding of the present system evident in submissions and admitted to in responses to questions on survey

8 Focus Questions based on Reviewers' deliberations mid-

term of Review

A discussion paper released in February 2014 invited responses to eight focus questions, each containing a statement of the reviewers' suggestions, a general question to prompt an answer, and a specific question related to the suggestion in action. The deadline for submissions was 24 April 2014, by which stage ACER's direction was emerging and known to the education community. ACER's interim position was shared with stakeholders in a formal and structured way at a forum on 29 April 2014.

When basing their submissions on the eight focus questions the respondents had varying degrees of understanding of the focus questions depending on the nature and timing of their engagement with the review process. Whatever their engagement with the review process, however, their answers to the focus questions provided information about their understanding of the present systems. A lack of understanding is evident in the submissions and admitted to in responses to two questions on the survey with 69% of respondents agreeing with the statement that the system is hard to understand and 72% indicating that they found it hard to explain to others.

Focus Questions

1. School-based assessment

We have suggested that school-based assessment be preserved. What is your response to this suggestion? What value do you place on school-based assessment in general and teacher-devised assessments in particular? What would you do specifically to enhance the validity and reliability of teacher-devised assessments?

2. External assessment

We have suggested that an externally set and marked assessment be used in some or all Authority subjects and that this assessment contribute up to 50% of a student's result in a subject. What is your response to this suggestion? What do you see as the advantages and disadvantages of including an External Assessment?

3. Moderation

We have suggested that, for school-based assessment, current moderation processes be strengthened. What do you see as the advantages of the consensus model of moderation that is currently operating? Do you agree that current moderation processes need to be strengthened and, if so, what specifically would you change?

4. Finer scale for school assessments

We have suggested that school assessments be reported on a 15-point scale based on five described and illustrated achievement levels (1 to 5, with 5 being the highest) within each of which teachers make finer-grained distinctions (+, 0, -). The process would recognise that teachers may arrive at a student's overall result by adding marks on different assessments and interpreting the resulting scores qualitatively by reference to the described achievement levels. What is your response to this suggestion? Do you believe teachers will be able to use their assessment evidence to make meaningful and comparable finer-grained distinctions of this kind?

5. Cross-curriculum capabilities testing

We have suggested that a small number of capabilities essential to study and work beyond school, which we call key cross-curriculum capabilities (KCCCs), be tested and that KCCC test results be reported alongside subject results. What is your response to this suggestion? What do you see as the role, if any, of these test results in university entrance decisions?

8 Focus Questions based on Reviewers' deliberations midterm of Review

6. Separation of responsibilities at the secondary-tertiary interface

We have suggested that the responsibilities of QCAA and the universities be separated so that QCAA's role is the certification of student achievement upon completion of Year 12 and the universities' role is to decide how this and other evidence is used in selection decisions (e.g. constructing rank orders of applicants, specifying prerequisite subjects, giving greater weight to results in certain subjects). What is your response to this suggestion? What do you see as the advantages and disadvantages of a separation of responsibilities?

7. Scaling and the construction of rank orders

We have suggested that it is the responsibility of universities to decide what evidence they will use to select students for entry into competitive courses and how that evidence will be used to rank applicants. We have also suggested that the construction of a single rank order (e.g. OP or ATAR) of all applicants to all courses in all universities no longer seems appropriate. It would be a decision of the universities whether or not they construct such a rank order. A consequence is that a scaling test (the QCS Test), schools' provision of SAIs, and QCAA scaling processes would no longer apply. What is your response to this suggestion? What are your predictions of effects on universities and schools/teachers?

8. Governance

These suggestions have implications for the work of the QCAA. Changes to QCAA's legislated functions would be necessary. A number of responsibilities would be removed (e.g. the calculation of the OP and FPs) and a number of responsibilities would be added (e.g. the development and marking of external assessments). This may have implications for capacity building within that Authority. What do you see as the implications of our suggestions for the QCAA?

These suggestions also have implications for the work of QTAC. As the agent of the universities, QTAC would be responsible for implementing universities' student selection policies. QTAC would receive Subject Results (on a finer scale than in the present system of senior assessment) and KCCC results from QCAA, and would use these (and other evidence as agreed) to produce rankings of applicants to competitive university courses. What do you see as the implications of our suggestions for the universities and QTAC?

Universities' right to decide on characteristics of the students they wish to enrol and the way in which Year 12 completers are selected for admission are givens

Clarification

Some clarification was necessary about the meaning of focus question 6. The intended meaning of the suggestion was that universities not only decide on the characteristics of the students they wish to admit to their undergraduate courses from schools and the ways in which they select them (which is and has always been their right) but also undertake associated tasks (such as ranking students) – tasks that at present are undertaken by QCAA in conjunction with schools.

Response to focus questions

Few authors exercised the option provided by ACER to suppress authorship if submissions were to be made public. Such openness, which has been a feature of this review, allows readers of the review report to access primary data for their own analyses (see Appendices 2 to 4 in Volume 2).

From the submissions, the level of stakeholder support for eight re-statements of the eight focus questions was assessed. Not all of the 17 key stakeholder organisations who made a submission answered all eight questions.

Support by key stakeholders:

- Revitalise school assessment
- Revamp moderation

Recognition that the OP is not sustainable

Table 4: Key Stakeholder Organisations' support for 8 position statements

Statement of position	Of the 17 responses from KSOs, support for the statement			Of those who supported the statement, schooling sector or universities	
	Υ	N	-	S (Y)	U (Y)
Revitalise school	10	0	-	8	2
assessment	(2P)				(1P)
Revamp moderation	12	0	5	8	4
Introduce external	8	3	6	4	4
assessment	(2P)			(1P)	(1P)
Combine	3	5	9	1	2
results	(1P)				(1)
Report on (15-pt)	9	3	5	3	6
fine scale			(1P)		(2P)
OP not	9	0	8	2	7
sustainable	(1P)			(1P)	(4P)
Alternatives to	3	6	8	1	2
OP/ATAR	(2P)	(1P)		(1P)	(1P)
TE separate	9	2	6	3	5
functions	(3P)	(1P)		(2P)	(2P)

Legend:

Y = Yes. N = No. - = No response

P = Provisional (included in tally not discrete)

U = Universities (including QTAC)

S = Schooling sector (including QCAA)

The three schooling sectors (EQ, ISQ, QCEC), the teacher unions, parents (general comment only from ICPCA), and QCAA all agreed that school-based assessment should be revitalised.

QTAC acknowledged that "teachers are well placed to provide valuable assessment information" as did the two universities who answered this question with JCU stating that "maintaining school-based assessment is non-negotiable". All who responded to focus question 4 agreed that moderation processes need to be strengthened. This was the strongest signal from key stakeholder organisations.

The responses concerning school-based assessment pointed up a difference between key stakeholder organisations and many individuals. The stakeholder organisations support school-based assessment, or at least a revitalised version of it (which is support that we did not take for granted at the start of this Review). On the other hand, submissions from many individuals opposed the notion of school-based assessment (which we had expected, from our study of the recommendations of the Parliamentary Inquiry into assessment methods used in senior mathematics, chemistry and physics).

Opposition became creativity

The tendency to deify one mode of assessment and demonise another was one of the Review's key themes; this tendency stood in the way of intellectual discussions of what constituted good assessment, irrespective of the assessment's external or internal locus of control. A difference that emerged during the course of the Review, however, related to the openness to change exhibited by supporters and opponents of external assessment. Those who started from a position of opposition to external assessment seemed to move beyond resignation to its being implemented to a more questioning, problem-solving attitude: what might this new assessment species look like, how would it complement school assessments, to what extent would the nature of the subject affect the type of external assessment? This creative approach usually followed the realisation that the external assessment being suggested was not simply a replication of the HSC model in New South Wales. Fervent advocates of external assessment, however, tended to show less flexibility in moving towards an acceptance of school-based assessment.

Notion of adding marks misinterpreted to be statistical moderation A signal of what was to become an important element of the Review was the nature of the responses to focus question 4, which referred to combining results on teacher-devised and externally set assessments. The question contained the words "adding marks on different assessments" (which is very different from the current procedure of making on-balance judgments across the assessments to arrive at an achievement level). Most respondents interpreted the question to be about combining results on internal and external assessments for certification; in other words, it was read as code for statistical moderation, which in turn was taken by some to be an alternative to consensus (social) moderation in validating teacher judgments. Since statistical moderation involves an external examination, responses to this question were influenced by attitudes to external exams *per se*. What the question was intended to deal with was a simple addition of marks, an idea that was not grasped by the universities or by most people from the schooling sector.

Two interpretations of finer scale:

- Ability of teacher to use a fine scale for assessment
- Statement of support for ATAR

The first part of focus question 4, which asked if teachers would be able to make judgments about the standard of students' work on a 15-point scale rather than as one of five levels of achievement, was treated in isolation, unrelated to statistical moderation. The secondary schooling sector expressed support for this notion: teachers already have experience in "going inside" an achievement band in the A+, A, A- style. The pressure this would put on the moderation system, however, was noted by few. The tertiary sector, in expressing support for reporting school

assessments on a finer scale, seemed to take this finer scale as referring to an ATAR. (This tendency to think in terms of an ATAR is evident also in the form of their support for the position that the OP is no longer sustainable: the alternative to the OP was envisaged exclusively in terms of an ATAR.)

Aggregation of numerical marks linked to focus question about finer scale

There is a link between the question of teachers making judgments on a finer scale and the issue of using marks to record assessment results. Advocates of numerical marking have suggested that marks provide a more transparent means of aggregating results of individual assessment tasks and/or results across syllabus criteria by making trade-offs more explicit and letting students know what each task is "worth" in their overall result.

Observed in submissions - what the submissions said about the authors

Lack of understanding of the present system is evident in submissions

Among the common characteristics of submission authors that can be deduced from the submissions, three characteristics stand out as being surprising:

- A widespread lack of knowledge about the current system and how it is designed to operate
- A naïve view of the ATAR (that it is done the same everywhere, that it is transparent and easily understood)
- Almost total ignorance/avoidance of the scaling question either a view that scaling would not be needed in a new "ATAR" system or that it would just happen.

Sixty per cent of respondents to a survey answered that the system is hard to understand and 72% of respondents answered that it was hard to explain to others.

Identification of general topics

It emerged that there is strong support for retaining school-based assessment from most key stakeholder organisations (who value it for its capacity to respond to students and for its valuing of teachers as professionals), but strong opposition to retaining it from individual authors of submissions and/or individuals at events and meetings. The moderation system in its current state is generally seen as broken and in need of repair. External assessment is envisaged as a traditional external examination, which in turn is seen as a means of independently verifying school assessments. Universities do not want responsibility for mechanisms other than rankings as the primary mechanism for selecting students, while schools do not want to be doing the universities' work for them (as in generating input data for the calculation of an OP/ATAR). An ATAR is widely supported for its apparent transparency and transferability between states. Support for the QCS Test was markedly lacking, as indeed was support for any other cross-curriculum test (including the testing of 21st Century skills – the key cross-curriculum capabilities (KCCCs) referred to in focus question 5).

Seven themes emerged from the submissions.

- 1 Value of school-based assessment
- 2 State of moderation
- 3 Polarity of views on external assessment
- 4 Bringing together results on internal and external assessments
- 5 Rejection of testing key cross-curriculum capabilities

Submissions revealed strong views about school-based assessment, moderation, external assessment, and the process for selecting Year 12 completers for university courses

- 6 Ambivalence about separation of responsibilities for senior certification and tertiary selection
- 7 Scaling and construction of rank orders

The themes, as would be expected, are related to the topics of the focus questions except for "finer scale for school assessments" [FQ 4] (for reasons discussed earlier in this chapter) and "governance" (incorporated into discussions about "separation of responsibilities at the secondary–tertiary interface" [FQ 6]).

Combining results on internal and external assessments [the fourth emergent theme above] was not specifically mentioned in the eight focus questions but was a recurring theme in the submissions and at consultation events.

Discussion of seven themes

Discussion of the seven themes listed above is loosely structured thus:

- The theme (e.g. "Value of school-based assessment")
- The message (e.g. "School-based assessment is worth preserving")
- What was in the submissions (i.e. "What they said")
- Commentary (e.g. "two-fold purpose of school-based assessment")

In the discussion that follows, we have made every effort to distinguish between our commentary and what the submissions said.

Value of school-based assessment

School-based assessment is worth preserving

What they said

There was general support for school-based assessment, tempered by strong concerns about capacity and quality assurance. It was felt that school-based assessment should be retained, albeit in a rejuvenated form. Great value was placed on school-based assessment in general and teacher-devised assessments in particular. The principles on which school-based assessment was founded still apply (teachers as best assessors, continuous assessment, bad side-effects of one-off exams).

The view that school-based assessment should remain a strong part of subject assessment was founded in two arguments: flexibility and professionalism. School-based assessment is considered to be flexible because it allows teachers to develop assessment instruments that reflect local context and students' interests. Accordingly, assessment becomes integrated with learning and allows flexibility in the ways in which students are required to demonstrate their knowledge and skills. School-based assessment is also taken to be part of the professional responsibility or skill set of teachers. According to this view, assessment is part of authentic pedagogy, and values teacher professionalism by making teachers the assessors. The important notion of teacher as assessor was balanced against resource implications of the support needed for teachers to produce high-quality assessment tasks. (On the other hand, it was often suggested that this production was the responsibility of QCAA.) A few submissions noted an apparent lack of assessment subjects in pre-teaching courses in universities.

Support for school-based assessment was diluted by perceptions of weaknesses in moderation, leading to the view that school-based assessment should only continue with external exams, which would give it credibility and could possibly be used for scaling.

General support for schoolbased assessment tempered by strong concerns about capacity and quality assurance

View that school-based assessment should be retained albeit rejuvenated

Support for school-based assessment diluted by perceived weaknesses in moderation

Some suggestions for change while maintaining school-based assessment included school administration of externally developed assessment tasks, possibly drawn from a bank of such items so that the task was not a de facto external exam, and school assessment conducted under controlled or supervised conditions.

It would appear that the Radford Committee's two-fold purpose of school-based assessment – to allow assessment to be continuous rather than point-in-time, and to encourage diversity and innovation in teaching and assessment in response to each school's clientele – has been adapted over time, to be now interpreted as a need to tailor and propagate assessment pieces, resulting in pressure on teachers and students.

Concerns regarding uneven quality of senior assessment instruments and items

Some teachers irritated by the quality of other teachers' assessments A characteristic of conversations about school-based assessment that is often overlooked is the emphasis on the system rather than on the assessment per se. A school-based assessment system has, at the heart of it, teacher-devised instruments and activities. Teacher-devised assessments are found across the world - as classroom assessments that are not situated in a high-stakes environment. What sets Queensland apart is the extent to which teacher-devised assessments "count" towards results for certification and are accepted by universities as the basis of selection decisions. Concerns were expressed during this Review about the uneven quality in school assessments, with teachers and principals stating that there should be more attention given to the quality of teacher-devised assessments. A feature of these comments was that they were underpinned both by teachers' pride in their own and their colleagues' achievements and by a sense of irritation that these achievements were not the norm. While survey responses frequently said that teacher-devised assessments are good, the intellectual stimulation involved in designing assessment tasks was not remarked upon at all.

State of moderation

Consensus moderation is not operating as envisaged

When assessment is school-based, the certification of students' levels of achievement in a subject demands assessment information that is comparable across teachers and schools, which is a reason for having moderation – so that the public can have faith in subject results. Moderation processes are intended to achieve the comparability that is required for the public to have faith in subject results on certificates. Even though that information is not obtained from exactly the same assessment instruments or programs, it is derived from judgments against common specified state-wide standards. Student work of an equivalent standard should receive the same grade. Queensland has long used a process of consensus (social) moderation with the intention of producing comparability of results.

What they said

It was a strongly stated view, from most perspectives, that the current operating model of consensus moderation is not working well; most of the criticism was of the panel process. Views ranged from the process needing strengthening, at the kindest, to its being broken beyond repair, at the harshest.

Concerns about panels, expressed by many stakeholders, included the quality and utility of feedback from review panels, the composition of the panels, and the

Certification of students' levels of achievement demands assessment information comparable across teachers and schools, reason for having moderation – so the public can have confidence in subject results

Criticism of current operational model of consensus moderation (review panels) time available for panellists to consider student folios. Feedback from panels to teachers was criticised as being at times either vague or contradictory of previous feedback. Variation in quality and utility of panel reports made them less useful, not fulfilling their potential to inform interventions at the school level. Other specific criticisms of the panel process were about lack of expertise and lack of experience on the part of panel members. It was stated that "rules of thumb" operate, "kingdoms" build up, gaming occurs, and advice given to schools is not followed up. A possible reason for disagreement between panels and schools was put forward: panel members make overall judgments of student work folios to confirm exit level of achievement without having access to the "private" trade-off rules that teachers used to arrive at these levels. The intensity and specificity of criticism of panels was notably different for different subjects.

Within these overarching concerns about moderation, however, there was recognition of the moderation process as good professional development for teachers; the view that all teachers should serve on review panels over time was put forward. There were suggestions to improve the situation: review panels to consist of experts not representatives; panel decisions to be enforceable rather than only being recommendations; and resourcing to be increased.

Many stakeholders emphasised procedures in their comments on the current state of the moderation process, with few if any considering the relationship of shifting procedures to moderation's core rationale. This notion of processes losing touch with core values or rationales was summed up by Graham Maxwell, a prolific writer about moderation: "One particular concern is that current moderation processes, in fact more general current assessment processes, have become the way to do things". In this situation, the reason for those processes can become lost. There is a need for constant refurbishment, particularly in the minds of teachers, of the underlying rationale for those processes. There are other instances of a lost rationale in the system and we strongly believe the rationale for these should be revisited". Given that it seems to be accepted that the system once worked, and is now perceived as not working, it is interesting that there was so little comment on why that might be so, and what level of responsibility various stakeholders might take.

Moderation system has lost connection with its rationale and theoretical base

This leads to the conclusion that the core issue with the moderation system is that is has lost its connection with its rationale and theoretical base, rather than being irrecoverably "broken" or unfeasible. The corollary of this view is that a renewal of the moderation system means first returning to its base and building from there, rather than continued adjustments to a system that has drifted.

There was little evidence that the panel process works to achieve comparability, or that any other process do so. We are not convinced that random sampling is the answer – there is an increasing lag between conduct and reporting that suggests a lack of value put on the results and there is a change in how panels look at student work – confirming rather than exploring, which has the potential to bolster comparability. To disregard consensus moderation completely is also to disregard the benefits for teachers' skills and practices that follow from a process that focuses on standards, student work and the agreement amongst peers that a certain standard has been reached by that student.

Polarity of views on external assessment

Partial support for external assessment

What they said

No other topic of discussion in this review so polarised the education community, parents and the wider community than external assessment

No other topic of discussion in this review so polarised the education community, parents and the wider community as external assessment.

It was notable that despite the express use of the term "external assessment" almost universally people responded as if that necessarily meant an external exam sat at the end of Year 12 - some even interpreted an external assessment component as a replication of the senior public exams of their youth in the '60s.

Proponents of external exams generally did not discuss the contrasting validity of different assessment modes, and that performance on a three-hour exam might bring forth a different sort of evidence about student achievement than performance on an in-depth assignment. Nor was there recognition that a "penand-paper" exam might only assess a narrow range of skills and abilities.

Various opinions about external exams included their role in helping to address concerns about authenticity that may arise with some forms of school assessment. External assessment is a means of independently verifying school assessments. External exams should be at least 50% of the total and used to scale school-based assessment.

The view was expressed that, if external tests are used, they should become part of the student's portfolio, with the whole profile interpreted against exit standards. Otherwise, a tension is being set up between the internal and external; experience shows that the external will win, destroying the integrity of the internal.

Equity was used as a supporting principle by both those in favour of and those against external exams, reflecting different conceptions of equity. For some, equity means fairness; for others, equality. Those in favour of external assessment cited equity as meaning equal conditions of assessment, which an external exam under standardised conditions would bring. For those against, the equitable concerns were about fairness and the potential disadvantage for students from different socioeconomic backgrounds and different regions. Generally, the latter view of equity was expressed by key stakeholder groups, whereas the former view

was expressed by individuals. In stakeholders' views, there were two uses to which external assessment (i.e.

exams) could be put. One was to provide a separate, independent perspective on student achievement. As some noted, this raised the issue of how to interpret discordant results. The second use, additional to the first, was to scale schoolbased assessments. This use functionally privileges external assessment over internal, and a concern raised was whether under this regime over time users of the results (universities, employers) would focus on the external assessment component.

Many stakeholders were concerned about, but accepted the inevitability of, the introduction of external assessment in one form or another. Their acceptance of external assessment was conditional on its not being used for scaling schoolbased assessments. In fact, there was an aversion to statistical moderation.

Another reason offered in favour of external assessment was that it relieved teaches of potential pressures from the conflicting interest of objectively assessing a student's performance and wanting to get the best mark for the student.

A view -External assessments address concerns about authenticity with some types of school assessment and are a means of independently verifying school assessments

External assessments construed as an independent perspective on student achievement

Concern around external assessment

- high-stakes nature of a single assessment
- teaching to the test
- backwash effects

Teachers of mathematics and the physical sciences were the most vocal in support of external exams (as they were also of marks expressed as percentages).

For those against external assessment, a key reason, beyond the equity/fairness concern, was the high-stakes nature of a single, summary piece of assessment; this was reflected in comments about the effect of an "off" day. The concern about teaching to the test, with its backwash effect of classroom experience, was also raised.

A feature of responses by the proponents of external assessment was they did not consider the range of ways external and school-based assessment might be combined; instead, they treated the exam as the unquestionably better form of assessment that would have primacy over school-based assessment. This relates to the discussion of statistical moderation elsewhere in this chapter.

Some saw the use of two types of assessment a positive thing: there are different ways of gathering information about student achievement, different styles of assessment suit different learning styles, and there is more chance of covering the syllabus outcomes (more information harvested per hour of student assessment).

One of the arguments against the introduction of external assessment was that, if school-based assessment needs rejuvenation, it would be better to direct energy, creativity and funds to rejuvenation than to divert funds to external assessments.

Bringing together results on internal and external assessments

Overall achievement on school assessments or combining results on internal and external assessments?

What they said

Although the material available to stakeholders only referred to combining school-based and external assessment, many interpreted this as meaning statistical moderation of school-based assessment using external assessment. This was seen as a positive by some and a negative by others: To advocates of school-based assessment statistical moderation was an issue of trust – they saw it as privileging external assessment and checking on their judgments, and they saw this as a negative thing. To advocates of external assessment statistical moderation was an issue of correcting teacher judgments and they saw this as a positive thing.

The issue of statistical moderation, a recurring theme throughout the Review, came up in consultations and public events as soon as the notion of introducing external assessment and retaining school-based assessment was discussed. That there are other ways of bringing together results on internal and external assessments was not countenanced.

The process by which school assessments and external assessments could be "brought together" to give a subject result for certification invoked two images of linking results from different assessments:

- Simply adding marks on different assessments in the one subject, in contrast to the current procedure of having teachers make an on-balance judgment across assessments to arrive at an achievement level for certification
- 2 Combining results on internal and external assessments, as is required for the HSC for example, after a process of statistical moderation (there is a technical note on statistical moderation at the end of this chapter).

Numerical marking alluded to in point 1 above is embedded in recommendations from the parliamentary inquiry into assessment methods in senior mathematics, chemistry and physics that were referred to this Review. For this and other reasons it was important for the Review to receive feedback on the addition of marks.

While focus question 4 was not seeking a view on statistical moderation per se it was noted from most stakeholders' submissions that there was there was an aversion to the use of statistical moderation as an alternative to consensus (social) moderation in validating teacher judgments. In other submissions and consultations the was a recognition of statistical moderation as a technique for putting external and internal assessments on the same scale before combining them to produce a subject result (sometimes equally weighted, sometimes not – say 70:30).

Statistical moderation was a recurring theme throughout the review

Moderation takes two or more results and makes them comparable. Consensus moderation (in the social moderation family) does this using people. Statistical moderation does this on a purely numerical basis. One practice of statistical moderation is the process of adjusting the distribution of school-based assessments so that it mirrors the distribution of the external examination results (i.e. same average and spread of scores). That is what happens to school-based assessments in most other Australian states before they are combined with external exam results to produce a subject result for certification. There is a technical note on statistical moderation at the end of this chapter.

Associated with the topic of bringing together results of school assessments and external assessments was the contribution of the external assessment to student's subject result. There was much discussion about the appropriate weighting, with 50% seen by some as the upper limit There was no consensus on an appropriate mix although there was support for different weightings for different subjects.

Rejection of testing key cross-curriculum capabilities

Schooling sector adamant, tertiary sector indifferent

There was universal rejection of a test (or tests) of key cross-curriculum capabilities. Tests of 21st Century skills were seen to have no purpose and to occupy a lot of teaching time. There were no positive comments about the QCS Test, which is construed as an external exam.

The QCS Test is seen as an impost that has a significant effect on teaching time through a focus on teaching to, and preparing for, the test. Reference was made to the "industry" that has grown up around QCS preparation, and that preparation for the test had become a pseudo-curriculum. By extension, any new form of cross-curriculum assessment was seen as likely to have the same problems as the QCS Test. The dominant view was that cross-curriculum assessment would need a clear purpose (which it was not felt to have); the cautionary point was made that it should not be used for statistical moderation.

The tertiary sector showed no interest in using the results of such tests in any way in selection decisions.

Testing key cross-curriculum capabilities was rejected on other grounds as well. Those who anticipated the introduction of external assessment alongside school-based assessment were concerned about the ensuing assessment load – school assessment in subjects, external assessment in subjects, and cross-curriculum testing.

Universal rejection of a test of key cross-curriculum capabilities, including the current QCS Test There was almost silence about a related issue. Everybody understood that the QCS Test would no longer be required for scaling if there were no OP, but the role of the QCS Test in testing cross-curriculum skills in unfamiliar contexts was barely acknowledged. There were two exceptions. High school principals suggested that the assessment of 21st Century skills should be mandatory in one of the assessment tasks of the collection of mandatory assessments (see later in this report for a description of the requirements for an "assessment package"). Some university people drew on movements in other countries to reconceptualise curriculum, and saw value in devising ways of assessing key capabilities in ways similar to the QCS Test and reporting results alongside subject results.

Ambivalence about separation of responsibilities for senior certification and tertiary selection

Who does what - QTAC and QCAA

What they said

Two opposing views were expressed about having the responsibilities for senior assessment and university selection separate. At present both responsibilities – certification of student achievement and the calculation of the OP, FPs and ATAR, and of all processes and interim products – reside with QCAA. Many contributors to discussions during the review process chose not to comment on the topic of separation of responsibilities, presumably because they had no strong opinion on the matter or because of the ambiguity in focus question 4 (referred to earlier) There was some support for the separation of responsibilities: that QCAA's responsibilities at the interface of the secondary and tertiary sectors stop after certification of results and the tertiary sector's responsibilities in relation to Year 12 completers start with the assessment data (subject results) received from QCAA.

Generally, QCAA supported the status quo noting that, if there were to be changes to the OP, QCAA had the infrastructure and capability for successful transition to whatever system might replace the OP system

Some support for the

separation of responsibilities

- QCAA's responsibilities stop

after certification of results

responsibilities in relation to

Year 12 completers start with

the assessment data (subject

results) received from QCAA

and the tertiary sector's

QCAA generally supported the status quo and noted that, if there were to be changes to the OP, QCAA had the infrastructure and capability for successful transition to whatever system might replace the OP system. Universities, on the other hand, indicated support for processes to be undertaken by QTAC. Responses from individuals and other organisations (not key stakeholders) included some contrasting viewpoints in relation to the role of the QSA (now QCAA) and the possibility of it continuing the same tasks in the future. On one hand, there was support for leaving current responsibilities with the QCAA as they possess the data and the expertise. (There was the view that the QSA (which existed before QCAA) had not performed adequately in its current form, but it was not clear whether this was a general statement.) Those in favour of a separation of responsibilities asserted that tertiary entrance is properly the domain of universities and it is the universities who should control and undertake all procedures for devising tertiary entrance mechanisms. Schools are then able to focus on student learning. According to this view, QCS preparation and administration, assigning and verifying SAIs are activities that detract from student learning time. QTAC's responsibilities are seen to now include determining all measures to be used for selecting Year 12 completers (e.g. ranking) given that QTAC is the agency of, and responsive to, universities.

Universities indicated support for processes to be undertaken by QTAC Those who were against a separation of responsibilities argued pragmatics: It would be a costly exercise to move the determination of any measures required by the universities. If the responsibility for determining tertiary entrance is moved from QCAA and if the agency that will take on that responsibility is QTAC then problems were foreseen for transition and additional time pressures on QTAC. However, it was noted that QCAA already has the infrastructure and expertise.

Scaling and construction of rank orders

comparability between states and so on.

Translated into universities' desire for fine-grained information

Opinions were stated repeatedly and strongly by the universities about the ATAR

should be given an ATAR [eligibility requirements were not discussed]. A strongly

held view is that a single rank order [presumably an ATAR] reflects the national

approach and is transparent and easy to understand. On the other hand there is some recognition that a single rank order discards achievement information. The view that an ATAR is easy to understand is curious: the fact that a student's score can fall above or below a cut-off may be simple to understand, but how the rank order is determined is not. In fact, the computational method for deriving an ATAR is no easier to understand than the calculation of the OP. It involves eligibility rules, input data (subject scores), a scaling model, and calibration so that there is

as the preferred basis for selection decisions and that all Year 12 completers

Opinions stated repeatedly and strongly by the universities about the ATAR as the preferred basis for selection decisions

Concerns about possible backwash effects on schools from any new selection mechanisms devised by the universities

There were concerns about possible backwash effects on schools from any new selection mechanisms devised by the universities, and about a scenario in which some subjects have greater apparent value, either assigned expressly by universities or made implicit in the calculation of an ATAR, thus affecting subject choice. A common thread through all of the comments about tertiary selection was that the ATAR was a foregone conclusion. It was noted, however, that an ATAR has been challenged in the media over the past year.

It is unusual in other parts of the world for universities to use rankings (based on overall achievement in various combinations of subjects) in selection decisions. Such ranking of students requires complex statistical processes. It is common practice, however, in all Australian jurisdictions. What sets Queensland (and the ACT) apart is that the calculation of the index (the OP in Queensland) is done within the secondary curriculum and assessment authority. Table 5 gives examples of locations for calculation of indices (whether OP or ATAR because both provide ranking of students). For example, in NSW the Universities Admission Centre (counterpart of QTAC) receives subject results from the NSW Board of Studies (counterpart of QCAA) and performs the necessary calculations.

In some states the admissions agency responsible for calculating an ATAR acquires technical expertise in scaling from sources external to the agency.

Table 5: Comparison of tertiary selection arrangements across states and territories

Jurisdiction	Handles applications	Does TE rank calculations	Sets eligibility rules	Released through	Students know their ATAR or equivalent?
ACT	UAC	ACT Board	By ACT Board	ACT Board	Υ
NSW	UAC	UAC (→)	Through UAC	UAC	Υ
QLD	QTAC	QCAA	By QCAA	QCAA	N
SA/NT	SATAC	SACE Board on behalf of SATAC	By universities and TAFE	SACE Board	Υ
TAS	UTAS	TQA	By UTAS and TQA	TQA	Υ

Queensland is unusual – calculation of the tertiary entrance index (the OP) is done within the secondary curriculum and assessment authority (QCAA) rather than the tertiary admissions agency (QTAC)

ATAR is mentioned many times in this chapter, reflecting the space it took up during the review. This is interesting, since so many people involved in all of our different consultation stratagems, and for all categories – including universities – were unaware of some significant features of ATAR: the history behind Queensland's not using an ATAR as the primary selection device; the current use of ATAR as a tie-breaker in third stage of the selection process (after OPs and FPs have failed to make the fine distinctions between students at the cut off for the course); the fact that the ATAR is actually calculated each year by QCAA but is not made known to Year 12 students; and indeed that students, unless they acquire the information incidentally, do not even know that they have an ATAR.

The OP pre-dates the ATAR. An ATAR in Queensland is derived from the OAIs, which are deemed not be distinguishable which is why OAIs they chunked into 25 bands.

Call from universities for the Queensland tertiary entrance rank to reflect the nationallyconsistent approach, an ATAR There was a call from universities for the Queensland tertiary entrance rank to reflect a nationally consistent approach. The primary reason advanced was about mobility, in that an ATAR was easily transportable across borders, both for Queensland students wishing to study elsewhere, and for interstate students applying to Queensland institutions.

A view often expressed was that the ATAR is transparent and easily understood. University stakeholders in particular championed the ATAR as being finer-grained than the OP.

There was some recognition that a single rank order, however expressed, did not contain all the information about a student's achievement. Concern was also expressed about the backwash effects on subject selection from some subject being seen as privileged in the ATAR calculation.

Important to note are marked differences across states in how the aggregate that underpins the ATAR is calculated All stakeholders supporting an ATAR treated it as a unitary, consistent concept. In fact, while it is correct that the ATAR is the same numerical scale regardless of state, and calculated on the same principle of ranking the student within the age cohort, there are marked differences across the states in how the aggregate that underpins the ATAR is calculated. Table 6 shows four selected states and highlights that the number of contributing subjects differs (including whether English is mandatory); the means by which each subject result is determined differ; and the granularity (i.e. the number of intervals on the scale) of the aggregate differs (from 0 to 80 to 0 to 500).

ATAR is calculated in different ways in different states

Table 6: Subject results and tertiary entrance results for selected non-Queensland states

Basis of ATAR	Non-Queensland	state		
calculation	NSW	SA	VIC	WA
Number of subjects (or equivalent)	5 best; English mandatory	4 best	4 best; English mandatory) + up to 10% of 2 other subjects	4 best
School mark scaling method	Statistical moderation; Max. 100	SA logistical scaling; Max. 20	Statistical moderation GAT scaling (adjusts for differences in competition in subjects) Inter-subject scaling (Maths) Max. 50	Statistical moderation Max. 100
External assessment contribution	50%	Varies	50%	50%
Tertiary entrance scaling method	Average marks scaling	Average marks scaling variant	Average marks scaling variant	Average marks scaling variant
Tertiary entrance score	"Aggregate" Max. 500	"University Aggregate" Max. 80	"Aggregate"	"Tertiary
			Max. 210 + LOTE bonus ≤ 5	Entrance Aggregate" Max. 400 + LOTE bonus 10

An extension of the assumption that the ATAR is a unitary concept is that it is truly comparable across states and across years; that is, that an ATAR of 86.05 means the same achievement within a year, regardless of state, and is stable over time. Neither is true. The ATAR is an estimate of a student's position within a theoretical cohort – all students who could have done Year 12 in a particular year. This changes over time with population shifts and "bulges" (e.g., in another era, the so-called baby boom) and is different across states.

Again, discussions about tertiary entrance mechanisms highlighted a broad lack of knowledge in the tertiary entrance realm, as exemplified by statements such as "immediately abolish QCS and introduce ATAR". The ATAR was an unknown species to many in the schooling sector until they attended functions related to this review.

Other topics

The focus questions gave key stakeholders and interested parties a framework for understanding the reviewers' position as it emerged during the Review, especially for ease of structuring and analysing submissions. It was possible to use the same framework for classifying information provided to the Review at events hosted by ACER and at meetings hosted by others. Any residual issues would have declared themselves in some way during the Review. With one exception they did not.

Gaming

They told us that gaming occurred so we investigated how this happens

The Review was told that the current emphasis on OP results sometimes puts school staff under pressure to maximise these results. By gaming we mean using the rules and procedures that are meant to protect a system to manipulate the system for a desired outcome. In the context of this Review desired outcomes are

to maximise an individual student's OP or a school's OPIs. Opportunities for gaming occur when schools assign SAIs. The ways in which teachers assign SAIs in order to advantage particular students in their subject in a school or in which schools assign SAIs to advantage particular students (across subjects) in their school were demonstrated to the Reviewers.

(While many schools engage in preparation for the QCS Test in the belief that it will give them a competitive advantage, this is not strictly gaming.)

The Review was told that some schools encourage students to take particular subjects in the belief that subject choice will make a difference based on the myth that some subjects are weighted more than others in the calculation of an OP.

The Review was also told that some schools encourage OP-eligible students to become ineligible (by dropping a subject, for example, or not sitting the QCS Test) so that they can apply for entry via the QTAC Selection Rank (which entails no scaling of subjects and allows OP and OP-ineligible students to compete for tertiary places). They do that in the belief that removing some low-performing students from the calculation of the QCS scaling parameters and raising the mean of the remainder will automatically confer an advantage on them. The interplay of the mean and the mean difference¹ (measures of location and spread of results in a distribution) is a subtlety not well understood.

Schools marketing themselves in terms of high OPs and schools defining themselves in terms of improvements in OPs appear to be the drivers for gaming behaviour.

Universities refer to the phenomenon of competition for places based on OPs and equivalent OPs as an "unfair binary system".

Scaling

Two types of scaling are mentioned in this chapter: the scaling of school-based assessments to external examination results; and the scaling of school-based assessments to QCS results. There is a technical note on statistical moderation at the end of this chapter. Paper 1 in Volume 2 explains the use of the QCS Test in scaling.

Or standard deviation

Main points

Seven themes emerged

This chapter has used eight position statements to frame an analysis of information provided to the Review through submissions, consultations and public events. The seven themes that emerged, as measured by frequency of comment, depth of response or both were:

- 1 Current processes deemed too complex, which undermines confidence in the system
- 2 General lack of understanding of the OP system, at all levels, and myths abound
- 3 Some evidence of gaming by schools
- 4 Broad acknowledgment of the strengths of school-based assessment, recognition of the centrality of teacher judgment in assessment, and respect for the endurance of the system for more than 40 years
- 5 Serious attention required for revamping moderation, with special attention to the operation of review panels
- 6 General acceptance of external assessment, recognition of the enhanced validity from gathering evidence about student learning in two styles internal and external, but rejection of statistical moderation
- 7 Push for national consistency in selection of applicants to university courses, embodied in an ATAR

Postscript

One particular position to heed

Although not a theme of the submissions and consultations, the following statement, provided more than once to the Review by its authors, is worth noting.

The success of any new system will be contingent on its improved simplicity, clarity, cost-effectiveness and efficiency.

Griffith University's submission to the Review, April 2014

Technical Note - Statistical moderation

Statistical moderation is the process of adjusting the school-based assessment distributions for a subject so that the average and spread of the school-based assessments match the average and spread of the school's distribution on the external examination scores for the subject. In technical terms, it uses a linear transformation to adjust the school-based assessment distribution for a subject in a school to have the same mean and standard deviation as the distribution of examination results for that subject achieved by students at that school. The linear transformation does not change the rank order of students or the relative differences between them. For a given student, adjusted scores thus obtained (called "scaled scores") may be higher or lower than the original school scores depending on the location and spread of the school scores.

The following equation is used to scale school-based assessments.

$MSA_{student 1} = \{[($	SBA $_{\text{student 1}}$ - Mean SBA $_{\text{school}}$) / SD SBA $_{\text{school}}$] x SD E $_{\text{school}}$ } + Mean E $_{\text{school}}$
Where:	
MSA student 1	is the moderated school-based assessment (scaled score) for student 1 in the school for a subject;
SBA student 1	is the school-based assessment for student 1 in the school for a subject;
Mean SBA _{school}	is the mean or average of the school-based assessments for the school in the subject; $ \\$
SD SBA _{school}	is the standard deviation of the school-based assessments for the school in the subject; $ \\$
SD E _{school}	is the standard deviation of the examination marks for the school in the subject; and,
Mean E _{school}	is the mean or average of the examination marks for the school in the subject.

Statistical moderation does not involve movement of materials (samples of student work) or movement of personnel (teachers, panellists, moderators). It relies on algorithms and computer processing of data.

The set of marks on the school assessment and the set of marks on the external assessment refer to different assessment performances but the performances may not reference the same underlying characteristics. Furthermore, even if they did reference the same characteristics (e.g. where the school assessment mirrors the external assessment in content and form), the standard of the performances could be quite different. Therefore, the scaling merely realises an expectation that one set of results mirrors the other set of results. The process of scaling adopts the assumption of equivalence but cannot verify it.



Chapter 3

Reflections, findings and recommendations

This review has addressed two separate but related activities at the transition between secondary schooling and tertiary education: the assessment and certification of student attainment in the senior secondary school; and the selection of students into tertiary courses of study. We have considered the nature of these two activities and the general challenges in ensuring that each is conducted fairly and effectively. We have identified ways in which we believe each could be further improved, and have made recommendations accordingly.

General challenges

We began our Review by clarifying the general purpose and challenge of each of the two activities we were asked to consider:

1. Assessing and certifying student attainment in senior subjects

The challenge here is to provide students with a result in each of the subjects they have studied which accurately and meaningfully conveys the level of knowledge, understanding and skill they have attained in that subject. Certification requires results that are valid, reliable and comparable across teachers and schools.

2. Selecting students for admission to tertiary courses of study

The challenge here is to select students for entry to tertiary courses using evidence that is relevant to those courses and that provides meaningful distinctions between applicants. The selection processes used by universities and other providers must be based on publicly transparent selection criteria that are fair to all applicants for course entry.

Assessing and certifying student attainment in senior subjects

Throughout the senior secondary years, teachers use a range of assessment methods to evaluate the progress that students make in a subject. Assessments are undertaken at convenient and appropriate times to provide feedback to students and parents and to inform classroom teaching. The fundamental purpose is to establish and understand where students are in their learning at the time of assessment, including by diagnosing the difficulties they are experiencing, exploring misunderstandings and identifying knowledge and skill gaps.

A key task of QCAA is to certify student attainment in senior subjects. This means providing students with a result in each of the senior subjects they have taken indicating the level of knowledge, understanding and skill they have attained in that subject upon completion of the course. The assessments on which certification is based need not be different in purpose or nature from the assessments that teachers use for their ongoing monitoring of student progress.

Two activities reviewed

Challenges in assessment & certification

However, certification requires results that are reliable and comparable across teachers and schools.

The certification of attainment is an essential component of senior secondary schooling. It provides students, parents and schools with independent confirmation of the levels of knowledge, understanding and skill that students have attained in each of the subjects they have studied. Certification is thus an important activity in its own right, regardless of whether and how students' subject results might subsequently be used by universities or employers.

The starting point in assessing and certifying attainment in a subject is the relevant syllabus and its intended learning outcomes. The validity of the certification process depends on the extent to which students are assessed on the full range of intended learning outcomes. If assessment processes do not provide information about the full range of outcomes, then not only is the certification of attainment incomplete, but there is also a risk of teaching and learning being distorted to address only what is assessed. A fundamental requirement of any assessment and certification process is that it must promote high-quality teaching and learning of the entire subject syllabus.

Challenges in assessment & certification

To certify student attainment in a subject, QCAA needs to be able to compare students' levels of knowledge, understanding and skill independently of the schools they attended and the teachers who taught them. In other words, the results of the assessment processes that form the basis of certification must provide fair comparisons of all students taking a subject. They must be objective in the sense that they are unaffected by the specifics of the assessment process (for example, the topic of a student's research project or essay, or the details of who marked it).

The certification process also must differentiate attainments in a subject at an appropriate level of detail. The fineness of the scale on which subject results are reported must reflect meaningful differences in student attainment. In statistical terms, whether or not two adjacent score points can be treated as meaningfully distinct depends on the measurement error associated with those scores. It is inappropriate to interpret finer distinctions (and usually inappropriate to report on a coarser scale) than is justified by measurement error.

Finally, with the expanding use of new technologies in teaching and learning, it will be increasingly important that senior secondary assessment and certification processes capitalise on advances in technology and are consistent with the ways in which students learn in the future. In particular, the growing use of technology in day-to-day classroom activities introduces the possibility of a closer integration of teaching, learning and assessment, with information about student learning and attainment being captured and recorded on a regular, if not ongoing, basis. Advances of this kind underscore the importance of planning a number of years ahead in any redesign of senior secondary assessment and certification arrangements.

Selecting students for admission to tertiary courses of study

Challenges in selection

Universities and other tertiary providers are responsible for deciding who they will admit to the courses they offer. Individual institutions have a right and a responsibility to determine the basis on which their future students are selected and admitted, including the kinds and amount of evidence used in making admissions decisions, the specification of course prerequisites, and any procedures for combining and/or weighting evidence in selection processes. The admission rules and procedures established by individual institutions

are implemented by QTAC, which processes applications for the majority of undergraduate courses in Queensland.

Over recent decades there have been a number of developments that have had an impact on tertiary selection and admission processes. First, the number of students completing senior secondary school has increased significantly. A larger number of school completers are now receiving offers and being admitted to tertiary study than was the case a generation ago.

Second, there has been an opening up of the pathways by which students enter tertiary courses. A much wider range of evidence, including VET qualifications and relevant work experience, is being used in admissions decisions. The percentage of students admitted directly from school on the basis of an OP has declined, and there are now many more routes and entry points into tertiary courses of study.

Third, recent government policies aimed at creating a more "demand-driven" tertiary system, coupled with efforts to lift participation rates among traditionally under-represented groups, are providing an even larger proportion of school leavers with opportunities for tertiary study. Many students whose results would not have given them access to tertiary study in the past are now being offered places in tertiary courses. Many courses and some institutions now enrol the vast majority of students who apply. Some universities even offer places to Year 12 students in advance through direct entry schemes.

Nevertheless, there continues to be competition for entry to a range of tertiary courses in a number of institutions. For some high-demand courses, the number of applicants can be much larger than the number of places available, and institutions find it necessary to manage competitions for entry. This requires reliable information for comparing applicants and selecting some applicants over others. If competitions for entry are to be managed fairly, then the criteria for selecting and admitting students must be publicly transparent and open to all categories of applicants.

There are a number of other challenges in managing fair student selection processes. First, the criteria and forms of evidence on which some students are selected ahead of others must be appropriate to the courses of study to which students are applying. Currently, Queensland universities use a wide variety of selection criteria and evidence. Depending on the nature of the course, this evidence includes, but is not limited to, Year 12 results, portfolios of student work, auditions, interviews, aptitude tests, language proficiency tests, applicants' written statements and employment experience. Fair selection decisions depend on the relevance of the evidence used to select some students ahead of others.

Second, fair selection decisions depend on evidence that can be compared reliably across applicants. For example, the use of senior subject results in tertiary selection processes depends on confidence in the comparability of students' results across teachers and schools. Beyond this, results must be reported in ways that enable meaningful distinctions and comparisons of applicants.

Third, universities sometimes find it necessary to compare applicants who transfer between states. In these situations, it is important that institutions are able to make fair and meaningful comparisons of applicants who have completed their secondary schooling in different systems.

Fourth, in designing selection processes, it is important that universities give adequate consideration to the possible impact of their selection processes on teaching and learning in the senior secondary school. It is inevitable that tertiary selection processes will influence the behaviour of senior secondary students and

Challenges in selection

schools. In some cases, this impact may be desirable – for example, if students make decisions to take senior courses that are prerequisites for, or that will better prepare them for, particular tertiary courses of study. But in other cases, the impact can be undesirable – for example, if students choose to take easier (or harder) senior subjects in the (mistaken) belief that this will maximise their OP or ATAR.

Review of current processes

Having considered the general purposes, underlying principles and challenges associated with the certification of student attainment in the senior secondary school and the selection of students into tertiary courses of study, we next reviewed existing assessment and selection processes.

Assessing and certifying student attainment in senior subjects

Currently, QCAA certifies student attainment in senior subjects on the basis of assessments devised by teachers in their schools. Under this system of school-based assessment, teachers design assessment programs and activities to provide information about students' achievements of the general objectives of the syllabus. Assessment programs must be designed to provide an appropriate balance of assessment activities, which may include supervised examinations, short tests, assignments, complex tasks, unseen essays, projects, practicals, orals, aurals, observational schedules, and field studies.

Current arrangements – assessment & certification

One of the defining features of assessment and certification in Queensland is the identification of a small number of criteria for each subject. These criteria (typically three per subject) are the important dimensions for assessment – the characteristics of student work or performance that are to be judged. Teachers' assessment programs must be designed to provide appropriate coverage of these criteria. For each criterion, five standards or Levels of Achievement labelled Very High Achievement to Very Limited Achievement describe performance benchmarks. This matrix of criteria and standards, referred to as the "Standards Matrix", is the frame of reference that teachers use to evaluate students' performances throughout the course of study and on completion (at exit).

Teachers evaluate performances on school assessments by making judgments against a set of instrument-specific criteria and standards based on excerpts of the overarching (exit) Standards Matrix for that subject. Teacher-maintained student profiles record students' performances on each activity as letter-grades (A–E) across the two years of the course. This information is selectively and continually updated, with the most recent assessments superseding information from earlier assessments, which may no longer be representative of student achievement.

At the end of the course of study, teachers judge the standard achieved by each student on each of the criteria for that subject (using the five standards defined in the syllabus, again recording the level of achievement on the A–E scale). QCAA provides rules for then determining students' exit Levels of Achievement in the course (for example, "Very High Achievement in a subject requires students to be awarded an A on any two criteria and no less than a B on the remaining criterion").

QCAA implements moderation processes to ensure the comparability of teachers' judgments in a subject across schools. First, each school's proposed work program (including its proposed assessment program) is approved by one of thirteen district review panels established for each subject. Second, a sample of Year 11

student folios from each school is reviewed by the panel and feedback is provided on each school's assessment package and its judgments of achievement levels. Third, at the end of the course, a sample of folios representing different Levels of Achievement from each school is reviewed and verified by the district panel. Members of the review panel consider whether they agree with the teacher judgments and provide feedback. Fourth, a state review panel for each subject considers samples of folios for each district to ensure comparability across the state. The product of senior assessment and moderation is a Level of Achievement for reporting on the Senior Statement. At the beginning of the following year, QCAA draws a random sample of folios from each district for review by panels in other districts. The purpose is to evaluate the success of QCAA's moderation processes.

For students who are OP-eligible there is an extra step for teachers/schools. As well as reporting students' overall performance in a subject using the five exit Levels of Achievement, teachers assign SAIs to show how students have achieved in comparison with other students taking that subject in that school. SAIs show the student ranking ("order") from highest to lowest and also the relative separations ("gaps") between students. This is done by assigning the top student in the subject-group an SAI of 400. The student who is at the bottom of the list is assigned an SAI of 200, and all other students, numbers between 400 and 200 at appropriate intervals, regardless of their Level of Achievement. The numbers assigned to SAIs have no absolute meaning. They are not intended as measures of achievement in a subject that can be compared across schools, but are intended to provide a finer degree of differentiation within a subject, which, after scaling, can be used in the calculation of tertiary entrance ranks: the OP and FPs.

Assessment of cross-curriculum skills

QCAA also certifies students' grades on the QCS Test, a standardised test of cross-curriculum skills, which is set and marked by QCAA. The QCS Test is used for statistical scaling in the construction of the OP and FPs. The test is designed to measure skills that are taught across the curriculum rather than to test subjectspecific knowledge and skills. The assumption is that there are commonalities across senior subjects which, taken together, represent the higher-order cognitive skills expected of an educated 17-year-old (senior) student and so are worthy of reporting in their own right. In the Queensland context, these commonalities are referred to as the Common Curriculum Elements (CCEs). Students' QCS Test grades (A to E) are obtained by aggregating scores on three sub-tests - multiplechoice, short response, and extended writing - and applying cut-offs determined through a psychometric process. QCS Test grades are reported alongside Levels of Achievement in Authority and Authority-registered subjects on the Senior Statement. Because group results on the QCS Test are used in the calculation of the OP and FPs, all OP-eligible students must take the test. Students who are not eligible for an OP also may elect to take the test.

Current arrangements – assessment & certification

The QCS Test differs from subject assessments in that it is administered under common conditions across the state. All students take the 7-hour test on the same two days at the end of third term in Year 12. QCAA employs invigilators external to the school. Student responses in extended writing and short response format are marked using a common marking scheme at a central location by teachers who are trained and monitored for consistency. The QCS Test also differs from subject assessments in that statistical methods are used to monitor its psychometric quality. Test items are trialled before use and, after an analysis of trial data, revised on the basis of their psychometric properties, thus ensuring the reliability of the instrument.

Input to the Review

Through the consultations conducted for this Review and the written submissions we received, it is clear that there is considerable support for the use of school-based assessments in the certification of student attainment in senior subjects. Underpinning this support is a widely held belief in the value of locally-designed assessment programs and activities, and in having classroom teachers judge the quality of students' work. School-based assessment enjoys the support of many current Queensland teachers and school leaders. Alongside Canada and Norway, Queensland is one of the few jurisdictions in which there is wide support for teachers being responsible for devising assessments in high-stakes environments.

It is equally clear that, even among the strongest supporters of school-based assessment, there are concerns about how well the current system is working. There are specific concerns about comparability and fairness. There are concerns about how well some elements of the moderation system are working, especially the work of review panels. Some stakeholders expressed concerns to us about perceived slippages in rigour over time and the under-resourcing of current processes. We believe there is almost unanimous agreement that some level of change and renewal is required.

In any review of senior secondary assessment and certification processes, a key question is whether the assessments on which certification is based provide valid and reliable evidence about the range of intended syllabus outcomes. The answer to this question depends in part on the specifications and rules of the certifying body (QCAA) and in part on how schools implement assessment processes within these specifications and rules.

What they said about current arrangements – assessment & certification

Concerns were expressed to the Review that, in some subjects, the syllabus specifications limit the extent to which schools are able to provide appropriate balance in addressing intended syllabus outcomes. This was perceived to be a particular problem in mathematics and science subjects where the collection of assessment types required by the syllabus was seen by some to overemphasise evidence in the form of written investigative reports at the expense of evidence in the form of "objective" tests of factual and procedural knowledge and understanding. This problem was considered to be compounded when students take several subjects in which there is a perceived overemphasis on extended writing.

The general concern being expressed here relates to the validity of subject assessments. To the extent that the assessment processes required of teachers of a subject do not enable the balanced collection of evidence about the full range of valued learning outcomes, the validity of the assessment and certification process for that subject is limited.

Other concerns relate to schools' implemented assessments. There is a widely held view that, within subjects, the quality of teachers' assessment processes and instruments varies considerably. Some express concern that insufficient attention is being given to checking and confirming that schools' work programs include genuine assessment plans showing how the school will address in a balanced way the intended syllabus outcomes. (In reality, the work program is not intended as an assessment planning document – it describes how the intended curriculum will be enacted and how assessment information will be recorded.) A proposal put to the Review is that more rigorous processes be put in place for endorsing the appropriateness and quality of schools' proposed assessment processes and instruments prior to students being assessed.

There are also concerns that teachers' assessment instruments sometimes differ in their level of demand and in the extent to which they give all students, including high-achieving students, an opportunity to engage and provide evidence of their achievements.

A second general set of issues raised with the Review concerns the comparability of students' exit Levels of Achievement across teachers and schools. Underpinning this set of issues are concerns about the difficulties of implementing standards matrices consistently, and the limited and confirmatory nature of review panel processes. A number of stakeholders referred to the difficulties of making meaningful distinctions based on the Standards Matrix provided in the subject syllabus. It appears that judgments of the quality of student work against standards often hinge on a relatively small number of descriptors intended to differentiate between standards, but which often are open to interpretation (for example, the need for teachers to distinguish "complex tasks" from "complex and challenging tasks"; to distinguish "evaluating" from "critically evaluating"; and to distinguish "analysis" from "discerning analysis"). Difficulties in interpreting the descriptions of standards accurately and applying them consistently are seen by some as a threat to the comparability of teachers' exit assessments across schools.

Questions about the rigour of current district review panel processes are adding to concerns about the comparability of students' exit Levels of Achievement. Many stakeholders expressed concern about the quality and utility of feedback from review panels, the composition of the panels, and the time available for panellists to consider student folios. Some gave reasons for disagreements between panels and schools, including the fact that panel members make overall judgments of student work folios to confirm exit Levels of Achievement without having access to the "private" trade-off rules that teachers used to arrive at these levels. Any lack of consensus in the verification phase has ramifications beyond the certification of Levels of Achievement – to the assignment of SAIs.

What they said about current arrangements – assessment & certification

Although the processes for assigning SAIs are a separate set of activities designed to provide finer detail about students' achievements in a subject, concerns also exist about the fairness of the SAIs produced by these processes. The Review was told of concerns that some schools create distributions of SAIs in an attempt to maximise some students' OPs. QCAA refers to this as artificially "stretching out" and "compressing" SAIs in different parts of the distribution and has procedures in place to check on the "reasonableness" of schools' SAI distributions. The stretching out or compressing of SAIs in different parts of the distribution, if it does occur, may advantage some students in a school while disadvantaging others.

Added to this are concerns that the verification of schools' Levels of Achievement, including placement of students on the ten rungs within each Level of Achievement – these rung placements being the basis of the intervals between SAIs – is open to manipulation which could benefit students from particular schools. QCAA has rules such as "there should never be more than 'double the difference' between any two places in the SAI distribution" and "the amount of difference between students (shown by SAI points) should increase from the lower levels of achievement to the higher levels of achievement". Although QCAA provides comprehensive guidelines and computer programs to assist teachers in assigning SAIs, the result is the mechanisation of what is essentially a judgment process.

Concerns about the comparability of students' exit Levels of Achievement have led to a push in some quarters for increased external assessment. Advocates of external exams often advance two additional arguments – that external exams

help to ensure that teachers cover all syllabus content and outcomes; and that external exams help to address concerns about authenticity that may arise with some forms of school assessment. Some favour a return to a system of external examinations along the lines of the HSC examinations in NSW. Vocal advocates of this form of assessment see a particular need for common, externally set and marked written examinations in mathematics and science subjects. Some teachers believe external examinations would put them under less pressure. There is little consensus among teachers and parents on the possible impact on student stress levels, some arguing that external examinations introduce more stress because students have only one chance to demonstrate their knowledge, skills and understanding, and others arguing that school assessments are more stressful because students feel they are always on trial. At the time of this Review, external written examinations were being promoted by some as an alternative to school-based assessment, polarising the discussion of future senior secondary assessment arrangements.

A third set of concerns relate to the coarseness of the scale on which students' subject results are reported. Despite the fact that they are derived from a number and range of assessment activities, exit Levels of Achievement in senior subjects are reported on only a five-point scale (Very Limited Achievement, Limited Achievement, Sound Achievement, High Achievement, and Very High Achievement). This condensing of assessment information is seen by some as not making full use of the available evidence about students' achievements in senior subjects.

What they said about current arrangements – assessment & certification

Related to this is the question of numerical marking. Although QCAA has made clear that it is supportive of numerical marking, this is not the message heard by many teachers over recent years. Even if QCAA has not always supported numerical marking, it has done considerable work recently on methods of numerical marking. Most teachers have understood that the supported approach to evaluating student work has been to make judgments against instrumentspecific criteria and standards based on excerpts of Standards Matrices published in the relevant subject syllabus and to record the judgment as A-E. For some teachers, judgments against standards are seen as additional work. They argue that aggregating results on individual assessment tasks recorded in the student profile would be simpler, easier, more transparent and would make trade-offs more explicit and let students know what each task was "worth" in their overall result. However, we also encountered a degree of naivety in discussions of numerical marking - for example, the mistaken belief that it would be possible to compare directly a result of 80% on an assessment set by one teacher with 80% on an assessment set by another.

Most of the concerns about the QCS Test expressed to the Review related to the industry that has grown up around QCS Test preparation. The Review was told that test preparation had become an impost, with significant negative effects on teaching time. The view of many stakeholders is that preparation for the test has become a pseudo-curriculum, and the test, an external examination. Schools appear not to be aware of the research on coaching and the extent to which it can make a difference, nor the advice provided by QCAA on this matter. The high priority given to QCS Test preparation is at the school level, rather than at the level of individual students, and appears to be linked to the Government's requirement since 2006 that schools' performances, including their OP distributions, be released publicly, as well as schools' use of OP1s as a marketing tool.

The other set of concerns about the QCS Test relates to the perceived complexity of the scaling model. Rather than being recognised as Queensland's approach to

placing results of different assessments (different subjects, different sites) on a common scale for the purposes of producing a tertiary entrance rank, the QCS Test itself is sometimes seen as the problem. The level of understanding of this test and its purpose and use was surprising given that it has been in place for the past 23 years.

Our reflections

Our reflections on assessment & certification

During the course of this Review it has become increasingly clear to us that senior secondary assessment and certification processes are in need of reform. The desirable changes, in our view, involve more than minor adjustments to existing processes; they require the reconceptualisation of some key aspects of the current assessment system. There are three general areas in which we believe change is required.

Assessment activities

The certification of student attainment in a subject depends on assessments of performance that can be compared across all students taking that subject, regardless of the schools they attended or the teachers by whom they were taught.

At the present time, there is a question about the comparability of the assessment activities that students in different schools undertake, including a belief that these activities sometimes vary in quality and level of demand. There are also concerns that schools' implemented assessment programs do not always provide appropriate coverage and balance in relation to the subject syllabus. And there is little or no empirical evidence about current levels of comparability.

We believe that the most reliable way to ensure comparability across schools within a subject is to have all students undertake the same types of assessment activities and to evaluate their performances using the same marking scheme. In this way, for certification purposes, all students taking a subject would complete a small number of assessment activities in common. The parameters of these activities and the criteria for assessing students' performances would be specified by QCAA.

Our reflections on assessment activities

The nature of this small set of assessment activities would be determined by an Expert Subject Group made up of teachers of the subject, academics in that field and relevant curriculum and assessment specialists. The set of activities would be designed to ensure appropriate coverage and balance in relation to the subject syllabus. For example, in a subject such as Geography, the Expert Subject Group may design a set of assessment activities such as a test of knowledge and understanding, an investigative report, a practical exercise, and a stimulus response essay. For most assessment activities in a subject, schools would develop the details of the assessment activity within the parameters specified by QCAA. These parameters would include the kinds of knowledge, understanding and skill to be assessed through the activity, the timing of the activity, the conditions under which the activity was to be completed, and the marking scheme to be used to evaluate students' performances. We also believe that there is a need for more rigorous processes for checking and endorsing the details of schools' proposed assessment activities.

To enhance comparability across teachers and schools, at least some of the assessment evidence collected for a subject should be based on externally set and marked assessment activities. We envisage one of the small set of assessment activities in each subject – the externally set and marked assessment – being designed to address students' factual and procedural knowledge and their ability

to apply their subject knowledge and understandings in a range of relevant contexts. This activity would be designed, developed, administered and marked by QCAA. It would normally take the form of a test completed under supervised, timed conditions.

The specification of a small set of defined assessment activities to be undertaken by all students in a subject and the requirement that one of those activities be an externally set and marked test represents a significant change from current practice. However, it does retain a major feature of senior secondary assessment arrangements in Queensland in that teachers would continue to be responsible for designing the details of the majority of assessment activities and for evaluating students' performances on those activities. We believe these changes are required to improve the validity, reliability and comparability of senior secondary assessments.

Our reflections on assessment activities

In the design of assessment activities for each subject, it will be important that Expert Subject Groups focus on designing assessment processes that are relevant into the future. Our view is that future students will not be well served by attempts to recreate assessment arrangements of the past (for example, traditional written 3-hour examinations or school-based assessment as it has operated in Queensland in the past). Advances in technology will bring continuing changes in how teachers teach and students learn, and also will have important implications for how students are assessed in the future. Expert Subject Groups need to consider these developments in their design of assessment activities and take advantage of the potential to gather new kinds of evidence and to integrate assessment processes more closely into ongoing teaching and learning.

Evaluating and reporting student performances

A central feature of the current assessment and certification process is the Standards Matrix (variously called exit criteria and standards, standards associated with exit criteria, standards schema, and dimensions and standards descriptors). Criteria are the properties of student work or performance that are to be judged. In En glish, for example, the criteria are "understanding and responding to contexts", "understanding and controlling textual features", and "creating and evaluating meaning". In some subject syllabuses criteria are referred to as dimensions for assessment. A Standards Matrix is developed for each subject and published as part of the subject syllabus. This matrix is the point of reference for evaluating and certifying students' overall performances in the subject on exit from the course of study at the end of Year 12. Teachers use excerpts of it to evaluate students' performances on specific assessment activities during the course of study.

Our reflections on evaluating and reporting

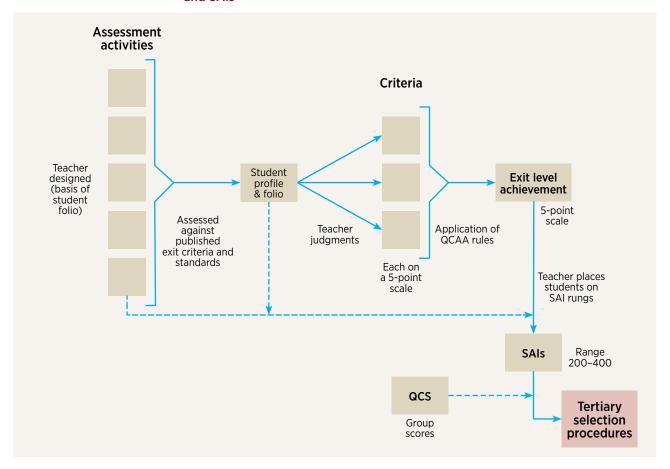
A Standards Matrix typically consists of three criteria (or dimensions for assessment) and five described standards labelled VLA to VHA for each of the criteria. Within each cell of the matrix (typically 15 cells) there are sub-criteria for each of the standards for each of the criteria. For example, in Chemistry and Physics, the sub-criteria for "knowledge and conceptual understanding" are "reproduce and interpret concepts, theories and principles"; "compare and explain concepts, processes and phenomena"; and "link and apply algorithms, concepts, principles, theories and schema to find solutions in various situations". To arrive at the A–E grade for a particular criterion for a particular assessment, teachers make "on-balance judgments" as they decide on how to combine grades on the three sub-criteria.

The role of the Standards Matrix can be understood in terms of the flowchart in Figure 13. (The number of assessment activities is not necessarily five, the

Our reflections on evaluating and reporting

number chosen here for illustration purposes.) The process begins with teachers designing assessment activities to address the objectives set down in the subject syllabus mindful of covering all three criteria unless otherwise specified. Some subjects require that all three criteria be assessed in each activity; others do not. Performances on these activities are interpreted (judged) against the (excerpt) of the Standards Matrix and recorded in the student profile as letter-grades A-E, one for each criterion. Often teachers record performances as +, 0, - (for example, E + or A-). The student work (performance or response) is retained in a student folio (usually digitalised) for later treatment (schools are required to produce sample folios for moderation). Taking into account a student's performances on all assessment activities, the teacher then makes a judgment about the standard achieved by the student on each criterion (recorded as A to E, no qualifiers of + or - at this stage). Rules provided by QCAA are then used to convert these three results into an overall (exit) Level of Achievement on a 5-point scale (VLA to VHA). Typically these rules are expressed as simple algorithms but this is not appropriate for all subjects. English is an example where the pure on-balance teacher judgment applies rather than a simple algorithm.

Figure 13: Current processes for arriving at students' exit levels of achievement and SAIs



This process involves the successive discarding of information about students' performances and attainment within subjects. Marks and other records are summarised as the standard achieved on each criterion for each assessment activity. These are then summarised in three A to E results, one for each criterion. And these are then summarised in a single result, the exit Level of Achievement on a 5-point scale. This successive reduction of detail is a feature of the current assessment process.

In a process distinctive to Queensland, having collapsed detail in this way, teachers are then asked to provide additional detail for the purposes of providing input into the calculation of OPs: the SAIs for OP-eligible students for every Authority subject in the school (drawing on the student profile of results and the folio of evidence on which they are based), following the verified distribution of students across the ten rungs per achievement band on the so-called "R6 ladder". This graphical representation of order and gaps is translated into a distribution of SAIs, where each student is assigned a number in the range 200 to 400. As noted above, there are concerns about the fairness of SAIs produced in this way. And then, as part of the current tertiary selection process, this cycle of compression and expansion of detail continues with SAIs leading to an OP reported on a 25-point scale.

The assessment of complex performances or artefacts against a set of assessment criteria is common practice internationally. For example, judges often assess a performance or piece of work on criteria such as originality, technical proficiency, consistency of execution, and artistic merit. For each of these criteria, it is common to make judgments against defined levels or "standards" of performance or quality.

Our reflections on evaluating and reporting

The reliability and comparability of such assessments depend in part on the assessment activities themselves. In general, the more tightly specified and similar the activities on which assessments are made, the more reliable and comparable the resulting judgments. When individuals are assessed in very different ways or assessment evidence is very varied, reliable and comparable judgments are more difficult to make. Reliability and comparability also depend on how well the distinctions between different standards of performance are defined.

The criteria and standards specified in senior subject syllabuses often depend on subtle distinctions in wording, and so are open to interpretation. It is also sometimes assumed that the number of "significant and discernible differences" used in judging quality must be the same for all criteria – an assumption that can result in syllabus developers or teachers manufacturing distinctions where real distinctions do not exist. And further complications can be introduced by the assumption that standards must be written to represent equally spaced levels of performance or quality.

We believe that a simpler and more defensible approach to arriving at an exit Level of Achievement would be to use students' assessed performances on the set of assessment activities for a subject as the basis for deriving directly their Levels of Achievement. Such an approach would not privilege the criteria as the lens through which students' performances are interpreted. Rather, the role of the current criteria would be in the up-front design of assessment activities. In developing the parameters for the set of activities, it would be incumbent on QCAA to ensure that the criteria were appropriately and adequately sampled and addressed. Schools would then need to ensure that this intention was reflected in their locally-designed implementations of the assessment activities (and QCAA may need to check and confirm that this is the case).

Our approach also would not privilege the five standards currently defined in subject syllabuses. Rather than judging students' performances on each assessment activity in terms of the same exit standards of achievement (or instrument-specific excerpts from the standards), we believe it would be more appropriate to develop a marking scheme for each activity separately and to use this as the basis for marking/judging and recording students' performances on the assessment activities. The logic underpinning this is that the marking schemes themselves should convey and reward what is valued in the student response/work, given that the assessment activities have already been designed to assess the important dimensions or aspects of performance identified in the subject syllabus. No further interpretation should be necessary. A student's Subject Result would then be calculated directly from the student's assessed performances on the set of assessment activities in that subject (see Figure 14). And we see this Subject Result being reported numerically on a much finer scale than currently.

Our reflections on evaluating and reporting

The use of activity-specific marking schemes, the direct calculation of students' Subject Results from this information, and the reporting of Subject Results on much finer numerical scales also represent significant changes from current practice. However, they do retain significant features of the current senior secondary assessment arrangements in that teachers would continue to be responsible for designing the details of the majority of assessment activities and for judging and evaluating their own students' performances on those activities – not against a standards matrix, but against a marking scheme specific to each assessment activity. We believe these changes are required to improve the validity, reliability and comparability of senior secondary assessment and certification processes. And because reported Subject Results would be used directly as input to tertiary selection procedures, there would be no place for the current process of assigning SAIs and attendant concerns about gaming and fairness in assigning students to SAI "rungs".

Assessment activities Teacher **Tertiary** Student Subject designed selection activities marks result procedures (one externally Marked using Multi-Addition of marks Sum of Input set) activity-specific on assessment point marks marking schemes scales activities

Figure 14: Proposed process for arriving at students' Subject Results

Moderation processes

Our reflections on moderation processes

The certification of students' Subject Results depends on assessment information that can be reliably compared across teachers and schools. This, in turn, depends on students being assessed on the same syllabus outcomes in broadly similar (if not equivalent) ways, and on the accurate and consistent judgment of students' performances. The purpose of moderation is to ensure that these conditions are

met. Moderation applies only to teacher-designed and assessed activities. In the case of externally set and marked assessment activities, QCAA will need to implement procedures to ensure that performances on these activities are marked consistently.

As noted above, concerns were expressed to the Review about how well some elements of the current moderation system are working, including the work of review panels. Some stakeholders expressed the view that there had been slippages in the rigour of moderation processes over time. There was a particular concern that moderation had become too "confirmatory" in the sense that panels were seeing their task as one of confirming teachers' assessments rather than providing independent evaluations of the quality of student work. There were also concerns about the lack of authoritative feedback to schools.

We believe that the moderation process needs to be strengthened in two ways: by introducing more rigorous procedures for evaluating and endorsing the equivalence of teachers' planned assessment activities before they are implemented; and by using blind re-assessments of students' performances to confirm the consistent application of marking schemes across schools.

The relative importance of these two aspects of a strengthened moderation system is likely to vary depending on the nature of the assessment activity.

For some activities it will be especially important that the equivalence of teachers' planned assessment activities is established before the activities are undertaken. For example, in Mathematics C, one of the specified assessment activities could be an extended "modelling and problem solving" task in which students answer a set of questions to assess their ability to recall, access, select and apply mathematical definitions, rules and procedures and to apply problem-solving strategies and procedures. Teachers in schools would develop the questions that make up this assessment activity.

Our reflections on moderation processes

For such an activity, it would be especially important that QCAA examined and confirmed the equivalence of teachers' sets of questions. This process would include evaluating the alignment of each question set with the intended syllabus outcomes (including coverage and balance), and also their levels of demand. The purpose would be to ensure that no particular teacher's set of questions was significantly easier or harder than other teachers' question sets. For an assessment activity such as the Mathematics C "modelling and problem solving" example, the moderation process also would include a check on the consistency with which the QCAA marking scheme for that activity was applied in each school.

For other kinds of assessment activities, the main focus of moderation is likely to be on confirming that the marking scheme has been applied in a consistent manner by all teachers. For example, in English, one of the specified assessment activities could be an "analytical exposition – extended response" task in which students respond to an unseen question based on an in-depth study of a complete literary task under supervised conditions in one uninterrupted session. Teachers would develop the questions that students would answer.

Again, it would be important that the questions teachers asked provided broadly equivalent levels of challenge. One teacher's question could be: "Analyse the ways Shakespeare positions his audiences to view a male or female character in the play you have studied. You should consider the cultural and social assumptions about men and women that existed and operated during Shakespeare's time and evaluate how a contemporary reader might respond to the play." Some preassessment consideration and endorsement of teachers' planned questions for

their equivalence would be important, but for an activity of this kind, this would be a less onerous process than for the Mathematics example.

Instead, the priority in the moderation process would be on confirming that the marking scheme for evaluating students' performances on this assessment activity was applied consistently by all teachers. We believe this process could be strengthened by having teachers meet to undertake blind re-assessments of samples of students' responses to this activity.

Moderation of the kind we envisage would represent a significant shift from current practice. Rather than including the meeting of panels to review entire student folios, moderation would occur for each assessment activity separately. The purpose would be to endorse teachers' proposed assessment activities for their equivalence prior to use, and to confirm that marking schemes had been applied consistently. This post-assessment aspect of the moderation process also would be different from current practice in that it would make greater use of blind re-assessments of student work. Under this process, there would be no end-of-year moderation procedures and no collection and review of entire folios of student work.

Selecting students for admission to tertiary courses of study

Currently, QCAA ranks students for university selection in the form of the OP and the five FPs.

Inputs into the ranks constructed by QCAA are the SAIs provided by schools (see Figure 1) and group results on the QCS Test. SAIs and Levels of Achievement in Authority subjects have a different population base. All students who study an Authority subject are awarded a Level of achievement; only OP-eligible students are assigned an SAI. The distribution of Levels of Achievement in a subject in a school includes the placement of students on one of ten "rungs" within an achievement band. District panels review this information and the student work underpinning it (five sampled folios per subject per school). It is on the basis of the school's approved distribution of Levels of Achievement and relative placement of students on rungs that SAIs are assigned to students

For each subject in each school, teachers assign SAIs. Those students' SAIs are then scaled against the QCS score distribution for that subject group. Each student's best five scaled SAIs (or equivalent for students who have not done five subjects for four semesters) are summed to produce the student's OAI (Overall Achievement Indicator). The final step in the scaling process is to scale the OAIs for all students in a school against their QCS Test score distribution. The result is the scaled OAI which is treated as directly comparable across all schools.

The state distribution of scaled OAIs is divided into 25 bands, with pre-determined percentages of students being assigned to each band. These bands are referred to as Overall Positions (OPs). Students whose OAIs fall within the same OP band are said to have the same OP.

In addition to this main student ranking, QCAA calculates five additional ranks known as Field Positions. Each FP is calculated not by weighting subjects equally as in the construction of the OP, but by weighting subjects differentially based on the contribution each subject is believed to make to each field. The five fields are: A. extended written expression involving complex analysis and synthesis of ideas; B. short written communication involving reading, comprehension and expression in English or a foreign language; C. basic numeracy involving simple calculations and graphical and tabular interpretation; D. solving complex problems involving mathematical symbols and abstractions; and E. substantial practical performance

Current arrangements - selection

involving physical or creative arts or expressive skills. FPs are reported in 10 bands, from 1 (the highest) to 10. Not all OP-eligible students are eligible for five FPs, nor would they be expected to be given that subjects are weighted differently in each of the fields and students take different combinations of subjects. (Tertiary institutions report that the specification of particular FPs for particular tertiary courses usually provides little additional help in differentiating among course applicants.)

Selection for entry into tertiary courses tends to be based on a staged selection process in which universities consider increasing amounts of information in an attempt to differentiate among applicants. In the original design of the OP system, the sequence was OP, then FPs, QCS Test grade, and Levels of Achievement. In practice today, when further differentiation is required between students with the same OP applying for the same course, an ATAR is used after FPs. Levels of Achievement in prerequisite subjects, school reports, additional information supplied by the applicant, or QCS Test grade may also be included in the process at this stage.

Current arrangements - selection

At the present time, QCAA constructs an ATAR for each OP-eligible student. However, students are not notified of their ATARs when they receive their OPs and FPs – a fact that is not well known. An ATAR provides a more fine-grained identification of students' positions within the state distribution of scaled OAIs. The ATAR differs from ATARs in other states in that it does not attempt to infer positions within the entire age distribution, but reports positions within the OP-eligible student distribution. QTAC does not receive a full list of applicants' ATARs directly from QCAA. If, after considering the OP and relevant FPs, QTAC requires finer information to distinguish between applicants, QTAC asks applicants to approach QCAA for their ATARs. QCAA provides applicants with their QCS Test percentile ranks at the same time.

Year 12 completers who are not eligible for an OP and who wish to enter a tertiary institution may apply for a QTAC Selection Rank from 1 (lowest) to 99. The selection rank enables OP-eligible and OP-ineligible students to compete for tertiary places. Ranking is based on results in Authority and Authority-registered subjects, VET units of competency/modules, and QCS Test grade if available (but only if it would affect the ranking in a positive way). A numerical value is assigned to results before they are summed. No scaling is undertaken. A "look-up" table provides the conversion of a QTAC ranking into an OP, which is referred to as an "equivalent" OP; for example, in 2012, 77–79 points was treated as equivalent to OP11.

Input to the Review

The Review's consultations with schools and universities in relation to tertiary selection identified just a few key concerns. In general, the concerns of universities were not the same as the concerns of schools.

What they said about current arrangements - selection

For a number of universities the primary concern was for access to sufficiently fine-grained information to discriminate among applicants. This was a particular concern for some universities and in relation to high-demand university courses. Consultation sessions sometimes began with university staff stating that they required an ATAR to enable them to select applicants. In support of this position, they referred to the short time period in which selection decisions have to be made over the summer, the magnitude of the administrative load, the need to be able to differentiate among applicants presenting with the same OPs and FPs, and the problems faced by Queensland students who apply for entry to universities

in states that already have ATARs. The need for fine-grained information for selecting some applicants ahead of others was the overriding issue for universities.

Universities also referred to an "unfair binary system" resulting from the use of the QTAC table to "compare" OPs and QTAC Selections Ranks, thus allowing OP-eligible and OP-ineligible students to compete for tertiary places. The two ranking devices are clearly not comparable. Only Authority subjects count for the OP while all senior studies count for the QTAC Selection Rank; and differences between subjects are dealt with by scaling against QCS Test group results for the OP, while no scaling is used in constructing the QTAC Selection Rank. QTAC's response to the increasing number of OP-ineligible students seeking entry to university had been a pragmatic one.

For many in the school sector the binary system was also a concern, but for a different reason. While the universities' concerns related to fairness and comparability, the school sector's concerns related to the perceived gaming of current arrangements.

It was noted that the proportion of OP-eligible students had declined over time – from around 80 per cent to just on 50 per cent over 20 years, with growth in the number of students seeking entry via the alternative QTAC Selection Rank. A view expressed to the Review was that some schools are choosing to put less able students through the QTAC Selection Rank in an attempt to maximise their chances of being selected for university entry while, at the same time, maximising the QCS Test scores of those who remained. It was believed that this was being done by ensuring that students either did not complete five Authority subjects (or equivalent) or did not sit the QCS Test, thereby making them OP-ineligible. The emergence of this dual system, and the gaming it has enabled, were seen as significant problems that had undermined confidence in the fairness of current tertiary entrance processes.

What they said about current arrangements - selection

The issue here, identified through the concerns of the universities and the schooling sector, is not the OP itself, but the question of how to deal with otherwise ineligible students who seek entry to tertiary institutions. In many other jurisdictions, there is no separate schedule for students not taking the standard tertiary pathway and these students often are not eligible for tertiary entry.

Another concern of many in the school sector is that the increasing use of the OP as a public measure of school performance is having a distorting effect on schools' practices. Schools commonly use OP results in their marketing efforts, for example, by advertising the number of OPIs achieved by students in the previous year. The Review was told that the current emphasis on OP results sometimes puts school staff under pressure to maximise these results. The discourse has the results belonging to the school: "Smith College got 15 OPIs" is not about individual students doing well; it is about school identity.

There has been additional pressure on schools since 2006 when the publication of outcomes was introduced. Two opportunities to influence OPs are through the school's determination of the SAI distribution and the preparation of students for the QCS Test. There are concerns in schools about the manipulation of SAI distributions and the role that the QCS Test now plays in the senior secondary school.

As a result of the public profile now given to schools' OP results, the QCS Test has emerged with the stigma of being a major external examination for Year 12s in Queensland. There are now significant commercial QCS Test preparation businesses that schools are accessing and using in an attempt to maximise the OPs of their students. Inordinate amounts of time spent on preparing for the QCS

Test take students and teachers away from the main learning game. This is not to deny the usefulness and value of making explicit the CCEs in the teaching-learning process, but that aspect of the QCS Test seems to have been lost along the way. And widespread concerns about how other schools might be manipulating SAI distributions to maximise students' OPs (even though many of the described practices are unlikely to have the desired effect) are creating unfortunate comment and tension within the system.

What they said about current arrangements – selection

Other concerns were expressed about myths and misunderstandings that have evolved in relation to current selection processes, some apparently having been resurrected over the past decade. The fact that the OP is so often referred to as a "score" when it is actually a position relative to other students and not an absolute measure of achievement indicates how little understanding there is of the concept of an order of merit and of the queuing of students seeking entry to university courses. Some misunderstandings relate to beliefs about how QCS Test results and subject choice influence students' OPs. These beliefs are having backwash effects on subject choice that are not always in the best interests of individual students.

In summary, the Review found very little support for the maintenance of current tertiary selection arrangements. The universities, in general, would prefer to see current arrangements replaced by an ATAR. In their view, the OP does not provide the differentiation they require, and FPs and QCS Test grades are largely ineffective in b reaking ties. Schools and parents have concerns about the fairness of aspects of current processes, particularly the use of the QTAC Selection Rank to bypass the OP, the role and emphasis given to the QCS Test, and perceived gaming in two different aspects of the system – assigning SAIs and changing OP-eligible status.

Our reflections

Through the course of this Review, we were struck by the extent to which many stakeholders continue to see and treat the senior years of school as preparation for tertiary study rather than as an important phase of learning in their own right. We were also struck by a lack of understanding of the OP system by many who are part of the system. This lack of understanding sometimes has resulted in misinformation and clouded the system's existing strengths and weaknesses. The review of current processes and the discussion of proposals for change were sometimes made difficult by limited understandings of how the system currently works and what exactly might be replaced.

Our reflections on selection

For many students, parents, teachers and schools, tertiary selection is a dominating influence on the senior years of school. The OP looms large as the primary measure not only of student success, but also of school quality and performance. Curriculum choices are being made in an attempt to maximise students' chances of being admitted to tertiary study – including choices that make students OP-ineligible in the belief that the QTAC Selection Rank will give them an advantage. The QCS Test, which exists primarily for the purpose of tertiary selection, has become the major assessment event during these years. The profile and attention given to this test, including by the media, is probably unmatched by any other senior school test or examination in the country. And there are widely held concerns about the fairness of the current tertiary entrance system.

The dominating influence of tertiary selection on the senior years of school is especially remarkable given changes in student participation rates in tertiary institutions. Only a small proportion of the large number of students now wishing to attend university fails to be admitted to any university course. The machinery

that has been established to manage competition for entry to tertiary study (SAIs, OAIs, QCS Test, OPs, FPs, ATAR, QTAC Selection Rank) is now largely irrelevant for many courses and some institutions which accept most if not all applicants, and is being maintained for the benefit of those courses that continue to experience competitive entry.

We believe that tertiary preparation and selection are also influencing current approaches to the senior curriculum, which at present is highly subject-focused. Students choose and study subjects – often based on traditional academic disciplines – and are then assessed on how well they perform in the set of subjects they have chosen. This approach can be contrasted with the approach of other senior curricula, such as the International Baccalaureate Diploma Program in which all students are required to take subjects from pre-defined groups (English, languages, social sciences, experimental sciences, mathematics) to ensure breadth of study, and also undertake an "extended essay" focusing on a topic of global significance through the lens of at least two subjects; a "theory of knowledge" course on critical thinking; and activities in the arts and creative thinking, physical activity and service in the community.

Our reflections on selection

Although the details of the senior curriculum were outside our terms of reference, we were surprised at how infrequently matters relating to the curriculum were raised with the Review. In a number of countries the senior curriculum is now under active review and reconceptualisation to provide a greater focus on knowledge, skills and attributes believed to be important for life and work in the 21st Century. Parallel work is underway on methods for assessing skills and attributes such as teamwork, collaborative problem solving, critical thinking, creativity, and presentation and verbal communication skills. We found little interest in the assessment of cross-curriculum skills and attributes; the focus in Queensland, at least in relation to OP-eligible students, continues to be on how students perform in existing subjects/disciplines and on the implications for students' OPs and tertiary entrance. With the exception of some who were familiar with the Queensland system in the 1990s, there appeared to be little appreciation of the fact that the QCS Test was designed to assess skills and attributes that transcend the disciplines. This feature of the test appears to be have been overshadowed by its role as a scaling test for tertiary entrance.

The observation that the senior curriculum is subject-centric applies specifically to tertiary-bound students undertaking Authority subjects. For students pursuing Authority-registered subjects and VET certificate studies – which are beyond the scope of this Review – the Queensland Certificate of Education does recognise and promote creative thinking, physical activity, verbal skills, international learning, service to the community, and many other 21st Century skills. There is a wide diversity of subject choice and a great deal of flexibility available to schools. But for students undertaking Authority subjects, there is little incentive to access other studies because of the strong focus on maximising performance in subjects that count towards the OP.

A single rank order of school leavers?

Our reflections on use of a single rank order

There are now many entry points and pathways by which students are admitted to tertiary courses raises questions about the appropriateness of attempting to place all school leavers in a single queue, regardless of the senior subjects they have studied or the tertiary course or institution to which they are applying. This is effectively what the OP and ATAR do. The construction of a single overall rank order of all senior students is a peculiarly Australian practice. Universities around the world use students' senior secondary results in their selection processes, but

do not expect the school sector to rank their applicants for them. And, rather than attempting to construct a single queue of all school leavers regardless of the institution or course to which they are applying, universities tend to select students on the basis of evidence relevant to individual courses (including the possibility of specifying prerequisites and giving preferential weight to senior studies of particular relevance to a tertiary course). In other words, the ranking of applicants often takes some account of the course to which applicants are applying.

The Australian practice of constructing OPs and ATARs is also peculiar in that it takes no account of standard quality control processes in educational measurement relating to validity and reliability. Under standard processes, the validity of combining results from different sources (e.g. different school subjects) and attempting to summarise them in a single index would routinely be tested statistically. In the tertiary selection context, the question would be whether students with quite different choices of senior subjects can be meaningfully compared and placed in a single rank order.

Under standard psychometric processes, a question also would be asked about the reliability of score differences – that is, are the reported differences statistically significant, or are they within measurement error? In the tertiary selection context, the question would be whether the difference between an ATAR of 90.05 and an ATAR of 90.10 was statistically significant. To the extent that such a difference was not statistically significant, it would be inappropriate to select automatically an applicant with an ATAR of 90.10 ahead of a student with an ATAR of 90.05. The construction of ATARs in Australia operates in the absence of these standard validity and reliability checks.

Our reflections on use of a single rank order

We believe that the construction of OPs and ATARs also can have backwash effects on the senior curriculum. It has sometimes been believed by those in the school sector that the construction of the OP/ATAR as an overall rank to which all accredited (TE) senior subjects can contribute is a liberating influence on the senior curriculum; students are free to choose any combination of subjects and have those subjects count in the construction of their tertiary admission rank. In reality, students, parents and teachers often develop beliefs about which subjects students should take to maximise their OP/ATAR. For example, there is clear evidence in New South Wales of students abandoning the study of the more advanced mathematics course in the belief that they can maximise their results, and thus ATAR, by choosing the less advanced (general) course. Whether such beliefs are valid is largely irrelevant once they become widespread. Our concern is that the mere construction of the OP/ATAR can encourage gaming behaviours of this kind, and that decisions based on attempts to maximise tertiary admission ranks will rarely be in the best interests of individual students.

Throughout this Review, there has been strong support within the university sector for the introduction of an ATAR as the primary selection device in Queensland. If universities choose to construct an ATAR, then decisions will be required about the eligibility rules to apply to Year 12 completers. For example, decisions will be required about the number of subjects to be used (perhaps four rather than the five currently required for the OP) and about any restrictions (or not) on subject combinations. Both of these decisions will require further technical advice and simulations as well as a consideration of their possible effects on students' subject choices. Such decisions have ramifications for schools' timetables and staffing.

The separation of responsibilities

We believe that there is much to be gained from recognising:

- · assessment and certification of student attainment in senior subjects; and
- selection of applicants for admission to tertiary courses

as two distinct but inter-related activities. Each of these activities is important in its own right. Neither exists solely to serve the other.

There are several reasons why this essential distinction has been blurred historically. First, the earliest assessments of student attainment in the Australian senior secondary school were undertaken by university examination boards for the purposes of university entry. The work of these boards was later passed to statutory school curriculum and assessment authorities. Second, a major use of senior subject results continues to be their use in tertiary selection processes, particularly in the construction of OP/ATAR ranks. Third, school curriculum and assessment authorities have sometimes continued to construct tertiary admission ranks on behalf of universities.

Currently, QCAA undertakes an extensive set of activities that go beyond assessing and certifying student attainment in senior subjects. These activities are undertaken solely for the purposes of ranking applicants to tertiary courses and include developing, administering and marking the QCS Test; gathering and checking SAIs from schools; scaling SAIs and OAIs against the QCS Test; constructing OPs; applying subject weights to construct the five FPs; reporting QCS Test results as grades and percentiles; and constructing ATARs, which are not provided to students except on request.

Our reflections on the separation of responsibilities

We believe that, as a matter of principle, there should be a separation of responsibilities, with QCAA taking responsibility for the assessment and certification of student attainment in senior subjects, and universities taking responsibility for defining the basis on which their future students will be selected and, where necessary, taking responsibility for any computations required as the basis for selection decisions. The task of defining the basis for selection would include deciding on the criteria to be used in selecting some course applicants ahead of others; producing rank orders of applicants as required; specifying prerequisites as appropriate; and undertaking any scaling, weighting or combining of evidence used in selection decisions.

The benefits of such a separation of responsibilities, we believe, would be an explicit recognition and clear message that the purposes of senior secondary schooling are much broader than preparation for tertiary study. The work of QCAA would be focused on ensuring high-quality assessments and certification of attainment in senior secondary subjects. This is a major task in its own right, requiring a new level of attention and accompanying resources. And, rather than relying on the school curriculum and assessment authority to rank their applicants for them, universities would be required to give a new level of attention to the criteria and processes they use to select some applicants ahead of others.

In practice, we see QTAC undertaking selection tasks such as scaling available evidence and constructing student ranks as part of its existing centralised tertiary application system. With universities determining their own admission requirements and principles of selection, QTAC would continue to ensure that these admission rules and related procedures were correctly administered on behalf of individual universities.

Whether or not all Queensland universities choose to collaborate to construct a single ranking of all school leavers in the form of an ATAR, or choose other ways to rank applicants to tertiary courses, ultimately is a decision for them. We are convinced that, if Subject Results were reported as marks that could be compared across teachers and schools – as we propose – then there would be nothing to prevent QTAC from using an inter-subject scaling process of the kind used in a number of other Australian states to produce an adequate tertiary admission rank.

Transparency

Whatever the processes used to compare and select applicants to tertiary courses, it is essential that these processes are publicly transparent and fair to all applicants. Students have a right to know the criteria underpinning course selection decisions and must believe that decisions to select some applicants ahead of others are made fairly.

There is often a lack of transparency in tertiary selection processes and suspicion about the fairness with which selection decisions are made. Fuelling these suspicions are the QTAC Selection Rank, the equivalent OPs it provides, and concerns about how schools may be using this alternative route. Adding to the lack of transparency is the ability of universities, through QTAC, to request additional information to differentiate among students with the same OP and where FPs do not assist – information that can include an ATAR and an applicant's percentile rank on the QCS Test. There are questions about whether students doing the QCS Test realise that their QCS Test percentile rank can be used and whether they are aware of the existence of the ATAR and how it can be used (although it is mentioned in QTAC publications). The use of additional information of these kinds can leave applicants unclear about the basis on which they were accepted or rejected for entry into tertiary courses or even oblivious to the measures that can be used.

Although questions can be asked about the validity of the ATAR and its attempt to provide a single ranking of all students regardless of the senior subjects they studied or the tertiary courses and institutions to which they are applying, and about the meaningfulness of ATAR differences reported in twentieths of a percentile, in Australian states that use an ATAR, at least there is greater transparency about the basis on which students are compared and selection decisions are made.

We believe that current selection processes are not sufficiently transparent and that any new arrangements introduced by universities must be designed to provide tertiary applicants with greater clarity about the criteria on which they are being selected.

Recommendations

A general conclusion of this Review is that senior secondary assessment and tertiary entrance in Queensland are in need of attention. It is more than twenty years since the current OP system was designed, and the broad features of the senior assessment system have been in place even longer. Over the past two decades, assessment and tertiary entrance processes have been the subject of ongoing modifications. Although the current processes have served Queensland well, we believe that they will be less adequate in meeting future needs and that the time has come for a redesign.

Any redesign must recognise and preserve strengths of the current arrangements. The challenge is to design senior assessment and tertiary selection processes

Our reflections on transparency

appropriate to Queensland in the 21st Century, rather than attempt to reconstruct arrangements from the past or to adopt solutions from elsewhere. We include among the strengths of existing Queensland arrangements the use of classroom teachers' judgments of students' performances and work, and believe that this aspect of the current system must be preserved as a significant element of future assessment arrangements.

The following recommendations list major features of our proposed redesign. It has not been possible in a Review of this kind to develop detailed implementation plans to accompany these recommendations. We recognise that this more detailed work is essential and will need to be undertaken prior to implementation. We also recognise that our recommendations have resourcing implications. A higher level of investment will be required to build the 21st Century system we envisage. And beyond this, there are likely to be implications for capacity building within the responsible agencies: QCAA and QTAC.

The current OP system

It is clear to us that the current OP system no longer functions as originally envisaged and is reaching the end of its usefulness. Shortcomings identified by the Review include:

- difficulties in translating the OP's theoretical basis into practice, with almost 50% of Year 12 completers being considered for university entrance on the basis of criteria other than the OP, most notably a ranking of OP-ineligible students that does not take account of differences in subject difficulty or subject-group enrolments;
- the inadequacy of OPs and FPs as a basis for differentiating among applicants to highdemand tertiary courses, and the construction and use of ATARs instead;
- the bypassing of the OP system through the use of the QTAC Selection Rank and associated concerns that schools may be directing students to this alternative route as a way of maximising their "OP" (actually OP-equivalent);
- the inability of FPs to provide the envisaged additional discrimination among applicants to high-demand tertiary courses;
- the increased and unhelpful status of the QCS Test as the major external examination and key assessment event during the senior secondary years;
- concerns about the amount of coaching that schools are accessing and providing for the QCS Test;
- the complexity of the current system with its subject Levels of Achievement, QCS Test grades, SAIs, QCS distribution parameters, OAIs, OPs, FPs, ATAR, QCS Test percentiles and QTAC Selection Rank, some of which have been introduced on an *ad hoc* basis; and
- a lack of transparency in current selection processes, with applicants sometimes unaware of the basis on which they are considered for admission to tertiary courses.

We found little support for the current OP system either among schools or universities, with these two groups usually expressing different concerns.

Recommendation 1

The OP system should be discontinued and the interface between secondary completion and university selection should be redesigned. The implications are that SAIs would no longer be generated, OAIs, OPs and FPs would no longer be calculated, and the QCS Test would be discontinued. Under the new model, Subject Results would be reported on a finer scale for use by universities in their selection decisions.

The separation of responsibilities

A central feature of the redesign we are proposing is the separation of responsibility for the certification of student attainment in senior subjects from responsibility for the selection of students for admission to tertiary courses of study. We see this as a fundamental distinction. At the present time, this distinction is blurred by the fact that the school curriculum and assessment authority undertakes work to produce rankings of applicants for tertiary selection purposes. These rankings are in the form of the OP, FPs and ATAR. The work of QCAA includes the development and use of the QCS Test and the scaling of SAIs and OAIs against this test – all for the purposes of tertiary selection.

We believe that a key role of QCAA should be to certify student attainment in senior subjects, and that its role at the interface between secondary completion and university selection should stop there. It is the role and responsibility of universities to decide the criteria on which their future students are selected, including such matters as the specification of prerequisites and any weighting or combining of evidence of student achievement. The ranking of applicants to tertiary courses, and decisions about which applicants are selected and which are not, are properly responsibilities of universities.

Recommendation 2

Responsibility for certifying student attainment in senior subjects should be separated from responsibility for selecting applicants for admission to university courses. The former should be the responsibility of QCAA, working directly with schools. The latter should be the responsibility of the universities and their agent QTAC.

Assessing and certifying student attainment in senior subjects

Subject Results

Under our proposed redesign of the secondary–tertiary interface, the activities of QCAA will culminate in the certification of student attainment in senior subjects. Each student's certified attainment will take the form of a "Subject Result" indicating the overall level of knowledge, understanding and skill the student has attained in that subject by the end of Year 12. Subject Results will be directly comparable across teachers and schools and will be reported on a scale that is fine enough to enable statistically meaningful distinctions and to be useful for tertiary selection purposes.

Importantly, Subject Results will be constructed as stand-alone measures of student attainment in senior subjects and be independent of how those results might subsequently be used (for example, by universities, other tertiary providers or employers). Subject Results will take the place of current Levels of Achievement (and SAIs) and will be the only information about performances in Authority Subjects reported and made available by QCAA.

Recommendation 3

Student attainment in each Authority Subject should be reported by QCAA in the form of a "Subject Result" indicating the level of knowledge, understanding and skill that the student has attained. Subject Results should be directly comparable across teachers and schools and function as stand-alone measures of senior secondary attainment, independently of how they might subsequently be used.

Specified assessment activities

The reliable certification of student attainment in a subject by QCAA depends on the ability to compare students' levels of knowledge, understanding and skill in that subject across teachers and schools. This, in turn, depends on all students in the subject being assessed in similar ways under similar (or identical) conditions. The assessment activities on which certification is based, while not necessarily identical, should be "equivalent" in the sense that they enable the performances of students in different schools to be compared directly.

Concerns were expressed to the Review about variability in the quality of teachers' assessment processes and instruments, the extent to which all schools' implemented assessment programs provide balanced coverage of intended syllabus outcomes, and variation in the level of demand in different teachers' assessment instruments.

We believe the comparability of Subject Results can be enhanced by tightening the specifications of the assessment activities on which certification by QCAA is based. For each senior subject, we are recommending that QCAA identify four types of assessment activities to be undertaken by all students.

For example, in a particular subject, the four activities might be an on-line multiple-choice test of facts and conceptual understandings; a field study with written report; a short-response test of students' abilities to apply their subject knowledge to unseen problems; and a practical exercise in manipulating and presenting data according to the conventions of the subject. In this particular example, all assessments would be completed under supervised conditions except for the written field study report. The parameters for the four assessment activities in each subject – including the nature of each activity, the conditions under which it is to be completed and marking schemes for assessing students' responses – will be specified by QCAA.

To further enhance comparability across teachers and schools, we are recommending that one of the four assessment activities in each subject be externally set and marked by QCAA. We envisage this externally set and marked assessment typically being a test of students' abilities to apply their knowledge, skills and understandings to relevant problems and contexts. If well designed and constructed, externally set assessment activities will enhance the comparability, reliability and validity of students' Subject Results.

These four specified assessment activities will be the basis for certifying student attainment in each Authority subject. Results on the four activities will be combined to produce a student's Subject Result. The four QCAA-specified assessment activities will complement other assessments that teachers make continually as part of their teaching – to establish and understand where students are in their learning, to provide ongoing feedback to students and parents, and to inform day-to-day classroom decision making.

Recommendation 4

The certification of student attainment in each senior subject should be based on a set of four specified types of assessment activities. QCAA should specify the nature of each activity, the conditions under which it is to be completed and the marking scheme for assessing students' performances. One of the four assessment activities should be externally set and marked by QCAA.

Calculating Subject Results

The model we are proposing ensures comparability of Subject Results by first ensuring that assessments of students' performances on each assessment activity are comparable across teachers and schools.

In the case of the externally set and marked assessment activity, this is relatively straightforward because all students will undertake the same task or set of items. We propose that performances on the externally set and marked activity in each subject be reported as integers on a scale of 1 to 30, with the possibility of a mark of zero being assigned for no attempt or lack of evidence of achievement.

In the case of the three assessment activities set and marked by teachers (using the parameters and marking scheme specified by QCAA), external moderation will be required to ensure that teachers' local assessments satisfy the QCAA parameters for each activity and that performances are marked consistently across teachers and schools. We propose that each of the three School Assessments be marked on a scale of 1 to 10, with the possibility of a mark of zero being assigned for no attempt or lack of evidence of achievement. Marks will be assigned by teachers in a two-stage process – first by judging the "level" of a student's work (based on five levels with up to five accompanying descriptions of performance developed by QCAA specifically for that assessment activity), and then by deciding whether the student's work is in the Upper or Lower half of that level (see Figure 15).

Figure 15: A marking scheme for a School Assessment activity



Each student's Subject Result will then be calculated as the simple sum of the student's marks on the four assessment activities and reported on a scale of 1 to 60. Results in all subjects will be reported on this 60-point scale as integers only.

We envisage QCAA designing a Senior Statement (or a newly designed formal record of achievement) that will contain information to accompany Subject Results. This additional information might include performance descriptors and diagrammatic representations of students' results against distributions of Subject Results in each year.

No assessment information other than students' Subject Results (marks out of 60) should be transmitted by QCAA to QTAC.

Under our recommendations, the comparability of students' results in each subject rests on the specification of the three School Assessments by QCAA; the checking of schools' local assessment processes and instruments against these specifications; checks on the consistency with which teachers apply each 10-point scale in assessing student performances; and the use of an externally set and marked assessment activity (External Assessment).

Our proposal is that effort and resources be invested in ensuring comparability at the level of each of the four assessment activities. With this achieved, we see no requirement for – and indeed recommend against – the statistical scaling of teachers' assessments against the external assessment activity.

We also strongly recommend against attempting to combine features of past arrangements with the future assessment and moderation processes we are recommending. For example, there will be no need under our recommendations for judgments about students' "overall" performances in a subject or for the collection and review of end-of-year folios of student work. Any attempt to retain past features in this way would be an unnecessary expense, would complicate the straightforward processes we are recommending, and is likely to confuse schools.

Recommendation 5

Students' Subject Results should be reported as integers on a scale of 1 to 60. Each Subject Result should be calculated as the sum of a student's mark on the external assessment (in the range 0 to 30) and marks on the three assessment activities set and marked by teachers (each in the range 0 to 10). Teachers' assessments should not be statistically scaled against the external assessment.

External Assessments

We are recommending that, in each subject, three of the specified assessment activities (the "School Assessments") be devised and marked by teachers according to parameters and guidelines provided by QCAA and that one assessment activity (the "External Assessment") be set and marked by QCAA. We believe that the inclusion of the externally set and marked activity will improve the validity of the assessments and the comparability and reliability of students' Subject Results. We also believe that, in most subjects, factual and procedural knowledge and the ability to apply subject-specific understandings to relevant issues and contexts can be efficiently and validly assessed using a common (that is, state-wide) test. We are recommending that the External Assessment contribute 50 per cent of the marks added to produce the Subject Result.

The four assessment activities for each senior subject should be designed to provide appropriate coverage of the subject syllabus and to address different kinds of learning and achievement within that subject. With this in mind, we recognise that an external assessment contributing 50 per cent of the Subject Result may not be appropriate for every subject. A decision will be required about the appropriateness and practicability of developing an External Assessment in subjects such as Dance and Drama. In such subjects, it may be more appropriate for the externally set and marked activity to be based on direct observations or recordings of performances than on a written test, and it may be appropriate for this activity's contribution to the Subject Result to be less that 50 per cent. In Languages other than English it may be appropriate that there is no External Assessment. These are judgments that will have to be made at the level of individual subjects by Expert Subject Groups. However, for the majority of senior subjects, we recommend that the External Assessment contribute 50 per cent of the Subject Result. We also believe it is important that subjects are not classified, stereotyped or valued differently on the basis of the External Assessment's contribution to the Subject Result.

We recognise that it may not be practicable – due to resourcing constraints – to develop External Assessments for all senior subjects. For example, it may not be practicable to develop such assessments for subjects with small enrolments such as Art. We recommend that priority be given to resourcing the development of External Assessments for all large-enrolment subjects, and that for subjects with smaller enrolments, External Assessments be developed where it is practicable and appropriate given the nature of the subject. Low-enrolment subjects that are university prerequisites or obvious precursors to successful university study, and subjects for which QCAA has already begun developing on-line assessments, also should be prioritised.

The External Assessment activity in each subject will be developed annually by QCAA. The nature of the activity will be appropriate to the subject and so is likely to vary from subject to subject. Most External Assessments will take the form of written tests (either paper-based or online) taken at the same time in all schools under supervised and timed conditions. We anticipate that many will include multiple-choice, short answer (open-ended or constrained response) or extended writing.

Results on the External Assessment in each subject should be recorded as marks (integers) from 0 to 30. We recommend that QCAA monitor the distribution of students' marks across this range for each External Assessment and give consideration to routinely scaling marks to ensure that the full range of marks on the 1-30 scale of External Assessments is used. Strategies might include linearly rescaling by setting the minimum at 1 and the maximum at 30, or to set the mean and standard deviation at fixed values (for example, 15 and 5), in each subject.

We also recommend that QCAA monitors the quality of the External Assessments developed for senior subjects. Where possible, the statistical methods used to monitor psychometric quality in national and international assessment programs also should be used to monitor the psychometric properties of tests developed by QCAA. Routine monitoring of this kind will become easier as External Assessments are increasingly completed online.

Recommendation 6

An External Assessment in each subject should be set and marked by QCAA and completed at the same time under the same supervised conditions in all schools. If resourcing is an issue, priority should be given to developing External Assessments for subjects with high enrolments, subjects which are foundational for university courses, and subjects for which external assessment is most practicable. For the vast majority of senior subjects, the External Assessment should contribute 50 per cent of the Subject Result.

School Assessments

We are recommending that, in each senior subject, three School Assessments be set and marked by teachers in their schools. The general specifications for these three School Assessments will be developed by QCAA. The three assessment activities could take a variety of forms, depending on the nature of the subject, including projects, reports, investigations, orals, practical work, performances, presentations, essays, mid-semester tests, and the production of artefacts. Although QCAA will specify the nature of each of the three School Assessments for a subject, and the broad intentions and parameters for each activity, schools will design the details of the local assessment activities and instruments. QCAA already produces high-quality examples of these forms of assessment. The three School Assessments and the External Assessment should be designed jointly to provide appropriate coverage and balance of the subject syllabus and in general should address different kinds of learning and achievement within the subject.

QCAA also will develop a marking scheme for each of the three School Assessments. Each marking scheme will consist of five levels and up to five accompanying descriptions of performance to anchor these levels substantively. Marking schemes will be developed by Expert Subject Groups comprising academics, teachers, and curriculum and assessment experts. (Stringent selection criteria should apply in establishing Expert Subject Groups and consideration should be given to remuneration levels that will attract highly experienced teachers.) The marking scheme will be used to assess and record students' performances, based on a two-stage process in which teachers first decide the appropriate level and then decide whether the student's performance is in the upper or lower part of that level. In this way, performances on each School Assessment will be recorded on a scale of 1 to 10 (with the possibility of a student being assigned a mark of zero for no attempt or lack of evidence of achievement).

Our proposal represents a departure from the current "criteria and standards" approach to assessing performances on assessment instruments and activities. Under our approach, the current criteria – that is, the major aspects or dimensions of achievement identified in subject syllabuses – play an important role in the design of the assessment activities and in defining what it means for a student to do well in a subject. The three School Assessments and the External Assessment are designed jointly to provide appropriate and balanced coverage of these major aspects of achievement, and the corresponding marking schemes are designed to capture evidence of these achievements. However, our methodology does not involve teachers making separate judgments of performance against standards for a subject.

Instead, teachers assess students' performances on each of the three School Assessments separately (each on a scale of 1 to 10). It is the responsibility of the Expert Subject Group to ensure that the levels are defined in a way that provides an adequate distribution of student results across the ten-point scale. It will be important that these are piloted ahead of implementation. The (up to five) level descriptors may need to be adjusted from time to time to ensure that the distribution of student results remains appropriate (for example, to counter long-term drift in performances over time).

Recommendation 7

Three School Assessments should be specified for each subject. The nature, intentions and parameters for these three assessment activities should be specified by QCAA, with teachers in schools annually designing local versions of each. The three School Assessments and the External Assessment should be designed jointly to provide appropriate coverage and balance of the subject syllabus and in general should address different kinds of learning and achievement within the subject.

Moderation of School Assessments

An important feature of our proposed redesign is the maintenance of teacher judgment as a key element of the assessment process. We believe that many of the intended learning outcomes of senior subject syllabuses are best assessed by teachers using evidence collected through student projects, presentations, reports, performances, essays and other products of student work.

A difference between our proposal and current practice is that, for the purposes of certification, teacher judgments will be made of students' performances on three assessment activities (the School Assessments), the broad parameters of which will be specified by QCAA. Teachers will design annual instantiations of each School Assessment and marking schemes that allow students' performances to be interpreted and reported in terms of the 10-point scale (QCAA's marking scheme) for that assessment.

On any given School Assessment, the comparability of teachers' assessments will depend on: (1) the consistency of locally devised activities/instruments with the QCAA parameters for that activity; and (2) the consistency of teachers' interpretations of the corresponding 10-point scale. The "moderation" model that we are recommending will test the consistency of these two aspects of teachers' assessments.

The first component of the moderation process we are referring to as the "endorsement" of schools' proposed assessment activities. This process will occur prior to any use of School Assessments and will be undertaken by "Assessment Supervisors" appointed by QCAA. They will review schools' proposed assessment activities and marking schemes from the point of view of appropriate coverage of the syllabus, appropriate level of difficulty, and the opportunity for students to engage at different levels (ensuring some success for less advanced students, but also challenging more advanced students). An important aspect of the endorsement process will be the comparison of schools' proposed activities in terms of their levels of demand. If necessary, Assessment Supervisors will order revisions before assessments are endorsed.

For example, if one of the specified School Assessments is a multiple-choice mid-semester test, then Assessment Supervisors will review schools' proposed test questions (and their keys). If a particular school's test is considered to be inconsistent with the QCAA specifications for that assessment activity or to be significantly different from other schools' tests in terms of its level of demand, then there would be a requirement that it be resubmitted to QCAA for endorsement. We recognise that this endorsement phase of the moderation process will be resource intensive. But we also see it as essential to ensuring that students in different schools are assessed in similar ways.

The second component of the moderation process we are referring to as the "confirmation" of schools' applications of marking schemes. This process will occur after the School Assessments have been completed and marked. Teachers will meet to undertake blind re-assessments of students' performances against the 10-point scale for each School Assessment. The purpose will be to ensure accuracy and consistency in the way teachers apply the marking scheme. If a particular school is judged by the meeting to have been too harsh or too lenient in its allocation of marks on the 10-point scale, then there will be a requirement that the work of all students in that subject in that school be re-marked and resubmitted. QCAA will develop a plan for sampling assessments, subjects and schools over the life of an assessment program.

As a further check, we are proposing that QCAA annually undertake a light sampling and blind re-assessment of student work in sampled schools. This process will assist in ensuring the comparability of results across all schools. If a problem is identified, all student work in that subject in that school will be re-marked.

Finally, we see value in a check of a different kind. Although the four assessments in each subject will be designed to assess different aspects of student learning in the subject, and so will not necessarily be highly correlated, we believe that there would be value in routinely checking each school's marks on the four assessments for anomalies. Examples include a school in which students' marks are very much higher on the three School Assessments than on the External Assessment (or vice versa), and where one of the School Assessments is very much higher than the other two. These are predictable patterns, but other less predictable anomalies also may occur. We recommend that QCAA check routinely for anomalies and investigate and resolve any that are identified before verifying students' marks on the four assessments. Once anomalies are resolved, the "ratification" of students' Subject Results for certification follows.

Because the moderation of students' results will be conducted for each assessment activity over the course of at least a year (typically all in Year 12 but possibly one at end of Year 11 for some subjects), students will most likely know their marks on all assessments. It is therefore likely that they will have expectations of their Subject Results. It is possible that resolution of anomalies will affect some students' Subject Results. For this reason and for equity more broadly, an appeals process should be available to students after they receive their Senior Statements from QCAA. QTAC will need to be involved in discussions about the design of this process.

Recommendation 8

QCAA should assure the validity and reliability of School Assessments in each subject through a revised approach to moderation that includes three elements: "Endorsement"; "Confirmation"; and "Ratification".

- Endorsement of proposed assessment activities For each of the three School
 Assessments, QCAA checks locally-devised assessment activities/instruments and
 marking schemes for their consistency with QCAA specifications and endorses their
 use with students.
- Confirmation of accurate application of marking schemes For each of the three
 School Assessments, QCAA checks that schools' applications of marking schemes
 are accurate and consistent across teachers and schools. This is done through
 "moderation" meetings in which teachers undertake blind re-assessments of student
 work against the relevant 10-point scale. QCAA also conducts annual spot sampling
 and blind re-assessments to check the consistency of marking across schools. Where
 a problem is identified, all student work in that subject in that school is re-marked.
 QCAA will determine which assessments in which subjects in which schools will have
 moderation meetings in a particular year.
- Ratification of Subject Results At the end of Year 12, QCAA checks each school's
 results on the four assessments for anomalies. If anomalies are identified, then
 these are investigated and resolved before verifying students' marks on the four
 assessments. Once anomalies are resolved, the ratification of students' Subject
 Results for certification follows.

An appeals process will be available to students after they receive their Senior Statements from QCAA (or in some other way as determined by QCAA). QTAC should be included in discussions about the appeals process.

Assessment Supervisors

The changed moderation processes we are proposing will require a different understanding of the purpose and essential components of moderation. We believe that there will be a need to identify and train teachers who can lead the introduction and roll-out of these new processes. We are proposing that the QCAA establish a new role, "Assessment Supervisor". Assessment Supervisors will be responsible for ensuring the equivalence of schools' proposed assessment activities, confirming the accuracy and consistency of schools' use of marking schemes, and detecting and resolving anomalies as part of the ratification of Subject Results.

Assessment Supervisors will be a guild of teachers, heads of department, or deputy principals, respected by their peers and appointed on the basis of their subject expertise, demonstrated knowledge of assessment principles and practice, understanding of the operational model for moderation, and ability to act with authority and decisiveness. The method of appointment will be determined by QCAA (secondment, part-time working out of school, re-assignment of existing QCAA staff, and so on). The number of Assessment Supervisors will be constrained by financial considerations. We believe that some current QCAA staff have the skill sets required for the role of Assessment Supervisor, and could be allocated to this work through a restructure of the QCAA Brisbane office. We strongly suggest that QCAA give priority to funding the maximum possible number of Assessment Supervisors. The effectiveness of the revamped moderation system we are recommending will, fairly or unfairly, be one of the measures of confidence in the decision to retain school-based assessment.

Recommendation 9

QCAA should establish a guild of Assessment Supervisors to lead the proposed moderation processes (the endorsement of assessment activities; the confirmation of the accurate and consistent application of marking schemes; and the ratification of Subject Results) and to assist in teacher capacity building.

Senior External Examinations

Currently, QCAA develops "Senior External Examinations" in 21 subjects under the provisions of the *Education (Queensland Curriculum and Assessment Authority) Act 2014* and associated regulations and amendments.

These examinations are based on an external syllabus that sets out the aims, objectives, learning experiences and assessment requirements for each subject and are conducted throughout the state in October and November of each year. The Senior External Examination is intended for Year 12 students enrolled at a Queensland secondary school who are unable to study particular subjects at their school, and for Queensland residents of any age not enrolled at a Queensland school.

We considered a number of factors: the history of the examinations, the number and nature of the school and non-school populations taking these examinations, the existence of a dual system for students in schools, the almost negligible number of non-school students taking these examinations, and the uniqueness in Australia of a single examination undertaken outside a school counting for certification and tertiary entrance purposes. We considered the effect on school-based candidates and non-school-based candidates if these examinations were no longer available. We were unable to find a reason for the existence of these examinations now. There are many alternatives for people wishing to gain a tertiary entrance rank or meet prerequisite requirements for further study. Most importantly, in the case on school-based students, there is no place for a single external examination in a redesigned system of senior assessment and tertiary entrance with its fusion of external and school assessments.

We are recommending that Senior External Examinations in all 21 subjects be discontinued and there be only one mechanism for obtaining a result in an Authority subject for certification or tertiary entrance purposes – the completion of the four assessment activities specified by QCAA for that subject (the three School Assessments and one External Assessment).

Recommendation 10

The Senior External Examinations currently developed by QCAA should be discontinued. Instead, all students who are undertaking an Authority subject should be required to complete the four assessment activities specified by QCAA for that subject (the three School Assessments and one External Assessment).

Selecting students for admission to tertiary courses of study

Transparency in tertiary selection

In comparison with tertiary selection processes used in some parts of the world, the evidence used to select applicants to Queensland institutions is often complex and not always particularly transparent. Even for applicants who have completed Authority subjects in the senior secondary school, the basis on which some applicants are selected ahead of others can be obscure. Some selection decisions are based solely on applicants' OPs. However, if universities are unable to differentiate on the basis of OPs, then they may also consider applicants' FPs. If this still does not provide the differentiation universities seek, they may use Levels of Achievement in senior subjects and QCS grade (unlikely to be fine enough), or request other evidence, including applicants' ATARs and their percentile ranks on the QCS Test. All of this means that students may be left unclear about the precise basis on which they have been compared with other applicants and selected or rejected for admission to tertiary courses. Added to this is the complexity introduced by growth in universities' use of bonus points and in the use of the QTAC Selection Rank to produce equivalent OPs, with accompanying questions about fairness.

We believe it is appropriate for universities to consider a range of evidence in their selection decisions and we recognise that it may not always be possible to make transparent the basis on which some applicants were selected ahead of others. Nevertheless, we believe that current selection processes are overly complex and opaque. Universities are sometimes resorting to the use of supplementary data that were not collected for that purpose and are of questionable reliability and validity for making fine distinctions between applicants.

Tertiary institutions should make as transparent as possible the evidence to be used in comparing applicants to competitive tertiary courses. This evidence already takes a wide variety of forms, including senior results, portfolios of student work, auditions, interviews, aptitude tests, language proficiency tests, applicants' written statements and employment experience. As already occurs, institutions should specify any prerequisites for course admission. And if evidence is to be weighted, scaled and combined, and applicants are to be ranked, then as far as possible, those processes should be explained in everyday language and the results of the numerical scaling and aggregation processes should be made public.

Recommendation 11

Tertiary institutions should make as transparent as possible the basis on which applicants are selected for admission to tertiary courses. This should include clarity about the nature of the evidence to be considered (for example, subject results, aptitude test scores, interviews), course prerequisites, any preferential weighting to be applied to subject results, and any processes for aggregating student results to rank applicants.

Role of QTAC

As the agent of the Queensland universities, QTAC processes applications to most undergraduate courses in Queensland and is responsible for implementing the course admission policies, rules and procedures established by individual institutions. QTAC provides information to enable applicants to make informed decisions about tertiary entry pathways and provides a streamlined process to deliver tertiary offers to applicants.

In delivering these services, QTAC currently uses student data provided by QCAA. Selection decisions are based firstly on the individual's OP. In the event of ties in OPs (when there are not enough places for applicants within an OP band), FPs are considered. Institutions make public their primary and secondary FPs for various courses. If further information is required to differentiate between applicants, this information may be an ATAR, Level of Achievement in prerequisite subjects, school reports, additional information provided by the applicant or QCS grade, depending on the policy of the tertiary institution. Some tertiary institutions also apply bonus points (e.g. for Mathematics C). For some courses, the completion of prerequisite subjects, or success at interview or audition is required before applicants are considered in the multi-stage selection process above.

We are recommending (Recommendation 1) that the current OP system be retired and that the QCAA's responsibilities at the secondary–tertiary interface be limited to the certification of attainment in senior studies (Recommendation 2). It follows that any future scaling or aggregation of Subject Results for the purposes of ranking applicants to tertiary courses would become the responsibility of universities and, presumably, would be undertaken for them by QTAC.

This recommendation has implications for the work program of QTAC and may have implications for capacity building and the resourcing of that Agency. The scaling and aggregation of senior subject results to produce rank orders of applicants are tasks undertaken by a number of other Australian tertiary admission centres on behalf of universities. Some have established technical committees to oversee this process. There is considerable experience in these agencies and also technical expertise within QCAA which may be of value to QTAC in its design and implementation of any processes that universities choose to implement.

Recommendation 12

The current responsibilities of QTAC for processing applications to undergraduate courses and implementing institutions' admission rules and procedures should be extended to include any scaling and aggregation of senior Subject Results to produce rankings of course applicants.

Construction of an ATAR

When there are more applicants to a tertiary course than places available, institutions have to compare applicants and choose some applicants ahead of others. Inevitably, this involves some form of ranking. At the present time, many tertiary courses do not face this task and are able to admit most if not all students who apply. Among courses for which it is necessary to manage a competition for entry, the basis for ranking applicants often depends on the nature of the course. For example, competitive tertiary courses in music, dance and drama use evidence of performance in selection decisions.

In Australia, the practice has developed of producing a single rank order of the majority of applicants to tertiary study. In 2010, the Australasian Conference of Tertiary Admissions Centres agreed to refer to this ranking by overall academic achievement as the Australian Tertiary Admission Rank (ATAR). In most states, an ATAR is intended to indicate percentile rank in the relevant age population and takes values between 0 and 99.95 (in practice 30.00 to 99.95) in increments of 0.05. In some high-demand courses, selection decisions are based solely on ATAR; in others, ATAR is used with other evidence, sometimes in a multi-stage selection process.

A common way of calculating ATAR is to scale students' subject results to take into account differences in the academic abilities of students enrolling in different subjects. In effect, this inter-subject scaling process estimates what students' results in a subject would have been if all subjects had been studied by all students. The scaling does not change the rank order within any subject. The intention of the scaling is that a student should be neither advantaged nor disadvantaged by the subjects they choose and so should be encouraged to take the subjects that best suit them.

We believe that, with the many pathways and entry points now being used by students to gain admission to tertiary study, coupled with the opening up of universities under a more demand-driven approach, a question exists about the appropriateness of attempting to place the majority of applicants to tertiary study in a single queue, regardless of the course or institution to which they are applying. Nevertheless, we recognise the need to rank applicants to competitive courses and to be able to do this efficiently. If tertiary institutions choose to construct an overall rank of applicants to tertiary courses, then we recommend that an intersubject scaling process be implemented by QTAC using Subject Results provided by QCAA.

We also recommend that, subject to technical advice, four not five subject results are used as input into an ATAR. If tertiary institutions chose to construct a ranking of applicants on the basis of Subject Results eligibility rules will need to be set. Eligibility for the OP required five subjects (actually expressed as semester units but not relevant to this discussion) and there were no restrictions on subject combinations. There are statistical issues in combining results that are not highly correlated. In considering a new rank ordering it might be timely to reconsider other options – for example only four subjects and restrictions on subject combinations. Implications for the senior school curriculum would need to be considered.

Recommendation 13

If tertiary institutions choose to construct an ATAR, then this should be computed using an inter-subject scaling of Subject Results reported by QCAA (each on a 60-point scale). In setting new eligibility rules tertiary institutions should consider reducing the number of subjects and restricting combinations of subjects.

Monitoring consequences and exploring alternatives

Inevitably, tertiary selection processes influence decisions and practices in the senior secondary school as students attempt to maximise their chances of being admitted to their courses of choice and schools attempt to maximise the numbers of students making successful transitions to tertiary study. It is important that tertiary institutions recognise the significance of this influence and, particularly, the unintended ways in which their selection processes can influence the behaviours of students and schools. Current examples of this influence include the prominence that the QCS Test has achieved – and not necessarily for the right reasons – with some schools now engaging commercial test preparation providers; concerns that some schools are gaming current OP processes through the strategic distribution of SAIs across the available rungs; and concerns that schools are increasingly encouraging Year 12 students to use the QTAC Selection Rank as a way of maximising their chances of being admitted to tertiary courses and in the mistaken belief that removing those students from the OP-eligible group will necessarily maximise the school's number of OP1s.

The influence of tertiary selection processes on decisions and practices in the senior secondary school is not limited to Queensland. In other states there are concerns about decisions that students are making in an attempt to maximise their ATAR. For example, there are concerns in NSW that many students are choosing not to study advanced mathematics, but to take the lower-level, general mathematics course instead, in the belief that this strategy will result in a higher ATAR. Although inter-subject scaling is intended to ensure that students are neither advantaged nor disadvantaged by the subjects they study, what matters in practice are students' and teachers' beliefs, and these are currently producing an unintended and undesirable drift to lower-level mathematics in that state.

We recommend that tertiary institutions systematically monitor the impact of their course selection processes on the behaviours of students and schools and act to modify their processes if they are promoting unintended outcomes. This would require collaboration with QCAA as impact studies would involve an investigation into curriculum patterns in Years 11 and 12 and changes to these over time.

We also believe that tertiary institutions should continue to explore improved ways of selecting students for admission to tertiary study. An impression we formed during the Review was that a primary concern of some universities was for administrative convenience. They were seeking a simple way of ranking and differentiating between applicants in a short time period over the summer. The meaningfulness of numerical differences sometimes seemed of less concern than access to additional data that would allow them to "break ties" between applicants. This was especially true for high-demand courses. For some, the administrative solution was to have the school curriculum and assessment authority rank all their applicants for them on a 2000-point (ATAR) scale.

We recommend that consideration be given to selection processes that take more account of the subjects students have studied and their relevance for particular tertiary courses. One way to do this would be to weight subjects in the selection process on the basis of their substantive relevance and academic demand. An advantage of this approach is that it could be applied to subjects and courses of quite different kinds (for example, Authority Subjects, Authority-registered subjects, VET certificate studies, International Baccalaureate).

Recommendation 14

Tertiary institutions, in collaboration with QCAA, should conduct ongoing monitoring of the impact of tertiary selection processes on the senior secondary school (particularly possible impacts on students' choices of senior subjects). Institutions should also continue to explore improvements to their selection processes and alternatives to rankings such as ATAR.

Planning and introducing change - senior secondary certification

Legislative Changes

QCAA was established under the *Education (Queensland Curriculum and Assessment Authority) Bill 2013*. Under this Act of Parliament, QCAA currently has responsibility for functions relating to tertiary entrance. In particular, it is responsible, in consultation with the Minister, for developing processes to rank applicants for tertiary entrance; the annual implementation of those processes to produce rank orders of tertiary applicants; and the issuing of documents to applicants advising them of their tertiary entrance ranking.

Our recommendation is that there be a separation of responsibilities, with QCAA having responsibility for the certification of student attainment in the senior secondary school, and tertiary institutions through QTAC being responsible for tertiary selection. This recommendation will require a change in the relevant legislation to divest QCAA of its current responsibilities for ranking applicants to tertiary courses.

Recommendation 15

The Queensland Government should make the legislative changes required to divest the QCAA of its current responsibilities relating to tertiary selection (including scaling and aggregating results to produce rank orders of tertiary applicants).

Funding implications

The reform of senior secondary assessment and certification will require an investment on the part of Government. It is clear that some of the cost implications of our recommendations could be off-set against, or transferred from, existing activities. For example, there will be savings in discontinuing the QCS Test and in QCAA's end-of-year procedures such as the verification of schools' distributions of results in Authority subjects, checking schools' assignment of SAIs, generating OPs and FPs from SAIs and QCS Test group parameters, and generating an ATAR based on scaled OAIs. (The Review was provided with an indicative cost of \$5.7m for the annual development and implementation of the QCS Test and an indicative cost of \$0.4m for scaling and ranking.) The costs of the components of the proposed moderation system (endorsement, confirmation and ratification) will be off-set at least in part by the discontinuation of the current operational model that uses review panels at state and district levels. Their work (monitoring, verification) involves the reviewing of schools' submitted folios of student work.

Our proposal that moderation be undertaken in relation to each assessment activity separately, although more expensive, is an imperative in the new system for at least three reasons: first, the reporting of Subject Results on a 60-point scale based on four assessment activities (rather than as five overall Levels of Achievement in a subject) increases the need for close moderation; second, rightly or wrongly, most if not all key stakeholder organisations appear to have lost confidence in the current review panel process; and, third, the success of a revitalised school-based assessment system hinges on an enhanced quality assurance mechanism (moderation).

Submissions to the Review referred to reduced funding as a factor in the erosion of moderation over the past decade. However, we are not persuaded that allocating more money to an unchanged moderation model is the best solution. We believe that increased funding tied to improved processes will deliver enhanced comparability and public credibility while at the same time providing in-built professional development.

There will also be significant costs associated with the design and development of the proposed school assessment activities and their associated marking schemes and annual external assessment instruments.

Some of these costs will be incurred mainly or only in the set-up phase; others will be recurrent. We also believe that there may be opportunities for efficiency benefits and savings over time as increasing use is made of technology. The precise costs of implementing the Review's recommendations will need to be further developed. They will depend in part on the number of subjects for which external assessment activities are developed annually. Our recommendation is that consideration be given to developing an External Assessment in every Authority subject, but we recognise that there may be budgetary constraints on the number of subjects for which External Assessments can be developed, administered and marked annually.

We also recognise that developing External Assessments for some subjects but not others risks creating two classes of senior subjects which may be treated differently by users. We recommend that a priority list of subjects be developed by QCAA and that External Assessments be developed for as many Authority subjects as possible. In developing this priority list, consideration should be given to the nature of the subject (for some subjects an External Assessment might not be feasible or desirable), student enrolment (low student numbers may be a reason not to develop an external component), and university prerequisite (a reason to include an external component).

Recommendation 16

The Queensland Government should invest additional funding in the creation of high-quality assessment and certification processes to underpin a reformed senior secondary credential. A priority order of subjects should be established in the event that it is not possible to fund the development of externally set and marked assessments in all senior subjects.

Organisational capacity of QCAA

Our recommendations will have significant implications for the work of QCAA. Many current activities of the Authority will no longer be required. These will be replaced by a range of new activities, including the design, development and marking of external assessments in Authority subjects. We envisage these external assessments increasingly being delivered in digital format, and this also will have implications for the kinds of skills and work required within QCAA.

We consider it important that, to the extent possible, modern psychometric methods are used to supervise the development and use of external assessments by QCAA. This is important for monitoring and ensuring the quality of the assessment instruments. Although these psychometric methods are used routinely in most standardised testing programs, they tend not to be used routinely to monitor the quality of external examinations.

The feasibility of delivering external assessments in digital format will need to be investigated. However, we expect that most, if not all, external assessments eventually will be delivered in this form, with students completing assessments online for either automatic or human marking by QCAA. This will require the development and ongoing maintenance and enhancement of delivery platforms and associated software. As increasing use is made of technology in senior secondary assessment and certification, QCAA will need to continue to build its capacity to deliver assessments in digital formats.

Recommendation 17

The QCAA should continue to build its staff capacity in educational assessment, educational measurement and information and communication technologies.

Evolving curriculum priorities

Changes in the senior school curriculum are also likely to have implications for how students are assessed in the future. The Australian Curriculum, in common with the curricula of many other countries, is placing increased priority on the development of skills and attributes necessary for life and work in the 21st century. In addition to subject-specific knowledge and skills, greater emphasis is being given to students' abilities to work and create solutions in teams, to respond flexibly to complex problems, to manage information dynamically, and to produce new knowledge. Assessments of student attainment in the senior secondary school will need to reflect these changes in curricular priorities. It seems likely that skills and attributes of these kinds will be best assessed through school assessment activities in each subject. In the design of an assessment package (four assessments), QCAA should stipulate that at least one of the skills mentioned above (or facets of it) be assessed. The 21st Century skills do not belong to one discipline alone. However, as there is to be no new test of Key Cross-Curriculum Capabilities or a QCS Test, assessing such skills within a subject requires that these important skills are made explicit in teaching and learning.

Recommendation 18

QCAA should include in its specified assessments processes a greater focus on skills and attributes now being identified in senior secondary curricula as essential to life and work in the 21st Century (for example, teamwork, problem solving, creativity, verbal communication).

Communication strategy

The reforms we are proposing will need to be communicated and explained to a range of stakeholders, including students, teachers and parents. This will require a communication strategy and a variety of forms of communication targeted to particular stakeholder groups. It will be important for the Government to explain the rationale and benefits of the proposed changes. It also will be important for QCAA to explain clearly to students and parents the nature of future assessment processes in the senior secondary school and the form in which subject results will be reported (60-point scale). And it will be important for tertiary institutions and QTAC to describe how they will use subject results (alone or in combination) in selection into tertiary courses.

An important element of the communication strategy will be clarification of the timeline on which changes will be introduced, and the identification of the cohorts for which new arrangements will apply.

Recommendation 19

The Queensland Government should devise a multi-platform information strategy to precede and accompany any significant changes or reforms to senior assessment and tertiary entrance.

Planning and introducing change - tertiary entrance

Review of admission processes

It is timely for tertiary institutions to review processes for selecting and admitting applicants to tertiary courses of study. Over the past twenty years there has been a significant increase in the number of students being admitted to tertiary study. Recent moves to establish a more demand-driven system and new pathways and entry points are making tertiary study more accessible to larger numbers of school leavers. In this context, selection and gate-keeping processes of the past are largely irrelevant for many of today's tertiary courses and some institutions. Nevertheless, for many courses, the number of applicants exceeds the number of available places and institutions face the challenge of managing competitions for entry.

At the same time, admissions decisions involve more than managing competitions. It is essential that tertiary institutions select and offer places to applicants who are adequately prepared and likely to benefit from tertiary courses. Many courses do this by specifying assumed knowledge in the form of minimum levels of achievement in senior subjects; through prerequisites such as the successful completion or specified senior subjects, the submission of a portfolio or presentation for an interview; and by requiring the completion of bridging, preparatory or appropriate introductory subjects prior to or during a student's first year of study.

Among the questions that a review of tertiary admissions processes should consider is the adequacy of currently specified course prerequisites and assumed knowledge. A recent communiqué by Australian tertiary mathematics teachers called on Universities Australia to provide greater clarity about the levels of mathematics required for the successful study of engineering and science, arguing that current requirements are contributing to high failure rates, an increased need for bridging courses, and increased costs associated with the re-taking of subjects. Specifying prerequisites for tertiary courses would, of course, have backwash effects on the senior school curriculum. Backwash effects are not necessarily negative. For example, if Engineering required three subjects, say English, Mathematics C and Physics, it is likely that more students would choose to study higher-level mathematics, which could hardly be deemed to be a negative for the student or the country.

A second question that should be considered is the appropriateness of attempting to construct a single queue of all school leavers regardless of the courses and senior subjects they have studied or the tertiary institutions or courses to which they are applying. Although administratively convenient, this simple queuing of school leavers (for example, on the basis of an ATAR) is less relevant than it might once have been – especially given the number of tertiary courses for which there is no serious competition and the variety of pathways through which students now enter tertiary study. Although the ranking of applicants to high-demand courses will continue to be necessary, it does not follow that all school leavers should be ranked in the same queue, or that the ATAR is the most appropriate way to rank applicants for every course.

Recommendation 20

Queensland tertiary institutions should undertake a review of their admissions processes, including options for comparing and selecting applicants to competitive tertiary courses. This review should consider the appropriateness of constructing a single rank order of school leavers regardless of the course or institution to which they are applying, and options for ranking course applicants (ATAR; a "points system").

Capacity building

Under our recommendations, the ranking of applicants to tertiary courses will be the responsibility of tertiary institutions themselves and presumably will be undertaken on their behalf by QTAC. One implication of this is that staff of QTAC will undertake any scaling, weighting and combining of evidence to produce rankings of course applicants. These will be new processes which will require high-level technical oversight, appropriate software routines and staff expertise in their implementation. It is recommended that the planning, design, development and pilot testing of any new scaling processes be commenced as soon as possible to ensure that these are fully operational at the time new arrangements come into force.

Consideration also should be given to establishing a high-level Technical Committee to provide advice on, and oversee, the introduction and ongoing implementation of any new statistical processes for combining evidence to produce rank orders of applicants. A report to tertiary institutions on the annual implementation of these processes may be appropriate.

Recommendation 21

Queensland tertiary institutions should consider enhancing technical capacity within QTAC to undertake any new scaling procedures to produce rank orders of course applicants. Consideration also should be given to establishing a high-level Technical Committee to oversee the technical quality of these procedures.

Monitoring impact on senior secondary schooling

It is inevitable that the processes used to admit applicants to tertiary courses will influence decisions that students, teachers and schools make during the senior secondary years. In many cases, these influences will be desirable (for example, students choosing senior subjects in areas of personal interest that will also prepare them for further study of those subjects at tertiary level). However, past experience in Queensland and elsewhere suggests that other, less desirable, decisions are likely to be made by students, teachers and schools simply to maximise the chances of successful selection. All tertiary entrance processes are susceptible to some form of gaming.

We recommend that the proposed Technical Committee be tasked by QTAC with the continual monitoring of intended and unintended consequences of tertiary selection processes. This monitoring should include impact on patterns of senior subject choice (bearing in mind that students, parents and teachers often develop beliefs about how indicators such as ATAR can be maximised by the judicious choice of subjects). Attention also should be paid to tactics such as the use of alternative pathways in an attempt to secure an advantage for some students (a tactic that many believe is now being employed by schools that use the QTAC Selection Rank to by-pass the OP).

Recommendation 22

The proposed QTAC Technical Committee should, as part of its responsibilities, monitor on an ongoing basis any impact (positive or negative) that tertiary selection processes have on the senior secondary school, including any impact on students' choices of subjects, and recommend changes to selection processes where appropriate.

Ensuring a world-class certification system

Senior secondary qualifications are undergoing change globally. The reasons for change include the emergence of an increasingly global marketplace for senior secondary qualifications; advances in technology which are beginning to allow courses and assessments to be delivered online anywhere in the world; a growing focus on the development and assessment of 21st Century skills and attributes, including teamwork, creativity and problem solving; growth in senior secondary participation rates resulting in increasingly diverse student populations and needs; and the emergence and growth of new qualification providers, including for-profit companies. These developments will create a significantly changed international qualifications landscape over the next few decades.

The vision in Queensland should be for a high-quality, highly-regarded credential that is internationally recognised as providing an excellent preparation for life and study beyond school.

We believe that, taken together, the recommendations of this Review lay the foundations for the further development of the Queensland Certificate of Education as a world-class credential. A key will be to enhance the capacity of QCAA to develop and deliver this qualification. Our recommendation that tertiary selection processes be separated from senior secondary assessment and certification processes is designed in part to free QCAA to focus on its core role of developing and delivering an innovative, future-oriented senior secondary credential.

We also believe that the achievement of this vision is made more difficult currently by the fact that QCAA is responsible for curriculum and assessment throughout the years of school (K–12). Structural changes within QCAA may be required, possibly including the establishment of a group of specialist staff capable of further conceptualising, leading and implementing our proposed changes. This group would be responsible for designing new processes, overseeing their implementation and ensuring the ongoing quality of a world-class senior secondary qualification. Consideration also could be given to the creation of two separate authorities, one with responsibility for curriculum and assessment in Years K–9, the other with responsibility for Years 10–12.

Recommendation 23

As part of the Queensland Government's commitment to further development of the Queensland Certificate of Education, consideration should be given to enhancing the capacity of QCAA to develop and deliver a world-class senior secondary qualification. This may include establishing a group of specialist staff within QCAA capable of further conceptualising, leading and implementing the recommendations of this Review. It may also include the creation of two separate authorities, one with responsibility for curriculum and assessment in Years K-9, the other with responsibility for Years 10–12.





Chapter 4

Envisaging a redesigned system

A general conclusion of ACER's Review is that senior assessment and tertiary entrance in Queensland are in need of attention and that the time has come for a redesign. This chapter first states the principles that guided the Review and then describes in simple terms the design features of a system based on our recommendations.

Principles

Before we started our investigation we established the principles that would underpin our deliberations. At each stage of our thinking we reconciled our proposals against those principles. Three principles follow together with their implications.

Principle 1

Assessments of student attainment must provide valid, reliable and meaningful information about what individuals know, understand and can do, and how well, upon completion of Year 12.

Assessment processes are valid to the extent they provide information about the range of knowledge, skills and attributes identified in the senior curriculum. Assessment processes are reliable to the extent they provide accurate information about students' levels of achievement comparable across students and schools.

There are several implications of this principle:

- The purpose of certification is to confirm publicly students' attainment levels upon completion of Year 12.
- Assessments of student attainment should be recorded on certificates in a form that is meaningful to students, their parents and schools, and useful to universities, employers and other users.
- Assessments of student attainment should stand alone and be independent of how they might subsequently be used.
- Indicators of student attainment must be appropriate to a range of curriculum intentions, accurate and comparable across schools.

It is also desirable that senior secondary assessment processes:

- promote high-quality teaching and learning in the senior secondary school, that is, do not detract from student learning
- have a futures orientation assessment systems with a futures orientation are appropriate to the 21st Century; recognise that curriculum priorities are changing; recognise that ways of assessing and learning are changing (responding to the role of new technologies in teaching and learning)

Validity
Reliability
Utility

Centrality of student learning

Looking to the future

look to the future not to the past; and able to adapt speedily to changing circumstances

 are fair, that is, objective in the sense of not depending on who does the assessing.

This general principle underpins our recommendations to enhance validity and reliability, namely:

- Revitalise school assessments.
- Add an external assessment (at least in some subjects).
- Prescribe the types of assessments to be undertaken and the conditions under which these assessment activities will occur.
- Add results of school assessments and an external assessment to arrive at an overall result for certification. However, the school assessment would not be statistically moderated against the external assessment.
- Devise a new moderation model that involves endorsement of assessment activities and confirms the attainment levels of students on those assessments, one at a time, over the course of study.

Further to the production of quality measures for student attainment are our recommendations to enhance the usability of subject results, namely:

- Devise a new way of describing performance against criteria, which is useful for arriving at subject results and for communicating those results to users.
- Certify subject results on a 60-point scale.

Principle 2

Universities should take complete responsibility for deciding how their future students are to be selected and for developing any indicators they wish to use themselves or through their agency QTAC.

Decisions about university selection – including decisions about course prerequisites, the evidence used in admission decisions and how that evidence is combined or weighted – are properly the responsibility of the universities. Universities are free to use a range of evidence in selecting students for entry to their courses, as at present. This evidence may include – but is not limited to – Year 12 results provided by QCAA, special tests, interviews and portfolios.

There are several implications of this principle:

- Universities should continue to be responsible for deciding how their future students are selected, including by managing fair competitions, where necessary, for entry to high-demand courses.
- If universities choose to combine available evidence in some way, such as
 aggregating, scaling or weighting, then those processes are properly the
 responsibility of the universities themselves, not QCAA and the school
 sector. (This is the NSW model, where the Board produces Year 12 results
 and universities then take responsibility for the use of evidence to compare
 and rank applicants to courses through the NSW Universities Admissions
 Centre.)

This general principle underpins our recommendations to separate the responsibilities for senior certification and tertiary entrance, namely:

 QCAA is responsible for the certification of student attainment on completion of Year 12 based on valid and reliable assessment

Separation of responsibilities for senior certification and tertiary entrance

Universities through QTAC calculate TE indicators

QCAA does not calculate TE indicators

 Universities through QTAC are responsible for comparing and ranking applicants to courses and for any associated scaling processes.

Principle 3

Transparency Fairness Processes for assessing student attainment in the senior secondary school and for selecting students for admission to universities should be as transparent as possible to students, parents and schools. Transparency is essential to fairness in assessment and selection processes.

There are several implications of this principle:

- In addition to understanding how their achievements will be assessed and
 the criteria to be used to evaluate the quality of their work and
 performances, students should understand how their assessment results
 will be combined to produce an overall result in each subject.
- Universities should make as transparent as possible the evidence to be used in course admissions decisions, including processes for the selection of Year 12 completers who are ineligible for OP/ATAR and for discriminating between OP-eligible students when other measures (OP, FP, QCS grade) have been exhausted.

Students know how Subject Results are produced

Students know how universities use evidence for selection purposes

Towards fundamental change

When we started work on this review we did not anticipate the extent of the changes we would eventually recommend. We had no predetermined position nor were we pointed in a particular direction. Our recommendations, however, are far-reaching and have as their centrepiece a redesigned system. Although the new design represents a fundamental shift from current procedures, it is relatively easy to understand and streamlined in practice. Furthermore, it is doable. In our opinion there are few if any barriers to its successful implementation and its design provides opportunities to use resources, human and financial, in effective ways. The assessment load for students and the workload for teachers would both be reduced.

Our recommendations are far-reaching and have as their centrepiece a redesigned system

- Easy to understand
- Streamlined in practice
- Reduced workload for teachers

What the new design means in practice

The "New System Architecture" diagram is the first frame in a sequence of frames containing information about new "things" – artefacts, processes, people. Information in the "NEW" frames is interrelated and so some terms will be found in one frame but not elaborated on until a later frame. In some cases information from one frame is repeated in another. The twelve frames are:

- 1 New system architecture
- 2 New Subject Result
- 3 New assessment package
- 4 New School Assessments
- 5 New External Assessment
- 6 New marking schemes for School Assessments
- 7 New moderation model for School Assessments
- 8 New assessment schedule
- 9 New roles
- 10 New certification
- 11 New Tertiary Entrance procedures
- 12 New times

NEW SYSTEM ARCHITECTURE

Redesigned secondary-tertiary interface

Senior assessment

for students in Years 11 & 12

- School-based assessment retained and revitalised
- Moderation model revamped
- External assessment introduced
- Subject Results produced as standalone indicators of attainment

Tertiary entrance

for Years 12 completers

 Universities and tertiary providers decide on method for using Subject Results to select Year 12 completers for entry



What is to be

- Prescribed and endorsed assessment types, conditions and marking schemes for three School Assessments in each subject
- New marking schemes with two-stage process for marking School Assessments
- One External Assessment in each subject to contribute 50 per cent to the Subject Result
- Results confirmed following each School Assessment
- Subject Results produced by adding marks from three School Assessments and one External Assessment
- Subject Results reported from 1 to 60 (maximum)

What is no longer

- Levels of Achievement (from VHA to VLA)
- Grades (A-E) for each criterion in each assessment
- Overall grade (A-E) for each criterion
- · Standards Matrix for each subject
- · Consensus moderation using review panels
- · Folios of student work for verification
- Queensland Core Skills testing for students
- Subject Achievement Indicators from teachers and schools
- Scaling to Queensland Core Skills Test group parameters
- Calculation of the Overall Position and Field Positions
- Calculation of an Australian Tertiary Admissions Rank using Overall Achievement Indicators

What is to be

- Subject Results used as the basis for selecting students along with other criteria set by the universities and other providers
- Separation of responsibilities for senior certification and tertiary selection:
 - Queensland Curriculum and Assessment Authority is responsible for the certification of student attainment of Year 12 completers
 - Queensland Tertiary Admissions Centre is responsible for comparing and ranking applicants, and any scaling processes

What is no longer

- Overall Position
- Field Positions
- · Queensland Core Skills grades
- Queensland Core Skills percentiles
- QTAC Selection Rank for OP-ineligible students

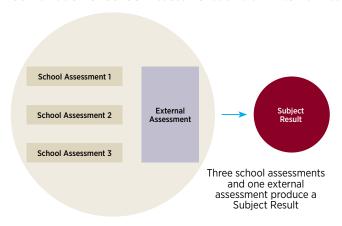
NEW SUBJECT RESULT

A student's Subject Result will be a combination of marks on four assessments, three of which are set and marked within schools (School Assessments) and one of which is set annually by QCAA and marked externally by that Authority (External Assessments). QCAA will determine eligibility rules for the award of a Subject Result to a Year 12 completer. The External Assessment will contribute 50% to the Subject Result.

Combination of School Assessments and an External Assessment

Subject Results will be stand-alone indicators of achievement

Adding marks from three School Assessments and one External Assessment



Weighting

For some subjects, based on the nature of the subject, the weighting of 50:50 may not be appropriate.

A decision will be required about the appropriateness and practicability of developing an External Assessment in subjects such as Dance and Drama. In such subjects, it may be more appropriate for the externally set and marked activity to be based on direct observations or recordings of performances than on a written test, and it may be appropriate for this activity's contribution to the Subject Result to be less that 50 per cent. In Languages other than English it may be appropriate that there is no External Assessment. These are judgments that will have to be made at the level of individual subjects by Expert Subject Groups. It is important that subjects are not classified, stereotyped or valued differently on the basis of the External Assessment's contribution to the Subject Result.

Criteria for deciding on weighting for subjects

Also it may not be practicable – due to resourcing constraints – to develop External Assessments for all senior subjects. For example, it may not be practicable to develop such assessments for subjects with small enrolments such as Art. Priority will be given to resourcing the development of External Assessments for all large-enrolment subjects. For subjects with smaller enrolments, External Assessments will be developed where it is practicable and appropriate given the nature of the subject. Low-enrolment subjects that are university prerequisites or obvious precursors to successful university study, and subjects for which development of online assessments is underway will be prioritised. (It does not necessarily follow that a subject would not have an External Assessment just because (a) it has a low enrolment and (b) it has a large practical component – that will be the business of the relevant Subject Expert Group.)

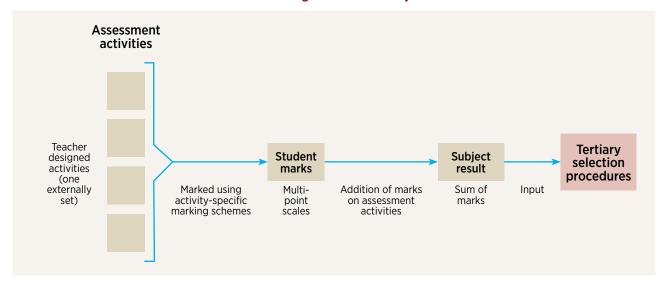
Marking

Each School Assessment will be marked on a scale of 1 to 10 (with the possibility of a student being assigned a mark of zero for no attempt or lack of evidence of achievement).

The External Assessment will be marked on a scale of 1 to 30 (with the possibility of a student being assigned a mark of zero for no attempt or lack of evidence of achievement). If the marking scale for an external assessment is 1 to 50 – for example an end-of-semester multiple-choice test, the marks will be adjusted to provide a minimum possible score of 1 and a maximum possible score of 30 (zero remaining) to that External Assessment before it is added to the School Assessments.

Marks on the four assessments will be added together to provide the student's Subject Result, which will have a maximum possible value of 60. Results in all subjects will be integers on the same scale, 1 to 60.

Flowchart for arriving at students' subject results



NEW ASSESSMENT PACKAGE

The assessment package for a particular subject for a particular year comprises:

- Three School Assessments, each with QCAA-specified assessment type
- One External Assessment, with QCAA-specified assessment technique
- Criteria for assessment as set down in the subject syllabus

The assessment package will be designed by an Expert Subject Group. The design process will ensure that:

- The School Assessments and the External Assessment assess different dimensions of learning and achievement in the subject.
- There is an appropriate range of, and balance in, syllabus outcomes assessed.
- There is variation in students' assessment experiences.

Mock-up of a QCAA-specified assessment package

Assessment criteria and sub-criteria (Geography)

Knowledge

recall of geographical facts, concepts, key ideas, processes

recall of spatial information

Analytical processes

and explanations

- identify and explain geographical patterns and processes
- transform, interpret and extrapolate geographical information
- identify and explain relationships

Decision-making processes

- evaluate alternative proposals, strategies, solutions and plans
- · apply appropriate criteria
- make judgments and decisions about alternatives
- iustify decisions

Research and communication

- gather and record information and primary data from sources and settings
- select and organise information
- communicate using language and geographic conventions
- integrate maps, diagrams, statistics and referencing adhering to geographic conventions

Prescribed Assessment Types

Short response test

Students connect geographical facts, concepts, key ideas, process and explanations with spatial and location-based examples.

Supervised conditions

Option to respond on line

Product: Paragraph responses demonstrating depth of conceptual understanding; sentence responses; discriminating multiple-choice and drawing, labelling or explaining diagrams and maps.

Data response test (externally set and marked)

Students respond to a range of geographic data including aerial photos, maps, graphs, images, statistics, cartoons and texts to demonstrate how patterns, relationships and anomalies present across different contexts. It could incorporate decision-making that recognises the need to balance appropriate criteria in different contexts.

Supervised

Product: In-depth responses (not in essay form)

(May be applied at the same time as a short response test.)

Practical exercise

Students manipulate and present geographical data and use analytical and/or decision-making processes to identify the issues, challenges and opportunities presented by particular places.

These data are primary data and may be field based.

Completed under supervised conditions

Product: Graphic or cartographic presentations that adhere to geographic conventions and in-depth paragraph responses.

Report

Students plan and undertake an investigation in the field designed to assess their ability to gather, record and present primary data and demonstrate analytical and decision-making processes

Conditions: Field work

The investigation focuses on field methodology, analysing interactions in space and deciding how well these interactions are or could be managed. Students produce a written report with support materials that adhere to language and geographic conventions.

Notes:

No one-to-one relationship of entries in LH and RH columns – no single assessment type for a particular criterion. Geography is atypical – four criteria rather than the usual three

NEW SCHOOL ASSESSMENTS

QCAA will specify, for each subject, the assessment types for each of the three School Assessments QCAA will specify, for each subject, the assessment types for each of the three School Assessments. Possible assessment types include projects, reports, investigations, orals, practical work, field work, performances, presentations, essays, mid-semester tests, end-of-semester exams, and the production of artefacts. These assessment types build on the existing school-based assessments. QCAA already produces high-quality forms of these, using exemplary practice found in current school-based assessments.

The assessment types for each of the three School Assessments for a particular subject for a particular year will be identified by Expert Subject Groups in collaboration with schools, according to best fit with the subject.

Teachers design local versions of each QCAA specified assessment School Assessments will be set by teachers in their schools. The nature, intentions and parameters for these three assessment activities will be specified by QCAA, with classroom teachers annually designing local versions of each. The marking model assumes that subject criteria and their relative weightings as required by the subject syllabus are incorporated in the design of the assessment activities, individually and as a collection.

All School Assessments will be supervised by the teacher who set them – that is, the teacher must have procedures in place for penalising students for unauthentic work. QCAA already has procedures in place for authentication of assessments completed outside school time. Where School Assessments are in the form of mid-semester tests or end-of-semester exams or equivalent, teachers will act in the role of invigilator. (No assessment system can guarantee that work presented by a student is that of the student. The parallel to unauthentic work in school-based assessment is cheating on external examinations.)

Feedback to students will be possible

The specification of three School Assessments does not preclude schools from conducting additional teacher-devised assessments within subjects for other purposes – in other assessment activities may be necessary to fulfil QCAA requirements for coverage of syllabus outcomes – but the assessment load for students and the workload for teachers should not be extended much beyond the prescribed assessment package. As students will know their marks on each of the School Assessments after they have been marked and the marks are confirmed by QCAA (see moderation model later), the School Assessments can be used formatively as well as summatively.

QCAA will provide schools with the marking schemes used for External Assessment at the same time they provide students' External Assessment marks to schools.

NEW EXTERNAL ASSESSMENT

Traditional external exam and proposed external assessment

Feature of the assessment	Traditional external examinations	New External Assessment
Assesses achievement in a subject based on a syllabus	Υ	Υ
Set and marked by an agency external to the school	Υ	Υ
Same assessment for all students in that subject across the state	Υ	Y
Common conditions (time limit, equipment allowed an so on)	Υ	Υ
Supervised	Υ	Υ
Terminal (i.e. at end of Year 12)	Υ	N
Special consideration	Υ	Υ
Looks the same whatever the subject	Y Exam "paper" contains questions to be answered in writing Typically 3 hours' duration	Not neccessarily Different from subject to subject: Varies in nature and length/time according to subject but most likely to be an end-of-semester test (multiple-choice is possible), essay, or collection of short responses Typically 2 hours' duration
One-off point-in-time	Y	Initially Y – summative only, but when calibrated item banks are introduced can be formative (a student can do the EA on more than one occasion) allowing selective updating of student profiles

The new External Assessment has two identifying features:

- One, the style of assessment depends on nature of the subject
- Two, the potential to provide feedback to students if assessment items are drawn from an item bank, and administered and marked on line

Distinguishing features of the New External Assessment

- Common tasks, commonly applied conditions, commonly applied marking scheme – for all students in a particular subject across Queensland.
- Subject-specific there is a different assessment for each subject (that is, the assessment is not a common test like the Queensland Core Skills Test).
- Subject-dependent the nature of the assessment depends on the nature
 of the subject being assessed. In setting the external assessments QCAA
 will choose from an array of assessment techniques and styles, adapted
 to the nature of the individual subjects. Not all assessment styles suit all
 subjects.
- Able to have a formative function in the future when calibrated item banks are developed, students will be able to take the assessments on-line at any time, and their results can be selectively updated by the school.

Common tasks and common conditions relate external assessment to external exams. Designing the external assessment using a style selected from an array of styles relates external assessment to school assessment. It is the third and fourth

of the features listed above that distinguish External Assessment from an external examination in the redesigned system for Queensland.

External Assessments will be set annually by suitably qualified QCAA staff working with the Expert Subject Group. The assessment technique will vary from subject to subject depending on the nature of the subject. External Assessments will require responses in multiple-choice, short answer, constructed response, extended writing, preferably delivered on line, or other response types that complement the School Assessments in a particular subject and that lend themselves to assessment under commonly applied conditions. The assessment technique will be selected by QCAA on advice from the corresponding Expert Subject Group.

Each year, after the External Assessment is marked, QCAA will provide schools with the marking scheme that was applied. Students' marks on the External Assessment will be provided to schools at the same time, and schools will notify students of their marks.

Modern psychometric methods will be used to supervise the development and use of External Assessments by QCAA. Although these psychometric methods are used routinely in most standardised testing programs (including the QCS Test), they tend not to be used routinely to monitor the quality of external examinations. They will, however, be used for Queensland's external assessments in multiple-choice format, which puts Queensland in a strong position. QCAA staff will need to acquire these high-level skills.

Comparability across schools for the External Assessment will be achieved through tasks that are common to all schools, administered to all schools across the state at the same time on the same day and marked by QCAA according to a commonly applied marking scheme. External Assessments in different subjects will of course not be on the same day – sometimes not even in the same term or semester, depending on the assessment schedule that QCAA will devise for each subject. Markers of External Assessments in formats other than multiple-choice will be trained before marking and monitored during marking. Models for this have already been developed and used successfully for QCS marking.

NEW MARKING SCHEMES FOR SCHOOL ASSESSMENTS

Two-stage process

The marking scheme will give a mark of 1 to 10 for performance on each of the three School Assessments (assessment activities) in each subject.

Each marking scheme will consist of:

- Five performances on an assessment activity
- Descriptions of up to five performances

The descriptions will be succinct and they will not necessarily be at equal intervals.

The marking scheme will be used to assess and record students' performances, based on a two-stage process in which teachers first decide the appropriate level and then decide whether the performance is in the upper or lower part of that level. The marking scheme for all assessment activities will look the same but the words that describe performances will be different.

Marking of School Assessments will be a two-stage process.

- Stage 1: Teachers judge student's performance (one of five levels) based on the described and illustrated performance levels.
- Stage 2: Teachers decide whether the student's performance is in the upper or lower part of that level.

Marking scheme specific to assessment activity

Five performance levels

Descriptions of performance

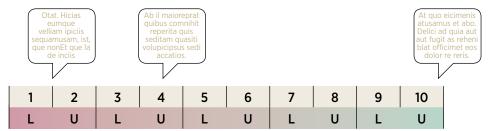
Teachers make judgments

Marking gives results on 10-point scale

Results confirmed following each school assessment

A marking scheme for a School Assessment activity

This is an early prototype of a marking scheme for purposes of illustration and discussion. It is a not presented as an actual marking scheme or as an exemplar.



An ideal response, at performance 10, will accompany the marking scheme. An ideal response is one that would receive maximum marks and so it illustrates to teachers what is to be rewarded in students' responses. Exemplars for intermediate performances will also accompany the marking scheme, at positions where the most noticeable differences in student performance are deemed to occur. (A study of actual student work will be necessary before these points are decided.)

The broad parameters of each of the School Assessments will be specified by QCAA. Teachers will design annual instantiations of each School Assessment and marking schemes that allow student performance to be interpreted and recorded in terms of the 10-point scale (QCAA's marking scheme for that assessment).

Expert Subject Groups will develop marking schemes for each of the student's School Assessments and be responsible for ensuring that performances are described in a way that provides an adequate distribution of marks across the 10-point scale. (These descriptions of performance will be piloted ahead of implementation.)

Thus the marking scheme gives a mark of 1 to 10 for each School Assessment. There are three School Assessments. The simple sum of the marks gives a range of 1 to 30 for School Assessment.

NEW MODERATION MODEL

Assessment-by-assessment moderation

Comparability across schools for the School Assessments will be achieved through external moderation assessment by assessment.

The moderation model has three elements: "Endorsement"; "Confirmation"; and "Ratification".

- Endorsement of proposed assessment activities For each of the three School Assessments, QCAA checks locally-devised assessment activities/ instruments and marking schemes for their consistency with QCAA specifications and endorses their use with students
- Confirmation of marking scheme application For each of the three
 School Assessments, QCAA checks that schools' applications of marking
 schemes are accurate and consistent across teachers and schools. This is
 done through "moderation" meetings in which teachers undertake blind
 re-assessments of student work against the relevant 10-point scale. QCAA
 also conducts annual spot sampling and blind re-assessments to check
 the consistency of marking across schools. Where a problem is identified,
 all student work in that subject in that school is re-marked. QCAA will
 determine which assessments in which subjects in which schools will have
 moderation meetings in a particular year.
- Ratification of Subject Results At the end of Year 12, QCAA checks each school's results on the four assessments for anomalies. If anomalies are identified, then these are investigated and resolved before verifying students' marks on the four assessments (three School Assessments and one External Assessment). Once anomalies are resolved, the ratification of students' Subject Result. Examples of anomalies include a school in which students' marks are very much higher on the three School Assessments than on the External Assessment (or vice versa) or where one of the School Assessments is very much higher than the other two. These are predictable patterns, but other less predictable anomalies may also occur.

Results for certification follow ratification.

An appeals process will be available to students after they receive their Senior Statements from QCAA.

The approval of schools' work programs by QCAA will no longer be necessary. Principals of schools will be accountable for the broader assessment program, which includes school-defined assessments beyond the specified School Assessments and the External Assessment. It is the program for specified assessments that will be scrutinised in the Endorsement process.

School assessments are endorsed before use

Results are confirmed following each of those assessments

NEW ASSESSMENT SCHEDULE

Timing and sequence of major assessments

External assessments will be administered at the same time on the same day across the state for a particular subject

School Assessments will culminate within school terms specified by QCAA on a subject-by-subject basis External assessments will be administered at the same time on the same day across the state for a particular subject.

School Assessments will culminate within school terms specified by QCAA on a subject-by-subject basis.

The timing and sequence of the four assessments will be determined by QCAA in collaboration with the three schooling sectors. Together they will consider the impact of the available options on students and learning, teachers and schools, management of schools and QCAA itself. The views of parents and past students will also be canvassed.

Consideration should be given to:

- Timely feedback to the learner there should be a two-week turn-around between assessing and providing information to students and parents. This requirement precludes the situation where an assessment occurs within the last two weeks of a school term.
- Implications for student and teachers workload pressures and school
 management issues need to be considered. Streamlined processes
 associated with the new design will reduce teacher workload. Students
 will have certainty about the timing of their four high-stakes assessment
 activities and will be able to plan accordingly.
- Existing plans for on-line assessment with appropriate resourcing and building staff capacity, QCAA will be able to produce calibrated item banks.
- Proportion of the assessment program occurring in Semester 2 or Term 4.
 Does the weighting of marks make sense? How does this incorporate the principle of fullest and latest?
- There must be adequate time for QCAA's end-of-year procedures.

Typically all of the assessments will be conducted in Year 12 but for some subjects an assessment at the end of Year 11 is a possibility.

Main options for timing of four assessments

Option	End Year 11	Term 1 Year 12	Term 2 Year 12	Term 3 Year 12	Term 4 Year 12
1	School Assessment		School Assessment	School Assessment	External Assessment
2	School Assessment	School Assessment	School Assessment		External Assessment
3	School Assessment		School Assessment	External Assessment	School Assessment

Preferred options are:

- External Assessment at the end of Year 12
- School Assessment at the end of Year 12 preceded by External Assessment at the end of Term 3

Different timing for different subjects

QCAA and schools will consider the effect of timing on the life of a student at the level of the student and his or her subject combination and analyse the situation in terms of the experience of students in assessment over two years, particularly in Year 11. Sometimes this is not managed well because assessment timetables are driven by subjects not students.

NEW ROLES

Teachers and Schools

- Devise assessments and marking schemes for School Assessment according to QCAA parameters and have these endorsed by QCAA and, at the same time, develop an assessment program for the package of the four specified assessment and have this endorsed by QCAA
- Revise above if necessary on basis of feedback from Assessment Supervisors
- Administer School Assessments according to QCAA's assessment schedule
- Mark School Assessments according to two-stage marking process that uses teachers' judgments
- Have application of marking schemes confirmed by QCAA at some time after each assessment activity as scheduled by QCAA
- Re-mark School Assessments if necessary on basis of feedback from Assessment Supervisors
- Attend moderation meetings if required by QCAA's schedule
- Administer and supervise External Assessments
- Receive marks on the School Assessments from QCAA after each assessment and provide these to students
- Receive marks from QCAA on the External Assessment after that assessment and provide these to students
- Receive marking scheme for the External Assessment for use as appropriate
- · Apply special consideration, if appropriate, according to QCAA policy

Subject Expert Group

A very small group of academics, teachers of the subject, and curriculum and assessment experts, who work alongside QCAA staff who are responsible for:

- Determining the nature of the four assessment activities in a particular assessment package (three School Assessments and one External Assessment)
- · Designing Assessments including marking scheme
- Setting External Assessments with marking schemes (security arrangements determined by QCAA)
- Undertaking psychometric analyses of multiple-choice items prior to their use
- Ensuring that school and external assessments measure different dimensions of learning and include a variety of assessment types
- Writing the QCAA specifications for the three School Assessments including marking schemes according to parameters set by QCAA
- Designing, piloting and monitoring levels to ensure an adequate distribution of Student Results across the 10-point scale

They will be appointed according to stringent selection criteria and paid for their time. Tasks are indicative only.

Assessment Supervisor

Guild of classroom teachers, heads of department, or deputy principals from Queensland schools, who will:

- Lead the introduction and roll-out of new moderation processes (endorsement of assessment activities and marking schemes, confirmation of accurate and consistent application of marking schemes, ratification of Subject Results including detection and resolution of anomalies before certification)
- Be responsible for the moderation processes once implemented
- Enhance teacher capacity in assessment through in-built professional development – immersing teachers in the endorsement and confirmation element of moderation as well as running workshops on assessment

They will be appointed on the basis of their subject expertise, demonstrated knowledge of assessment principles and practice, understanding of the operational model for moderation, demonstrated respect of their peers, and ability to act with authority and decisiveness. The Assessment Supervisor is the linchpin in ensuring the rigour of school assessment.

The method of appointment of Assessment Supervisors will be determined by QCAA (secondment, part-time working out of school, re-assignment of existing QCAA staff, and so on). Remuneration levels should be such that highly experienced teachers are attracted to the role. The number of Assessment Supervisors will be constrained by financial considerations. Some current QCAA staff could be allocated to this work through a restructure of the QCAA Brisbane office. QCAA should give priority to funding the maximum possible number of Assessment Supervisors. The effectiveness of the revamped moderation system will, fairly or unfairly, be one of the measures of confidence in the decision to retain school-based assessment.

Principal as School Moderator

The principal is accountable for assessment integrity within the school and will be responsible for school operations associated with QCAA's moderation and certification functions. Having the Principal act and be seen to act in the role of School Moderator is essential for the credibility of senior assessment.

Technical Committee

High-level committee within QTAC responsible for:

- Overseeing advising and reporting on introduction and ongoing implementation of new statistical processes for combining evidence to produce rank orders of applicants should the universities decide to rank students – for example, in using an ATAR or a points-value ranking
- Overseeing the technical quality of QTAC's new procedures for scaling, weighting, or combining evidence
- Monitoring of intended and unintended consequences of tertiary selection processes, including impacts on patterns of senior subject choice and use of alternative pathways (in collaboration with QCAA)
- Reporting to tertiary institutions annually
- Recommending changes to selection processes where appropriate

QCAA would have strong representation on this Committee.

QCAA

At the secondary-tertiary interface, with respect to Authority subjects, will be responsible for certifying student attainment, which includes all aspects of the redesigned assessment system. QCAA will no longer be responsible for computing selection indices for tertiary selection purposes. This includes the calculation of an ATAR. QCAA will provide QTAC with students' Subject Results.

QTAC

The current responsibilities of QTAC for processing applications to undergraduate courses for Year 12 completers and implementing institutions' admissions rules and procedures will be extended to include scaling and aggregation of Subject Results to produce rankings of course applications that the universities might require.

NEW CERTIFICATION

For all subjects, a student's Subject Result will be shown as an integer with values 1 to 60 (or N in the case of no evidence of attainment or result suppressed).

QCAA will design a Senior Statement (or other document) that contains information to accompany the Subject Result. Included in the design may be descriptions of performance, diagrammatic representation of student's Subject Result on the 60-point scale, or distribution of results for that subject in that year.

QCAA will transmit to QTAC no assessment information apart from students' Subject Results for use in tertiary selection.

NEW TERTIARY ENTRANCE PROCEDURES

Universities will decide on mechanisms for selection of students to their courses and advise QTAC. QCAA will provide QTAC with Subject Results for Year 12 completers. Subject Results will be used, in addition to other criteria universities wish to be applied, for the purposes of tertiary selection. If ranking of students is required by universities. QTAC rather than QCAA will compute rank orders. (If the rank order is an ATAR, eligibility rules will need to be set.) For some courses universities may decide not to use Subject Results in the selection process.

NEW TIMES

The Government will release its draft response to the Review by the end of the year for public consultation. We would expect a Government decision at the beginning of 2015. In announcing this Review, Minister Langbroek stated that "there could be some change, there may be no change, or there may be significant change. On analysis it turns out that the redesigned system we envisage represents fundamental change. Transition from the present system to the proposed system will require imagination, collaboration and a special constellation of skills in conceptualisation and implementation.

Whatever the nature of the Government's decision on this Report, it will need to make that decision known as early as possible in 2015. Although the new system is comparatively easy to understand in principle and operation, the work that must be done in advance of implementation is complex and considerable, especially for QCAA. Senior assessment processes will change. Tertiary selection processes will change. The changes are interrelated. Actions will need to be implemented on different time scales. Perspectives on change will be different for different groups – students and parents, schools and teachers, universities, QTAC and QCAA. Research and development activities will need to be carried out – pilot studies

and simulations; communication strategies will need to be devised – possibly considering models as yet untried in education settings; resourcing implications will have to be understood – a higher level of investment will be required to build the 21st Century system we envisage; and beyond this, there are likely to be implications for capacity building within, and restructuring of, the responsible agencies.

Developing the details of the new model will require intense, focused attention, and the dedicated immersion of responsible experts. The work to be done is considerable, but it is most likely to be done to the highest quality in a dedicated, focused environment. The timeframe need not be large if the focus is precise.

We see four phases in the implementation process. It may be the case that the four phases are not completed in strict sequence. For example, based on the discussion above, it is possible that parts of phases 2 and 3 could occur simultaneously.

Phase 1 - Policy adoption

- Government response
- · Policy position introduced new system details and timeframes
- Communication strategy devised and implemented

Phase 2 - Policy implementation

- Governance and legislative changes to realign roles and responsibilities as/ if necessary
- Research and development
- Assessment program design and development QCAA and schools
- Tertiary entrance procedures decided and devised QTAC and universities
- Communication strategy continued in preparation for implementation of new system

Phase 3 – Implementation

If the new system does not start with Year 11s in 2016, those Year 11s will do the QCS Test and receive an OP in 2017. It would not be until 2018 that Year 12 completers received Subject Results on the 60-point scale and entered university on the basis of those results in 2019. There are many tensions to be resolved in deciding on the most favourable way forward. We believe that the first item for action on the policy adoption agenda should be the establishment of a short-term high-level Taskforce to clarify the elements of the new design and identify the options and their advantages and disadvantages. Presently there are calls for transition, clean break, overlap, not having two systems operating at once, not having a student do senior assessment under the current system and apply for entry to university under the other ... and so on ... a function perhaps of differing perspectives on the change experience ahead. Apart from undertaking this crucial preliminary piece of work, the Taskforce or any other committee would have no role in overseeing implementation unless convened by QCAA and/or QTAC themselves on the basis of their own identified needs.

Phase 4 - Monitoring, review and research

- · Ongoing monitoring and review of system processes
- Scheduled evaluation
- Research on the system by those in the system

Conclusion

We return to where we began with this Review. We began by clarifying the general purpose and challenge of each of the two activities we were asked to consider: assessing and certifying student attainment in senior subjects; and selecting students for admission to tertiary courses of study. The challenge in assessment and certification is to provide students with a result in each of the subjects they have studied which accurately and meaningfully conveys the level of knowledge, understanding and skill they have attained in that subject. Certification requires results that are valid, reliable and comparable across teachers and schools. The challenge in selecting Year 12 completers for entry to tertiary courses of study is to use evidence that is relevant to those courses and that provides meaningful distinctions between applicants. The selection processes used by universities and other providers must be based on publicly transparent selection criteria that are fair to all applicants for course entry.

Having considered the general purposes, underlying principles and challenges associated with senior assessment and certification and the selection of students into tertiary courses of study, we next reviewed existing assessment and selection processes. We did this by studying current arrangements and then considering inputs to the Review – what was written in submissions and said during consultations. Before we started our investigation we had established the principles that would underpin our deliberations. At each stage of our thinking we reconciled our proposals against those principles.

We also made our own observations and undertook our own research, drew on our own knowledge and experience, built theories and tested out our findings with key stakeholders, interested parties, technical experts, and colleagues in Australia and overseas who are influential in the fields of assessment and selection of Year 12 completers to tertiary courses. At no time did we resist approaching people whose stated positions were different from our own.

After serious reflection we concluded that senior assessment and tertiary entrance processes are in need of reform and that the desirable changes, in our view, involve more than minor adjustments to existing processes; they require the reconceptualisation of some key aspects of the current system.

There are three general areas in which we believe change is required in senior assessment: Assessment activities, evaluating and reporting student performances, and the moderation process. And there are three general areas in which we believe change is required in tertiary entrance: the use of a single rank order, the separation of responsibilities for senior certification and tertiary selection, and transparency of procedures to those most affected by them.

Our general conclusion is that is that senior secondary assessment and tertiary entrance in Queensland are in need of attention. It is more than twenty years since the current OP system was designed, and the broad features of the senior assessment system have been in place even longer. Over the past two decades, assessment and tertiary entrance processes have been the subject of ongoing modifications. Although the current processes have served Queensland well, we believe that they will be less adequate in meeting future needs and that the time has come for a redesign.

Elements of that redesign are a revitalised system of school-based assessment, the introduction of external assessment, a new moderation process that is viable and rigorous, and a 60-point scale for reporting students' subject results. Universities and other tertiary providers are responsible for deciding on the method for using Subject Results to select Year 12 completers for entry to their

courses and, furthermore, for undertaking any computations related to scaling, weighting or ranking that they might require – that is, QTAC not QCAA would be responsible for tertiary selection indices.

Our concluding remark is a personal one: We believe that a system built on our recommendations has the potential to change the educational experiences and life chances of a generation of Queenslanders. And we also believe that the goodwill, experience, expertise, creativity, and energy that pervade the present Queensland systems of senior assessment and tertiary entrance, if properly harnessed, will deliver the 21st Century system recommended in this Report.



Bibliography

Allen, J. R. (2012), "Developing the enabling context for school-based assessment in Queensland, Australia", *Systems Approach for Better Education Results (SABER)*, The World Bank, Washington DC.

Allen, J. R. (2013), *Strengths and weaknesses of Queensland's OP system today*, Tasmanian Qualifications Authority, Hobart.

Australian Bureau of Statistics (2013), *Australian Demographic Statistics*, Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (2013), Education and Work Australia: Additional data cubes, Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (2013), *Snapshot: Migration and the increase in bachelor degrees among people aged 25-34 years in Australia*, viewed 16 September 2014, http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4211.0main+features30April%202013>.

Australian Government (2014), Fact sheet: demand driven funding for undergraduate student places, Department of Industry, Canberra, accessed May 2014, http://www.industry.gov.au/highereducation/ResourcesAndPublications/Resources/Documents/DemandDrivenSystem.pdf

Bennett, R.E. (2006), Foreword, Matters, G. N. (2006), "Using data to support learning in schools: Students, teachers, systems" (pp. iii-v), *Australian Education Review*, 5, Australian Council for Educational Research, Melbourne.

Campbell, W. J., Basset, G. W., Campbell, E. M., Cotterell, J. L., Evans, G. T., & Grassie, M. C. (1975), *Some consequences of the Radford Scheme for schools, teachers, and students in Queensland*, Final Report of Project, Australian Advisory Committee for Research and Development in Education, Brisbane.

Campbell, W.J., Archer, J., Beasley, W., Butler, J., Cowie, R., Cox, B., Galbraith, P., Grice, D., Joy, B., McMeniman, M., Sadler, R. & Wilkes, R. (1983), *Implementation of ROSBA in schools*, unpublished report to the Minister for Education, Brisbane.

Clarke, E. (1987), Assessment in Queensland Secondary Schools: 1983–1990, Department of Education, Brisbane.

Clarke, E. (1990), Assessment in Queensland Secondary Schools: Two decades of change 1964–1983, Department of Education, Brisbane.

Council of Australian Governments (2014), *Reform agenda: schools and education*, Department of Prime Minister and Cabinet, Canberra, viewed May 2014, https://www.coag.gov.au/schools_and_education

Cronbach, L. J. (1988). "Five perspectives on validity argument" in H. Wainer (ed.), *Test Validity*, Erlbaum, Hillsdale, NJ, pp. 3-17.

Dekker, S.W.A. (2011), *Drift into failure: From hunting broken components to understanding complex systems*, Ashgate Publishing Co, Farnham, UK.

Hill P. & Barber, M (forthcoming), *The education revolution and the coming renaissance in assessment*, Pearson, London.

Kelly, D. J. (2014), *Analysis of selected major reports in Queensland 1970–1990*, Australian Council for Educational Research, Brisbane.

Kemp, D. & Norton, A. (2014), *Review of the demand driven funding system report*, Australian Government, Department of Education, Canberra, http://www.industry.gov.au/highereducation/ResourcesAndPublications/Resources/Pages/DemandDrivenFundingForUndergraduateStudentPlaces.aspx

Langbroek J.-P. (Minister for Education, Training and Employment) 2013, *Queensland launches OP score review*, media statement, Queensland Parliament, Brisbane, 31 July,

viewed 16 September 2014 http://statements.qld.gov.au/Statement/2013/7/30/queensland-launches-op-score-review.

Levin, B. & Segedin, L. (2011), *International Approaches to Secondary Education*, Higher Education Quality Council of Ontario, Toronto.

Linn, R. L. (1993), "Linking results of distinct assessment", *Applied Measurement in Education*, 6(1), 83–102.

Masters, G.N. (2013), Australian education review: reforming educational assessment: imperatives, principles and challenges, Australian Council for Educational Research, Melbourne.

Masters, G. N., & McBryde, B. (1994), *An investigation of the comparability of teachers' assessment of student folios*, Queensland Tertiary Procedures Authority, Brisbane.

Matters, G.N. (2006), Assessment approaches in Queensland senior science syllabuses, a report to the Queensland Studies Authority, Australian Council for Educational Research, Brisbane.

Matters, G. N. (2006), "Using data to support learning: students, schools, systems", *Australian Education Review* No. 48, Australian Council for Educational Research, Melbourne.

Matters, G.N., & Masters, G.N. (2007), *Year 12 Curriculum content and achievement standards*, Australian Council for Educational Research, Brisbane.

Maxwell, G.S. (1997), "A systems analysis of selection for tertiary education: Queensland as a case study", PhD thesis, School of Education, University of Queensland.

Maxwell, G. S. (2001), *Are core learning outcomes standards?*, Queensland Studies Authority, Brisbane.

Maxwell, G. S. (2007), *Implications for moderation of proposed changes to senior secondary school syllabuses*, Queensland Studies Authority, Brisbane.

Maxwell, G. S. (2010), "Moderation of student work by teachers", *International encyclopaedia of education*, 3, 457–463.

Maxwell, G.S. & Cumming, J.J. (2011), "Managing without public examinations: successful and sustained curriculum and assessment reform in Queensland", in L. Yates, C. Collins & K. O'Connor (eds), *Australia's curriculum dilemmas: State perspectives and changing times* (pp. 202–222), Melbourne University Press, Academic Monographs, Melbourne.

McCurry, D. M. (2013), *Overview of senior assessment and tertiary entrance in Australia and other countries*, Australian Council for Educational Research, Melbourne.

McMeniman, M. (1986), *A standards schema*, Assessment Unit Discussion Paper 3, Board of Secondary School Studies, Brisbane.

McMeniman, M. (1986), Formative and summative assessment: a complementary approach, Assessment Unit Discussion Paper 6, Board of Secondary School Studies, Brisbane.

Mislevy, R.J., Almond, R.G., & Lukas, J.F. (2003), *A brief introduction to evidence-centered design (RR-03-16)*, Educational Testing Service, Princeton, NJ.

Norton, A. (2013), *Keep the caps off! Student access and choice in higher education*, Grattan Institute, Melbourne, http://grattan.edu.au/static/files/assets/205fbc0e/195-Keep-the-caps-off.pdf>.

Pitman, J. A (1987), *Tertiary entrance in Queensland: a review*, Board of Secondary School Studies, Brisbane.

Pitman, J. A. & Herschell, P. (2002), *The Senior Certificate: A new deal*, Education Queensland and Board of Senior Secondary School Studies, Brisbane.

Pitman, J. A., O'Brien, J. E., & McCollow, J. E. (1999), "High-quality assessment: We are what we believe and do, paper presented at the 25th annual conference of the International Association for Educational Assessment, Bled, Slovenia.

Queensland Curriculum and Assessment Authority (formerly Queensland Studies Authority), data supplied on request by Australian Council for Educational Research.

Queensland Studies Authority (2007), 1992 State distribution of overall positions (OPs) and field positions (FPs), Queensland Studies Authority, Brisbane, viewed 16 September 2014, https://www.qsa.qld.edu.au/downloads/publications/stats_distribute_opfp_1992.pdf

Queensland Studies Authority (2014), 2013 Data summary: QCS attendance and grades, Queensland Studies Authority, Brisbane, viewed 16 September 2014, http://www.qsa.qld.edu.au/downloads/publications/qsa_stats_qcs_attend_grades_2013.pdf

Queensland Department of Education, Training and Employment, data supplied on request by Australian Council for Educational Research.

Queensland Department of Education, Training and the Arts (2007), *Annual Report 2006-2007*, Department of Education, Training and the Arts , Brisbane, viewed 16 September 2014, http://deta.qld.gov.au/publications/resources/report-07.pdf

Queensland Government (2013). *The assessment methods used in senior mathematics, chemistry and physics in Queensland schools*. Report No. 25, Education and Innovation Parliamentary Committee October 2013., https://www.parliament.qld.gov.au/documents/committees/EIC/2013/QldAssessment/rpt-025-14Oct2013.pdf

Queensland Parliament, Assessment Methods for Senior Maths, Chemistry and Physics, Education and Innovation Committee, https://www.parliament.qld.gov.au/work-of-committees/EIC/inquiries/past-inquiries/QldAssessment

Queensland Tertiary Admissions Centre, data supplied on request by Australian Council for Educational Research.

Queensland Tertiary Admissions Centre, *Statistical reports*, Queensland Tertiary Admissions Centre, Brisbane.

Radford, W. M. C. (1970), Public examinations for Queensland secondary school students: Report of the committee appointed to review the system of public examinations for Queensland secondary school students and to make recommendations for the assessment of students' achievements, Department of Education, Brisbane.

Sadler, D.R. (1993), Comparability in school-based assessment in Queensland secondary schools, Tertiary Entrance Procedures Authority, Brisbane.

Sadler, R. (1987), *Defining and achieving comparability of assessments*, Board of Secondary School Studies, Brisbane.

Sadler, R. (1988), *The place of numerical marks in criteria-based assessment*, Board of Secondary School Studies, Brisbane.

Scott, D.R., Berkeley, G.F., Howell, M.A., Schuntner, L.T., Walker, R.F., & Winkle, L. (1978), *A review of school-based assessment in Queensland secondary schools*, Board of Secondary School Studies, Brisbane.

Snook, S. (2002), *Friendly fire: the accidental shootdown of U.S. Black Hawks over Northern Iraq*, Princeton University Press, New Jersey, USA.

Universities Admissions Centre (2014), Report on the scaling of the 2013 NSW Higher School Certificate, Universities Admissions Centre, NSW, http://www.uac.edu.au/documents/atar/2013-ScalingReport.pdf

Viviani, N. (1990), *The review of tertiary entrance in Queensland 1990*, Department of Education, Brisbane.

Vogler, S. & Chilcott, T. (2013) "OP scores for Queensland schools may be scrapped after review", *The Courier-Mail*, 30 July, viewed 16 September 2014, http://www.couriermail.com. au/news/queensland/op-scores-for-queensland-schools-may-be-scrapped-after-review/story-fnihsrf2-1226687761401>.

Wyatt-Smith, C.M. and Matters, G.N. (2007), *Proposal for a new model of senior assessment: realising potentials*, joint Griffith University- Australian Council for Educational Research initiative, Brisbane.



Introduction to Volume 2

The Queensland Review of Senior Assessment and Tertiary Entrance report contains two volumes.

Volume 1 presents the main report, while Volume 2 is a supplement to the main report containing papers and research, as well as the appendices.

Disclaimer:

The content of papers commissioned for the review are the author's sole responsibility and do not represent the views of ACER.

The information provided in the report on consultations, including names and position titles, is as accurate as possible based on information collected at the time of meetings.

Introduction v



Papers and research

1	The present system in a nutshell	3
2	Analysis of selected major reports in Queensland 1970-1990	33
3	Overview of senior assessment and tertiary entrance in	
	Australia and other countries	5
4	Strengths and weaknesses of Queensland's OP system today	85
5	An account of the inner workings of standards, judgement and	
	moderation - A previously untold evidence-based parrative	11.3

Paper 1

The present system in a nutshell

The system we are recommending has, as one its features, a common grasp of some simple facts, including knowledge of what things are and, to some extent, how things got to be the way they are. The purpose of Paper 1 is to set some of these facts forth, the "how we got here" in Section I and the current arrangements in Section II.

Section I: How we got here: a snapshot

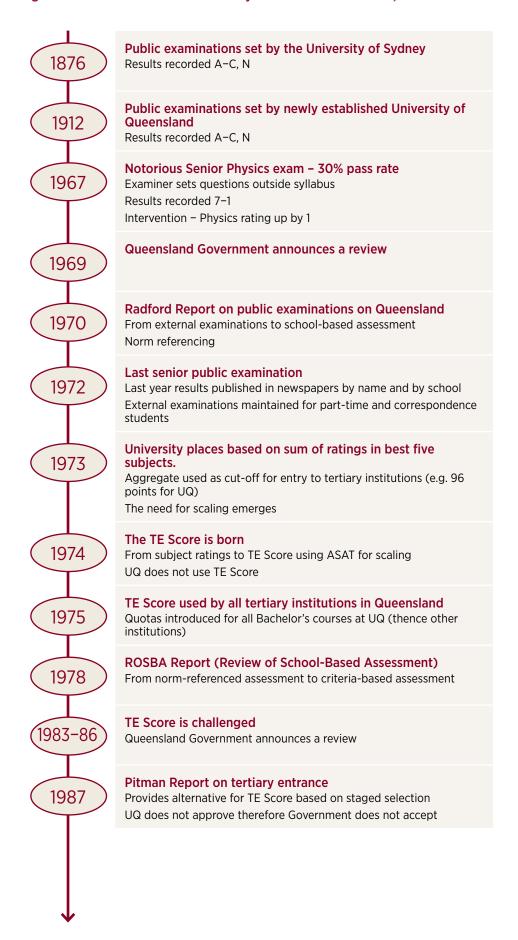
We start with a timeline from 1876 to now. Figure 1 is a collation of challenges that have shaped our system of senior assessment and tertiary entrance, and events that have defined it.

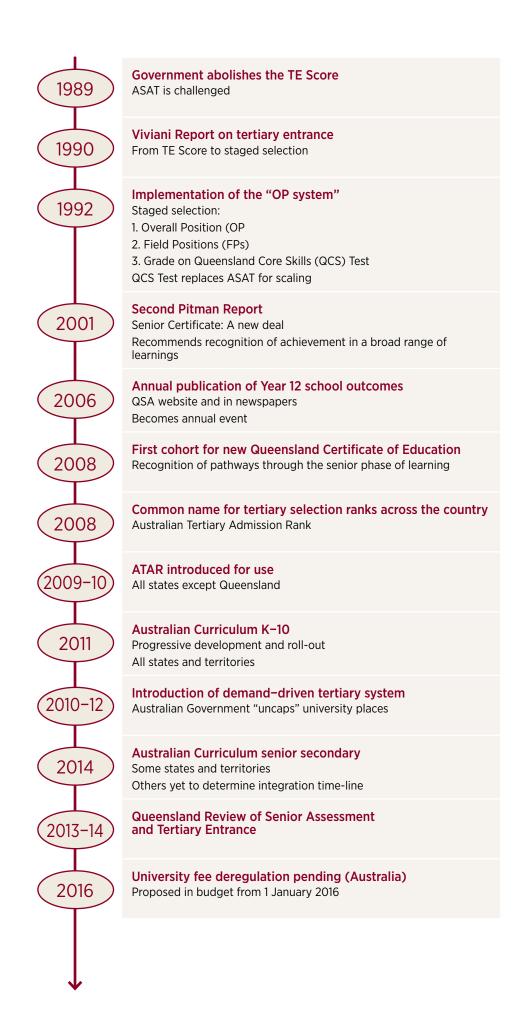
One of the defining characteristics of a jurisdiction's assessment arrangements is the nature of the regime that sets and marks the components of an assessment program for which student results appear on a certificate. What follows is a short story about how, when and why school assessments replaced public examinations in Queensland. A description by Claire Wyatt-Smith and Peta Colbert of how the assessment system developed through five eras can be found in Paper 5 of this volume. Era 1 covers public examinations. The advent of criteria-based assessment and the emphasis on standards are highlighted in discussion of the eras in between. Era 5 refers to 2011 and the future. The story in this section covers Era 1 and some of Era 2.

How, when and why school assessments replaced public (external) examinations in Queensland

Unless you are over 59 years of age [2014] you have not experienced public (external) examinations in Queensland either as a student or a teacher. The story of how, when and why school assessments replaced public examinations in Queensland is well known. It is not described in detail here. What follows merely captures time and place. The story starts at the beginning of 1968. Prime Minister Harold Holt had drowned in the surf at Cheviot Beach just before Christmas the previous year. The new Premier of Queensland was Johannes Bjelke-Petersen. Queensland schools, universities and the general public were reeling from the aftermath of the 1967 Senior Physics paper set (as were all public examinations) by the University of Queensland (UQ). Only 30% of candidates had "passed" (that is, were awarded a grade of 4 or above on the 7–1 rating scale [with 7, highest]). The examiner had set questions on topics outside the syllabus. The nomenclature for reporting results for "passing" students as A–C was changed to 7–1 for all students (so what was the "pass" mark to be then?). This confounded the performance of the Physics group.

Figure 1: Senior assessment and tertiary entrance in Queensland, 1876-2014





Paper 1: The present system in a nutshell

In response to public dissatisfaction, the Government set up a review of public examinations, chaired by Dr William Radford, Director of the Australian Council for Educational Research (ACER). The Radford Review challenged the university's control over the senior school curriculum and cast doubts on the social and technical grounds for external examinations. The solution to the problem was to excise the link between schools and universities – public examinations were abolished and a single statutory authority known as the Board of Secondary School Studies was vested with control over the award and nature of senior certificates.

The last Senior Public Examination was held in 1972. The results on the senior certificate for students who had been in Year 11 in 1972 came from assessments devised by teachers in their schools, and these assessments (rated 1–7) were used as the basis for university selection. The moderation model at that time had teachers meeting to validate each other's judgments.

To this day, Queensland and the ACT are the only state and territory in Australia where no external examinations exist in the senior years of schooling. In Queensland there has been a focus on what has become known as teacher professional judgment and the complementary nature of formative and summative assessment – assessments along the way count towards the final results as well as providing feedback to students during the course of study. A related premise is that assessment should occur as close as possible to learning – classroom teachers being in the best position to monitor student learning and judge the quality of their work.

More than forty years on and discussions about school-based assessment refer again to the notion of control – control over the setting and marking of assessments. External examinations and school-based assessments are obviously not the same in terms of their loci of control but the argument now tends to be framed in terms of the advantages and disadvantages of using teachers' judgments in high-stakes assessment programs. A system that puts teacher judgment at its centre must grapple with issues of validity and reliability. How the Queensland system has responded to the dual imperatives of validity and reliability is a topic of crucial importance in the current review.

Tertiary entrance

When the first Year 12 students to complete senior secondary schooling under the Radford scheme applied for tertiary places in 1973, the "best" five ratings were simply added together and this aggregate served as the cut-off for entrance to universities and colleges of advance education. This use of school assessments in this fashion exerted significant pressure on the moderation system. The Board of Secondary School Studies (BSSS) was keen to ensure that the issues of tertiary entrance and moderation of school assessments were kept separate. The Radford Committee had deliberated about how to devise an order of merit when there were no longer external exam marks and finally recommended that in situations where an order or merit list had to be prepared, it should be based on a combination of scaled school assessments and special examinations not based on prescribed syllabuses. The Australian Scholastic Aptitude Test (ASAT) became the "special examinations not based on prescribed syllabuses". The Queensland Education Department had concluded that an order of merit list based on school assessments scaled against ASAT would be as effective as one based on aggregate scores in students' best five results in senior examination subjects for the purpose of awarding scholarships. Hence the Tertiary Entrance (TE) Score. The first TE Scores were issued in 1974 and by 1975 were used by all

tertiary institutions in Queensland for selection of first-year students. The number of students receiving the top TE Score (always 990) was equivalent to 1% of the state's 17-year-old population. Each other band comprised a number of students equal to 0.5% of the same population. TE Scores were labelled in intervals of 5 (985, 980, 975 and so on) until all TE-eligible students had been assigned a TE Score. Because the number of eligible students varied from year to year against a relatively stable 17-year-old population figure the lowest TE Score in any year also varied. The assumption was that students not at school would occupy the otherwise vacant TE Scores.

Until the early 1970s it was relatively easy to gain entry into a chosen course, given possession of the prerequisite subjects, but this situation did not last. Demand exploded for reasons which include an increased retention rate and social mobility. With a subsequent ceiling on available Commonwealth funds, it became necessary for some tertiary institutions to consider quotas for entry and eventually quotas became universal for Queensland tertiary courses. This represented a massive shift in the basis of selection from one where the students' choices were the major determinant for entry – that is, a matriculation-based scheme – to a quota-based system where institution-driven selection was the dominant mode. By the 1980s tertiary entrance came under increasing pressure as the retention rate exploded and supply of places had not kept up with demand. The Pitman Report dealt with this by recommending the introduction of delayed selection for entry to high-demand courses.

Public concern about the TE Score was more about the use of a single "three-digit" number that filtered applicants through the gates to university than it was about the way the TE Score was calculated. Interestingly, this introduction of quotas almost coincided with the introduction of TE Scores. Actually, an increase in the number of applicants had led UQ in 1966 to impose a quota on the number of students to be admitted annually to medicine. The quota in 1975 was 245; in 1982, 230; in 1989, 240; while the minimum TE Score for entry changed from 945 in 1975 to 980 in 1982 to 985 in 1989. However, it was the TE Score itself, not the introduction of quotas, which was singled out by the public as the obstacle to tertiary entrance. The 1987 Pitman Report pushed for a profile of results to replace the TE Score to be used in stages of selection decisions. The Government abolished the TE Score in 1989, and subsequently accepted the recommendations of the 1990 Viviani Report and a three-part method of tertiary entrance – Overall Performance (OP), Field Positions (FPs), Queensland Core Skills (QCS) grade. This was the solution to the discredited TE Score.

Since then the Queensland education landscape has changed dramatically and institution-driven selection has given way to a demand-driven model. Selection is almost a non-issue except in some courses in some universities. This non-issue for entry is, however, an issue for the current review.

Some aspects of relevance to the current review

The effects of some of the decisions made by the Radford Committee are still felt today. Two of them are now described.

Complications of an order of merit

Today in Australia we are still attached to ranking students from highest to lowest according to some aggregation of their results in (typically) five subjects and then selecting students by going down this rank order list until places are filled. This is why the high-demand high-status courses are able to take the best students. The OP and Australian Tertiary Admission Rank (ATAR) are both examples of this

peculiarly Australian practice. And it is not a recent phenomenon - the practice of ranking students occurred before the abolition of public examinations. There were full unversity fees in those days. The only "free" way was to be awarded a Commonwealth scholarship - these were the top students in the then order of merit list. It was created by adding students' results in their best five subjects. Marks on examinations were reported as A–C and later 7–1 but the examination marks that underpinned the grade or rating were percentages (marks out of 100). Just as is the case today, a mark of 80 in one subject does not mean the same thing as a mark of 80 on another subject. Some subjects are more difficult than others; some subjects are taken by the most capable students. In order to remove the subject-group effect, the distribution of marks on the examinations were adjusted to a distribution with a mean of 62 and a standard deviation of 12. The adjusted marks were then aggregated to create an order of merit for that particular year. There are some aspects of this method that appear to be naive today but the same statistical problem exists. (It is worth noting that few people knew and even fewer asked about the mechanics of creating an order of merit. Unlike today when everybody who is touched by or who touches an OP is expected to know and expects to know the mechanics of scaling and combining.)

What follows about the TE Score then is recognisable in conversations about the OP today:

- It is necessary to produce a single ranking (order of merit list)
- But students study different combinations of subjects
- Different subjects attract students of different abilities
- Levels of achievement are not sufficiently comparable within a subject across the state even after moderation so they cannot be simply added together
- How then do we combine results in different subjects?
- And the realisation that even if assessment is external as was originally the case, subject results have to be scaled before aggregation
- A measure of general scholastic ability should be used for scaling

Place of Senior External Examinations in the current system

A consequence of the abolition of external senior examinations was that young people who wanted to upgrade their senior results or complete a prerequisite for admission to particular university courses were no longer able to study a subject part-time (usually in one year, through a private provider or by correspondence) and then sit for the external examination in that subject alongside Year 12 students. (University fees applied at the time.) The Radford Report responded to the situation by recommending that the Board provide an external examination for correspondence and part-time students. A dual system of internal and external examinations has endured even though the nature of the candidature has changed. The Queensland Studies Authority (QSA) suspended its decision to phase out senior external examinations for non-language subjects until the outcome of this review. The status of external examinations is maintained until considered by the review.

Currently, Senior External Examinations are developed in 21 subjects for Year 12 students enrolled at a Queensland secondary school who are unable to access particular subjects at their school (subject not offered or timetable clash) and for adult students (any age, not enrolled at school) to meet tertiary entrance or employment requirements or for personal interest. Programs are offered by Schools of Distance Education, Continuing Centres for Secondary Education, Colleges of Technical and Further Education and numerous private providers.

Year 12 students are eligible to sit for an examination (subject to a maximum of two). Results are reported as one of five levels of achievement (Very High to Very Limited) and, for Year 12 completers who are OP-eligible, results can count in the calculation of an OP.

In summary, we have a mechanism whereby students' results on a single examination taken outside the school sit alongside results in Authority subjects for certification or tertiary entrance purposes. There are many alternatives now for people wishing to gain a tertiary entrance rank or meet prerequisite requirements for further study. This is most unusual.

Other points

It is not possible here to cover all of the topics that persisted from review to review. An addendum to Paper 2 in Volume 2 of this report contains selected recommendations from three major reports. Topics that appear repeatedly include:

- Number of subjects that count in the calculation of a TE rank
- The basis for discriminating between essentially equivalent applicants
- Use of prerequisites for admission to university courses
- Comparability (and moderation) of school assessments, and concomitant research

Reviews

Reviews such as the current one provide the opportunity to update the records and consolidate information about other reviews. Table 1 lists eleven significant reports since 1970. It cannot be said that Queensland does not examine itself.

Table 1: Report and Author

Authors
W. C. Radford, 1970 Committee
S K. Fairbairn, B. McBryde, R. Rigby, 1976
W. J. Campbell et al, 1976
Edward (Ted) Scott, 1978 Committee
Kenneth Wiltshire, Marilyn McMeniman and Tom Tolhurst, 1994
Gunter Tröst, Bonn, 1996, 1992
John A Pitman, 1987 Ministerial Working Party
Nancy Viviani, 1990
Allan Cumming, 1996
John Pitman and Paul Herschell, 2002
Parliamentary Education and Innovation Committee (Chair: Rosemary Menkens), 2014

Many events have made the Queensland system what it is today. Section I of this paper only touches on the history of assessment and tertiary entrance in Queensland. The route that led to the present assessment system is illustrated in Figure 2, which maps ¹ the options that were available, organised as a decision tree. These decisions were not, of course, made serially – but the sum total of them leads to an assessment system that can be defined as "externally moderated school-based standards-based assessment in a high-stakes environment".

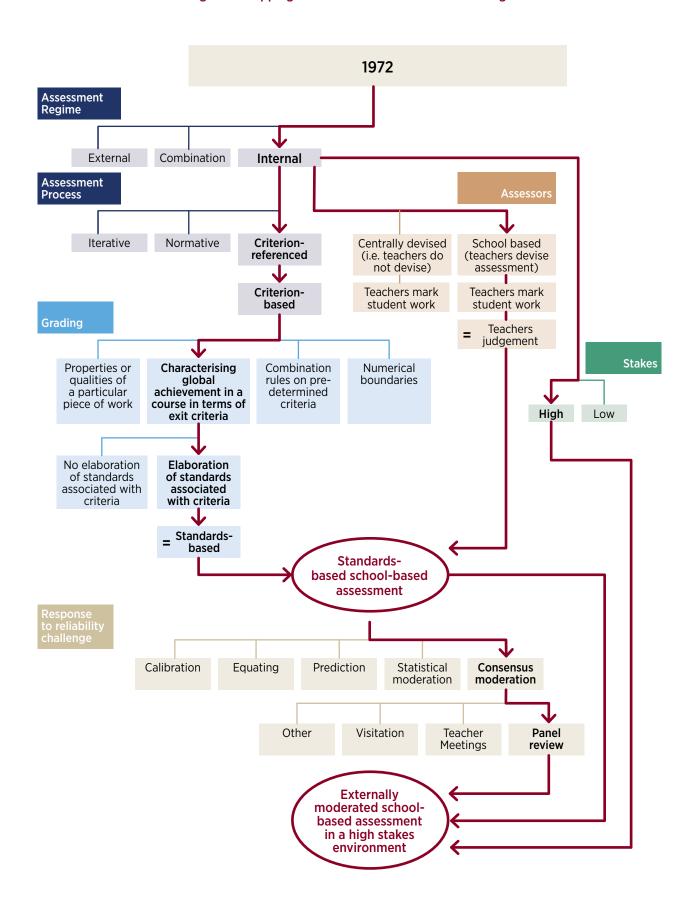
Defining the elements of an assessment regime

The first horizontal line of options has an assessment regime that can be external, internal or combined; the second line has an assessment process that can be iterative, normative, or criterion-referenced. Moving further down the decision tree – was the assessor to be a teacher or central agency of something else? Was the method of grading to be through combination rules on predetermined criteria or numerical cut-offs or something else? And so on for all branches in the decision tree. The red lines indicate the route that the system or policy makers took in navigating their choices. For example, in the Queensland case, assessments are devised and marked by teachers, teacher judgments are validated through the panel model of consensus moderation (for comparability), and grading is based on the application of a standards schema.

A common understanding of the elements that define an assessment system and the alternatives that once existed in Queensland is vital if changes are anticipated. It is only then, with a common grasp of some simple facts, that proper conversations about a future system can be had. The same decision tree will apply but the red line will map out a different route.

Published by Claire Wyatt-Smith (Griffith University) and Gabrielle Matters (ACER) in 2007

Figure 2: Mapping of Queensland's assessment heritage



Section II: The current arrangements

This section describes the key features of senior assessment and tertiary entrance in Queensland. Not all aspects of senior assessment and tertiary entrance are mentioned and technical discussion is kept to a minimum.

There are three main parts to this section. Part A describes senior assessment. Part B links senior assessment to tertiary entrance. The calculation of the Overall Position and Field Positions is included in this section. Part C describes tertiary entrance for Year 12 completers.

The current senior assessment system is described in terms of subject-specific assessment and cross-curriculum testing. The current tertiary entrance system is described in terms of Queensland Tertiary Admissions Centre (QTAC) procedures in which the OP is the primary selection device. Other selection devices are mentioned.

Where information in this paper is in conflict with official statements from Queensland Curriculum and Assessment Authority (QCAA) or QTAC, it is the latter that takes precedence.

Part A: Senior Assessment

A feature of senior secondary education in Queensland is the number and variety of studies on offer to students. The multiple offerings reflect and respond to the ever-increasing diversity of the student population.

Senior studies

The studies listed below are on offer to students in their senior phase of learning.

- Authority subjects
- Authority-registered subjects
- Vocational Education and Training certificate studies
- School-based apprenticeships and traineeships
- Tailored training programs
- · International learning
- Preparatory, enrichment and advanced courses recognised by QCAA

All certification relating to results in senior studies is determined by QCAA. QCAA is a statutory body of the Queensland Government. It was established on 1 July 2014 under the *Education (Queensland Curriculum and Assessment Authority)*Act 2014, replacing the Queensland Studies Authority (QSA). QCAA provides Kindergarten to Year 12 syllabuses, guidelines, assessment, reporting, testing and certification services for Queensland schools.

Of the studies listed above, Authority subjects illustrate fully both school-based assessments (devised by teachers) and moderation of those assessments (through an external verification process).

Authority subjects are courses of study that have been approved and issued by QCAA. Results in Authority subjects can count in the calculation of tertiary entrance ranks (constructed by QCAA) and are the most common selection devices used by the tertiary sector. It should not necessarily follow, however, that all students who take these subjects are tertiary bound or want to be so.

Authority-registered subjects are developed from Study Area Specifications (SASs) and generally include substantial vocational and practical components. Results in Authority-registered subjects are not used in the calculation of tertiary entrance ranks but, as is the case with national vocational education and training certificates that are undertaken by many senior students, Authority-registered subjects can count towards alternative tertiary ranks calculated by QTAC.

Syllabuses in each Authority subject describe the standards for assessing that subject. The notion of commonly-applied pre-set standards is one of the significant differences between Authority and Authority-registered subjects. Calculation of the OP uses students' results in Authority subjects only. Alternative tertiary entrance ranks constructed by QTAC use results in Authority-registered subjects (and other studies) as well. Tertiary entrance ranks constructed by QCAA (OP and FPs) and QTAC's selection ranks are the main topics of discussion in the Part B of this section. Authority subjects, however, are the focus of discussion because all of the procedures referred to in this paper involve Authority subjects in some way or another.

Senior Assessment System

The current Queensland senior assessment system has two components:

- 1 School-based assessment in specific subjects
- 2 A test of cross-curriculum skills, the Queensland Core Skills Test

Results in each of these components appear on a student's Senior Statement, the transcript of learning received by all students completing Year 12 at a school in Queensland.

School-based assessment in specific subjects

Students' subject results are reported on the Senior Statement as one of five levels of achievement, Very High, High, Sound, Limited and Very Limited.

Senior assessment is internal

The senior assessment model in Queensland is a form of internal assessment in that assessments are not set and marked by an authority external to the school. There are no external examinations² for students in full-time schooling in Queensland.

Senior assessment is school-based

Schools plan and manage their own assessment. Teachers and schools are responsible for designing assessment plans and instruments, collecting and collating evidence of student achievement (student work), profiling student achievement over a course of study, awarding grades and reporting on student achievement up to the award of a summative or terminal level of achievement for certification on course completion.

Schools assess significant aspects of the course of study as set down in the syllabus and translated into an approved work program. Teacher-devised assessments include supervised examinations, short tests, assignments, complex tasks, unseen essays, projects, practicals, orals, aurals, observational schedules

There is an exception: QCAA sets Senior External Examinations in 21 subjects for Year 12 students unable to access particular subjects at their school and adult students (people of any age not enrolled at a Queensland secondary school) to meet tertiary entrance or employment requirements or for personal interest. This apparent anomaly has historical roots described earlier in this paper.

and field studies. Assessment occurs under various rules and conditions such as supervision, notice, access to resources, set schedules, handing-in procedures and acceptance of late submissions.

Information about student achievement is gathered through a process of continuous assessment. Continuous assessment does not mean very frequent or continual formal assessment. Nor does it mean cumulative or terminal assessment but rather a process of constant judging of student achievement with an implication that the result or product is not a static quantity. Assessment is balanced over the course of study (not necessarily within a semester or between semesters). The school work program shows how performances in the various elements of the course are to be combined to produce an exit level of achievement for certification. Within schools teachers use profiles as a tool to record assessment results of students throughout the two-year course of study. Profiling incorporates the notion of selectively updating student records so that the profile is an accurate record of achievement at any point in time during those two years. This makes possible a decision about a student's exit level of achievement for a particular subject that is based on the latest and most complete information on record. The rules for combining results in different assessments are set down in syllabuses.

Senior assessment is standards-based

Senior assessment focuses on the specific nature of each student's actual achievements on multiple criteria or dimensions with reference to pre-set standards, in contrast to norm-based assessment where the emphasis is on relating the achievement of a particular student to the achievements of other students. Descriptions of student work that meets these standards appear in the corresponding subject syllabus. The descriptions of standards are free from any references to the performance of the typical student, the proportion of students expected to achieve a give n level, or the particular age or stage of schooling at which a certain level of performance is thought to be acceptable. Table 4 is the standards matrix for Music.

The standards matrix

The important dimensions for assessment are the criteria (typically three per subject). They represent the characteristics of student work or performance that are to be judged. For each criterion, five standards or levels of achievement labelled Very High Achievement to Very Limited Achievement describe performance benchmarks. The matrix of three criteria and five levels of achievement with a standards descriptor in each of the 15 cells, and referred to as the "standards matrix", is the frame of reference that teachers use to evaluate students' work (performances) throughout the course of study and at exit. There is a standards matrix in every syllabus (see Mathematics B and English attached at the end of this paper).

Teachers evaluate performances on school assessment activities by making judgments against a set of activity-specific criteria and standards based on excerpts of the overarching (exit) criteria and standards for that subject.

Teacher-maintained student profiles record students' levels of achievement on each activity as a letter-grade (A–E) across the two years of the course.

This information is selectively and continually updated, with the most recent assessments superseding information from earlier assessments. At the end of the course of study, teachers judge the standard achieved by each student on each of the criteria for that subject (using the five standards defined in the syllabus,

again recording the level of achievement on the A–E scale). Teachers then make an on-balance judgment across criteria in determining students' exit levels of achievement in the course of study. In some subjects the syllabus provides rules for determining the exit level of achievement (for example, the syllabus states that Very High Achievement in a subject requires students to be awarded an A on any two criteria and no less than a B on the remaining criterion).

Comparability of standards

Teachers use a variety of assessment instruments for obtaining evidence about students' achievement levels. The public need for credibility would not be met if teachers were the sole assessors of the performance of their own students and if teachers were working in isolation.

Students who take the same subject in different schools and who attain the same standard through assessment programs based on a common syllabus should be awarded the same level of achievement on exit from Year 12, irrespective of the teacher who is responsible for setting and marking of assessment instruments. (This is not to suggest that two students who receive the same level of achievement have had the same collection of experiences or have achieved equally in any one aspect of the course. It means that they have, on balance, reached the same standard.)

It is the role of moderation to ensure comparability of standards through a system of verification of school decision-making.

Senior assessment is moderated

The Queensland approach to moderation uses review panels operating at district and state levels. Moderation by review panels places bounds on the extent to which teachers exercise freedom in deciding standards of student work.

A review panel is a group of experienced practicing teachers who give advice to schools, on behalf of QCAA, in subjects within their area of expertise, about the appropriateness of work programs and about standards of student work. They are appointed by a committee of school principals in each district. Their participation is voluntary and supported by their schools (for example, being released to attend panel meetings). While panellists receive some remuneration³, schools bear much of the cost of their involvement in the system. The partnership between schools and QCAA is a defining feature of the system.

Queensland is divided into 13 administrative districts. For each subject or subject area there is a district panel in each district plus a state review panel; some subjects with small enrolments have different arrangements. State panels regulate the operation of the district review panels, advise on issues within the district review panels and resolve disagreement between schools and district panels.

Components of moderation

- Approval of school plans for implementing the subject syllabus (work programs)
- Review of each school's assessments through monitoring, verification, comparability and confirmation
- Random sampling (a post-hoc mechanism for evaluating the effectiveness of the moderation process).

Panellists are paid for up to two hours per school submission for pre-reviewing at monitoring and verification, and for reviewing work programs. Panel chairs and state chairs also receive a stipend for their work throughout the year.

Approval (of work programs)

Approval and work programs

QCAA approves a school's programs of study in Authority and Authority-registered subjects as programs for which students' results may contribute to certification and be recorded on the Senior Statement. The term "Authority subject" like "Board subject" in an earlier era does not have meaning beyond Queensland and is due for change. Authority subjects are the only subjects for which the full suite of moderation processes applies and which "count" in determining tertiary entrance ranks (discussed later). In the case of an Authority subject, the course of study is confirmed by a process in which the relevant review panel checks a school's work program against the corresponding syllabus to ensure that the requirements of the syllabus have been met. The life-span of an approved work program is six years, with designated commencement and expiry years.

Review: Monitoring, Verification, Comparability and Confirmation

The operation of the review panels during monitoring and verification is as follows.

At *monitoring*, a sample of student folios of Year 11 work is sent from each school in each subject to the relevant review panel. Advice is then provided to the school about the effectiveness of its assessment package and interim judgments about levels of achievements.

At the end of a course of study, schools provide a *verification* submission to district panels for review. This typically involves five folios at mid-range level and four at threshold level. Each folio includes the relevant pieces of student work or other records of their performances as well as the school's judgments of the standard attained by the student. Teachers' judgments concerning how close each student is to the boundary between adjacent levels (for example, Sound and High) are also provided at verification. Adjustment for any student in the sample can have repercussions for other students in the group. Members of the review panel meet and review each of the sampled folios, considering whether they agree with the teacher judgments about standards based on the evidence before them. The panel seeks agreement across its members before offering its advice to the school.

Verification is followed by a process called *comparability* in which state review panels look at a sample of folios from each district to ensure judgments are comparable across the state.

Confirmation is the final process of validation of the results to appear on the Senior Statement. The responsibility for confirmation rests with QCAA.

Random sampling

A postscript to certification, random sampling is part of the system of moderation that relates to verification of school decision-making. It offers information about how successful QCAA's review procedures are in providing schools with suitable advice about standards, advice that leads to appropriate further action by schools. At the beginning of the year following certification of results, QCAA extracts random sample of student folios for post-hoc analysis. This student work is analysed by review panels in "non-home" districts. Where there are concerns, QCAA contacts the school and advises the principal of action to be taken.

Timing and summary of moderation events

Figure 3, provided by QCAA, summarises the events described above for Authority subjects and indicates the timing of those events.

Figure 3: Timing and summary of moderation events

Phase 1: Syllabus Development

Learning Area Reference Committees develop syllabuses for QCAA approval Syllabuses contain the pre-set standards for assessment

Schools write work programs

Phase 2: Work Program Approval

District review panels ensure that work programs meet syllabus requirements QCAA approves work program

Schools teach and assess students according to their approved work programs

Phase 3: Monitoring (February)

District review panels provide advice on schools about course implementation based on samples of Year 11 work

Schools apply panel advice

Phase 4: Verification (October)

District review panels verify schools' judgments of student achievements Schools respond to panel advice

State panel negotiates if there is disagreement between schools and district panel

Phase 5: Comparability (November)

State review panels ensure judgments are comparable across the state

Phase 6: Confirmation (November)

QCAA checks school results and confirms levels of achievement

Student Outcomes (December)

Exit levels of achievement awarded

Phase 7: Random Sampling (December-January)

Random samples of student folios extracted

Student work analysed and school decision-making verified

The QCS Test

Queensland Core Skills Test is a test of cross-curriculum skills whose primary function is to enable the statistical process of scaling in constructing the OP and FPs for tertiary selection. The test is developed and marked by QCAA. The process of scaling is described in Part B but it is necessary to note here that the process of scaling of school assessments uses group results. A student's result does not count in the calculation of that individual student's OP.

The QCS Test must be sat by students who are eligible for an OP. Students who are not eligible for an OP may choose to sit for the test. All students who take the test are awarded a grade (A to E) which is recorded on the Senior Statement. Thus a secondary function of the QCS Test is to provide information about an individual student's achievement in the skills that thread the curriculum, which are now described.

Content

The QCS Test assesses achievement in the common elements of the senior curriculum, referred to as Common Curriculum Elements (CCEs). These skills are embedded, to varying degrees, in subject syllabuses and students acquire them in different contexts as they move through their subject-specific studies. At the end of Year 12, students are tested on how well they can apply these skills in unfamiliar contexts. There are sets of the CCEs that fit together. These five sets of CCEs or aspects of achievement are referred to as "criteria" and they provide a summary of what is measured by the test and they are the basis for establishing cut-scores for grades. Table 2 shows the five criteria, together with a description of what it means to perform at an A-standard on the test.

Table 2: QCS Construct

Criterion (or basket of CCEs)	A-standard descriptor
Comprehend and collect ideas and information	Comprehend facts and literal meanings over a wide range of material Extract information, clarify it, and transform it to display meaning
Structure and sequence ideas and information	Select/sort relevant, subtle and/or obscure information from a wide range of materials and then sequence it logically and organise it systematically Discern complex patterns and relationships from verbal, pictorial, tabular, graphical and symbolic text
Create and present	Demonstrate a confident and flexible proficiency with written language, a skilled and effective control of structure, and a consistent ability to develop, clearly and sensitively, a relevant central idea Write effectively and accurately Produce clear, coherent and accurate information of the highest visual appeal
Analyse, assess and conclude	Deduce and induce subtle causal and other relationships between factors from interrelated material Identify the essence and suitably evaluate the worth of multifaceted, complex arguments, verbal and mathematical Draw conclusions through evaluation of a wide range of materials thus: • evaluate explicit and implicit assumptions, distinguish factors, evince and assess principles, predicts conclusions • consider many possibilities from a wide range of complicated material in making sound judgments
Apply techniques and procedures	Determine and use appropriate techniques for making exact and approximate calculations Solve problems involving a number of pieces of information

One illustration of the way a set of CCEs fits together under a criterion (or within a "basket") is Criterion 5: "Apply techniques and procedures". Even though this basket contains all of the mathematics-specific CCEs, it is obvious that most of these CCEs are developed in the study of subjects other than mathematics; for example two and three-dimensional shapes in Art, Geography and Earth Science to name just a few:

- Calculating with or without calculators
- · Estimating numerical magnitude
- Approximating numerical value
- Substituting in formulae
- Structuring and organising a mathematical argument
- Applying a progression of steps to achieve the required answer
- Identifying shapes in two and three dimensions

Format

The 7-hour test comprises four papers in three formats — extended writing (one paper), short response (one paper) and multiple-choice (two papers). Two multiple-choice papers (1.5 hours each for 50 items) contain questions based on a variety of stimulus material, such as prose passages, poetry, graphs, tables, maps, mathematical and scientific data, cartoons and reproductions of works of art. Students are required to answer the question asked by selecting the best answer from four options. In the short-response paper (2 hours) students respond by writing sentences or paragraphs, arguing a point of view, interpreting literary extracts and academic prose, sketching and drawing, performing calculations, graphing, tabulating, summarising written text, substituting in formulae and so on. A writing task (2 hours) requires students to produce an extended piece of continuous prose of about 600 words in response to multi-medium, multi-mode stimulus material, presented to students as an A3 fold-out in colour.

Marking and grading

Marking of the QCS Test involves the use of computer technology and human markers. The multiple-choice papers (100 items in total) are scored by computer according to a key (list of correct options). Markers of the short-response items and the writing task are recruited by QCAA. Each student response is marked more than once. Training and monitoring of markers is undertaken so that marking schemes are applied in the same way to students' responses.

The total QCS score is the weighted aggregate of the subtest scores (Writing Task contribution being adjusted to 25%). The total score on the test is converted to one of the five available grades (A to E). The state-wide distribution of grades is not predetermined, but is ascertained by setting numerical cut-scores after a data-driven standards setting process.

Conditions

The test is administered across the state under commonly-applied conditions (for example, time, equipment allowed) over two consecutive days at the end of Term 3. Tests are administered with strict security. A new version of the QCS Test is produced each year. All papers including the multiple-choice papers are released into the public domain.

Fact checks

Contrary to what is often taken to be a fact by many people, the QCS Test is not used to moderate school-based assessments. School-based assessments are validated through external moderation.

A student's individual score (total "marks" on the four papers that make up the QCS Test) is not used in the calculation of that student's OP (see Part C).

Subjects are weighted equally in the calculation of the OP. There is no hierarchy of subjects for the calculation (see Part C).

Part B: From Senior Assessment to Tertiary Entrance

This part links senior assessment to tertiary entrance via the certification process at the end of Year 12. Tertiary entrance in Australia for Year 12 completers is based on achievement in senior secondary school studies (as opposed to the sort of standardised testing found in the US).

Year 12 Certification

All certification relating to results in the senior phase of learning is determined by QCAA. Students completing Year 12 may receive one or more of the following:

- Senior Statement records all learning in the student's account and the results achieved during the senior phase of learning including a QCS result if applicable – described above
- QCE Queensland Certificate of Education
- QCIA Queensland Certificate of Individual Achievement confirms learning outcomes for special needs students on individualised learning programs
- VET Certificate Vocational Education and Training Certificate certifies competence in a vocational education and training course or qualification level
- Tertiary Entrance Statement records a student's OP and up to five FPs described below

Senior Statement

Elements of the Senior Statement were described in Part A.

Queensland Certificate of Education

The QCE is Queensland's senior school-based qualification, awarded to eligible students on completion of the senior phase of learning, usually at the end of Year 12. The QCE recognises the broad learning options available to students and offers flexibility in what, where and when learning occurs.

Learning options include Authority and Authority-registered subjects, VET courses, workplace and community learning, and university subjects undertaken while at school. To be eligible for a QCE, student must achieve at least 20 credits of learning including minimum literacy and numeracy standards. A minimum of 12 credits must come from completed Core courses of study. These include Authority and Authority-registered subjects, VET courses, school-based apprenticeships and recognised international learning programs. The remaining eight credits can come from a combination of Core, Preparatory, Enrichment or Advanced courses.

Tertiary Entrance Statement

A Tertiary Entrance Statement is issued by QCAA to students who are eligible for an OP. It records a student's OP and up to five FPs.

To be eligible for an OP (and therefore for one or more FPs) a student must study a certain number of Authority subjects and satisfy other requirements including completion of Year 12 and the QCS Test. The basic eligibility requirement is 20 semester units of credit in Authority subjects with at least three subjects taken for four semesters. (Authority subjects are based on syllabuses that have been approved and issued by QCAA. There is a list of International Baccalaureate studies comparable to QCAA subjects.)

A student's OP, together with subject prerequisites or other requirements such as portfolios and interviews, is very important in determining the tertiary courses for which they could gain entry.

The Tertiary Entrance Statement also reports a student's achievement in up to five fields of study, expressed as FPs.

Calculation of the Overall Position (OP) – Why and How

Why

When Year 12 completers have a common goal such as admission to university courses, particularly when there are limitations on the number of places available in all or some courses, there must be a common measure of achievement. Currently, in Australia, the selection of Year 12 completers for entry to university is on the basis of their position in a list that ranks students from highest to lowest according to their overall achievement. In Queensland that rank order is the Overall Position. The OP, as its name indicates, is a position not a score. The calculation of the OP uses results in any combination of Authority subjects (rules apply to semesters study but not to subject combination).

Different subjects in different schools attract students of differing abilities. Thus, in one school the most capable students may select Geography and Dance. In another school, Mathematics and Physics might be more popular with the most capable students. We are able to say⁴ that a Very High Achievement (VHA) in Physics at one school is equivalent to a VHA in Physics at another school and so on for all subjects across all schools in the state. But we cannot say⁵ that a VHA in Geography is equivalent to a VHA in Beekeeping⁶. Coming first in the Melbourne Cup is not the same as coming first at a country race meeting. Being top in Maths A is not the same accomplishment as being top in Maths C. It all depends on the competition.

For an OP calculation, we need to combine results in different subjects. If we want to add Geography results to Physics results we have to get those results on to the same scale. The technique used in Queensland involves giving a common test to all students involved, thus providing a yardstick against which achievement in subject groups and a school may be compared. This process is called "scaling". The starting point is that teachers determine a rank order of students within each subject group.

⁴ Because there is a quality assurance process called moderation that aims to ensure comparability of standards within a subject

⁵ And there is no reason or expectation that this would be in the case

⁶ Hypothetical subject name so that Geography is not taken to be more difficult than some other real subject

What

The OP is a number, from 1 to 25, representing the ranking, in order of merit, of an OP-eligible Year 12 student in that year's cohort. The ranking is based on overall achievement in Tertiary Entrance Rank (Authority) subjects (there are rules about semester units, but typically five subjects for four semesters). The OP is derived from a measure called the overall achievement indicator (OAI). The 25 OP bands are determined by setting cut-offs along the range of the OAI, according to a rule about percentage of OP-eligible students in each band. The 25 OP bands are not equal in size.

The Review of Tertiary Entrance in Queensland 1990 recommended "basic year-to-year comparibility" of OPs. Consequently, a numerical process is used to equate students' performances across years. This means that there is no fixed quota of students in each band and that year-to-year differences in the OP-eligible cohort may produce variations in the proportions of students in each band.

How

In simplified terms a student's OAI is an aggregate score obtained from that student's achievement in Authority subjects and the group scores of students in the same school on an anchor test, the Queensland Core Skills Test, which is a test of generic skills.

A student's subject achievement relative to other students in that subject in that school is expressed as a Subject Achievement Indicator (SAI). The QCS group scores (subject-group and school-group) are expressed as mean and mean difference, these group-parameters being used to "iron out" differences between subjects and between schools in order to place all OP-eligible students on a common scale (and in order of merit).

There are rules that govern which subject results count (not discussed here). Each subject result is equally weighted in the aggregation of scaled SAIs to produce the OAI.

In summary, inputs are individual SAIs and QCS group-parameters; output is the OP:

SAIs are assigned to students by their subject teachers based on their achievement relative to other students in that subject group – students are ranked from highest to lowest . SAIs show the order of the students and how far apart they are from each other

This happens at the end of Year 12.

QCS parameters are measures of location (mean) and spread (mean difference) of the distribution of QCS raw scores. There are QCS parameters for all subject-groups within a school and for all school-groups. Group parameters are used in scaling. Students sit for the QCS Test in August–September of Year 12

Scaling and combining

Outputs are scaled OAIs (for all OP-eligible students across the state) and OPs

The OP appears on a student's Tertiary Entrance Statement from QCAA. QCAA transmits OPs (and OAIs) to QTAC for use in the selection for university courses.

The decision to have 25 bands for the OP was based on the principle that the number of bands should be that which can be meaningly supported by the level of precision in the input data.

The purpose of Figure 5 is to reinforce the fact that the OP is a position not a score.

Figure 4: Procedures in the compilation of the OP

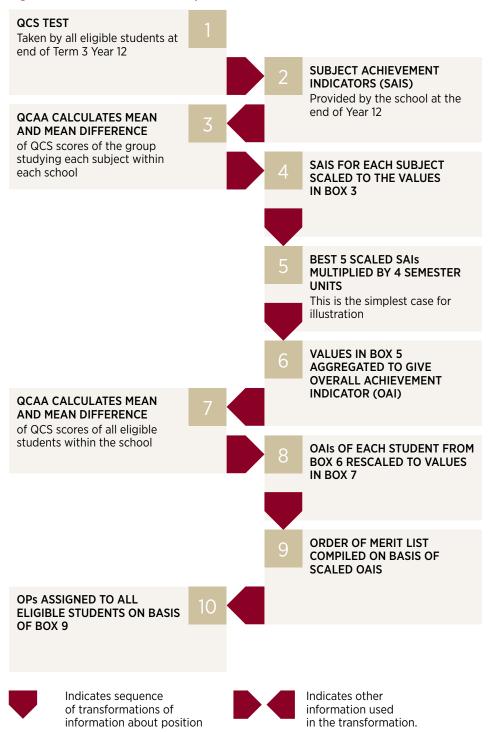
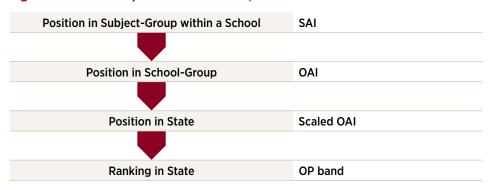


Figure 5: The OP is a *position* in the state, based on *overall* achievement



The OAI cut-off for OP1 is determined each year so that there is year-to-year comparability of OP1s. The process involves the linking of QCS items between years. Originally the proportion of OP1s and OP25s was set at 2%.

Field Positions are the other output of TE entrance calculations.

Field Positions

FPs are used to provide more information when it is necessary to consider two or more applicants with the same OP at the cut-off point for a course. Whereas the OP represents a ranking based on an indicator of overall achievement, FPs recognise that different skills areas of the curriculum are emphasised in assessment across the Authority subjects. These skills areas are called *fields*. Table 2 describes the five fields.

Table 3: Field Descriptions

Field	Description
Α	Extended written expression involving complex analysis and synthesis or elements of writing necessary to complete such tasks
В	Short written communication involving reading comprehension, pictorial interpretation and basic English expression or understanding the elements necessary to complete such tasks
С	Basic numeracy involving simple calculations and graphical, diagrammatic and tabular representation
D	Solving complex problems involving mathematical symbols and abstractions or elements of problem solving necessary to complete such tasks, including complex graphical and scientific interpretation
E	Substantial practical performance involving physical or creative arts or expressive skills

Different subjects contribute different weights to the different fields. For example, Mathematics B⁷ contributes more highly to Field C than English. On the other hand, English contributes more highly to Field A than Mathematics B. The extent to which a subject contributes to each field is published each year. Eligibility is a function of subjects taken and their respective weights in the fields and the number of semester units studied.

Subject results, in the form of SAIs, are not weighted equally in the process of aggregating scores across subjects. Rather than being the same for all fields, a

The nomenclature of the Maths hierarchy is counterintuitive: Maths C, Maths B, Maths A

subject's weighting for a particular field can have a value 0 to 5 inclusive. Not all items on the QCS Test count towards the scaling parameters (mean and mean difference) used in the process of scaling between subject-groups within a school. In fact, a different subset of items is used for each of the fields. Another difference between OPs and FPs, of a technical nature and not immediately relevant in this discussion, is that there is no second stage of scaling in the calculation of FPs. That is, there is no between-schools scaling as there is for the OP.

There are fewer bands for each of the FPs than for the OP, and hence wider categories, reflecting a lower level of precision in this measure than in the OP.

Part C: Selection for Tertiary Study

It is the role of QTAC to process applications for the majority of undergraduate courses at Queensland universities, Medicine at Bond University, the Australian Maritime College in Tasmania and to some courses at universities in Northern New South Wales, TAFE Queensland, Southbank Institute of Technology and some private providers of post-secondary courses. Part of their role is to manage the bridge between senior assessment and tertiary entrance.

The main selection criteria for tertiary study are:

- Meeting the institutional admission rules
- Meeting the minimum course entry requirements
- OP or QTAC selection rank (for OP-ineligible students)

This part describes how senior assessments are used for tertiary entrance purposes, and the roads to university that exist for students with an OP and for students who do not have an OP. OP-eligible students compete for places in tertiary courses not only with their peers but with applicants outside the school system.

QTAC Procedures

What follows is drawn from QTAC publications.

Institution Admissions Rules

These rules vary by institution and can include policies regarding, for example, the level of English proficiency required and minimum age or qualification requirements. More specifically, Christian Heritage College, Central Queensland University, James Cook University, Queensland Institute of Business and Technology, University of New England and University of the Sunshine Coast require applicants to have completed Year 12 or be 17 years of age. Southern Cross University requires applicants to have completed Year 12 or be 18 years of age. Southbank Institute of Technology and TAFE Queensland require applicants to have completed Year 12 or attained Year 12 leaving age. Applicants who do not meet the above rules can still apply for courses, however, the success of their application is at the institution's discretion.

Minimum Course Entry Requirements

Minimum course entry requirements are usually prerequisite subjects but can also be success at interview or audition.

Subject prerequisites are the subjects studied in Years 11 and 12 that are stated by the tertiary institutions as necessary for consideration for entry for particular courses. They are expressed as minimum exit Levels of Achievement (LOAs) in specific senior subjects. For example, an entry of English (4, SA) in the list published through QTAC indicates that QCAA subject English (or equivalent) must have been studied over four semesters (that is, Years 11 and 12) and an exit (overall) LOA of Sound or better be obtained.

Assumed knowledge is the minimum LOA in a senior subject (or equivalent) considered necessary for successful first-year tertiary study. Students lacking the assumed level of knowledge are not prevented from enrolling, however, they might be disadvantaged unless they undertake recommended bridging, preparatory or appropriate introductory subjects prior to or during their first year of study.

Recommended study refers to subjects that are recommended in order for a student to study a course successfully. They are not entry requirements and do not affect selection of applicants.

Subject Choice

QTAC advises students selecting their Year 11 and 12 subjects to select prerequisites and recommended subjects for the tertiary courses they are interested in and to choose the remainder of their senior subjects according to those in which they do best and which they prefer to do.

The Selection Process

The OP Road

Selection is a three-stage process.

- 1 All applicants who fall into an OP band above the minimum cut-off point for a particular course will be offered a place in the course.
- 2 If the number of places in a course dictates that not all applicants within an OP band can be made an offer then selection within the OP band will be based on FPs.
- 3 In some cases, even after FPs have been considered (where applicable), more information may be needed to differentiate between students with the same OP applying to courses that are highly competitive. In these instances a further step may be added. Depending on the institution this could include any of the following:
 - Australian Tertiary Admission Rank (ATAR)
 - LOA in prerequisite subjects, school reports or additional information supplied by the applicant
 - QCS grade

The staged selection process as originally designed in 1990 when demand outstripped supply, had the decision-making sequence as OP, FPs, QCS grade. In recent times, as university places have become "uncapped", the pressure is off the selection process in general because most students who apply for a place are successful, except for the high-demand high-status courses where competition for a place is intense. So the universities turned to students' scores on the ATAR, a 2,000-point scale used in all other states.

Students who are not eligible for an OP can be considered for tertiary entrance on the basis of assessable academic achievements or other qualifications as described below.

The OP-Ineligible Road

Selection is based on the OP-ineligible QTAC selection rank.

Ranking is based on results in a student's best 20 semester units of Authority and Authority-registered subjects and VET units of competency or modules as recorded on the Senior Statement and, if available, the student's QCS grade (QCS grade used to moderate upwards only).

Students are ranked from 1 (lowest) to 99. QTAC compiles a table showing comparisons between OPs and QTAC selection ranks thus allowing OP-eligible and OP-ineligible students to compete for tertiary places.

FPs are not used in differentiating applicants in QTAC selection rank because the scale is finer than the OP scale. Taking 2012 as an example, OP11 (one band) lined up with a selection rank from 77 to 79 (three points).

Students not taking the standard tertiary pathways (that is, by being OP-eligible) may not be considered for tertiary entry interstate or overseas and are advised to contact the relevant institution outside Queensland when making a decision to change status from OP-eligible to OP-ineligible by, for example, not sitting for the QCS Test or "dropping" an Authority subject.

Other Roads to Tertiary Study

Courses not requiring OPs or QTAC selection ranks

For courses not requiring OPs or QTAC selection ranks applicants may be selected on the basis of a portfolio of work, audition, interview, test result or other requirement (these are published in QTAC handbook). This scenario usually occurs within skills-based courses such as art, music and dance.

Applicants with qualifications in addition to senior study

Some Year 12 students have qualifications in addition to senior results that can be used in the assessment of their application. Such qualifications include Australian Qualifications Framework (AQF) Certificate III or IV, music qualifications (for example, from the Australian Music Examinations Board), or study undertaken at a tertiary institution. These qualifications may give the student a more competitive QTAC selection rank than awarded for their senior study.

Special admissions schemes

Most institutions have admissions schemes to assist applicants in special circumstances gain entry to tertiary courses. For example, there are access and equity schemes, regional preference schemes and Aboriginal and Torres Strait Islander schemes.

Subject bonus schemes

Some institutions have schemes where applicants receive bonus ranks if they have passed specified subjects at school, such as languages other than English or Maths C.

OPs in Queensland are currently converted to QTAC selection ranks so that bonuses can be applied. Seven universities have QTAC apply bonus points. One case study has a student with an OP8 (QTAC selection rank 85) obtaining bonus points for studying Mathematics C (QTAC selection rank now 87). Another has an OP6 student moving from 90 to 94, having acquired bonus points for studying French and Japanese. There is a ceiling to how many bonus points can be awarded to the same student and the rules are clearly stated in tables provided by QTAC.

QTAC's educational access scheme

QTAC's educational access scheme takes into account circumstances beyond the control of the applicant that affected their level of academic achievement when assessing an application for tertiary entrance. The range of circumstances includes financial hardship, English language difficulties and disruption at home or school.

Use of ATARs

In 2008, following advice from the then Minister for Education and Training, approval was given to QTAC to use Queensland students' ATARs as a final tie-breaker in the selection process for high-demand courses on the condition that the information was confidential and not for public release or discussion, and that ATARs were only to be used after both OPs and FPs had been exhausted as selection mechanisms. Further, at its meeting on 23 October 2013, the Governing Body of QCAA approved QTAC's use of ATARs to inform selection decisions for specified OP1 courses and merit-based scholarships, and additional QCS Test information based on a student's raw score on the test (raw scores underpin the A–E grade distribution) to inform selection decisions for specified courses with cut-offs lower than OP1, and to make this information available to affected students upon request. Students need to ask for a form which is provided only by QCAA in order to request their ATAR and, since 2013, students are also provided with their "QCS rank", a percentile rank based QCS raw scores.

A selection process with so many intricacies has evolved as a series of reasonable responses to other needs such as making fine distinctions between students who are otherwise the same (have the same OP and FPs and QCS grade) or encouraging students to study highest-level mathematics and languages other than English.

Procedures in other states/territories

What we observed in 2006 when exploring the notion of an Australian Certificate of Education does not appear to have changed in any significant way today (notwithstanding the Australian Curriculum whose success is not yet assured and the transformation of Tertiary Entrance Ranks into an ATAR – discussed elsewhere in this review report). There are five key differences in arrangements for senior curricula, assessment and certification across Australia's eight jurisdictions. There are also similarities. The major similarities have historical origins in the culture and values of Australia. The notion of a federation of states in which states have constitutional responsibility for school education is fundamental to understanding the existence of different systems across the country.

The policies and procedures of the states and territories are underpinned by a set of common intentions: excellence in procedures and products; diversity in curriculum offerings; flexibility in arrangements; equity in access to participation, engagement and achievement; and validity and reliability in assessment. In assessment and reporting arrangements the biggest differences are in the balance of arrangements and modes of assessment and the underpinnings of assessment and standards. In certification the biggest differences are in eligibility requirements for a certificate or tertiary entrance rank and the terminology used to report student results. There are differences in the rationales given for certain procedures and in the use of terms. Differences in terminology, in particular, complicate the task of adequately describing senior secondary arrangements in different jurisdictions. Reg Allen's classification of differences in senior curricula, assessment and certification fits: to paraphrase – differences are (a) accidental – somebody made an arbitrary decision and it stuck; (b) historical – grounded in the

history of the states and their education systems, their changes and continuities; and (c) conceptual – a function of different notions of a subject and its pedagogy. We add a fourth – political climate or dominant philosophy or ideology at the time.

Supplement to Part A

Table 4: Music Standards Matrix

Music Senior Syllabus 2013 Standards matrix

	Standard A	Standard B	Standard C	Standard D	Standard E
Composition	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:
	consistent and proficient selection and application of music elements and concepts in the creation of their own works	effective selection and application of music elements and concepts in the creation of their own works	selection and application of music elements and concepts in the creation of their own works	variable selection and application of music elements and concepts in their own works	selection and application of some music elements and concepts in their own works
	skilful manipulation of compositional techniques in the creation of cohesive and well-structured music	manipulation of compositional techniques in the creation of cohesive music	demonstration of compositional techniques in the creation of their own works	use of basic compositional techniques to develop works of variable quality	use of rudimentary compositional techniques to produce partial works
	 discerning synthesis and convincing expression of music ideas and stylistic characteristics integral to the creation of their own works. 	effective synthesis and expression of music ideas and stylistic characteristics that support the creation of their own works.	synthesis and communication of music ideas and stylistic characteristics to create their own works.	presentation of music ideas and stylistic characteristics in their own works.	use of music ideas in their own works.
Musicology	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:
	discerning perception and interpretation of relevant music elements and concepts in repertoire and music sources	thorough perception and interpretation of relevant music elements and concepts in repertoire and music sources	perception and interpretation of music elements and concepts in repertoire and music sources	inconsistent perception and interpretation of music elements and concepts in repertoire and music sources	little consideration of music elements or concepts in repertoire and music sources
	comprehensive and discerning analysis and evaluation of music to determine the relationships between music elements, concepts and stylistic characteristics	in-depth and coherent analysis and evaluation of music to determine the relationships between music elements, concepts and stylistic characteristics	analysis and evaluation of music to determine the relationships between music elements, concepts and stylistic characteristics	simple analysis of music to identify some connections between music elements, concepts or stylistic characteristics	statements that may relate to music elements or concepts
	discerning synthesis of findings, well-supported justification of music viewpoints, and convincing communication of music ideas.	effective synthesis of findings, valid justification of music viewpoints, and logical communication of music ideas.	 synthesis of findings, justification of music viewpoints, and communication of music ideas. 	statements of findings with simple justification of music viewpoints and presentation of music ideas.	statements of opinion related to music ideas.
Performance	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:
	consistent and proficient interpretation and application of music elements and concepts in performance	effective interpretation and application of music elements and concepts in performance	interpretation and application of music elements and concepts in performance	superficial interpretation and application of music elements and concepts in performance	use of some music elements and concepts in performance
	fluent and authoritative demonstration of refined performance skills and techniques related to contexts	effective demonstration of secure performance skills and techniques related to contexts	demonstration of performance skills and techniques related to contexts	evidence of some basic performance skills and techniques in context	use of rudimentary performance techniques
	 discerning synthesis and convincing expression of music ideas and stylistic characteristics integral to the performance. 	effective synthesis and expression of music ideas and stylistic characteristics that support the performance.	synthesis and communication of music ideas and stylistic characteristics to create performances.	presentation of music ideas and stylistic characteristics in performance.	simplistic use of music ideas in performance.





Paper 2

Analysis of selected major reports in Queensland 1970–1990

DJ Kelly, ACER January 2014

This paper is an analysis of four major reviews of senior assessment and tertiary entrance procedures in Queensland; namely:

- Public Examinations for Queensland Secondary School Students (1970, "Radford Report")
- A Review of School-based Assessment in Queensland Secondary Schools (1978, "ROSBA Report")
- Tertiary Entrance in Queensland: A Review (1987, "Pitman Report")
- The Review of Tertiary Entrance in Queensland 1990 (1990, "Viviani Report").

These reports mark stages in a long history. The first of them, the Radford Report, is almost 45 years old; the most recent, the Viviani Report, is almost 25 years old. The Radford Report was as close in time to World War II as we, in turn, are to the Viviani Report.

This paper is not a recounting of that long history but an analysis of some reports that responded to and helped form the history.

Why do such an analysis? Previous reports, after all, have had their day. Their recommendations have been implemented, rejected, adapted, superseded. The situation they sought to improve has passed. Their predictions have been verified, averted, perhaps discredited. Their missed opportunities cannot be reclaimed. Written indeed in the hope of being superseded by policies and practices, they have proved subject to the common fate of "grey literature" and have largely disappeared from publicly accessible sources.

The current report of course will stand or fall according to its connections with today's realities, not according to its place in a lineage of previous reports. Nevertheless, an analysis of reports has more than historical interest. Like Buckminster Fuller's knot, which slides along a series of spliced ropes (the "same" knot manifested successively in materially "different" ropes), themes, patterns and positions recur in different reports, written by different authors for different times, using different material. Examining the "knots" in previous reports can suggest crucial questions about the current report that its readers, and indeed its writers, can ask of it. Of the many such knots that could be examined, three have been selected here, to incorporate considerations of:

- the interrelationship of the reports (How did each report relate to its predecessors?)
- the relationship of the reports to their time (How did each report characterise the existing situation?)

 the values that drive the reports (What values were embedded in each report?).

How did each report relate to its predecessors?

From the viewpoint of the current report, the Radford Report can be regarded as an originator. It is true that the report includes a magisterial account of the previous century's initiatives, concerns and responses (more or less incremental) in relation to examinations in Queensland. That narrative, however, was one that the Radford Report itself brought to a close: it is a survey of how the system got to where it then was ("Practices arose in response to a particular need, and were continued as traditions after the need disappeared." p. 7), followed immediately by a striking out in a new direction. The narrative becomes a new story. Subsequent reports have not struck out in wholly new directions in this way, but have rather adjusted existing directions and sought to alter practices, in response to needs, before they ossified into traditions. Whatever their individual characteristics, later reports can be seen as contributions to the narrative that was set in train by Radford; that is, as attempts to make the system of schoolbased assessment, and its application to tertiary entrance procedures, as effective, fair and useful as it could be within the (then) current or predicted social and educational situation.

The ROSBA Report is the second major report considered in this analysis, but it is in fact a review and an evaluative synthesis of two intervening reports, which had addressed the consequences of the adoption of the Radford recommendations:

- Schools under Radford, by K. Fairbairn et al.
- Some Consequences of the Radford Scheme for Schools, Teachers and Students in Queensland, by W. J. Campbell et al.

Although its temporal relation to Radford is close (only eight years later), its substantive, intellectual relation is already indirect. The Radford Report had been a single enterprise; the early years of implementation of the Radford system had given birth to different studies; the ROSBA Report sought to draw the various strands of investigation and recommendation together into another single report, on which government and the Board could base decisions. Whether or not the joint responsibility behind the ROSBA Report provided a reassuring, shared-experience element to some who still regarded the Radford implementations as an aberration, the ROSBA Report nevertheless has a "meta-report" status in the history of Queensland senior education reports.

About the same number of years separated the Pitman Report from the ROSBA Report as had separated ROSBA from the Radford Report. The relationship between the two pairs of reports, however, is markedly different. If Radford represents the birth of a new system and ROSBA the expert, professional advice on its uncertain, exploratory early stages of development, the subject of the Pitman Report is already unmistakably mature and established (although still interested in exploration). Radford and ROSBA together could be dramatised as "The Queensland System: The Early Years"; Pitman, however, would require a new series. The lines of development – the links between the series – are clear. Many of the complex technical understandings of the Pitman Report may be regarded as developments from two simply expressed recommendations of ROSBA, related to the Tertiary Entrance Score:

P27: For the purpose of determining order of merit for entry to Tertiary Institutions, the Tertiary Entrance Score should be retained, though the

Board should continue its research into the efficacy of the Tertiary Entrance Score as a method of ranking students.

P28: In calculating the Tertiary Entrance Score use should be made of ASAT, or of a comparable test, as at present. However the Board should continue its research into the use and efficacy of such a moderating instrument.

However, while the ROSBA Report was an experienced consideration of the implementation of the Radford Report, the tone and content of the Pitman Report suggest something more than a consideration of the ROSBA Report. It is a document from within a system that has developed its own momentum, conducted its own research, and developed its own recommendations.

Three years after the Pitman Report, the Viviani Report was published. In the meantime, the abolition of the Tertiary Entrance Score had been announced (which was in keeping with the recommendations of the Pitman Report) but its replacement had not been decided. Viviani's recommendation for a three-part replacement (comprising an Overall Position, Field Positions and an individual result in a new Core Skills Test) drew heavily on the Pitman Report but, in important ways, the Viviani Report differed from its immediate predecessor. Its viewpoint was more external to the system: it described the tertiary entrance procedures as "a fragile system that has lost public confidence", and diagnosed the problem, in part, as the system's having "clung to the TE score, instituted in 1974, long after its usefulness had declined". The Viviani Report's position of external critic, so different from the Pitman Report's, can be seen as creating a space in which Pitman's analyses and recommendations could be reconsidered and evaluated.

In summary, the four reports under consideration seem to fall into two pairs: first, the initial impetus of the Radford Report followed by the guiding influence of the ROSBA Report; and second, the in-depth, internal analysis of the Pitman Report, followed by the external evaluation of the Viviani Report. The first pair are part of one phase of the Queensland initiative of school-based assessment, involving the TE Score; the second recognisably belong to the start of the next phase, involving OPs. Those four reports were written within a 20-year period, with no more than eight years between any two of them; the current report represents a view from 24 years later.

How did each report characterise the existing situation?

Reports such as the four under consideration (as well as the current one) inevitably describe an existing imperfect situation, envisage a significantly less imperfect situation, and propose pathways to get from one to the other. Examining the ways that previous imperfect situations have been described may help put the current report's description of the current situation into perspective: a deepening perspective of successive attempts to renew the Queensland system to make it – for a time, and then for another time – as little imperfect as possible.

The Radford Report confronted a system that had, in effect, followed a single line of development for over a century. The decade immediately preceding the report the influence of new forces came into play as a wider range of students completed Year 12. This system was strongly influenced by the universities through their control of the culminating assessment of the Senior Examination, which could act like a magnet drawing the iron filings of secondary education into a university-oriented pattern. Radford traced this influence from an earlier time, when it could be justified, to the 1960s, and described the then current situation:

The Senior Examination is being taken by more and more students who have in mind full-time study other than at universities, employment which will require part-time study of a specialised nature or employment where a good general education associated with initiative will bring rewards in responsibility and income.

For a significant proportion of these students, the examination is considered to be too difficult. (p. 17)

In addition to emphasising the inappropriateness of such an academic examination at a time when "fewer than half of those sitting for Senior [went] on to the University in the following year" (p. 16), Radford pointed out the inappropriate consequences of the examination on the Senior curriculum (such as a focus on reproduction of others' ideas, "evanescent forms of knowledge", and passive absorption of information – p. 56), and on pedagogy (such as "cramming, reluctance to experiment, [and] teaching towards the examination" – p. 60).

In the light of later developments (evident already in ROSBA and a strong feature of both Pitman and Viviani), it is worth pointing out that in Radford, while the inappropriateness of the Senior curriculum and examinations for non-university-bound students was emphasised, the issue of fierce competition for limited tertiary places was not presented as a major problem facing students or the system.

In considering how the ROSBA Report in turn characterised the situation in 1978, it is necessary to consider the consequences that Radford had predicted for the new system. The ROSBA Report in effect drew on its two source reports to observe the current situation through the lens of Radford's expectations; it did not take a wholly fresh view. What it saw is presented in largely negative terms. The ROSBA Report synthesised criticisms of the Radford Scheme endorsed in its source reports to obtain a list of 28 substantial criticisms, reproduced in full here to provide a starting point in post-Radford evaluations:

- 1 The liberalising elements in the Radford proposals have been withstood and frustrated.
- 2 Schools have become more difficult to administer.
- 3 There has been no improvement in the openness of school climates.
- 4 There has been a significant increase in workloads which, in turn, has had unintended effects.
- 5 Curriculum change has essentially remained system-boxed with very little influence from community bodies and other groups.
- 6 The operational syllabus in schools seems largely determined by the expectations of moderators and by the sanctions of moderators meetings.
- 7 Evaluation is seen as acting as a control over curriculum evaluation.
- 8 Many teachers feel incompetent to exercise the freedom of syllabus development and believe they do not receive sufficient consultative support. They also believe that such support is missing when new courses are introduced.
- 9 Individual differences in students are not really accommodated.
- 10 Schools offer a limited range of Board Subjects thus limiting student choice.
- 11 Board Subjects currently available are academically oriented.
- 12 The frequency of developing Board Subjects has been disappointing.

- 13 Tests and examinations remain the imperative of school life.
- 14 Assessment is almost exclusively concerned with the recall of academic knowledge.
- 15 Low priority has been given as feedback to amend teaching strategies and to diagnose student weaknesses.
- 16 Testing and ranking of students have increased in frequency and are having a detrimental effect on students, teachers and school administrators.
- 17 There has been an erosion of student-teacher relationships.
- 18 Continuous assessment together with relativistic ratings has generated anxiety and hostility in students.
- 19 The demands of school assessment programs have decreased student involvement in extra-curricular activities.
- 20 The promise of freedom in evaluation practices remains largely unfulfilled.
- 21 Students believe the distribution of ratings to their school as predetermined and this has led to a decline in teacher-student relationships.
- 22 The time constraints of moderation meetings lead to
 - i moderators making superficial, subjective judgments,
 - ii teachers being overwhelmed by administration,
 - iii a reduction in time available for teaching,
 - iv emphasis being placed only on assessable aspects of the curriculum,
 - v decline in teacher-student relationships over assessment.
- 23 Atypically bright students in small groups are disadvantaged.
- 24 The Radford Scheme has generated stress and frustration.
- 25 Science students are less prepared in the development of their cognitive abilities.
- 26 Students report senior school life to be dull.
- 27 A marks 'fetish' has developed leading to unhealthy competition.
- 28 There is a lack of trust and a build-up of animosity between students. (p. 5-7)

On the other hand, the ROSBA Report noted that the Campbell Report had identified some positive achievements in some areas of predicted improvement:

- New subjects have been introduced, and on a large scale within some schools.
- Greater coherence has occurred among objectives, curricula and evaluation.
- Teachers are more involved in cooperative activities within their schools.
- The evidence suggests an increase in both quality and variety of instructional policies, course preparation, lesson preparation and classroom teaching.
- Teachers are experiencing challenge, stimulation, a sense of mastery and a sense of professional growth.
- Higher achievements in both cognitive and affective domains. On balance this expectation has been fulfilled; any drop in mastery of facts

and principles is more than offset by increased competence in higherlevel cognitive processes; distinct gains have also been made in social competencies and affective development.

Despite these positive elements, the range and severity of the criticisms are notable. The ROSBA Report maintained that some of them related to "teething problems" (p. 3) that had been overcome subsequent to the two source reports, that is, between 1975 and 1978.

A further feature of the ROSBA analysis of problems, beyond the above syntheses of criticisms contained in its source reports, is a consideration of the rapidly changing social context for Queensland education, including the link between serious unemployment and increased school retention, and the apparently more complex moral climate in which students in the late 1970s lived.

There is an inherent difference between Radford's adumbration of an entrenched system's shortcomings and ROSBA's more urgent exposing of a new system's failures. The Pitman Report, in turn, presents another approach. Taking as its starting point the position that there is "widespread doubt in the community about the efficacy and equity of tertiary entrance selection procedures" (p. 8), the Pitman Working Party invited submissions expressing those doubts. The issues raised in the report are initially those that were raised in the submissions, which the Working Party categorised as follows.

- The Australian Scholastic Aptitude Test (ASAT)
- Closing date for QTAC preferences relative to issue of TE Scores
- Tertiary prerequisites
- Alleged manipulation of data by schools
- Delayed selection
- Year 13
- Other criteria for selection
- The lack of tertiary places unmet demand
- External examinations (alone or in combination with internal assessments)
- The "notional" TE score (NTE) and first-year places offered to applicants not from the previous Year 12 cohort
- Community education and the need for public relations; lack of understanding of and/or confidence in the current system
- Access to tertiary places for minority/disadvantaged groups
- The self-perpetuating status of certain courses, particularly those with high TE Score cut-offs
- Effects of tertiary selection on the secondary curriculum
- University quotas in relation to planning for future needs

The report details the often contradictory nature of the concerns expressed on each of these topics. In some instances, especially those that relate to the nature and consequences of Board procedures, it seeks to demonstrate that an expressed concern is unfounded, but the fact that the concern exists is taken as an important part of the current situation.

It can be seen that these concerns cover a wide range of topics, and are certainly not limited to the context of secondary schooling. The Pitman Working Party's brief was specifically "to review all aspects of entrance to tertiary institutions in Queensland" (p. 9), and both the secondary and tertiary sides of that line of transition are given due weight; indeed the notion of tertiary entrance as crossing a line between secondary and tertiary education is itself dismissed, in the light of the 50 per cent of tertiary entrants each year who were not members of the previous year's Year 12 cohort.

While the Pitman Report sought out a wide range of concerns about the current system and acknowledged that real problems underlay most of these concerns, its account of the problems was essentially different from ROSBA's account nine years earlier. ROSBA had described an emerging system beset with problems: the continuation of the system itself was at issue. The problems featured in the Pitman Report were not teething problems. Nor for that matter were they the problems of a system as deeply entrenched as that analysed by Radford. They were, however, the problems of an established system that had had time to experience and reflect.

The Viviani Report, only three years after the Pitman Report, essentially dealt with the same problems in the same social and educational situation; but where the Pitman Report had analysed a range of public concerns, dismissed some, considered and advocated possible solutions to others, and acknowledged that some were part of the human condition, the Viviani Report's approach to the current situation appeared more urgent. The system was described as "a fragile system that has lost public confidence"; the public's concern was "verging on widespread antipathy' (p. 93); the TE Score was something that had been 'clung to ... long after its usefulness had declined". The teething problems of ROSBA, which had become the mature complications of Pitman, had in turn begun to be seen as signs of aging decline in Viviani. To some extent, perhaps, this was a feature of the brief: the abolition of the TE Score had been announced, and a new system was required.

The major problems with the TE Score identified in the Viviani Report related to:

- public confidence (including a perception of its inscrutable complexity)
- comparability (involving levels of achievement, Special Subject Assessments [SSAs], and the ASAT Test)
- the belief that the TE Score contained a Maths-Science bias
- the inappropriate uses to which TE Scores were being put.

The Viviani Report, however, like the Pitman Report, focused not only on problems with the TE Score but on problems with governance of the entire system of tertiary selection. In this area, too, Viviani found evidence of near-terminal failure: the "process of consultation, negotiation and co-operation between schools and universities on tertiary entrance has effectively broken down ... there has been a serious decline in public confidence in tertiary entrance methods." (p. 3) Like the ROSBA and Pitman Reports before it, the Viviani Report noted the social changes that underlay these problems: notably, the larger and more heterogeneous student population, the more widespread expectation of a tertiary education, an expansion of universities (to four public universities at that time), the offering of higher-level qualifications by TAFE and private colleges, and the demand for further education by people already in the workforce.

What values were embedded in each report?

As has been noted, a feature of all four reports' delineation of the problems they are seeking to deal with is the placing of educational problems within a social

context. Educational constructs such as external examinations, TE Scores and Overall Positions can be seen to have a certain internal coherence of their own, but they are never entirely closed systems. Furthermore, since education deals with personal development, any report that evaluates current educational systems and proposes new ones will have, explicitly or implicitly, its own vision of what being a person means. It will of necessity be a document that is rich in values. Sometimes these values might be more apparent in retrospect than at the time.

The Radford Report was commissioned by the Bjelke-Petersen government in July 1969, a month before the Woodstock Festival. The "progressive" nature of its recommendations, accepted by a government not usually characterised as "progressive" in that sense, has often been remarked upon. In ways perhaps more apparent in hindsight, the report (although impeccably sober in tone) has something in common with the discourse associated with Woodstock's "Aquarian Exposition". It is instructive to consider the value-rich terms in which the effects of both examinations and school assessment are described in the report.

In the crucial chapter, "An Examination of Examinations", arguments for and against examinations and school assessment are presented. The arguments in favour of examinations are expressed in terms of objectivity, independence, incentive, sustained application, the discipline of a specific deadline, tangible goals, and being made to work at something "which, though important, may be uninteresting". (p. 54–55) The arguments in favour of school assessment, on the other hand, are expressed in terms of personal responsibility, flexibility, variation, enrichment, remediation, ceasing to guard privilege, individual needs, potential, collective judgment, consensus, capacity to change, a greater range, multiple features of a student's ability, practical and group work, interest, enthusiasm, and creative and imaginative flair. (p. 60–61)

The arguments against examinations emphasise (in the student's case) reproducing others' ideas, "evanescent" forms of knowledge, intellectual passivity, failing to form an independent judgment, "the clever use of slender achievement rather than the recognition of the need to improve understanding and judgment". Disadvantages for teachers and schools are presented in terms of limited freedom, constraints, restrictions and barriers. Criticisms of examinations in general refer to "the rules of the game" and resistance to change. Arguments against school assessment (all rejected in the report) include the teacher becoming an evaluator not a guide, teachers awarding marks unfairly, students being frustrated by constant failure, and grades not being equivalent across institutions.

While objectivity, discipline and application are acknowledged, the competing values of freedom, flexibility, creativity, change and multiplicity are ultimately decisive. Constraint and prescription, on the other hand, are regarded as undesirable. Faith in people's ability and desire to do the right thing is also evident in the justifications given for advocating a system of school-based assessment:

- We ourselves can see no reason for doubting the ability of teachers in secondary schools to form sound judgments on their students' achievements. We consider that schools should be able to make assessments at least as reliable as present scores on Senior Examination papers, and more valid because they can take account of more performances than a single written examination. (p. 76)
- We believe that the wisdom and professional judgment of the principal and staff will prevent bias affecting school assessments. (p. 65)

The Radford Report's confident faith in freedom can be seen as a sign of its times. Even when limitations are being placed on freedom – "We are not proposing to give uninhibited freedom to schools to do what they want" (p. 80) – the choice of words is redolent of the late 1960s.

While the 1960s were experienced and are remembered as a time of social turmoil, economically they were more stable than the 1970s; unemployment in particular became a serious issue for young people in the 1970s, resulting in many students staying at school until Year 12 who might otherwise have left earlier. Radford had confidently mapped the destinations of most Year 10 leavers: "Most of the students who leave school on completing Grade 10 take employment either immediately or later as clerks, typists, cadets, apprentices, trainee nurses or shop assistants, or enter post-Junior vocational courses in Technical Colleges and in the Armed Services." (p. 64) By the time of the ROSBA Report (only eight years later), these traditional pathways were not so open.

The social changes of the 1970s are reflected in the ROSBA Report in various ways. It is probably in the nature of things that a review of recent reforms will appear less confident, more restrained than the document that proposed the reforms. It has been seen already how many criticisms of the enacted Radford Scheme the ROSBA Report had to document and examine. Nevertheless, the difference between the Radford and ROSBA Reports is not just that between aspirations and reality. The nature of the society itself within which education is to take place is seen to have changed. To problems associated with unemploymentdriven school retention, the report argues, 'must be added the implications for our schools of the significant change in the cultural mix of the student body, the growing awareness of sexism in secondary school opportunities and the pressures exerted from time to time to include specific studies - such as driver training, consumerism, human relations, sex education, and vocational training - as obliged studies within the curriculum.' (p. 19) While Radford had certainly been driven partly by the need to bring Senior education closer to students' real needs (which were more various than a need to gain entry to a university), this note sounded in the ROSBA Report is new: freedom and potential now appear more circumscribed by social realities - not just the realities of implementation but the new realities of a more complex (and apparently, to young people, more inhospitable) society.

The ROSBA Report diagnosed recent issues in Australian society that education should have a role in improving:

The most salient characteristics of contemporary Australian society are its increasing multicultural composition, its dynamism and its pluralistic ideologies – so much so that through traditional observation it is difficult to discern overt consensus in our basic value system. If any quality has clearly emerged it would seem to be a tolerance of deviation from our traditional moral values and from our democratic orientation. It is the view of the Committee that many of the models of conduct, of standards and values presented to young people by contemporary society are cause for serious concern. They legitimately present alternative behaviour and value patterns (with which the youth of today are surrounded), but they do not offer guiding criteria against which youth may evaluate the efficacy of those alternatives. The inevitable consequence of this is the development of widespread personal insecurity and anxiety in young people. (Incidentally these phenomena are reported observations by critics of the Radford Scheme who may, in fact, be found to be attributing the cause of the behaviours observed to the wrong source.) (p. 18)

Furthermore, the ROSBA Report put forward values to be encouraged through a new "core curriculum", in which the less than total freedom available within a society was to be made explicit:

We believe that secondary school students should know the basic beliefs and ideas held to be valuable in our society and which give it a sense of community. Against these mores each student should develop his or her individuality in such a way as to meet with the approval of his or her fellow citizens. Yet to allow them to follow their own interests and to solve their own problems in the name of relevancy is to court disaster, to encourage them to think only about social problems and understand social trends, however important these may be, will not suffice for the education of tomorrow. We believe that, at the secondary school level, the challenge to our youth to think about the future and the kind of society it is possible to build within the bounds of social trends, should be provided within a framework of the traditional values and democratic ideals upon which our heritage has been built. We also believe that the core experiences advocated are essential for the maintenance of a healthy society and lead to individual student achievement on the dimensions listed in paragraph 3.04 [i.e. the general aims of education]. (p. 19–20)

Together with this espousal of a post-1960s acceptance of personal limitations and social responsibilities, and a sense of the need to conserve valued features of Australian society against internal threats, the ROSBA Report sounds a new note with regard to the role of teachers and schools that also seems to belong to its time. Where Radford acknowledged the need for public confidence in school results and asserted the ability of teachers to provide results that deserved this confidence, the ROSBA Report explicitly introduced a theme that would be further developed through the Pitman and Viviani reports – accountability.

There is little doubt that secondary education is moving through a period of accountability in which the efficacy of programs of study, of teaching procedures and student achievement are much in question. We believe that parents and students have a right to know what competences are intended to be developed in the student through a particular instructional program. They also have the right to know how effective a particular program has been. (p. 29)

This theme of accountability, first introduced in the context of curriculum development, also drives the report's advocacy of competency-based assessment (where the awarded results can be held up as having an inherent, not just a relative, meaning) and of the moderation of students' results (through which the awarded results can acquire greater credibility).

The Pitman Report belongs to another decade, the 1980s, and had a narrower brief: specifically, tertiary entrance. The values to be encouraged in students by a curriculum were not part of this brief. However, other features of the ROSBA Report were followed through and developed to a marked extent. The changing patterns of school completion and tertiary entrance, and the pressures they exerted on existing procedures, were, inevitably, major themes. An important post-ROSBA element in the situation was the Queensland Tertiary Admissions Centre, formally established in 1980, which then, as now, processed applications for tertiary entrance and made offers to applicants on behalf of tertiary institutions. While much of the Pitman Report consists of discussions of procedures associated with the TE Score and with possible replacements for it, a parallel concern was the larger process of tertiary selection, in which the TE Score played a part for only some applicants. The diversification of pathways that had occurred between Radford and ROSBA had continued, with a complicating influence on procedures that essentially are comparisons of applicants: "The more different the paths, the

harder the comparisons. The more there are varied methods for applicants with similar backgrounds, the greater the possibility of anomalies." (p. 128).

Within the discussions of the TE Score and of the larger processes for tertiary selection, the value of accountability, first emphasised in the ROSBA Report, was given still greater prominence. From the start of the report, where public statements of concern are investigated and responded to, the importance of public accountability – of processes being justified and explained, and concerns about those processes being answered – is a recurrent theme. From one viewpoint this may appear paradoxical: the level of technical detail provided in the report does not at first glance suggest openness to the public. The source of the apparent paradox is explained within the report itself:

The various parts of a tertiary entrance system interrelate in complex and sometimes surprising ways. Apparently simple solutions are neither simple nor, indeed, are they solutions: their ramifications are complex and their effects are not those desired by their proponents. The Working Party has found that to give expression to principles that are simple to state – fairness, comparability and so on – it is necessary to devise procedures whose details may appear complicated. A principle may be simple but the mechanism complicated. It seems that those who demand that the system be both simple and fair will have to be disappointed: it can be one or the other but not both. (p. 96)

The apparent paradox in values is this: while the principle of accountability is crucial, the principle of fairness is absolute and may lead the system into complex areas which the light of everyday accountability may struggle to reach.

An apparent paradox similar in some ways to the apparent accountability/ accessibility paradox – and like that, resolvable – can be found in the matter of responsiveness to public concerns. On the one hand, the report is based on the reality of public concerns; that is the point from which it starts. On the other hand, public concerns can sometimes be dealt with summarily:

It seems that most people know that ASAT "matters" but do not know what it is used for nor why. Partial knowledge breeds suspicion and concern. There are allegations that are simply untrue and others that are unprovable. There is the irony that a policy adopted to provide a measure of fairness should be seen as an attempt to conceal. There are dark hints that the use of ASAT is maintained for nefarious purposes.

This report cannot address all the misconceptions which exist and which formed part of submissions, but a discussion of some of them is instructive. People's perceptions form a real and significant part of the system, even where those perceptions are neither soundly based nor those hoped for by the designers of the system. (p. 15)

Just as fairness might take a system to a point where its fairness cannot be easily explained, so scrupulous responsiveness to public concerns might lead to publicly unpalatable explanations.

If the ruling value of the Radford Report is freedom, and that of the ROSBA Report accountability, the ruling value of the Pitman Report – the one that the report itself calls on as its fundamental support – is fairness.

The complexities of the Pitman Report underlie, and are in no way rejected by, the Viviani Report three years later. The greatest difference between the two reports is not where they end up (the recommendations) but where they begin. Where Pitman started from the position that public concerns could often

be answered, and should be, even if some of the answers were unlikely to be universally accepted, Viviani starts from the position that public concerns are so great that it is too late to answer them: the system had already lost the confidence of the public, and needed to be changed. Indeed this position was inherent in the terms of reference, "To recommend an alternative system..." (p. iv) Moreover, in comparison with the very broad terms of reference of the Pitman Working Party ("To review all aspects of entrance to tertiary institutions in Queensland"), Viviani's terms of reference indicated not only that an alternative system was to be recommended but also some of the characteristics of the desired system. The second of four terms of reference was as follows:

To recommend an alternative system which would -

- a. be fair, equitable and easily understood by students, parents and teachers;
- aim to provide a tertiary entrance profile which includes as separate components school based assessments of achievements as recorded on the Senior Certificate and independent measures of aptitude for tertiary entrance;
- c. aim to use measures which depend, and are seen to depend, on each individual student's own performance;
- d. avoid using a single score as an indication of a student's aptitude to undertake tertiary studies;
- e. avoid the necessity to rescale school assessments using procedures reliant on group performance;
- f. reduce the pressures imposed by Tertiary Entrance Score requirements on the curriculum in the senior secondary school, and on the subject choices of individual students; and
- g. be accessed by those students completing Year 12 who wish to compete for tertiary entrance. (p. iv)

If some of these terms of reference appear to derive from recommendations made by the Pitman Report, the insistence on the new system being 'fair, equitable and easily understood' would appear to be a reaction against the Pitman position that fairness and simplicity are incompatible. In any case, whether or not the proposed alternative system was indeed significantly more easily understood than its predecessor, the Viviani Report itself makes a virtue of directness. This is apparent in the style of the report: where the Pitman Report would sometimes pursue an analysis or an argument throughout a lengthy paragraph, the Viviani Report favoured short, assertive paragraphs. The tone produced is one of decisive intervention; for example:

Returning to the broader question of comparability of assessment for university entrance, it is apparent that statistical moderation (scaling) creates as well as solves problems, and it is, on balance, a second best solution. There is no first best solution. The other alternatives which are used to achieve comparability, accreditation of assessment processes and moderation of assessment processes and outcomes cannot, *by themselves*, achieve sufficient comparability for university entrance purposes.

We need to use all three processes – accreditation, moderation and statistical scaling – *in combination*. But we need to move over time to place less weight on scaling, and more weight on moderation in comparability of assessment.

This was at the core of the Radford and ROSBA reforms, and as we are now midway through the ROSBA process, we should move to strengthen comparability through a review and reform of the moderation process.

7.20 If we can do this successfully over time, then we can have more confidence in the comparability of assessment within subjects. This would allow us to remove one scaling step, and to use levels of achievement (VHAs etc.) as one factor in university entrance. We would still need to scale student achievement across subjects so as to achieve equivalence, but we would have made progress in assessment in schools, and got rid of the need to rescale assessments. (p. 52)

The guiding value of the Viviani Report is one that assumes and builds on the values of freedom, accountability and fairness that guided its predecessors. Viviani's guiding value can be characterised as functionality, or acceptability.

Conclusion

A study of these reports is something different from a study of developments in education in Queensland since 1970, not only because the reality of a complex system over time cannot be captured in the pages of a few official, guiding documents, but also for the mundane reason that some of their recommendations were not implemented and so remained on their pages, forever outside of the actual system. The reports are a map not only of some of the paths that brought us to where we are but also of a number of roads not taken.

The value of revisiting these reports at this stage is less historical than suggestive of the present, as it poses the questions: How does the present report relate to the sequence? How does it relate to the current situation in Queensland? What are the values that drive it?

Addendum to Paper 2

Selected recommendations from the major reports

Selected recommendations of the **Radford Report** of direct relevance to the interface of senior assessment and university entrance:

- Recommendations from the 1970 Radford Report – not to be mistaken for recommendations from this 2014 Review
- 17 That the present Senior Examination be replaced, for the purpose of awarding a Senior Certificate, by school assessment, and that the Certificate be awarded on the basis of school assessment.
- 18 That for correspondence and part-time students, the Board provide an external examination.
- That in situations where an order of merit needs to be prepared, it be based on a combination of scaled school assessments and special examinations not based on prescribed syllabuses.
- 37 That the school assessments be based on four subjects for each of which the work covered will be equivalent to that of four semesters in the subject.

Selected recommendations of the **ROSBA Report** of direct relevance to the interface of senior assessment and university entrance:

- Recommendations from the 1978 ROSBA Report - not to be mistaken for recommendations from this 2014 Review
- 27 For the purpose of determining order of merit for entry to Tertiary Institutions, the Tertiary Entrance Score should be retained, though the Board should continue its research into the efficacy of the Tertiary Entrance Score as a method of ranking students.
- 28 In calculating the Tertiary Entrance Score use should be made of ASAT, or of a comparable test, as at present. However the Board should continue its research into the use and efficacy of such a moderating instrument.

Selected recommendations of the **Pitman Report** of direct relevance to the interface of senior assessment and university entrance:

- Recommendations from the 1987 Pitman Report – not to be mistaken for recommendations from this 2014 Review
- That eligible students receive an Achievement Position Profile comprising a single general-purpose indicator, to be known as an Overall Achievement Position, which compares eligible students' overall achievements in senior secondary school studies; and four special-purpose indicators, to be known as Specific Achievement Positions, which compare the achievements of students with the same Overall Achievement Position.
- That Achievement Position Profiles be devised in a way which will minimise "backwash" effects on the secondary curriculum; allow curriculum flexibility; yield comparability; and not confer significant automatic advantage or disadvantage on the basis of school attended or subjects studied.
- 10 That tertiary institutions adopt the principles of a staged, or step-wise, approach to selection whereby: at the early stages broad, general, distinctions are made; at the later stages narrower, more specific, distinctions are needed; the process halts when the requisite number of decisions has been made.
- 15 That each tertiary institution which currently prescribes four or five specific Board subjects as prerequisites for any course reduce the number of such prerequisites.
- That the following principles guide the design and review of the procedures used to assign Achievement Position Profiles: since what is produced is a position and not a score it is to be reported as such; the position is not to be reported with an apparent precision that is not reasonably sustainable, and hence can only be given in terms of bands. The size of the bandwidths will reflect the imprecision of the methods that generated the data; there need to be enough bands to render the information of use to selectors.

Full set of recommendations of the Viviani Report:

Recommendations from the 1990 Viviani Report - not to be mistaken for recommendations from this 2014 Review 1 Decision-making on tertiary entrance: The Queensland Tertiary Entrance Procedures Authority (TEPA)

The government should move immediately to set up a statutory body whose chief responsibility would be to advise the Minister for Education on tertiary entrance procedures in Queensland.

This body, to be called the Queensland Tertiary Entrance Procedures Authority (TEPA), should have two main tasks:

To provide the information needed for university selection and admission to every eligible student seeking entry to tertiary education. This information, on overall achievement and other specific measures of achievement, will be supplied to students and to TEPA by the Board of Senior Secondary School Studies. This information, to be issued on a separate Tertiary Entrance Statement, together with that available on the Senior Certificate, will form a Student Profile;

To monitor, review and advise the Minister for Education on modifications to tertiary entry procedures in response to ongoing changes in schools and tertiary education.

2 The structure of the Queensland Tertiary Entrance Procedures Authority (TEPA).

The Minister for Education should appoint representatives to TEPA as follows:

- Independent Chair; Executive Committee 3 university representatives, 3 representatives from the Board of Senior Secondary School Studies, 1 representative from the TAFE sector, 2 Ministerial nominees, one of whom would represent the community interest. These nine representatives and the independent chair will form TEPA.
- The Minister should also appoint a TEPA Reference Committee whose functions will be to advise on, and react to proposals on tertiary entrance procedures recommended by the Executive Committee. The TEPA Reference Committee should be broadly representative of schools from the three sectors (State, Catholic and Independent), tertiary institutions, teachers' unions, parent groups, practising teachers, students and employers.
- The TEPA Reference Committee should be chaired by the Independent chair
 of the TEPA Executive Committee, thus forming one direct channel from the
 Reference Committee to the Executive Committee.
- 3 Shortage of university places
 - The Minister for Education should press the Federal Government for an immediate and substantial increase in university places for Queensland, in order to redress the past and current pattern of its disadvantage relative to other states.
 - 2. TEPA should monitor the supply and demand for university places in Queensland through information supplied by the Australian Vice-Chancellors' Committee (AVCC) and the Queensland Tertiary Admissions Centre (QTAC). TEPA should report annually to the Minister for Education and recommend appropriate action at the federal level and the award of state government funded places where these are necessary.
- 4 Second goes and "the other 50 per cent"
 - Year 12 students, parents and teachers should be made fully aware, through better linkage between universities and schools, that the 'second go' route to preferred courses is widely available.
 - Year 12 students should be encouraged by parents, teachers and guidance
 officers to use this route, since career decisions made at the end of first year
 university are likely to be better informed than those made at 17 years of age in
 Year 12, without benefit of post-school experience.
 - Universities should review the methods by which they compare entrants from Year 12 with those entering first year by other routes and make certain these are equitable, publicly known and accountable. TEPA should be provided with information on this process so as to enable the monitoring of the situation of Year 12s in university entry.
 - The use of sub-quotas by universities for non-Year 12 entrants should be expanded and the conditions for entry to these should be publicly known.

Recommendations from the 1990 Viviani Report - not to be mistaken for recommendations from this 2014 Review

- Qualified TAFE college graduates seeking entry to university courses should not be disadvantaged vis-à-vis entrants by other routes. This will require Queensland universities and the TAFE sector to tackle in a coherent way the problem of course accreditation and credit transfer between institutions, through consultation and negotiation. Information on the process of credit transfer across institutions should be reported to TEPA since this will be a growing part of tertiary entrance.
- 5 Students applying for university in the transition period, 1990 and 1991
 - In 1990 and 1991, before the introduction of a new tertiary entrance system in 1992, students seeking to enter courses of high demand should be ranked on the TE score as at present, since that is the basis on which they chose their subjects.
 - As the use of Rescaled Aggregate scores, (RAGs) is the basis for inappropriate discrimination among essentially equivalent student applicants, these scores should not be made available to universities in 1990 and 1991.
 - Universities should identify a group of students either side of the cut-off point for entry to specific courses and consider their performance in more detail so as to admit all those whose performance is judged as equivalent.
 - · Universities should inform TEPA of their intentions in this regard.

6

- The role of school-based assessment, as it relates to tertiary entrance should be retained, although it requires reform in several aspects.
- The setting of particular prerequisites for some specific courses of study (e.g. Medicine, Engineering) is crucial to progress in some areas of professional training. Though these can have both positive and negative effects on schools (the "backwash" effect) and should be reviewed by universities, they cannot be changed quickly and should remain more or less the same for the transition period of this review.
- A single Senior Certificate should continue to be produced by the Board, as
 this prevents public confusion. The additional information required for tertiary
 entrance will be issued on a separate Tertiary Entrance Statement by TEPA, as
 occurs at present with TE scores (which are currently issued by the Board).
- 7 University-school linkages
 - University-school linkages should be strengthened, so that students choosing courses are better informed of the opportunities available and universities provide better information on courses and entry requirements. Other higher education institutions, such as TAFE colleges, also need to strengthen their linkages with schools.
 - The Department of Education and education authorities from the non-state sectors should review the human and financial resources assigned to career education in schools with a view to their expansion. As this will be crucial in the implementation of a new tertiary entrance system, this review will need to be undertaken immediately.
 - Universities need to review their liaison and extension services to schools in order to upgrade these, both for the transition to a new tertiary entrance system and for the longer run.
 - 8 The adoption of the three-part method for tertiary entrance
 - The government should adopt the Three-Part Method of Tertiary Entrance as follows:
 - a. A measure of overall student achievement at school, expressed as a position in a rank order (the Overall Position or OP).
 - b. A measure of student skills in specific fields of study at school also expressed as a position in a rank order (the Field Position or FP).
 - c. The student's individual results in a new Core Skills Test (CS Test) which is taken by all Year 12 students, and is stated on the Senior Certificate.
 - TEPA, after consultation on the technical aspects of this method, should request
 the Board of Senior Secondary School Studies, to make available the information
 on Overall Positions (OPs), Field Positions (FPs) and the individual results in the
 Core Skills Test (CS Test) to students and to TEPA. This information, together
 with the levels of achievement on the Senior Certificate forms the Student
 Profile. This information can then be used by universities in 1992 and thereafter
 for selection purposes.
 - TEPA should monitor and review the use of OPs, FPs, and the CS Test by universities and others. Where problems arise it should seek timely solutions, informing the TEPA Reference Committee and the Minister of this process.

Recommendations from the 1990 Viviani Report - not to be mistaken for recommendations from this 2014 Review

9 Appeals

An appeals process should be set up jointly by universities with an observer representative from TEPA. The Appeals Committee should decide the specific grounds on which appeals can be made, investigate complaints, act on these, informing the complainant of the outcome, and reporting this to TEPA.

- 10 The new system of tertiary entrance proposed above will suffer the same lack of confidence as the TE score system unless the comparability of assessment problem is tackled directly by the following measures:
 - TEPA should institute immediately major independent research into the
 comparability of assessment in Years 11 and 12 in schools. This research should
 provide an answer to the question of how comparable assessment outcomes are
 across schools, and should provide a benchmark for future research and policy
 action by TEPA. In addition, the Board should be funded to carry out research on
 assessment practices now and for the future.
 - The Board of Senior Secondary School Studies should set up immediately a
 committee to review assessment in upper secondary schools. This committee
 should report to the Minister on reform of the assessment and moderation
 processes in Years 11 and 12 as soon as possible recommending reforms,
 particularly directed to reducing the quantity and raising the quality and
 comparability of assessment. This committee should have system wide
 representation along with a university participant from TEPA, keeping TEPA
 informed on its recommendations for action to the Minister.



Paper 3

Overview of senior assessment and tertiary entrance in Australia and other countries

DM McCurry, ACER February 2014

The aim of this text is to offer an overview of senior assessment and tertiary entrance procedures in Australia and other countries.

Senior secondary assessment systems and tertiary entrance arrangements are often diverse, both within systems and between different systems. Generalisations about secondary assessment and tertiary entrance systems are perilous, and inevitably inaccurate and incomplete to some degree. Nonetheless there is good reason for risking such generalisations in an attempt see the key characteristics of different systems and the similarities and differences between systems. It is easy to assume that the practices one is familiar with are more or less inevitable.

The following discussion attempts to generalise about different systems by describing them within a similar framework. This work has attempted to find the optimal categories for identifying the differences between systems through a set of tables. The aim of these tables is to find the categories that best register at a very high level of generality the differences between systems of senior secondary assessment and tertiary entrance.

Table 1 is an overview of the senior secondary assessment and tertiary entrance systems of some 30 countries. The table is formed around the use of examinations, tests and school-based assessments for certification and selection for tertiary entrance. It also includes a category for information other than examinations, tests and school assessments that is used for tertiary selection.

20 of the 30 systems in Table 1 have external examinations used as final or leaving examinations for secondary certification. These examinations are usually at national level. 15 of the 20 countries also use the same external examinations as part of the tertiary selection. 7 of the 20 systems using external examinations for certification also use school assessments.

11 of the 30 have tertiary selection on the basis of the examinations of particular tertiary institutions. India is the exception in Table 1. It has no state or nation-wide system of secondary certification. Tertiary selection in India is based entirely on the entrance examinations of particular institutions.

Systems that use system-wide, external examinations for certification and selection usually have few institutional entrance examinations, although Finland and Japan have external examinations for certification and a range of institutional entrance examinations. France has an examination system for certification and tertiary selection, and a range of institutional entrance examinations.

The tertiary entrance systems in Norway and Canada system are based exclusively on school assessments. Tertiary selection in the United States is based on school assessment, usually in conjunction with standardised test scores.

All of the 30 systems in Table 1 use examinations, tests or school assessments for certification and/or tertiary selection. One would expect that every tertiary selection system would have some methods of admitting students that did not involve general assessments systems, but overall it seems fair to conclude that only England, Scotland and the United States of the 30 countries in Table 1 make extensive use of other information for tertiary entry. England and Scotland use examination scores, school assessments and application dossiers for tertiary entrance. Many tertiary institutions in the United States use school assessments, application dossiers and standardised test scores for tertiary entrance. Some tertiary institutions in the United States use school assessments and applications dossiers only for tertiary selection.

Table 2 gives a more specific description of 8 systems and the proposed English Baccalaureate.

The 'Kind of program' column in Table 2 involves the emphasis on academic and/or applied/vocational nature of the system. The International Baccalaureate is purely academic rather than vocational. Denmark and France have separate streams of academic and applied learning. England, Scotland and New Zealand offer a range a choices and the possible integration of academic and vocational studies. Hong Kong requires both academic and applied learning. The United States offers a wide range of programs of many kinds.

The 'Curriculum choice' column in Table 2 is concerned with the openness and specificity of the requirements for the completion of a senior secondary course. England has no overall requirements. Success in individual subjects is reported in that system. New Zealand contrasts with England in that there is an overall certificate award on the basis of breadth and depth requirements. There are no overall requirements for Scotland, although there are particular requirements for the Scottish Baccalaureate. There is a proposal for an English Baccalaureate (row 4) which would require 6 core subjects at a particular level.

Hong Kong requires 4 core subjects and 3 electives. France has 4 different streams with common requirements. Denmark has 12 set programs. The International Baccalaureate requires 5 groups of subjects. The US has no subject requirements, although subjects are generally recognised at different levels of difficulty. High school diplomas of specific schools or jurisdictions in the US usually have some specific graduation requirements.

The 'Cross-curricular studies' column records a common liberal studies subject in Hong Kong. There is an individual project in Denmark for graduation, and France requires an individual cross-curricular project and a group project. The International Baccalaureate requires a Theory of Knowledge Essay, a research based Extended Essay, and Creativity, Actions and Service activity.

The 'Completion requirements' recorded in column five show that there is recognition of separate subjects results and no completion requirements for senior secondary education in England and Scotland. A number of units is required for completion in New Zealand. A level of success is required in 9 subjects in France. In Hong Kong 4 core subjects and Liberal studies have to be completed. The International Baccalaureate requires a range of subjects and cross-curricular activities. There would be a set of required studies at certain levels for the proposed English Baccalaureate.

The 'Assessment mode' is school-based or internal in the US. It is both external and internal in Denmark, England, France, Hong Kong, New Zealand and Scotland. The proposed English Baccalaureate would be exclusively externally assessed.

While it is tempting to generalise about the use of assessment methods such as written examinations, projects, assignments, portfolios, oral examinations and performances in particular systems, it cannot be done satisfactorily. Some systems are more or less exclusively based on written examinations, particularly if the assessment is substantially external to the school, but some systems use system-wide projects and oral assessments as well as written assessments. Internal assessment commonly lends itself to a wider range of assessment methods than external assessment.

The assessment standards in Denmark and France are normative. The assessments in Hong Kong are standards-referenced and normative. Assessments are standards-referenced in England, the International Baccalaureate, New Zealand and Scotland. Standards in the US are determined locally with a mixture of norm and standards referencing.

There is no particular moderation of internal assessment in Denmark and France. The assessments of England, the International Baccalaureate. New Zealand and Scotland are reviewed and supervised by the accrediting or supervising agency. Social and statistical moderation are used in Hong Kong. There is no moderation of school assessment standards in the US, other than through standardised tests.

Broad grades are used for reporting assessments in England, Hong Kong, New Zealand and Scotland. There are 7 grades with a pass of grade 3 in Denmark. There is a score out of 20 in France and a score out of 45 for the International Baccalaureate.

The final secondary assessment is integrated with tertiary selection in Denmark, England, Hong Kong and New Zealand. Tertiary entrance is possible at various levels in Scotland. Completion of the French Baccalaureate is automatic entry to many tertiary courses.

The categories used in Tables 1 and 2 were chosen because they registered differences between different national systems. Table 3 uses much the same categories as Table 2 for describing the systems in Australian jurisdictions.

All of the systems in Australia integrate the academic and vocational subjects.

Completion requirements in Australian systems are usually framed in terms of the number of courses to be taken. NSW specifies a maximum number of science units. South Australia requires the study of English and mathematics. Victoria and Western Australia require the study of English.

The cross-curricular requirements seen in some systems in Table 2 are not common in Australia. Most systems require a certain breadth and depth of study. South Australia requires the production of a Personal Learning Plan, has literacy and numeracy requirements and the production of a Research Project. As well as requirements for breadth and depth, Tasmania requires the achievement of standards in literacy, numeracy and information and communication technology. A study in mathematics, science, technology and arts, language and social sciences at Year 12 is required in Western Australia. Students must attain a C grade in English or be given a school-based statement of competence in literacy to complete the secondary certificate in Western Australia.

The systems in Australian Capital Territory and Queensland are school-based with some external testing. The other Australian systems have a mixture of internal and external assessment. All jurisdictions have courses which are completely school assessment with varying degrees of authority supervision.

The standards used for reporting in New South Wales and Victoria are normative. The assessments in the Australian Capital Territory, New South Wales and Western Australia are both normative and standards-referenced. Queensland and Tasmania give emphasis to the standards referencing of assessments. New South Wales and Tasmania give emphasis to describing levels of performance.

New South Wales and Victoria use external assessments to statistically moderate internal assessments. Queensland, Tasmania and Western Australia use statistical, social and supervised moderation in which some form of sampling of student work is reviewed by the authority. South Australia uses social and supervised moderation without formal statistical moderation.

The Australian systems differ in the fineness of the assessments they report. Australian Capital Territory, Queensland and Tasmania report broad grades. New South Wales, South Australia, Victoria and Western Australia report a combination of grades and numbers.

The Characteristics of Australian Senior Secondary Certificates

Table 3 show the commonalities and the differences in the senior secondary assessment systems and certificates in different Australian jurisdictions. Tables 4 to 9 give a detailed description of the systems in individual jurisdictions.

Some commonalities

There is no separation of academic and vocational courses in Australian senior secondary certificates. Academic and vocational education can be integrated and reported on the same certificate in many ways in Australia.

There is a good deal of school-based assessment in Australia. Assessment methods tend to reflect the assessment mode. School-based assessment is used to broaden the range of skills and outcomes that can be assessed in Australia.

Subject specific courses are dominant, and there are few cross-curricular requirements in Australian senior secondary courses.

All Australian systems integrate senior secondary certification with tertiary selection through the Australian Tertiary Admission Rank (ATAR). There are no institutional entrance examinations and few faculty specific examinations for tertiary entrance in Australia. (Entrance to medical school in Australia is one exception in a number of ways.) The ATAR score is the sole basis for selection into many tertiary courses in Australia, and in comparison with Britain and the United States there is little other information used for tertiary entrance in Australia.

The Australian Tertiary Admissions Rank

The ATAR aims to give individuals a score on a scale that can be compared with students taking other subjects, and students in other systems, and students from other years. The ATAR is a percentile rank (reported between 30.00 and 99.95 in intervals of 0.05) based on an aggregate of individual subject scores. The percentile rank takes into account the total age cohort, both in and out of schooling, in a system.

The ATAR is constructed by scaling the scores of individual subjects to adjust for differences in difficulty between subjects. There is some variation in the way the

aggregates are determined in different systems. (For instance, must an English score be included in the aggregate?) In essence the between subject scaling uses the average scores of students in their other subjects to adjust the average of a subject to create the 'scaled' score. The scaled scores are added to give a total for the student which is converted into a percentile rank for a system using a method agreed to by all States (except Queensland).

Some differences

The emphasis given to internal and external assessment can differ significantly in Australian senior secondary systems. Two systems have no external examinations. These systems use general ability tests as external assessments.

Methods of quality assurance and means of moderating school assessments differ significantly in different Australian systems.

The scales used for reporting senior secondary assessments differ significantly across Australia.

All systems have breadth and depth requirements for their senior secondary certificates, and some systems add compulsory subjects requirements, literacy and numeracy requirements and other activity for completion of a certificate. There are not many of these other requirements for Australian senior secondary certificates.

Table 1: Senior Secondary Assessment and Tertiary Selection

	External examination used for certification	External examination used for selection	Institutional entrance examinations	Standardised test of aptitude/ achievement	School assessment	Selection information other than ability assessments
Argentina			•			
Austria		•				
Bulgaria						
Brazil		•				
Canada						
Chile						
China		•				
Denmark.		•				
Egypt		•				
England		•				
Finland						
France		•				
Germany		•				
Hong Kong		•				
India						
International Baccalaureate	•	•			•	
Ireland						
Israel		•		•		
Japan						
Norway						
Paraguay			•			
Russia			•			
Scotland						
Spain						
Sweden				•		
Tanzania						
Thailand						
Turkey						
United States				•		
ACT				•		
QLD				•		
NSW		•				
SA		•				
TAS						
VIC				•		
WA	•	•				

Notes:

Some states privilege external assessment; others privilege internal assessment

Where states use both types of assessment, it is not clear from the table which of these has the most influence. Queensland and the ACT do not have external examinations. The jurisdictions with both internal and external assessment have introduced internal (school-based) assessment into an external examinations system over different periods of time and in different proportions towards a total score. Some states have social moderation; others have statistical moderation.

Some states use tests called aptitude tests; others call them tests of general achievement.

All states use senior subject results as input into rankings (orders of merit) for university selection purposes.

Table 2: Characteristics of Selected Senior Secondary Assessments

	Kinds of program Academic or applied / vocational	Curriculum choice open, some required, most required	Cross- curricular studies	Completion requirements all, some, none	Assessment mode external, internal, both	Assessment standards norm or standards referenced	Moderation Statistical social, or supervised	Reporting of performance numbers, grades, descriptions	Tertiary entrance separate from certification or integrated
Denmark	4 Separate streams of academic and applied	12 different programs	Individual project	13 core & 3 electives	External and internal	Norm referenced	No particular moderation	7 grades with grade 3 a pass	Integrated part of tertiary entrance
England	Academic or vocational	Recognising separate subjects Tiered subjects		None	External and internal	Standards referenced	Ofqual supervision	Grades	Integrated part of tertiary entrance
English Baccalaureate (possible)	Academic	6 core subjects at one level		Required subjects and levels	External	Standard referenced	Single external examinations	Grades	Integrated part of tertiary entrance
France	Choice between science, economics, social science and literature streams	Common requirements for streams	Cross-curricular and group projects	9 required subjects and independent and group projects	External and internal	Norm referenced	No particular moderation	Scores out of 20	Completion is tertiary entrance Entrance exams for some courses
Hong Kong	Academic and applied	4 core subjects and 3 electives	Liberal studies	4 core subjects of Chinese, English, Mathematics and Liberal studies	External and internal	Standards referenced Some normative distinctions Described standards	Social moderation for internal and applied subjects Some standards monitoring	Five levels and normative grading Attained with distinction for applied subjects Standards referenced reporting	Integrated part of tertiary entrance
International Baccalaureate	Academic	At least one from the 5 groups of subjects	Theory of Knowledge Essay, Extended Essay, Creativity, Actions and Service activity	24 points from required groups with minimum thresholds Satisfactory performance on cross and co-curricular activities	External and internal	Standards referenced	IBO supervision	Score out of 45	Aimed at tertiary entrance
New Zealand	Range of equivalent academic and VET programs	Recognising separate subjects		Specified number of credits	External and internal	Standards referenced	NZQA supervision	4 levels from Not achieved to Achieved with excellence	Integrated part of tertiary entrance
Scotland	Diverse qualifications at different levels Optional Baccalaureate awards	No general requirements Requirements for Baccalaureate awards		Recognising separate achievements	External and internal	Standards referenced	SQA supervision	Graded A to D	Tertiary entrance at various levels A series of qualifications and awards
United States	General and diverse	Open but some tiered subjects		Determined by region	Internal and external ability testing	Locally determined grades	Common ability tests	Grade point average	Integrated part of tertiary entrance
Australia	Academic and academic / vocational	Required number of studies and some required studies		Required number of studies and some required studies	External and internal	Normative or standards-based or both	Statistical and or social	Different ranges of number and grades Some described levels of performance	Integrated and often sole basis of tertiary selection

Table 3: Characteristics of Australian Senior Secondary Certificates

	Kinds of program academic or applied / vocational	Curriculum choice open, some required, most required	Completion requirements breadth and depth	Assessment mode external, internal, both	Assessment standards norm or standards referenced	Moderation Statistical, supervised sampling or social	Reporting of performance numbers, broad grades, descriptions
ACT	Academic & vocational	No specific requirements	Breadth & depth requirements	Internal with some external	Both	Statistical and social	Grades
NSW	Academic & vocational	Maximum of 6 units of science	Breadth & depth requirements	External & internal Internal only	Both Described levels	Statistical	Grades and numbers
QLD	Academic & vocational	No specific requirements	Breadth & depth requirements	Internal with some external	Standards referenced	All	Grades
SA	Academic & vocational	Study of English and Maths required	Personal Learning Plan Literacy Numeracy Research Project	External & internal Internal only	Standards referenced	Supervised & social	Grades and numbers
TAS	Academic & vocational	No specific requirements	Breadth & depth requirements Standards of literacy, numeracy and ICT required	External & internal Internal only	Standards referenced Described levels	All	Grades and statements
VIC	Academic & vocational	English required	Breadth & depth requirements	External & internal Internal only	Normative	Statistical	Grades and numbers
WA	Academic & vocational	English required	An MST and ALSS study at Y12 C in English or statement of competence required	External & internal Internal only	Both	Social and supervised sampling	Grades and numbers

Assessment and Reporting Arrangements in Australian Jurisdictions

Tables 4 to 9 describe the characteristics of senior secondary assessment and reporting in the various jurisdictions other than Queensland as at 2013. The following issues were used to shape the information in the tables.

Formalities

- · State Certificate of Education
- Awarding body
- Requirements
- Permissible patterns of subject choice

Methods of Reporting/Certificating

- Documentation
- Time-span for certification
- · Format and nomenclature

Tertiary Entrance

- Selection mechanism
- Eligibility
- · Combining results for tertiary entrance

Incorporation of VET Curriculum

- Underpinning curriculum principles
- Premises/value statements
- Areas of study
- Structure of curriculum document
- Curriculum development

Assessment Arrangements

- Internal
- External
- · Standardised testing
- Modes that contribute to high-stakes assessment

Moderation

- Type
- Purpose
- Process

Table 4: Australian Capital Territory

FORMALITIES

State Certificate of Education

Awarding body

Requirements

ACT Year 12 Certificate

ACT Board of Senior Secondary Studies

Student must complete a coherent pattern of study: at least 17 standard units forming at least 3 minors (A, M, T, H, V, C, E, R). Contribution per course to Certificate is a maximum of 8 standard units.

Classification of courses (and units within courses):

- A Deemed by the Board to be educationally sound and appropriate for students in Years 11 and 12
- M An A course deemed by the Board to provide appropriate educational experiences for students who satisfy specific disability criteria.
- T Deemed by the Board to prepare students for higher education.
- H Accredited and delivered by a higher education provider and recognized towards an undergraduate degree. Registered by the Board for recognition towards the Year 12 Certificate and ATAR.
- V Accredited A to T course that also lead to the award of a Vocational Certificate or Statement of Attainment delivered by a college as the Registered Training Organisation.
- C Accredited course delivered by a college as the Registered Training Organisation, which is competency assessed only.
- E Vocational course delivered by an external Registered Training Organisation, which is registered by the Board for recognition towards the Year 12 Certificate.
- R Appropriate for students in Years 11 and 12; design usually includes personal development, recreational or community services activities.

One standard unit of study represents 55 hr minimum of structured learning activities, which includes timetabled classes, scheduled contact times, on-line learning, generally over 1 semester.

Minor 2-3 standard units

Major 3.5-5 standard units

Major minor 5.5-6.5 standard units Double major 7-8 standard units

Permissible patterns of subject choice

No compulsory courses .There may be mandatory units within courses.

METHODS OF REPORTING/CERTIFICATING

Documentation

Year 12 Certificate

Tertiary Entrance Statement

Vocational Certificate or Vocational Statement of Attainment

Secondary College Record

Time-span for certification Up to 5 years

1 break in study of up to 1 yr allowed; with permission of college principal.

Format and nomenclature

A, B, C, D and E grades awarded against course specific descriptors.

Competencies achieved under the AQF listed.

TERTIARY ENTRANCE Selection mechanism

Australian Tertiary Admission Rank (ATAR), based on student performance in T courses, reported on the Tertiary Entrance Statement (TES), on a scale from 30.00 to 99.95.

Eligibility

Eligibility for TES

- at least 20 standard units of which 18 are A T, H, C, E, M, with a minimum of 12.5 being T or H; arranged to form at least 3 majors and 3 minors or 4 majors and 1 minor; and of these at least 3 majors and 1 minor are T or H;
- sit for ACT Scaling Test (AST) in final year of study.

Combining results of tertiary entrance Calculating the ATAR

A course score is calculated for each student completing a T or H course. BSSS scales the course scores where between school differences are provided by the AST results. This ensures that all T/H course scores can be meaningfully compared within and across

Each student's Aggregate Score is the sum of the best three major scaled scores plus 0.6 of the next best scaled course score, whether a major or minor.

Aggregate Scores for all eligible students are ranked (highest to lowest). Candidate rank assigned to students, starting at the top of the list. Ranks are converted to a cohort rank with a table supplied by the NSW Technical Committee on Scaling.

INCORPORATION OF VET

Within both types of courses (T and A), there are provisions for students to study vocational courses and, to receive vocational certificates in addition to the Year 12 Certificate.

CURRICULUM

Underpinning curriculum principles

Curriculum including training packages should:

- encourage students to complete secondary education in the fields of study of their choice
- be inclusive and encourage respect for the diversity of the global community.
- · be capable of being flexibly delivered
- be broadly based, challenging and responsive to the diverse needs and learning styles of students
- enable students to prepare for their futures in further education
- and training, employment, and as active citizens by:
 - developing knowledge and skills
 - providing opportunities to explore attitudes and values, fostering physical, spiritual and creative development
- providing opportunities to participate and shape local and global communities
- providing opportunities to learn both independently and collaboratively and manage their own learning
- provide students with explicit statements about the basis for assessment of students' achievements, which ensure the assessment is fair, valid and reliable
- enable students' achievements to be reported accurately and comprehensively motivate students to continue learning throughout their lives
- be presented in clear, coherent, comprehensive documents
- be subject to regular review

uises/ Underpinning Beliefs

- All students are able to learn.
- Learning is a partnership between students and teachers.
- Teachers are responsible for advancing student learning.

Learning Principles

- 1. Prior knowledge: Learning builds on existing knowledge, understandings and skills.
- 2. Connectivity: When learning is organised around major concepts, principles and significant real world issues, within and across disciplines, it helps students make connections and build knowledge structures.
- 3. Metacognition: Learning is facilitated when students actively monitor their own learning and consciously develop ways of organizing and applying knowledge within and across contexts.
- 4. Self-concept: Learners' sense of self and motivation to learn affect learning.
- 5. High expectations: Learning needs to take place in a context of high expectations.
- 6. Individual differences: Learners learn in different ways and at different rates.
- 7. Socio-cultural effects: Different cultural environments, including the use of language, shape learners' understandings and the way they learn.
- 8. Collaborative learning: Learning is a social and collaborative function as well as an individual one.
- 9. Explicit expectations and feedback: Learning is strengthened when learning outcomes and criteria for judging learning are made explicit and when students receive frequent feedback on their progress.

Premises/ values statements

Areas of study

Structure of curriculum document

Course document

- 1 Course name
- 2 Classification
- 3 Course framework
- 4 Course developers
- 5 Evaluation of previous course
- 6 Course length and composition
- 7 Subject rationale
- 8 Goals
 - 8.1 Student group
 - 8.2 College philosophy
- 9 Key content, concepts and processes
- 10 Teaching and learning strategies
- 11 Across curriculum perspectives
- 12 Student assessment
- 13 Unit grades
- 14 Bibliography
- 15 Resources
- 16 Proposed evaluation procedures
- 17 Unit content

Curriculum development

Course documents are based on the appropriate Course Frameworks.

Courses are proposed and developed by colleges for accreditation by the Board. Course developers are responsible for detailing the content, across-curriculum perspectives, and teaching/learning strategies that implement the goals and promote student achievement within identified areas of knowledge and skill.

Before a course can be taught it must be accredited by the Board.

Accreditation Panels, consist of representatives from tertiary institutions, schools, industry and the community, which provide advice to the Board. Courses classified as T must be endorsed by the university representative and courses classified as V must be endorsed by the Industry representative.

Curriculum review occurs as a 5-year rolling process.

Standards setting/maintenance

Principles for the Development of Unit Grade Descriptors

- each unit grade descriptor is to stand alone without requiring comparison with other unit grade descriptors
- unit grade descriptors are to be stated in positive terms
- unit grade descriptors are to be stated in terms of outcomes what a student can do, the
 quality of the student's achievements and if appropriate, the conditions or situation under
 which these outcomes have been demonstrated
- unit grade descriptors do not need to make mention of every assessment criterion
- descriptors of student outcomes are to report what has been demonstrated. Descriptors are not stated as predictors
- the language of the unit grade descriptors should be comprehensible to all readers and be unambiguous, with care taken to avoid unnecessary jargon
- unit grade descriptors will be presented in a consistent style and format across Course Frameworks.

Generic criteria, which form the basis of unit grade decisions across all Course Frameworks include:

- student's knowledge and understanding of the unit concepts and principles;
- student's cognitive and practical skills in a wide range of situations. As well as representing the Course Framework-specific unit grade descriptions, the letters A, B, C, D and E can be generally understood thus:
- A: Demonstrated a very high level of knowledge and understanding of the full range of concepts and principles of the unit. Shown evidence of a very high level of cognitive and practical skill in a wide range of assessment situations.
- B: Demonstrated a high level of knowledge and understanding of the concepts and principles of the unit. Shown evidence of a high level of cognitive and practical skill in a range of assessment situations.

- C: Demonstrated a sound level of knowledge and understanding of the basic concepts and principles of the unit. Shown evidence of a sound level of cognitive and practical skill in most assessment situations.
- D: Demonstrated a limited knowledge and understanding of the basic concepts and principles of the unit. Shown evidence of a limited level of cognitive and practical skill in assessment situations.
- E: Demonstrated a very limited knowledge and understanding of the basic concepts and principles of the unit. Shown evidence of a very limited level of cognitive and practical skill in assessment situations.

ASSESSMENT ARRANGEMENTS

Internal

Externally moderated, continuous school-based assessment

Criterion-based; standards-referenced

External

There are no examinations set by a central authority for any subject.

Standardised testing

The ACT Scaling Test (AST) measures skills considered necessary for success at university. The AST provides group results for calculating the ATAR. The test consists of a two and half hour multiple choice test of 80 questions, a writing test of two and half hours and a short response test of one and half hours.

Modes that contribute to high-stakes assessment

A range of task types (as outlined in Course Framework and Course document). The Board has developed a set of Common Curriculum

Elements to provide guidance to teachers in setting assessment items.

MODERATION

Type

Purpose

Consensus (peer review) and statistical

To ensure consistency of teacher judgments and comparability of standards in reported grades. Statistical moderation ensures comparability of scores before aggregation to calculate the ATAR.

Process

Advice given to colleges to assist teachers with, and/or reassure them on, their judgments. The broad processes of moderation include:

- Establishment of system-wide assessment requirements, criteria and standards in Board Course Frameworks:
- Accreditation of colleges' programs of study (courses) from which student results may be recorded on Board certificates;
- Review of portfolios of student assessment responses (Yrs 11 and 12) to validate standards and maintain comparability of assessment outcomes;
- Feedback to colleges about consensus-based grade decisions;
- Development of college action plans to address problems arising from the review process.

All senior secondary teachers participate in the review process twice a year.

Structured peer-review of standards and validation of unit grades assigned to student assessment portfolios Yrs 11 and 12 for all accredited courses; by matching student performance to criteria and standards outlined in the unit grade descriptors as stated in the Course Framework

MISCELLANEOUS

Recent reviews

Current revision/transition arrangements System is under continuous analysis and review.

The Board is revising its Course Frameworks and courses in English, mathematics, history and science to integrate Australian Curriculum.

Table 5: New South Wales

FORMALITIES

State Certificate of

Education

Awarding body Requirements

Higher School Certificate (HSC)

Board of Studies NSW

Student has:

- gained the School Certificate or other qualifications considered satisfactory by Board;
- · attended a government school, an accredited non-government school, an institute of TAFE NSW or a Board-recognised school outside NSW;
- satisfactorily completed courses that comprise the required pattern of study;
- sat for and made a serious attempt at the required HSC examination(s).

Permissible patterns of subject choice

Satisfactory completion of a Preliminary pattern of study comprising at least 12 units and an HSC pattern of study comprising at least 10 units. Both patterns must include:

- at least 6 units of Board-developed courses;
- at least 2 units of a Board-developed course in English;
- at least 3 courses of unit value at least 2 (can be Board-developed or -endorsed courses);
- at least 4 subjects.

Maximum units from Science courses = 6 Preliminary and 6 HSC.

METHODS OF REPORTING/CERTIFICATING

Documentation

Testamur

For student who meets all requirements - Higher School Certificate (HSC), showing student name and school name

Higher School Certificate Record of Achievement

For student who satisfactorily completes at least 1 Preliminary or 1 HSC course - lists all courses satisfactorily completed and results therein, and courses satisfactorily completed in previous years; does not list courses studied but not satisfactorily completed.

Course Report

For each Board-developed HSC course completed and presented for examination:

- moderated school assessment mark (except in VET courses)
- · external examination mark
- HSC mark (average of assessment and examination marks)
- · performance band with description of what a typical student knows and can do at each level of achievement (bands 1–6 shown with 6 representing highest level of achievement)
- graph showing student's HSC mark relative to HSC marks for course candidature.

AQF Certificate or Statement of Attainment

For student who meets requirements for at least 1 Board-developed VET course

Profile of Student Achievement

For student who meet requirements for at least 1 Board-developed Life Skills course

Time-span for certification

Accumulation of HSC courses and Preliminary courses allowed over 5-year rolling period that starts in first year of completion of an HSC course. Deletion of earliest year's presentation for students going beyond 5 yrs.

Format and nomenclature

HSC mark expressed numerically and graphically so that reader can relate student performance to corresponding descriptor and to her/his position in subject cohort.

TERTIARY ENTRANCE Selection mechanism

Eligibility Combining results for

tertiary entrance

Index based on senior secondary school results, the ATAR (Australian Tertiary Admission Rank), calculated by the universities in NSW via the Universities Admissions Centre (UAC)

The ATAR is based on best 10 Board-developed units, including 2 English. Board-developed courses must include at least 3 courses of at least 2 units and at least 4 subjects. Can include up to 2 units of Category B courses. Board-endorsed course results do not count towards the ATAR.

Calculating the ATAR

Step 1: Scaling HSC marks

Quality of a subject's candidature defined in terms of their other subject performances. Process modifies the mean, standard deviation and maximum mark in a course. Maximum mark in a course is related to the mean of the scaled marks in that course (to discourage students from taking easy courses in order to get high marks).

Step 2: Combining scaled HSC marks

Each student's scaled HSC marks are added together to produce that student's aggregate score (interim calculation not reported).

Step 3: Ranking aggregate scores

All students' aggregate scores placed in rank order. Individual student ranking expressed as position in the entire age cohort expressed as a percentile. This is the ATAR.

Step 4: Providing the ATAR

Students receive their ATAR from UAC.

INCORPORATION OF VET

Board-developed industry curriculum framework courses: Examination optional, result appears on Record of Achievement as HSC mark within a performance band. Can be included in ATAR calculation if exam undertaken.

Board-endorsed VET courses (content is endorsed): Delivered by TAFE NSW. Count as units of study towards HSC but do not contribute to ATAR. Course name and unit value (no assessment mark) appear on Record of Achievement.

Locally designed VET courses: Subject to Board endorsement

Where eligible: AQF Certificate and statement of competencies achieved or a Statement of Attainment

CURRICULUM

Underpinning curriculum principles

- Encourage students to complete secondary education.
- Foster the intellectual, social and moral development of students, in particular:
 - Knowledge, skills, understanding and attitudes in the fields of study
 - Capacity to manage their own learning
 - Desire to continue learning in formal or informal settings after school
 - Capacity to work with others
 - Respect for the cultural diversity of Australian society.
- Provide a flexible structure within which students can prepare for further education and training, employment, and full and active participation as citizens.
- Provide formal assessment and certification of students' achievements
- Provide a context within which schools also have the opportunity to foster students' physical and spiritual development.

Premises/value statements Support the pursuit of excellence.

Support quality teaching and learning. Encourage personal growth and self-confidence.

Promote a fair and just society. Value diversity.

Encourage English language literacy. Are environmentally sensitive.

Areas of study

Subject is the general name given to an area of study that may have several different courses (e.g. within subject English, courses include English Standard, English Advanced, English Life Skills). Course is a branch of study within a subject. There can be more than one level of study within a course. .

Structure of curriculum document

Syllabus

- The Higher School Certificate Program of Study
- 2. Rationale for [Subject] in the Stage 6 Curriculum
- 3. Continuum of Learning for [Subject] Stage 6 Students
- 4. Aim
- 5. Objectives
- 6. Course Structure
- 7. Objectives and Outcomes
 - 7.1. Table of Objectives and Outcomes
 - 7.2. Key Competencies
 - 7.3. Course Overview
- 8. Content
 - 8.1. Preliminary Course
 - 8.2. HSC Course
- 9. Course Requirements
- 10. Post-school Opportunities

- 11. Assessment and Reporting
 - 11.1. Requirements and Advice
 - 11.2. Internal Assessment
 - 11.3. External Examination
 - 11.4. Board Requirements for the Internal Assessment Mark in Board Developed Courses
 - 11.5. Assessment Components, Weightings and Tasks
 - 11.6. HSC External Examination Specifications
 - 11.7. Summary of Internal and External Assessment
 - 11.8. Reporting Student Performance Against Standards
- 12. Glossary/Appendix

Curriculum development

Occurs in following stages:

- Syllabus review: evaluate, consult, research, recommend.
- Writing-brief development: write brief, consult, identify issues, revise brief.
- Syllabus development: draft; consult; address issues; report on meeting Board criteria; modify; to Curriculum Committee, then Board, then Minister; brief schools; distribute.

Standards setting/maintenance

Outcome statements are written during development of new syllabuses. Along with course content, outcome statements guide teachers as to the knowledge, skills and understanding students are to develop through studying that course. Teams of experienced teachers considered student responses, statistical data and other materials from past HSC examinations, and prepared short statements (band descriptions) to summarize different levels of performance in the course.

Mark of 90-100 corresponds to performance band 6; 80-89, band 5; 70-79, band 4; 60-69, band 3; 50-59, band 2; <50, band 1 (referred to as below minimum standard expected). There is no statement for band 1.

ASSESSMENT ARRANGEMENTS

Internal

School-based assessments count for 50% of HSC. The exceptions are VET courses, Board Endorsed courses and Life Skills courses. Expressed as a mark on a scale with ordinal and interval properties Schools prepare and administer an assessment program in accordance with mandatory assessment components and weightings (as per corresponding syllabus). School determines timing and weighting of assessment tasks. Board recommends:

- 3–5 tasks
- weighting of each individual task at least 10% and up to 40% of total assessment
- higher weightings for tasks towards end of the assessment program
- outcomes and components assessed by more than one task. Schools submit students' marks in HSC Board-endorsed courses to Board.

External

External examinations count for 50% of HSC. The exceptions are VET courses, Board Endorsed courses and Life Skills courses. Focuses on a sample of course outcomes in any one year (expectation that all outcomes able to be assessed in an examination are covered by the exam across a number of years).

Standardised testing

Modes that contribute to high- stakes assessment

None

HSC examination may involve more than one component, such as written examination, submitted work or practical examination. Some courses require practical examinations or submission of works (e.g. Dance, Industrial Technology).

Internal assessment may include tests, written assignments, practical activities, fieldwork, and projects—a wider range of modes than external, aim being to assess a wide range of outcomes.

MODERATION

Type Purpose

Statistical

To ensure that marks from internal assessment and external examination are aligned to the same standard $\,$

Process

For each course-group in a school, mean school assessment mark is set to be equal to mean examination mark, top school assessment mark to top examination mark and, where possible, bottom school assessment mark to bottom examination mark. Cut scores for each performance band are established through a standards setting process using subject experts (judges). Examination marks and school assessment marks expressed on a scale with anchors (70, 80, 90) to the boundaries between standards. Student's HSC mark in course is average of examination mark and moderated school assessment mark.

Table 6: South Australia

FORMALITIES

State Certificate of **Education**

Awarding body

Requirements

The South Australian Certificate of Education (SACE)

SACE Board of South Australia

Student must:

- undertake specified studies at Stages 1 and 2
- complete a minimum of 200 credits
- achieve a C grade or higher in the Stage 1 compulsory requirements
- achieve a C- grade or higher in the Stage 2 compulsory requirements

The compulsory requirements are:

- Personal Learning Plan (10 credits at Stage 1)
- Literacy from a range of English subjects or courses (at least 20 credits at Stage 1 or 2)
- Numeracy from a range of mathematics subjects or courses (at least 10 credits at Stage
- Research Project (10 credits at Stage 2)
- Other Stage 2 subjects that total at least 60 credits.

Permissible patterns of subject choice

Specified studies

Stage 1 (usually Year 11)

Literacy

- 20 credits from a range of English subjects or courses (minimum C grade)
- 10 credits from a range of mathematics subjects or courses (minimum of C grade)

Personal Learning Plan

• 10 credits from this subject (minimum C grade)

Research Project

• 10 credits from this subject (minimum C- grade)

Other Stage 2 subjects

• 60 credits at Stage 2 (minimum C- grade)

Free-choice credits: 90 credits from Stage 1 or Stage 2.

METHODS OF REPORTING/CERTIFICATING

Documentation

The South Australian Certificate of Education is awarded to students who complete all the requirements of the certificate

The SACE Record of Achievement is a transcript of a student's Stage 1 and Stage 2 results.

- Stage 1 subjects, reported as a grade, A to E.
- Stage 2 subjects, reported as a grade, A+ to E-
- Recognition of Vocational Education and Training (listed under relevant qualification); Community-based learning; University Studies; Interstate and International secondary school qualifications, reported as number of SACE credits and 'granted'

Time-span for certification No time limits apply **TERTIARY ENTRANCE** Selection mechanism

Eligibility

Index based on senior secondary school results, the Australian Tertiary Admissions Rank (ATAR), calculated by the SACE Board of SA on behalf of the universities and TAFE SA.

Eligibility for the university aggregate (precursor to the ATAR):

- · qualified for the SACE
- complete at least 80 credits of study in Tertiary Admissions Subjects (TAS) and Recognised Studies at Stage 2 in a maximum of three attempts which need not be in consecutive years
- of the 80 credits of study a minimum of 60 credits of study must be from 20 credit TAS.

Combining results for tertiary entrance

The ATAR is derived from the university aggregate. The university aggregate is calculated from scaled scores. The best scaled scores (on a scale of 20.00) from three 20 credit TAS plus the best outcome from the 'flexible option', which can be either:

• the score of a fourth 20 credit TAS or Recognised Studies;

or any two of the following:

- half the score of a fourth 20 credit TAS or Recognised Studies;
- the score of a 10 credit TAS or Recognised Studies;
- the score of another 10 credit TAS or Recognised Studies.

Calculating the ATAR

- Add scaled scores for the student's best three 20-credit subjects to the score for the 'flexible option'.
- Obtain total out of 80. This is the university aggregate score.
- Obtain percentile distribution and corresponding percentile rank (0-100).
- Student's percentile rank is her/his ATAR.

TAFE SA entrance

Eligibility for TAFE SA Selection Scores, a score out of 60.00, is calculated from the scaled scores of the best 40 Stage 2 credits of TAS plus the best outcome from either:

• The score of a third 20 credit TAS or Recognised Studies;

or any two of the following:

- half the score of another 20 credit TAS or Recognised Studies;
- The score of a 10 credit TAS or Recognised Studies;
- The score of another 10 credit TAS or Recognised Studies.

The TAFE SA Selection Score is reported to students in the score range of 0-60.00.

INCORPORATION OF VET

The SACE recognises successfully completed VET units of competency and qualifications towards the completion of the required 200 credits. Up to 150 credits can come from VET. All VET qualifications (from Certificate I to Diploma) contribute towards the SACE completion requirements. VET qualifications are assigned either Stage 1 or Stage 2 recognition status. In general, Certificate I and II are assigned Stage 1 status and CIII and above are assigned Stage 2 status.

The SACE does not package units of competency or qualifications into SACE subjects. Rather, the SACE Board recognises directly the VET that is completed by students through delivery by Registered Training Organisations.

A completed CIII can contribute to a student's calculation of the university aggregate and their ATAR. Students who successfully complete a CIII are given the average scaled score for their best 60 Stage 2 credits (i.e. average scaled score of their best three Stage 2 subjects) as part of the Recognised Studies policy.

CURRICULUM

Underpinning curriculum principles

The SACE is designed to enable students to:

- Develop the capabilities to live, learn, work and participate successfully in a changing world
- Plan and engage in a range of challenging, achievable, and manageable learning experiences, taking into account their goals and abilities;
- Build their knowledge, skills, and understanding in a variety of contexts, for example, schools, workplaces, and training and community organisations
- Gain credit for their learning achievements against performance standards.

Premises/ value statements

The SACE takes into account:

- · Diversity of students
- · Different places of learning
- · Personalisation of learning
- Applying rigorous and consistent standards.

Areas of study

Arts

Business, Enterprise and Technology

Cross-disciplinary

English

Health and Physical Education Humanities and Social Sciences

Languages Mathematics Sciences

Modified Subjects (for students with Intellectual Disabilities).

Structure of curriculum document

Introduction

- Purposes of the SACE
- · Subject Description
- · Capabilities
- Cross-Curriculum Priorities

STAGE 1 [Subject Name]

Learning Scope and Requirements

- Learning Requirements
- Content

Assessment Scope and Requirements

- · Evidence of Learning
- · Assessment Design Criteria
- School Assessment
- Performance Standards

Assessment Integrity

Support Materials

- Subject-specific Advice
- Advice on Ethical Study and Research

STAGE 2 [Subject Name]

Learning and Scope and Requirements

- Learning Requirements
- Content

Assessment Scope and Requirements

Evidence of Learning

- · Assessment Design Criteria
- · School Assessment
- External Assessment
- Performance Standards Assessment Integrity Support Materials
- Subject-specific Advice
- Advice on Ethical Study and Research

Curriculum development

Underpinned by community consultation, comprising:

- research
- drafting
- · accreditation
- implementation
- · monitoring
- auditing

Similar quality assurance processes applied to all subject outlines. Once accredited, available to all organisations licensed to deliver the SACE.

Accreditation of curriculum and assessment is a legislative function of the Board. It delegates responsibility for the accreditation of subject outlines, and subsequent changes to curriculum statements, to the Accreditation, Recognition, and Certification Committee (ARCC), a Board sub-committee.

The Board approves all policies related to the accreditation of subject outlines.

The Board systematically reviews its subject offerings. It canvasses, via written submission and/or questionnaire, the views on possible amalgamations, deletions, and/or additions to the overall subject offerings from all the nominating agencies and schools. It reviews the subject offerings taking into account the curriculum development undertaken by ACARA. The criteria upon which the reviews are conducted are identical to those used by the Board to consider requests from schools, institutions, and other authorities, viz:

- increase in participation in the SACE
- demand and support for the subject
- overlap with existing subjects
- resource impact on schools and SACE Board

Standards setting / maintenance

SACE Board has a 'SACE Assuring Assessment Integrity Policy'.

This policy states the standards setting process, and the quality assurance processes adopted by the Board. The quality assurance process have for main elements:

- planning
- clarifying (includes standards workshops)
- confirming (includes moderation and marking processes)
- improving

ASSESSMENT ARRANGEMENTS

School External

School grades count for 100% at Stage 1 and 70% at Stage 2.

No external examinations at Stage 1 of the SACE.

At Stage 2, all subjects have a 30% external assessment component. This component usually takes the form of an examination, performance, product, or investigative study.

Standardised testing

Modes that contribute to high-stakes assessment

A variety of writing-based, oral, practical and performance assessments.

For majority of SACE subjects the required number of assessment components is prescribed. Assessment tasks within assessment components are negotiable; range of components not negotiable, except through special provisions in assessment in limited circumstances.

MODERATION

Type

Purpose

Process

Non-statistical

To validate marking standards

- Teachers submit grades for all students for each assessment type of the school assessment.
- SACE Board chooses a sample from the complete list; usually examples of A+, A-, B-, C-, D+, E-
- 3. School prepares the sample material for the identified students and sends them to the SACE Board.
- 4. SACE Board conducts moderation of the grades by panels of two moderators.
- Any changes to grades are authorised by a supervisor. For full details see SACE
 Assessment and Quality Assurance of Board-Accredited Subjects Policy, February 2013.

MISCELLANEOUS Recent reviews

South Australian Certificate of Education (SACE) was conducted in 2006.

SACE First Year Evaluation was conducted in 2012.

Table 7: Tasmania

FORMALITIES State Certificate of Education

Awarding body Requirements

There are three senior secondary certificates in Tasmania: the Tasmanian Certificate of Education (TCE); the Qualifications Certificate (QC); and the Tasmanian Certificate of Educational Achievement (TCEA). Depending on achievement and personal circumstances, a student might get one, two or all three certificates.

Tasmanian Qualifications Authority (TQA)

To obtain the TCE qualification a person must meet or exceed standards for:

- everyday adult reading, writing, communicating (literacy)
- everyday adult mathematics (numeracy)
- everyday adult use of information and communications technology (ICT)
- participation and achievement in senior secondary studies (education and training)
- planning for future career and education pathways.

People can meet these requirements in different ways (including through senior secondary and Vocational Education and Training courses), in different settings (including secondary schools or colleges, the Tasmanian Polytechnic and the Academy, and other education and training providers and the workplace) and over different periods of time. For example, people may reach the TCE skills standards by:

- senior secondary courses (year 11 and 12) in areas such as English, Mathematics and Information Technology
- VET courses like Certificate II in Information Technology
- stand-alone tests provided by the TQA.

To meet the participation and achievement standards people need to have 120 credit points in education and training (TQA level 1, 2, 3 or 4), with at least 80 of these credit points in courses rated at TQA level 2 or higher.

The TCE requires a person 'to have developed and reviewed plans for education and training'. Most students meet this standard by developing a plan during Year 10 and reviewing their progress at some time before they finish their senior secondary education and training.

To obtain the QC at the end of senior secondary studies a person must successfully complete at least one of the following:

- · TQA accredited course
- VET certificate or unit of competency
- · TQA recognised course.

The QC is issued to all students, including those who do not meet the requirements for the TCE, showing all their senior secondary education and training qualifications. The QC includes VET qualifications and units of competence, senior secondary qualifications and other qualifications recognised by the TQA.

To obtain the TCEA a person must show that their personal circumstances mean that the TCE or QC will not give an adequately just and fair description of their educational participation and achievement. The TCEA contains a descriptive, personalised account of educational participation and achievement that is validated by the TQA. The TCEA provides a quality assured, centrally issued, descriptive account of learning. A person who gets the TCEA may also get the Qualifications Certificate and the TCE.

Permissible patterns of subject choice

No compulsory subjects

No prescribed patterns of subject choice

METHODS OF REPORTING/CERTIFICATING

Documentation

Australian Tertiary Admissions Statement is sent to Yr 12 students eligible for tertiary entrance showing all TCE level 3/High Achiever Program (HAP) subjects satisfactorily undertaken, the score achieved for each subject and their overall tertiary entrance result.

Time-span for certification No time limits apply.

Format and nomenclature The TCE certificate shows senior secondary results recording student's achievements in:

- subjects assessed under TCE senior secondary syllabuses levels 2-5
- nationally-recognised VET certificates and competencies
- TQA recognised courses
- · University of Tasmania HAP studies.

The certificate may also record student's achievements in subjects assessed under:

- TCE secondary syllabuses (before 2005)
- TCE 1 syllabuses (syllabuses not assigned to a level)
- school developed courses.

In a TCE syllabus/TQA accredited course a successful student receives one of the following awards:

EA - Exceptional Achievement

HA - High Achievement

CA - Commendable Achievement

SA - Satisfactory Achievement

PA - Preliminary Achievement.

Senior secondary results can also include:

- VET competencies and certificates using the nationally recognised terminology
- TQA recognised courses using nomenclature defined by an awarding body

Competency-based assessments may use a 'mastery plus' award structure. In courses using this approach, different levels of achievement are reflected in the awards available. For example 'Pass' and 'Higher Pass'.

TERTIARY ENTRANCE Selection mechanism

Year 12 students usually gain entry to courses at the University of Tasmania using their Australian Tertiary Admissions Rank (ATAR), worked out from achievement in TCE level 3 subjects using rules approved by the university.

There are other pathways for non-Yr 12 students.

Eligibility

A student in Tasmania who has completed at least four level 3 subjects, with at least three from Yr 12 is eligible for an ATAR. The calculation is based on the best five (equivalent -HAP subjects are half the size of TCE level 3 subjects) results. Subjects cannot be counted twice

Combining results for tertiary entrance

TQA in collaboration with the University of Tasmanian calculates the ATAR. Rasch Analysis (a form of IRT) is used to estimate the relative 'difficulty' of each award in each level 3 subject. The 'test items' in this case are the subject assessments and the underlying characteristic that is being estimated is 'general academic ability' of students. The relative estimated difficulties are adjusted so that the weighted average values for the CA and the EA award remain the same from year to year. Estimates for HAP results are linked to the estimates for TCE level 3 subjects.

A (scaled) score is then calculated for each subject result. These range from at least 1 to 21+ approx.

The ATAR is calculated by adding the three best (scaled) subject scores from level 3 subjects satisfactorily completed in Yr 12 (or a subsequent year), together with the next best two (equivalent) other subject scores taken from either the same year, or any other single year after Yr 10.

The Tasmanian ATAR is determined from a ranking based on the tertiary entrance scores (using a method agreed to by all States) as a percentile ranking of students from the total age cohort.

INCORPORATION OF VET

Tasmanian senior secondary students can complete nationally recognised VET competencies and certificates, including on-the-job training as required by Training Packages, with Registered Training Organizations (RTO) registered with TQA. Schools may be RTOs.

Senior secondary students' results (competencies and certificates) in VET also appear on their TCEs.

VET certificates and units of competency, when successfully completed, generate credit points toward the TCE and may be used to assign a notional score to determine an equivalent ATAR.

CURRICULUM

Underpinning curriculum principles

The Tasmanian Qualifications Authority classifies courses/ qualifications according to three parameters:

- complexity (how difficult/demanding)
- size value (how long/big)
- robustness (the degree of reliability and validity of results issued)

Education providers can deliver courses whether they are accredited or not. However, only accredited courses are listed on the Qualifications Certificate and may contribute to a student meeting the requirements of the Tasmanian Certificate of Education.

Accreditation provides a level of external scrutiny and quality assurance for a course and enhances the value of the results students receive. Once a senior secondary course is accredited by the TQA, it is listed on the TQA website and is available to be delivered by any registered provider.

Proponents of senior secondary courses submit them to the TQA for accreditation on the understanding that:

- the TQA may make amendments to course documents to ensure they meet standard formatting requirements
- the TQA will identify quality assurance regimes and undertake activities to quality assure
 the implementation of accredited courses
- accredited course documents are published on the TQA website and are freely available for use by providers.

The following principles offer a framework for course development.

- 1. Courses must align with the goals of education specified in the Melbourne Declaration
- 2. There is information about levels of student demand in enrolments, teacher perceptions and student perspectives.
- 3. Tasmania has strategic needs for student learning related to sustainable economic and social prosperity (for example, green skills).
- 4. There is a significant role for TQA accredited courses in providing preparation for further studies
- 5. There is a significant role for TQA accredited courses in developing 'life-skills'.
- 6. TQA accredited courses must be coherent and have clear, identified and distinctive learning outcomes that can be assessed and reported in terms meaningful to the users of TQA certificates.
- 7. General capabilities identified in the Melbourne Declaration (literacy, numeracy, ICT, thinking skills, creativity, self-management, teamwork, intercultural understanding, ethical behaviour and social competence) should be embedded in a course to the extent that these capabilities align with the nature of the knowledge and skills that define the distinctive nature of the course and with valid and reliable assessment in the course.
- 8. Priorities for course development should:
 - avoid unnecessary and inefficient duplication between senior secondary and VET/ higher education
 - (ii) support credit transfer and articulation across post-compulsory education
 - (iii) encourage links between senior secondary providers and UTAS.
- 9. TQA accredited courses must provide learning that is not superficial, not so narrowly focused that it leads at best to an immediate specialised destination.
- 10. The suite of TQA accredited courses should be sufficiently small to provide not only for efficiency but also for clarity of purpose and outcomes the set of courses should be small enough that different courses are clearly different and distinct.
- 11. The need for a particular TQA accredited course is not demonstrated by considerations of provider timetables, a need to keep students 'occupied', inadequacy of or superfluity of providers' physical or human resources, the fact that a course already exists or ensuring that no achievement is too small to be formally certified.
- 12. The size of a TQA course is driven by its learning outcomes and not by timetabling considerations.
- 13. The level of a TQA course is driven by the learning outcomes/standards.

Curriculum development

Individuals or bodies may develop senior secondary courses and apply to the TQA for their accreditation. Under the Tasmanian Qualifications Authority Act (2003), the Authority is responsible for accrediting senior secondary courses. The TQA may accredit courses at its own instigation. The accreditation of a course will depend on its strategic value and the course will involve the TQA in one or more of the following:

- determining procedures and arrangements for assessment
- ensuring the standards of provision are met
- · issuing qualifications

To accredit a course, the TQA must be satisfied that the following are adequately provided for and of a sufficient standard:

- the aims and learning outcomes of the course
- the scope of the studies involved
- the assessment processes
- course and methods of delivery are likely to achieve the purposes, aims and learning outcomes of the course
- the contents, standards and delivery methods are consistent with any relevant national standards

In considering a proposed course the TQA will apply the Senior Secondary Course Accreditation Criteria.

The TQA recognises a wide range of formal learning undertaken by senior secondary Tasmanian students. Providers of formal learning qualifications not recognised by the TQA may apply for such recognition. 'Recognition' means that the qualifications issued by recognised formal learning providers are listed on a student's Qualification Certificate and may contribute to meeting TCE requirements.

The TQA has a process for recognising – assessing and certifying – a person's informal (and non-formal) learning that takes place outside formal programs in schools, colleges, registered training organisations and universities.

Standards setting/ maintenance

All TCE senior secondary syllabuses use criterion-based assessment.

For each criterion (generic and subject specific) there are specific standards ranging over the levels of difficulty (i.e. levels 2–5) for which the syllabus has been provided. At each level there are three sub-sets of descriptors, distinguished by the ratings labelled C, B or A. The descriptors define the minimum requirement for achievement of the rating. A student's final award is determined from the profile of ratings.

The standards for TQA accredited course frameworks are defined in terms of a template that relates required features of achievement and the awards – EA, HA, CA, SA, PA. Each feature is a continuum. Benchmarks placed on each feature help to define the feature and to show the relationship of achievement on this feature and the final award. The final decision about an award is an on-balance decision, taking into account rules listed on the template. The template provides both a description of the standards and a tool for making and recording the assessment decisions.

The TQA is responsible for the quality assurance of qualifications issued as a result of successful completion of the requirements of courses it accredits. To ensure confidence in the integrity and meaning of its qualifications the TQA uses a number of methods to provide an adequate degree of quality. One of the methods employed is to audit the course provision by individual providers. In the audit process providers submit bodies of students' work sufficient to allow an assessment against a nominated range of criteria and the overall award to an annual review meeting organised by the TQA. The work, while not necessarily fully resolved, will be assessed by the provider against the range of nominated assessment criteria and the overall award. The TQA gives each provider guidance regarding the selection of students and the nominated criteria.

ASSESSMENT ARRANGEMENTS

Internal

The TQA approves students' internal assessments if schools ensure that:

- the course of study complies with the syllabus statement, that all criteria are addressed, that specified content is covered, and that the broad objectives of the syllabus are reflected in the teaching and assessment
- each student's performance is assessed on the assessment criteria stated in the syllabus against the standards provided by the TQA for that syllabus
- each student's achievement on each criterion is given a rating of A, B, C at the end of the course of study
- the school complies with all moderation requirements for the syllabus

External

All TCE level 3 syllabuses include an external assessment component, where students are assessed on half of the criteria stated in the syllabus. Students' performances on these externally assessed criteria are summarised as a rating of A, B and C. Final awards are determined from the combined set of internal rating and external rating, using the award rules that are stated in the syllabus.

TQA accredited course frameworks at levels 3 and 5 include external quality assurance of the assessment and standards.

Standardised testing

The TCEA provides 'safety net' tests for students who would not otherwise be given an adequately just and fair description of their educational participation and achievement. The TCEA contains a descriptive, personalised account of educational participation and achievement that is validated by the TQA.

Modes that contribute to high-stakes assessment

TQA level 3 subjects, UTAS HAP subjects, notional VET scores

MODERATION

Tvpe

Quality assurance arrangements exist for all the achievement results that can be used to demonstrate meeting the requirement of the TCE:

- TQA accredited courses
- VET nationally recognised qualifications issued by Registered Training Organisations
- TQA recognised formal learning qualifications issued by other institutions/organisations
- TQA issued qualifications such as the Individual Learning Qualification
- Safety-net testing of 'everyday adult' skill sets

There are two components of TCE syllabus moderation. Major emphasis is placed on consensus moderation: the process of attaining comparability in the assessment of student achievement. The second moderation component is statistical monitoring, where the TQA makes determinations about consistency in awards and takes actions to ensure comparability in assessments where appropriate.

TQA accredited course frameworks specify an external TQA panel review of learning designs and assessment standards as shown in the evidence of student work.

State-wide comparability of standards and consistency with syllabus/course standards minimum requirements

Purpose

Process

Consensus

Particular criteria (usually one or two), and tasks appropriate for assessing these criteria, are selected for moderation each year. One meeting of at least one teacher from each school offering the syllabus is held in March to decide tasks. A second meeting in September is held to examine examples of assessments to the particular descriptors of the selected criteria. Internal school moderation meetings are held to ensure that all teachers of the syllabus are fully informed of the requirements of and results from the moderation meetings.

The TQA may reject a school's final ratings or adjust them if there is evidence to justify such action, for example, if:

- assessment procedures have not been followed; or
- moderation consensus recommendations have been rejected

Analysis

TCE level 3 syllabuses have an external assessment component. Half of the assessment criteria as assessed both by internal process and by one or more external instruments. The two assessments against the same criteria are analysed. Class and school variations greater than those commonly observed are identified and discussed with school leaders. Strategies for rectification are identified by schools. Monitoring the following year is undertaken to determine the effectiveness of the strategy. The TQA's verification processes include:

- going to destinations (employment, further education, training, higher education) for:
 - feedback about the demonstrated skills of holders of the TCE; and
 - gathering evidence of student achievement.

Table 8: Victoria

FORMALITIES

State Certificate of Education

Awarding body Requirements Victorian Certificate of Education (VCE)

Victorian Certificate of Applied Learning (VCAL), an alternative to the VCE

Victorian Curriculum and Assessment Authority (VCAA)

VCE

- Satisfactorily complete at least 16 units
- · Can include VET
- Regardless of total number of units, must satisfactorily complete at least 3 from:
 - Foundation English Units 1, 2
 - English Units 1-4 or /EAL 3-4
 - English Language Units 1-4
 - Literature Units 1-4
- Cannot count > 2 units from studies at units 1 and 2
- Three sequences of Units 3 and 4 studies in addition to the sequence chosen for compulsory English. These sequences can be from VCE studies and/or VCE VET programs.

Permissible patterns of subject choice

As above.

Also, VTAC places restrictions on certain combinations of VCE study areas and VET studies.

METHODS OF REPORTING/CERTIFICATING

Documentation

VCE Certificate
Statement of Results

Time-span for certification

Although designed for Yrs 11 and 12, VCE studies can start in Yr 10.

(This is the case with approx. 54% of Victorian Yr 10 students.)

TERTIARY ENTRANCE Selection mechanism

Eligibility

Combining results for tertiary entrance

ATAR (a number between 0 and 99.95 in intervals of 0.05).

Student obtains S for both Units 3 and 4 in a study and a study score.

Calculating the ATAR

Assign study scores: Student gets a Study Score on a scale 0-50 (a measure of performance relative to others who took the study).

Distribution of study scores (50 max, 0 min) cluster around 30 (for a given study approx. 70% of students get a study scores 23–37).

Scale study scores to obtain ATAR subject scores for each study: For each VCE study, study scores are scaled according to the strength of the competition in that study (strength of competition in a particular study is gauged by comparing students' performance in all their other VCE studies with their performance in the particular study). This scaled study score is the ATAR subject score.

Aggregate subject scores to obtain the ATAR aggregate: Use maximum of 6 results (including VCE VET sequences) in the aggregate. Where > 6 results exist, use the 6 legitimate results yielding the highest aggregate. Add ATAR subject scores according to the following sequence:

- best subject score for an English study
- next best 3 ATAR subject scores (of an allowable combination)
- 10% of any fifth and sixth ATAR subject score as/if available

Up to 3 scored VCE VET sequences may be included in the primary four; a fourth or fifth may count as an increment. VET sequences may count as the fifth and/or sixth increment by adding 10% of the average of the primary four. The increment for the sixth study may be for an approved university study as part of the VCE extension study program. ATAR aggregate is between 0 and 210+.

Rank all eligible students according to their ATAR aggregates.

Assign a percentile rank that (as far as possible) distributes the students evenly (although ties might result in an increase in the number of students assigned a certain percentile rank). Convert the percentage rank to an ATAR, using a method agreed to by all States (except Qld).

ATAR, a number between 0 and 99.95 in intervals of 0.05, is thus an estimate of a student's relative position in her/his age-group, having taken account of students who have moved or left school before Year 12.

INCORPORATION OF VET

Of the > 90 VCE studies, 30 are VCE VET programs that also provide a nationally recognised industry qualification, 14 of which count directly towards the ATAR for tertiary entrance via a study score. Most other VET programs also count through block credit recognition.

CURRICULUM Areas of study Structure of curriculum document

Study Design

Variations on:

- Introduction
- Rationale
- Aims
- Structure
- Entry
- Duration
- · Prescribed texts
- · Changes to the study design
- · Monitoring for quality
- Safety
- Use of information technology
- · Community standards
- Assessment and reporting
- Satisfactory completion
- Authentication
- · Levels of achievement
- Units
- Outcome statements
- Key knowledge and key skills under each outcome statements
- Prescribed assessments for Units 3-4.
- Weightings of assessment tasks for units 3-4

ASSESSMENT ARRANGEMENTS

Internal

There are three forms of graded school assessment – School-assessed Coursework, School-assessed Tasks and Externally-assessed Tasks. The form/s of school assessment and their weighting are specified for each study and are to be found in the Study Design. For each coursework component, the Study Design specifies a range of assessment tasks for assessing the achievement of the unit outcomes. School-assessed Tasks occur in studies where products and models are assessed (Art, Media etc).

External

External examinations (written, oral, performance and electronic) are set and marked by VCAA.

Standardised testing

General Achievement Test (GAT): a test of general knowledge and skills in:

- written communication
- · mathematics, science and technology
- humanities, the arts and social sciences.

Used for monitoring assessments and statistical moderation

MODERATION

Type

Statistical

Purpose

To ensure that schools' coursework assessments are comparable across the State and fair to all students

Process

The level and spread of each school's assessments of its students in each study is compared with the level and spread of the same students' scores in the external examinations. School scores are adjusted if necessary.

In some studies, students' GAT scores (as well as their examination scores) are used for comparison purposes; specifically where GAT is a better match with schools' coursework assessments throughout the State. External examination scores, however, are the major influence in statistical moderation.

All VCE studies are statistically moderated.

Table 9: Western Australia

Formalities

State Certificate of Education

Awarding body

Requirements

WA Certificate of Education (WACE)

School Curriculum and Standards Authority

Achievement of a WACE signifies that a student has successfully met the breadth and depth, achievement standard and English language competence requirements in their senior secondary schooling.

For 2013-2015 these requirements will be:

- Complete a minimum of 20 course units or the equivalent. The 20 course units must include at least four course units from English, Literature and/or English as an Additional Language/Dialect, studied during Year 11 and Year 12 (at least two of these units must be completed in Year 12)
- one pair of course units from each of List A (arts/languages/social sciences) and List B (mathematics/science/technology) completed in Year 12.
- Achieve a C grade or better in any Stage 1 or higher course unit from English, Literature and/or English as an Additional Language or Dialect (except 1A and 1B for English as an Additional Language or Dialect).
- For students who have not achieved a C grade in one of their English, Literature and/or English as an Additional Language or Dialect course units, schools will need to compare a selection of the student's work with the work samples provided by the School Curriculum and Standards Authority to verify the student has demonstrated the required standard
- Up to 10 unit equivalents may comprise endorsed programs and/or VET credit transfer.
 Unit equivalence for endorsed programs is determined by an endorsed programs panel
 in relation to one unit of a WACE course. There are quite explicit rules that support and
 constrain the processes of credit (or block) transfer for VET and unit equivalence for
 endorsed programs.

www.scsa.wa.edu.au/internet/Senior_Secondary/The_WACE/WACE_Requirements

Permissible patterns of subject choice

Breadth and depth

Students must complete a minimum of 20 course units or the equivalent. These must include at least:

- four different course units from English, Literature and/or English as an Additional Language or Dialect, studied during Year 11 and Year 12 (at least two of these units must be completed in Year 12)
- one pair of course units from each of List A (arts/languages/social sciences) and List B (mathematics/science/technology) completed in Year 12.

Methods of reporting/certificating

Documentation

WACE (if attained)

Statement of results

A statement of results is issued to Year 12 students who complete at least one course unit, endorsed program or VET unit of competency. The statement of results formally records, as relevant:

- · the meeting of WACE requirements
- English language competence
- exhibitions and awards
- · WACE course scores
- grades in course units
- VET qualifications and VET units of competency successfully completed
- · endorsed programs successfully completed
- number of community service hours completed
- results in D and E code subjects and WACE courses from previous years.

WACE course report

A WACE course report is issued to students who sit a WACE examination in that course. There is a separate WACE course report for each stage of a course. The WACE course report records:

- school grades
- · school marks
- moderated school marks
- raw examination marks
- · standardised examination marks.

The WACE course report shows how the student performed relative to:

- · the course standards
- all other students who completed and sat the examination in that pair of units

Time-span for certification No time limit **Tertiary Entrance**

Selection mechanism

Eligibility

Australian Tertiary Admission Rank (ATAR) based on achievement standards in school assessments and WACE examinations

Anyone who satisfies the requirements for a Tertiary Entrance Aggregate (TEA).

The TEA will be calculated by adding a student's best four scaled scores plus 10% of that student's best Language Other Than English (LOTE) scaled score, based on the following rules:

- The best four scaled scores may be accumulated scaled scores which contribute to the ATAR over five consecutive years, with no subject or course counting more than once.
- There are unacceptable course combinations whereby scores in both courses/subjects cannot both be used.
- A LOTE bonus of 10% of a LOTE scaled score is added to the aggregate of the best four scaled scores, subject to no LOTE scaled score earlier than 2011 being used. From 2016 Year 12, LOTE scaled scores must be from current or the previous four years. If more than one LOTE has been sat, only one (the best) LOTE scaled score can be used as the LOTE bonus. Students receive the LOTE bonus irrespective of whether their LOTE course was counted as one of the best four.
- The maximum TEA is 410.
- The ATAR directly reports a student's position relative to other students. The ATAR allows for accurate comparisons from year to year. The ATAR calculation takes into account the number of students who sit the WACE examinations in any year and also the number of people of Year 12 school leaving age in the total population. The ATAR allows the results of any WA student applying for university admission interstate to be directly compared with results in other states. All states (except Queensland) report student rankings as an ATAR.

Combining results for tertiary entrance

Calculating the scaled score

Scaling adjusts for differences in difficulty between courses and aims to ensure that, in terms of access to university, students are not disadvantaged if they choose to study difficult course/stages. TISC and the Authority apply the average marks scaling (AMS) method to the combined course marks of all students who have completed at least four course/stages. This method uses the averages in other courses, to adjust the average of the course/stage to create a 'scaled' score.

A student's scaled score for a course/stage is likely to be different from the student's school mark, examination mark, combined mark and WACE course score. Because scaled scores from all courses are on a common scale, they are used to calculate the Tertiary Entrance Aggregate (TEA) and the Australian Tertiary Admission Rank (ATAR) for university admission purposes.

Incorporation of VET

In WA, the Training Accreditation Council (TAC) is responsible for quality assurance and recognition processes for Registered Training Organisations (RTOs) and for the accreditation of courses. For RTOs in partnership with WA schools, but with scope not limited to WA, the quality assurance is regulated under the National VET regulator through the Australian Skills Quality Authority (ASQA). All school RTOs are subject to the same audit processes by TAC as other training providers involved in VET in schools delivery and assessment.

Full and partial AQF qualifications undertaken as a part of a WACE program may be allocated credit towards the WACE through:

- VET industry specific courses (full qualifications only)
- VET integrated within courses
- VET credit transfer.

There are VET industry specific courses including a full nationally recognised AQF qualification that contributes towards the WACE as a WACE course. VET courses can be integrated within a course involves students undertaking one or more VET units of competency concurrently with a WACE course unit.

Curriculum Underpinning curriculum principles

The Principles of teaching, learning and assessment in the WA Curriculum and Assessment outline focus on the provision of a school and class environment that is intellectually, socially and physically supportive of learning. The principles assist whole-school planning and individual classroom practice. It is essential, therefore, to ensure that there is a shared understanding of them within particular school communities and a collaborative effort to implement these principles in ways appropriate to individual schools. The principles are:

- Opportunity to learn
 Learning experiences should enable students to observe and practise the actual
 processes, products, skills and values that are expected of them.
- 2. Connection and challenge Students should be provided with opportunities to connect their existing knowledge, skills and values while extending and challenging their current ways of thinking with their new experiences.
- Action and reflection
 Learning experiences should encourage both action and reflection on the part of the
 student.
- 4. Motivation and purpose Learning experiences should be motivating and their purpose clear to the student.
- 5. Inclusivity and difference Learning experiences should respect and accommodate differences between learners.
- 6. Independence and collaboration
 Learning experiences should encourage students to learn both independently and from and with others.
- 7. Supportive environment
 The school and classroom setting should be safe and conducive to effective learning.

Areas of study Structure of curriculum document

The Authority provides the syllabus for each course. The syllabus includes:

- a rationale
- a description of each unit
- the content (i.e., knowledge, skills and understanding) for each unit
- an assessment table which specifies the assessment types and weightings for each stage
- the WACE examination details (the examination design briefs) for Stage 2 and Stage 3
- the grade descriptions for each stage (or, in the case of Mathematics and Mathematics: Specialist, for each pair of units).

Curriculum development

Formal process for development and accreditation of courses and their units using SCSA course advisory committee (CAC) processes providing evidence and advice, with accreditation subject to review every 5 years.

- Establishing course reference groups to develop the initial conceptual framework of content and contexts and provide feedback on the courses as they develop;
- Developing courses using small writing teams working primarily with a curriculum specialist member of the secretariat;
- Obtaining feedback through CACs comprising sector and system; representatives, a wide range of classroom teachers, and other experts;
- Consulting widely in early developmental stages for each course statement;
- The Board endorses the course for implementation.

Standards setting
Maintenance
Assessment arrangements

Standards identified as scales of achievement based on evidence derived from student work samples and judged by experienced teachers using a paired-comparison process

External

Internal

Internal assessment counts for 50% of final results where students undertake the external assessment. If not, then it counts for 100% of the final result.

All courses have an external examination, the WACE Examination for both Stages, 2 and 3. All students completing Year 12 and intending to seek selection for university are required to sit for the WACE exams. External assessment counts for 50% of the final result.

Standardised testing Modes that contribute to high-stakes assessment

None

Principles of assessment

School-based assessment of student achievement in all courses is underpinned by the following principles.

- Assessment tasks provide accurate and valid information on the knowledge, skills and understandings expected of students.
- Assessment makes a positive contribution to student learning.
- Assessment procedures are clearly defined and marking keys are specific to the task and provide a clear basis for judgements of student achievement.
- Assessment is demonstrably fair to all students and does not discriminate on grounds such as gender, disability or ethnicity.
- Judgements on student achievement are based on multiple assessment tasks of various types.

A quality school assessment program should ensure that all assessment tasks have the following characteristics.

- Assessment tasks are consistent, accurate and can be used with different groups of students to produce assessment information.
- · Assessment tasks have the capacity to differentiate student achievement.
- Assessment tasks are consistent with the content and the assessment requirements of the syllabus.

Moderation

Type

- 1) Consensus
- 2) Statistical
- 3) Small group

Purpose

- 1) To ensure that the course standards are being applied consistently.
- 2) To ensure that judgments of student achievement from external and internal assessments are comparable.

Process

For each course, Course Advisory Committee has responsibility for providing advice on external and school assessment requirements and ensuring that judgments about achievement in both contexts are comparable.

Each year, consensus meetings are conducted in a sample of courses (as per negotiation with sectors and systems). The consensus meetings are anticipated to be essential in first year of full implementation and once again during the 5-year accreditation period.

Each year, the SCSA collects samples of student work from selected schools.

An Assessment and moderation panel views these samples with the aim of verifying teachers' judgments (this is within-school comparability). Adjustments to teachers' ratings will be made if necessary.

Results from external assessments will enable the construction of statistical models for the investigation of any systematic bias in school assessments. It is expected that results from school and external assessment will be closely correlated, as they are both assessments of course outcomes. The scales of achievement for course outcomes will provide the external measures for moderation.

Miscellaneous

- Recent reviews and reports School Curriculum and Standards Authority report on Vocational Education and Training in Senior Secondary Education Western Australia 2011
 - Vocational Education and Training in Senior Secondary Education WA 2010
 - Curriculum Framework Review—Executive summary
 - Curriculum Framework Review—Full report by Professor David Andrich
 - Meeting the challenge of assessing in a standards based education system—Professor Jim Tognolini
 - $\bullet \ \ {\rm A\ report\ to\ the\ Curriculum\ Council\ regarding\ assessment\ for\ tertiary\ selection-Professor}$ David Andrich

The full transcripts can be found at:

www.scsa.wa.edu.au/internet/Publications/Reports/General Reports

Current revision/ transition Transition to the WACE 2016 arrangements

The minimum requirements to receive a WACE in 2016 and beyond are listed below. Achieving a WACE will continue to signify that students have successfully met the breadth and depth requirements and the achievement standards for the courses they choose. However, for 2016 and beyond

- Students will need to demonstrate a minimum level of literacy and numeracy based on the skills regarded as essential for individuals to meet the demands of everyday life and work in a knowledge-based economy;
- Students will need to achieve an ATAR or complete a Certificate II or higher. Achieving an ATAR will require students to complete a minimum of four (4) designated ATAR courses at Year 12.

Breadth and depth

Students will complete a minimum of 20 course units or the equivalent. This requirement must include at least:

- A minimum of ten (10) Year 12 units
- Two (2) completed Year 11 English units and one (1) pair of completed Year 12 English
- One pair of Year 12 course units from each of List A (arts/languages/social sciences) and List B (mathematics/science/technology).

Achievement standard

Achieve a minimum of six (6) C grades in Year 11 units and eight (8) C grades in four (4) pairs of Year 12 units (or equivalents).

There will be provision for students to offset these unit requirements by completing VET qualifications at Certificate I, II, III or IV level. A Certificate I can replace two Year 11 course units, a Certificate II, two Year 11 and two Year 12 units, a Certificate III, two Year 11 and two Year 12 units and a Certificate IV or above, two Year 11 and four Year 12 units.

English language competence

Completion of at least four units of English post Year 10 studied over at least two years. Students will need to demonstrate minimum standards of literacy and numeracy mapped to the Australian Core Skills Framework.





Paper 4

Strengths and weaknesses of Queensland's OP system today

JR Allen October 2013

Paper commissioned by ACER as part of the Queensland Review of Senior Assessment and Tertiary Entrance

Purpose

The purpose of this paper is to inform the Queensland Review of Senior Assessment and Tertiary Entrance Processes by describing the strengths and weakness of the 'OP' system in Queensland as it is in the opening years of the second decade of the twenty-first century.

Introduction

The paper is intended to provide a basis for consideration of possible changes to the current system. It therefore focuses on those underlying features that set the fundamental shape of the system.

Any significant change, rather than incremental improvements and refinements, will involve change to one of more of these underlying features. Such changes are likely to affect other aspects of the Queensland system. Equally, if the review of other aspects of the Queensland system changes, directly or indirectly, any of these underlying features, the OP system will change, whether that change is wanted or not.

A chapter of the Pitman Report (2001, pp 106 – 117), written by the present author, identified the need to plan for changes in the then current system (since key assumptions on which it was based were likely to be less well met in practice) and key requirements for a system aligned with the more diverse ways of completing senior secondary studies. This chapter summarised the situation as follows:

The assessments from which OPs are determined, SAIs, are based on the notion of a two-year cohort of senior students at a school completing study in a subject at the same time. The greater the mismatch between this assumption and practices the less workable the system. This is a fundamental rather than a technical difficulty. That is, as the trend towards more diverse approaches to senior studies strengthens (and it will be reinforced by the New Deal proposals, precisely because this diversity of approaches is needed to increase effective participation), the present OP system will have to change in its fundamentals; the within-school, within-subject comparisons that form its input data will become increasingly unviable. OP calculations are done each year for the group of students completing Year 12 that year, finishing two-year courses of study in subjects at the same time. The present system works because it is reasonable to ask a teacher to provide a class rank order at the end of the course and because

there is a state-wide cohort of Year 12 students completing their courses at the same time. It will not continue to work in its present form when there is no such class, no group of students completing the course at the same time, and no Year 12 cohort across the State all completing their Year 12 courses at the same time.

This will not happen overnight — it is the result of a longer term trend. There is opportunity to develop the new system that is required. This paper sets out some options for developing a new system consistent with the New Deal proposals and for managing the transition period.

(Allen 2001 in Pitman 2001, page 110 - 111)

The development of a different system has not yet occurred. The need for it has increased, not diminished. A later paper in this series will identify feasible options. Transition will also require careful design and management.

The OP system was developed, from its initial design in 1987 through to more-orless its current form in the mid-1990s, to deal with the competing considerations of

- pressures arising from competition for places in university courses
- basing university entrance on results in senior secondary studies
- reporting achievement with a precision based on the properties of the data¹.

Competition for university places occurs when there are more qualified and capable applicants than there are places – an excess of demand over supply. Competition is lessened when there is an increase in supply and or a decrease in demand. In recent years, it appears that such changes have been happening in relation to many courses and universities. There is still serious competition for some courses at some universities, however. And the resolution of this competition has 'backwash' effects on what students do in senior secondary studies. It would be a mistake to imagine that it is not necessary to design a tertiary entrance system that takes this into account and meets the needs of students and universities for fair, transparent and efficient selection processes.

The current OP system is part of the Queensland system of externally-moderated school-based assessment. A recent paper in a continuing World Bank series providing data and evidence on what matters most in driving quality in education described and analysed the factors that created and maintained the Queensland system. In this paper², the author observes that

The Queensland approach requires consensus among key stakeholders on the following beliefs or guiding principles: that teachers are best qualified to judge the achievement of their students; that assessment activities should never be separated from curriculum and instruction; and that the construct and consequential validity of assessment results (and the impact on learning) should take priority over a narrow focus on psychometric concerns about reliability and equating and the value of standardized testing. (Allen 2012, p. xiii)

This is why the OP is in broad bands. It is possible to provide scores with many digits – 98.456343, for example. But the data do not support such a degree of apparent precision or, more importantly, the fairness of decisions based tiny differences.

Allen, Reg. 2012. Australia - Developing the enabling context for school-based assessment in Queensland, Australia. Systems Approach for Better Education Results (SABER) student assessment working paper; no. 6. Washington D.C. - The Worldbank. http://documents.worldbank.org/curated/en/2012/12/17191778/australia-

The current OP system reflects these guiding principles. A challenge for the design of a changes to the OP system is whether to retain these principles, while changing its design and practice, or to discard one or more of them.

We focus first, therefore, on the key elements of the current system, before turning to its fundamental assumptions, its strength and its weaknesses.

Key elements of the design of the current OP system

Accounts, in summary and in detail, of the OP system designed for audiences of teachers, students, parents and the community are readily available on the Queensland Studies Authority website. An overview of the Queensland system, including the OP, written for an international audience not familiar with local terms and ideas, appears in Allen (2012).

This section focuses on the key elements that underpin the design of the current system. In this context, understanding the current system as a system requires understanding the conceptual basis of each of these elements. For this purpose, the concept is what matters, the operational details are not important.

Key element: a measure of overall achievement in senior secondary studies

The OP (Overall Position) is a rank order from 1 (the highest) to 25 based on students' overall academic achievement in senior secondary studies³. It is not a 'score' in the sense of 'number out of', despite the frequent references in the media to 'OP score'. It was designed to be approximately comparable from year to year – so that a student with an OP 2 from one year can be considered to have achieved – overall – more highly than a student with an OP 4 from another year.

Overall academic achievement is not subject-specific achievement but is related to it – just as achievement in a pentathlon is overall achievement in that contest, related to but not the same as achievement in each event. This concept seems to be readily grasped in the context of sporting contests but is often misunderstood in discussions about the scaling processes used in Australia to derive measures of overall achievement from subject results.

As acknowledged in Viviani (1990)⁴, having an OP together with results in individual subjects is a policy decision: designing the system to avoid putting too much pressure on any one component. As Allen (2012) notes

Too much pressure happens when the results from a single component – an examination, a moderation system – are relied on alone for high-stakes decisions. The consequences of such excess pressure can show up in different ways: for external tests it can lead to a preference for reliability over validity; for moderation systems it can lead to malpractice of one kind or another.

(Allen 2012, p 8)

Key element: the main purpose of the OP is its use for tertiary entrance

The OP, which is a measure of overall achievement at one stage of education, is described as being essentially for the purposes of selecting students for tertiary

The term 'overall academic achievement' is used here in the sense that a combination (an aggregate or an average) of results across a student's different subjects represents a measure of achievement overall. Grade-point average is an example of a measure of overall achievement, one based on the assumption that grades are comparable across subjects without any scaling. It is well known that grades do not have this property.

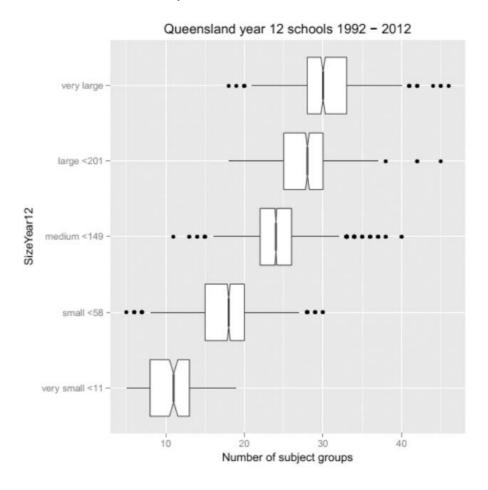
⁴ Viviani, N. (1990). The review of tertiary entrance in Queensland 1990: Report submitted to the Minister for Education (Viviani Report). Brisbane: Department of Education.

education – a process sometimes called university entrance. This may seem so obvious that it is not worth remarking on. However, treating tertiary entrance as the central purpose of the OP regardless of the other uses to which it is put affects the sorts of subjects included and excluded and the rules for eligibility.

Key element: students can choose from a wide range of subjects

Students can choose from a wide range of subjects – there are around 60 different subjects with results that can be counted towards an OP. No individual school offers this many – a total of about 40 is the upper limit for schools with a large or very large year 12 cohort⁵.

As can be seen from the following chart⁶, there is a clear tendency for larger schools to have more subjects⁷. However, there are some very large schools with fewer subjects than some schools with small year 12 cohorts. There are some very small schools with a lot of subjects.



This is the count of year 12 students, not the count of OP-eligible students. Data sets provided by the Queensland Studies Authority.

Analyses and charts in this report done with R: R Core Team (2013). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL http://www.R-project.org/.

If the notches in two boxplots do not overlap it is likely that there is a significant difference in the medians.

Further analysis of the data suggests that there is a tendency (once the size of the year 12 cohort has been taken into account) for the number of subject groups per school to increase

- over time there is a marked difference between the 1990s and today
- with region the more urban regions
- with the QCS mean and spread of the school group
- with an estimate of current average socio-economic status.

Key element: to get an OP students take five or six subjects – breadth without specification of essential subjects

While there are many possible subjects, an individual student takes between five and six subjects (occasionally more). In the last ten years, the proportion taking five only has fluctuated around 24 per cent, dipping below this in 2009 to 2011.

Calculating a measure of overall achievement common across different students requires that each student's set of specific subject results covers a range of subjects. One way to do this is to define some explicit requirements for diversity and balance in each student's choice, perhaps by specifying some compulsory subjects or by specifying lists of subjects and requiring each student to choose one from each list.

It is however a feature of the current OP system that requiring each student to have at least five results in different subjects, together with long-standing assumptions by schools, teachers, parents and students, have meant that no rules specifying restrictions on combinations of subjects have been needed – most students have taken a reasonably broad range of subjects. While there has been a decline in the last decade in the proportion of students with four semesters of English, this has been from 99.5% to 98.9%. The proportion with four semesters of mathematics has increased over the same period from 96.7% to 98.3%, a trend that may be associated with changing patterns of participation.

Generally, this means that most combinations of subjects taken by an individual student are not so narrow as to be repetitions of essentially the same subject – something that is necessary for the construction of a measure of overall achievement that is reasonably common across students⁸. The introduction of 'extension' subjects has the potential to change this. The numbers of students with results in one or more units of credit⁹ in extension subjects has more than doubled over the last decade, from less than three per cent in 2003 to 6.5 per cent in 2012.

Key element: the school is the decision maker

The current OP system sits within the Queensland system of externally moderated school-based assessment.

Outside Queensland, the idea of school-based assessment is often confused with *classroom assessment*. Classroom assessment usually connotes relatively informal assessment at the individual class level by an individual teacher. Where this form of assessment is used for summative purposes it is well known to lead to 'grade-

A measure of overall achievement can be thought of in terms of the first principal component from the covariance matrix of all of the subject achievement indicators. If this covariance matrix includes multiple entries for essentially the same subject, the first principal component will align with this subject. In practice, of course, the fact that subjects are not selected at random means that estimation of this covariance matrix is difficult. The subject selection mechanism is not random, but may not be explained in terms of a single, simple process.

⁹ Nearly all (97.5%) students with results in extension subjects have two units of credit in these subjects.

inflation' and to actual or perceived exercise of caprice and prejudice. School-based assessment in the Queensland assessment system connotes a program in each subject of systematic and planned assessment activities for which the *school* is responsible and that are used for state-wide certification. The school, not its individual teachers, is the accountable agency. It signs off on the assessment program and is responsible for ensuring its implementation.

Within this environment, the input data for the determination of OPs is determined by the school.

There are pressures to remove the human element from high-stakes decisions in many fields, including education. In the OP system, these manifest as attempts to find ways to make school decision-making about the input data more mechanical rather than judgmental.

Key element: Order and gaps (SAIs)

In the OP system, consistent with the principle of the school as the decision-maker, the input data takes the form of within-school within-subject interval scales¹⁰. These are known as Subject Achievement Indicators (SAIs). SAIs provide a finer-grained set of comparisons (a 200 point scale) than the five point scale provided by the standards-based subject results (levels of achievement – LOAs). SAIs are comparisons of *relative* achievement – enacting an assumption that teachers can make fine-grained comparisons of the work of students they have taught. The standards-based LOAs are, of necessity, a coarse scale, requiring teachers to make comparisons of student work with a set of abstractions – the definitions of standards.

In the 1980s, there were attempts to use paired-comparisons approaches to determining SAIs. The technology may now be emerging to support this sort of approach.

Key element: two stage scaling model

SAIs make comparisons within a subject within an individual school. Putting SAIs from different subjects together requires that these be placed on a common scale (overall achievement).

In the current OP system this is done in two stages. First, there is a within-school scaling that puts all the SAIs in the school on a common scale so that they can be added up to give a single composite – overall achievement within that school.

Secondly, there is a between-school scaling that puts the individual school composites on a common scale – overall achievement across the state.

QCS test as a reference measure

The Queensland Core Skills Test (QCS Test) is a test of general academic achievement taken by all (eligible) Year 12 students in late August or early September.

The principal purpose of the test is to gather group (school and subject class) information (measures of central tendency and spread) to put SAIs onto a common scale. Students' rankings or scores in the QCS test are not combined with their subject results.

The QCS Test is not an external examination in the sense that it is used for individual high stakes certification: students receive individual results but, unlike external examinations, these are not used for any high-stakes decisions for the

¹⁰ Interval scales have order and gap properties but no zero.

individual – two individuals with identical subject results and the same tertiary entrance rank can have very different QCS results.

As noted above, the underlying construct of the OP is 'overall academic achievement', not subject-specific achievement. The underlying construct of the QCS test is, correspondingly, overall academic achievement. The test construct is given in more detail in terms of a set of 49 common curriculum elements.

When QCS test group results are used to compare the academic strength of, for example, a school's group of students doing Physics with its group doing French the underlying construct is neither French nor Physics but general or overall academic achievement as estimated from a test of common curriculum elements.

FPs

Field Positions (FPs) show a student's rank order position (on a one to 10 scale, with one being the highest) based on an unequally weighted combination of scaled SAIs¹¹. The weights for subjects reflect judgments about the emphasis in each subject on particular types of knowledge and skills.

FPs were designed to provide additional information where needed to distinguish students with the same OP, not as the only means for selection. FPs are therefore only intended to be used at the margin and hence only a few selection decisions will involve the use of FPs. The lower the selection pressures, the smaller the number of decisions likely to be made with FPs.

Refinements to deal with anomalous situations

Over the years since Queensland first derived measures of overall achievement (then called a TE Score) from school-based decisions a wide range of refinements have been added to deal with anomalous situations. There are procedures to deal with the challenges posed by

- subject groups that are small (ten or fewer) the scaling model makes no sense when there is only one student doing a subject in a school
- having different procedures for these "small subject groups"
- the impact on the validity of scaling procedures of students with anomalous QCS results
- potentially inappropriate practices in determining SAIs
- cases where a student's OP is very much lower than the OP of other students with the same levels of achievement in the same subjects.

Key assumptions

The purpose of describing the following key assumptions is to establish a framework within which the major strengths and weaknesses of the current system can be understood and which will help to understand the likely impact of any proposed changes to the OP system.

Assumption 4.1: there is a well-defined cohort completing year 12 at a given time

The current system is built around an assumption that students complete two years of full-time study culminating in the completion of year 12, a tertiary entrance result and transition to further study. The idea of a state-wide rank

In the determination of OPs, all subjects are given the same weight. Public perception sometimes confuses the design and operation of scaling with a weighting process whereby some subjects 'count' more than others.

order – a feature of tertiary entrance ranks in Australia – fundamentally rests on a snapshot at a point in time, where the overall achievements of a set of students are placed in order. While there are procedures in Australia (including Queensland) designed to make these rank orders comparable from year to year, the starting point is the comparisons made in a particular year. These start with an individual student's subject achievements, put these onto a within-year comparative scale, put these comparative scales onto a between-subject scale, combine these 'scaled' values into an aggregate and use this aggregate as the basis of a rank order.

Pressures on this assumption include

- public expectation that there is or ought to be some standards-based process for comparing academic merit
- · universities' moving away from the idea of the academic year
- students' expecting to move in and out of post-year 10 study at different times and to be able to study part-time.

In the last decade, the proportion of OP eligible students completing studies over three years has remained at a very low level of around one per cent.

A further aspect of this assumption is the idea of a 'year 12' cohort at a school – the OP system assumes that at each school there is a body of students completing year 12 through study at that school. Widespread use of on-line courses, where the teaching and assessing is outside the school and of external examinations puts pressure on this assumption.

Assumption 4.2: there is a reasonable range of participation within school

The calculations that underpin the OP system are designed to estimate overall achievement from sets of relative subject achievements. The scaling of the input data, which is in the form of interval scales, uses estimates of the location and the spread. If there is no variation in the input data (every student has the same result), there is no spread and the processes break down completely. The closer to this situation in practice, as the group of OP-eligible students becomes more select, the greater the uncertainty introduced into the validity of the scaling processes. For example, the use of QCS results to compare two groups of students in terms of overall achievement becomes less valid the less variation there is in the achievement of one or both of these groups – the observed variance and co-variance becomes less and less good estimates of the 'true' variance and co-variance. This is not of merely theoretical importance – a key principle of the OP calculations is the idea that an individual's OP should depend on that individual's achievement and not on membership of a group.

Assumption 4.3: decisions about order and gaps in SAIs are based on identifiable features of student work

The OP system assumes that decisions about SAIs (the input interval scales) are based on differences in the work students have done and on no other considerations of any kind, whether these are judgments of a student's 'real' ability that has not shown up in the work, some notion of what an individual student needs or some extrinsic factor.

Assumption 4.4: SAIs are not intentionally correlated across subjects within school

Since SAIs are to reflect relative achievement in subjects, there should be no relationship between SAIs across subjects other than that attributable to students' individual academic ability and commitment to study.

More formally, the SAI of the ith student in the jth subject could be modelled in terms of an overall ability factor modified by a factor reflecting particular strengths/weaknesses in and commitment to achievement in that subject plus an error term:

$$SAI_{ij} = overall_i + subject_{ij} + \varepsilon_{ij}$$

The OP system assumes that these are uncorrelated across subjects and students.

Suggestions that a school is 'manipulating' its SAIs to successfully advantage some of its students are in effect suggestions that there are processes within the school that involve a breakdown of this assumption. Note that, given the two stage scaling model, any such process is essentially a zero sum one – although it might involve compensating for the advantage of a few by spreading the loss among many. Whether such manipulations occur, whether they have any significant impact or whether they are merely unfounded rumour is less important. Monitoring processes were introduced during the 1990s to identify any instances of the breakdown of this assumption and to take corrective action where required. Such processes, however, come with costs and consequences for other aspects of the system.

Assumption 4.5: SAIs and Levels of Achievement are related but different

In design, a Level of Achievement (LOA) is a broad brush result expressing a student's achievement in terms of state-wide standards. An SAI compares a student's achievement with that of other students doing the same subject at the same school. It is assumed, therefore, that there is a relationship between LOAs and SAIs within a school – students with a higher LOA will have higher SAIs. In practice, the system assumes a somewhat closer relationship than this. Just how close presents a challenge to this assumption: requiring SAIs to be modelled from LOAs, to represent each LOA with the same interval and to be evenly spaced within each LOA creates a tension between the within-school within-subject purpose of SAIs and the state-wide comparability of LOAs. A mechanical relationship between SAIs and LOAs reduces the role of the school as decision-maker and places too great a reliance on the precision of state-wide moderation.

Assumption 4.6: achievements in different subjects have enough in common with each other to define a single construct

A key requirement of any process determining an estimate of overall achievement in senior secondary studies is that the input data (results in subjects) have enough in common with each other to define a single construct. This condition is met with moderate covariance between subjects. A subject in which achievement has little, no or a negative relationship with achievement in other subjects should in principle not be included in the OP calculations. It is important for practical purposes that there are not very many of these.

Assumption 4.7: the components of each school data set have enough in common with each other to define a single construct that relates sufficiently well to the state-wide construct that underpins the OP

The first of the two stages in the scaling model for OPs – within-school between-subject then between-school – rests on an assumption that the general condition for creation of an estimate of overall achievement applies sufficiently well in each school and that this construct can be aligned in the second stage of scaling with that in other schools.

The sparse nature of the data in most schools¹² means that it is not easy to do much more than very basic checks on the validity of this assumption. However, if there is not a reasonable range of participation in the school (see assumption 4.3) some of the necessary conditions *a priori* for this assumption will not be met.

Assumption 4.8: QCS relates well enough with the construct – within schools and overall

The way that the QCS Test is used in the scaling process means that the relationship between QCS scores and overall achievement has to be adequate at only the group, not the individual, level. It needs to be adequate at both a within-school level – since this is the level at which results in different subjects are put onto a common scale – and a between-school level, since this is the level at which overall achievement in different schools is put onto a common scale.

The system has an independent measure for overall achievement within each school¹³. The relationship of these two measures provides an approximate indirect indicator of the relationship between QCS scores and the underlying overall achievement construct.

The relationship of QCS scores and average level of achievement provides an indicator of the adequacy of QCS scores as an estimator of overall achievement – and hence, by inference, its adequacy for its role in the second stage of scaling, putting within-school results onto a common state-wide scale. This assumes, of course, that exceptional cases are just that – exceptional.

Assumption 4.9: the system can be explained and understood

The current OP system is a mature system – it has many details developed over time in response to the importance of deriving estimators of overall achievement in ways that are reasonably fair to the individual and align with policies for matters such as appropriate backwash effects on the senior secondary curriculum, diversity and flexibility in students' choice of subjects and locating key decisions about students' achievements with those best placed to know and understand these achievements in a full and rounded way.

All this, however, presents a challenge in building community understanding of and confidence in the system. Paradoxically, there can be more community confidence in a system whose technical details are not defensible but is thought to be simple and straightforward – and therefore fair.

Strengths of the current OP system:

The key input - SAIs - uses what teachers can do well in identifying fine-grained distinctions between achievements

Teachers are well placed to make fine distinctions between the achievements of students whose work they have seen. The process of making comparisons against abstract statements of standards is much less precise – a key reason that usual practice for standards-referenced systems is to have fewer than ten levels¹⁴.

¹² In the average school about 100 year 12 students have results in six subjects from twentythree subject groups, so any estimates of the subject covariances must take into account the extensive missing data, data that are not missing at random.

¹³ This uses the SAIs as providing a set of paired comparisons. A simple indicator of relative achievement is then derived from these comparisons, based on a method devised by HA David.

Queensland currently uses five – levels of achievement are standards-referenced where achievement is matched against explicit statements. New South Wales uses six – bands 1 to 6. South Australia uses five with a plus/minus distinction to get fifteen grades.

In principle, and experience suggests in practice, they are likely to be better at decisions about order (who did better than whom) than about gaps (who did better than whom by how much).

Recent developments in techniques and the technologies that support paired comparisons¹⁵ suggest that ideas about making order and gap judgments that were first explored with Queensland teachers in the mid-1980s can be more readily operationalised than proved possible at that time.

The school-decision model puts the important decisions where they should be

Having the school as the decision-maker is fundamental to the current Queensland system of externally-moderated school-based assessment, of which the OP system is a part. This is a strength of the system in the sense that it puts the institution best placed to know and understand a student's achievement right at the centre, rather than using the snap-shot, limited one-off sample approach of the classic external examination, which is often assumed to be the only way in which high-stakes decisions can be made at the senior secondary level¹⁶.

It may be worth remembering that the Queensland system had its origins in the 1970s in community and teacher realisation of the strengths of having schools make decisions about the achievements of their students.

On the other hand, the Queensland system avoids the problems that occur when schools are the sole decision-maker with no external moderating influence that is designed and implemented to ensure that these decisions are soundly based.

School-based assessment alone is well-known to lead to grade inflation and other undesirable consequences for both reliability and validity of results. Any system that bases high stakes decisions on provider-based assessments requires careful design to minimise risks to validity of results, including, as examples,

- pressure from parents make it hard to refuse to give higher results in individual cases
- school reputation pressures push standards downwards in practice
- the negative consequences to the school of not having appropriate practices in these assessments are less than the costs to it of doing so
- the school, does not ensure that its staff implement its teaching and assessment strategies correctly and consistently
- the school gives greater priority to meeting the needs of the learner for the issue of the qualification than to applying the standards

A similar set of issues about validity and reliability of assessment decisions is found in the current Australian VET system, where each provider is responsible for assessment and issue of qualifications. The issues, causes and proposed changes were explored in some depth in a report to the then National Quality Council¹⁷. One of the key recommendations in this report has emerged in proposals from the

¹⁵ See Whitehouse, C. and Pollitt, A (2012). Using adaptive comparative judgement to obtain a highly reliable rank order in summative assessment. Manchester: AQA Centre for Education Research and Policy.

¹⁶ Although high-stakes assessment decisions are successfully made in other ways in other areas.

¹⁷ National Strategic Industry Audit TAA40104 Certificate IV in Training and Assessment Stage 2 Report. National Quality Council 2011. Downloaded from http://www.nssc.natese.gov.au/_data/assets/pdf_file/0017/58103/Stage_2_National_Strategic_Industry_Audit_TAA40104_20110726.pdf

National Skills Standards Council¹⁸. These propose that each VET provider should be required to have an 'Accountable Education Officer'. Such an officer must be appropriately qualified and be registered. This registration can be withdrawn where there is a demonstrated failure of assessment practices by the provider.

This proposal is an example of designing a system so that there is a balance of pressures – in this case, the provider's interest in maximising the number of qualifications (a market pressure that operates at an organisation level) and the accountable officer's interest in maintaining registration and hence the officer's role with the provider (a market pressure that operates on an individual level).

The design of the current OP system has a set of elements that provide for a balance of the pressures schools experience in their decision-making about students' achievements. The successful implementation of this design depends on resources, leadership and commitment.

Triangulation: SAIs, LOAs and the QCS test

A strength of the current OP system is that it draws on three kinds of data:

- SAIs the interval scale representing relative achievement within a subject within a school
- Levels of Achievement (LOAs) externally moderated, standards-based subject results, comparable across the state
- QCS test scores a reference test of common (not subject-specific) curriculum elements.

This allows for triangulation:

- Levels of Achievement can be used to check for anomalies in OPs students with the same set of levels of achievement in the same subjects should not have very different OPs
- within-school estimators based solely on SAIs can be used to reduce the influence of any anomalous QCS scores (students who done well at school but poorly in the QCS test and vice-versa)
- measures based on QCS scores align estimates of overall achievement (derived from SAIs) between schools.

Some external examination systems have a form of triangulation in using teacher estimates of students' predicted results as a way of identifying potentially anomalous results.

Allows wide range of subject combinations from a wide range of subjects

The current OP system allows students to follow a wide variety of subject combinations – in the 1990s, the number of unique subject combinations was roughly one third of the number of students. At the same time, most students include some English and some mathematics in their studies.

However, it should be noted that a comprehensive review in England, *A Review* of Vocational Education - the Wolf Report¹⁹ argues for the value of each student

National Skills Standards Council March 2013 Improving Vocational Education and Training. A position paper of the national skills standards council. COAG Consultation Regulation Impact Statement. Downloaded from http://www.nssc.natese.gov.au/__data/assets/pdf_ file/0020/74063/NSSC_Position_Paper.pdf

¹⁹ Wolf, A. 2011. A Review of Vocational Education - the Wolf Report. Downloaded from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/DFE-00031-2011.pdf

having an overall study program that is governed by a set of principles relating to content, structure, assessment and contact time and that is coherent. The analysis and conclusions of the Wolf Report indicate that wide diversity of courses is not in itself sufficient.

Sophisticated processes

The current system is underpinned by a wide repertoire of sophisticated quantitative and qualitative processes.

Weaknesses of the current OP system:

The current system has two types of weaknesses: in principle weaknesses, attributable to key assumptions of the system and in practice weaknesses – ones attributable to changes in external circumstances and or internal actions (or inactions).

In principle weaknesses:

The OP is focused on university entrance

The OP system's focus on university entrance as its fundamental purpose is an in-principle weakness. It actually provides an estimate of overall achievement in senior secondary studies – something that could be used for a variety of purposes. However, its focus on university entrance creates difficulties and complications including:

- who is eligible and who is not eligible definitions and implementation
- impacts on patterns of participation in subjects and on perceptions of the purpose of particular subjects
- perceptions that some schools advise students on their study patterns
 (and whether or not to sit the QCS Test) in terms of the possible impact on
 school status as reflected through OP distributions
- which types of subject results will be counted why not anything that is a valid study for senior secondary students
- the use of OP distributions as an indicator of 'school performance' reinforcing a perception that university entrance is the only important aspect of senior secondary studies
- a focus on the QCS Test as a scaling instrument for university entrance rather than as something providing individual and group information about learning.

Breakdown of fundamental assumptions

Assumption 4.1 breakdown

It is likely that young people will increasingly seek to move through post-year 10 education and training in varied ways, entering and leaving at various times, mixing full and part-time participation with employment and other activities. The current OP system is not built for this.

Assumption 4.2 breakdown

The system is not designed to ensure that there is a reasonable range of participation within each school and each subject within the school. It assumes that this will happen (which historically it did) but does not ensure it. The assumption of a reasonable range of participation and achievement is fundamental to a variety of assessment systems – for example, James Popham has

pointed out that standardised tests will delete items that all students get right, so if teachers successfully taught all students the required knowledge to the required standards, the types of tests currently used in the US would ensure that this success could not be reflected in test scores.

Only subjects where there is some differentiation of achievement can be used as input. This presents an obstacle to using subjects where results do not permit any real differentiation – for example, so-called competency-based assessment presents results that are at best dichotomous (competent/not yet competent) and usually virtually or completely single-valued – everybody with a result has the same result. Many scaling models, including those in common use such as Item Response Theory, breakdown if the input data is not sufficiently differentiated.

Assumption 4.3 and 4.4 breakdown

Effective 'manipulation' of SAIs to advantage some students while spreading the consequences across other students is difficult and can be identified and corrected by the QSA. Fundamentally, however, the capacity of schools to make good decisions – a strength of the system – must bring with it a capacity to make poor decisions. A system that values the professionalism of teachers has that as its strength and its weakness. A system that is not based on valuing the professionalism of teachers has that as its weakness – people tend on average to behave in line with such expectations – and its strength – it is 'teacher-proof'.

As noted in Allen (2012)

From the outset, the Queensland system located not only responsibility for high-stakes assessment decisions at the individual school level, but responsibility for the details of the course and assessment program that students at this school would follow. This local responsibility followed from the assumption of the professionalism of the teacher, from the idea that learning is best achieved where the teacher is actively designing the learning program, implementing it, designing how information about student achievement will be gathered and gathering and using that information.

Positioning of the teacher as a fair and reasonable, professional arbiter, applying standards to students' work, students with whom the teacher engages on a daily basis, places additional responsibility on the teacher. And at the same time it prevents the teacher from taking the traditional role in an external examination system of being in partnership with the student, seeking the best advantage in a contest with the examiner...

The value of having an assessment system based around the ideal of teacher professionalism should not be underestimated: ensuring that classroom practices foster the development of the deep learning considered essential for students' futures requires professional teachers. Systems that espouse one view of teachers but imply another in the way they act, systems that behave as if most teachers cannot be professional will find that many will live down to this expectation – though there will be honourable exceptions. Systems designed around the expectation of professional behaviour will find, over time, that many, though not all, will live up to this expectation.

In practice weaknesses

The competitive academic curriculum

The set of subjects with results that count towards the OP is dominated by what Connell and Ashenden called the 'competitive academic curriculum' (CAC). This is marked²⁰ by characteristics such as

- division of knowledge into 'subjects'
- a hierarchy of subjects with mathematics amongst the top
- a hierarchical ordering of knowledge within each subject
- formal competitive assessment (the 'exam').

This is not a necessary feature of the system, but the taken-for-granted nature of the CAC – the way the system is built around the assumption of most people that this is the way things are meant to be – means that rigorous learning that doesn't fit the CAC model²¹ does not really have a place in the current OP system.

Changing patterns of participation²²

The following graph charts trends over the period 1992 to 2012, each trend as an index with the 1992 value as 100. The trends shown are changes in

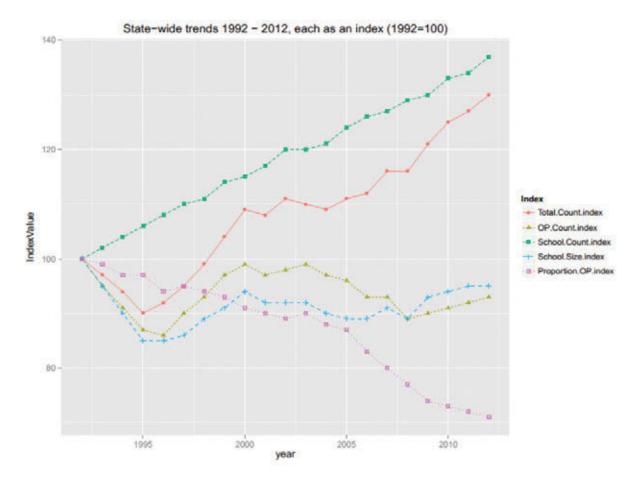
- the total count of year 12 students
- the OP count of students eligible for an OP
- the school count showing the number of schools with year 12 students
- the school size index showing the average size (total year 12 count) of schools
- the *proportion OP index* showing the number of OP eligible students as a proportion of the total year 12 count.

Clearly, the number of year 12 students and the number of schools has steadily increased since the year 2000. The number of OP eligible students as a proportion of the total count has steadily declined – despite a slight increase in the absolute numbers since 2008. Since the year 2000, the size of the average school has varied between 89 and 95 per cent of its value in 1992.

Taken from RW Connell "Social Change and Curriculum Futures" in *Change: Transformations in Education*, vol 1, No. 1 May 1998 pp 84 -90

²¹ For example, one based on students' following a single, complete program of what some people call applied or situated learning, one not organised into five or six subjects.

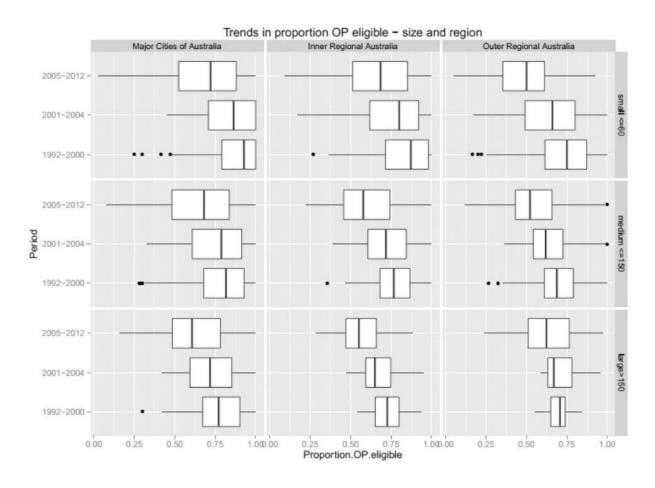
²² Data sets provided by the Queensland Studies Authority.

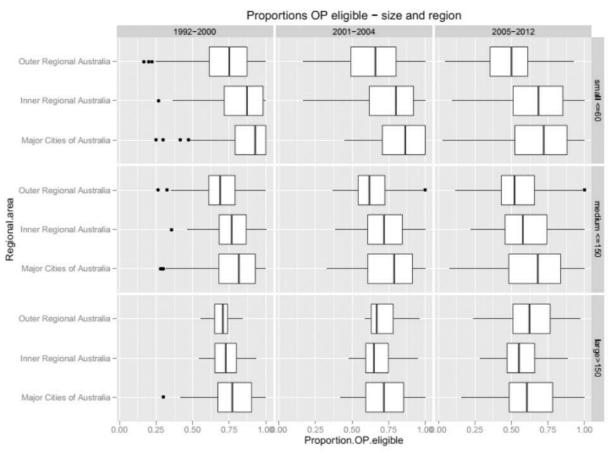


At an individual school level, the trend towards a lower proportion of OP eligible students is evident over time. As is clear from the following graph, there are differences in terms of the size of school (total number of year 12s): smaller schools are more variable and the range of differences between larger schools of a similar size is increasing.

A brief look at additional data about schools provided by the QSA (location, an index of relative socio-economic disadvantage) suggests that there is considerable complexity in the factors associated with the proportion of OP eligible students²³. Aspects of the complex relationship are illustrated in the following boxplots.

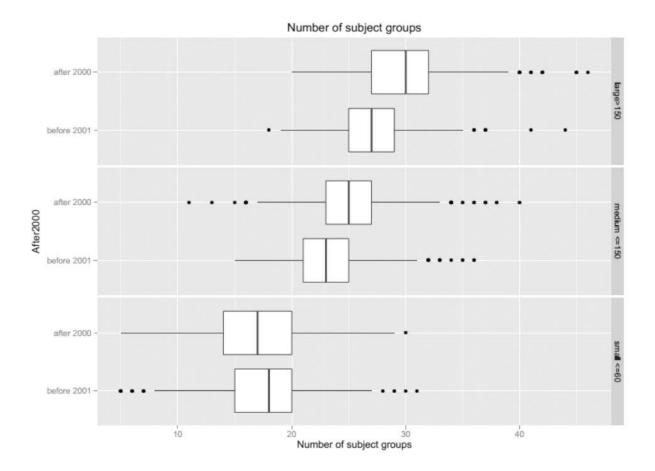
²³ Modelling using general linear modelling (glm) in R: quasibinomial family. There are significant main effects for year, size, Index of disadvantage (IRSD), Regional area and interaction effects of size and IRSD, size and region, region and IRSD.





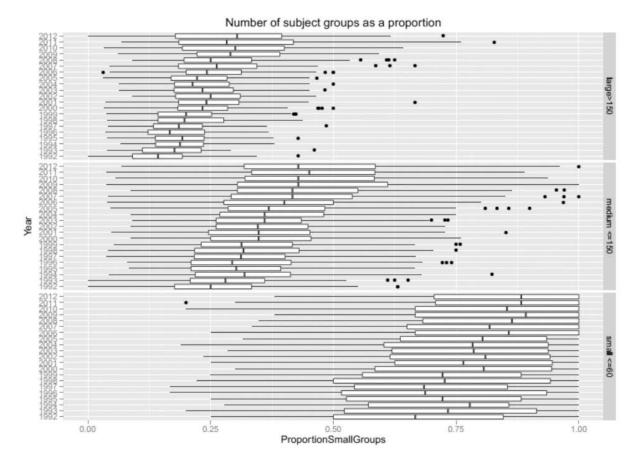
None of these complexities is surprising, of course. Their significance is that observations about the strengths and weaknesses of the current system (and any proposals for change) should be understood in the context that participation rates vary across schools to the extent that discussion based on simple stereotypes about the system and schools is very likely to be misplaced.

The number of subject groups per school is obviously affected by the size of the school, although as noted above there are small schools with a lot of subject groups and large schools with relatively few. Once this basic relationship is accounted for, there are significant trends in recent years towards an increase in the number of groups (again there are complex relationships with other factors) as is evident in the following boxplot.

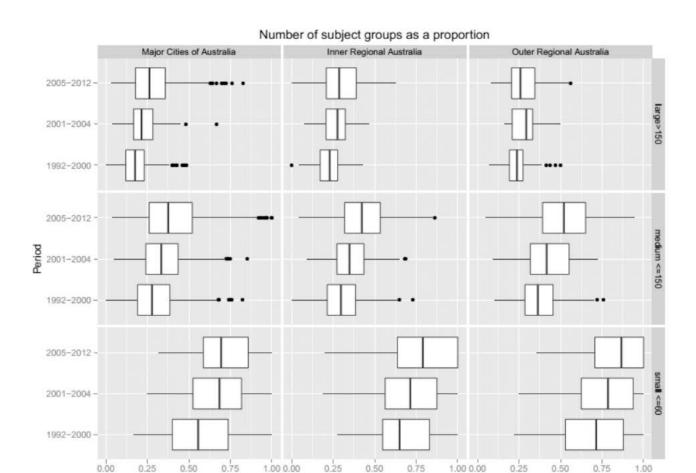


The pressures on the OP system can be gauged from the changes in the proportion of subject groups that are classified as 'small' subject groups²⁴. There is a significant increase in the proportion of 'small' subject groups over time.

Subject groups are classified as small, intermediate and large. Results in large subject groups are scaled. Results in small subject groups are not (the scaling process makes no sense for a small group of one, although in the early days of the TE score this is what happened). Results in intermediate groups are a weighted average of a small group result and the result of scaling using the procedure for large groups.



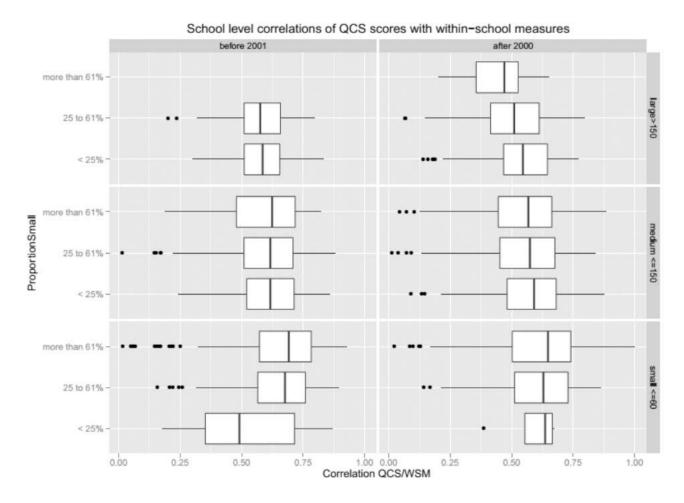
There are, as before, complex relationships with other factors. The following boxplot illustrates how the changes over time play out differently in different regions.



ProportionSmallGroups

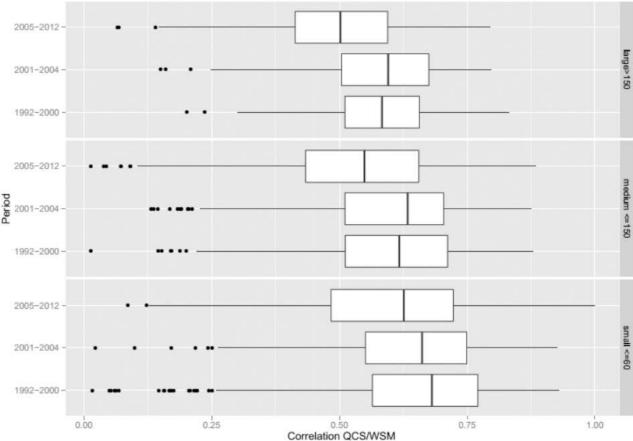
The smaller proportion eligible and the large proportion of small groups are likely to be associated with a reduced range of participation and/or less coherence across subjects²⁵. We can get some indication of this by looking at the change in the relationship of QCS scores and within-school estimates of overall achievement.

²⁵ Reduced coherence across subjects can be, but does not have to be, a consequence of reduced range of participation – the more restricted the range of participation the less coherence we should expect on average. However, it is also possible to have less coherence across subjects for other reasons.



There is a noticeable decline in this relationship – consistent with the idea that the participation pattern is becoming more select. This appears to be more a feature of schools with more than 150 year 12 students.





And it seems to have a regional element to it as well, as is suggested by the following boxplot, which is restricted to large schools. The notch in the boxplots suggest confidence intervals for the medians – if the notches do not overlap it is likely that the medians are different.

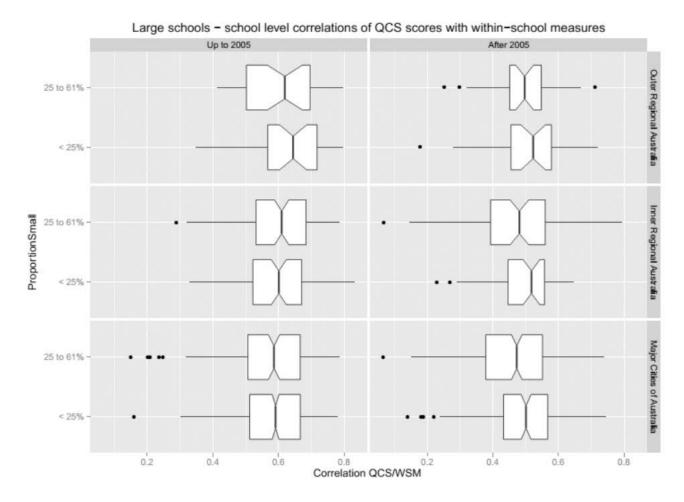
Up to 2005, the differences between large schools in the metropolitan area with few small groups (less than 25 per cent) and more small groups is not noticeable. After 2005, it is. A similar difference is emerging for large schools in other areas.

These suggest that the changes anticipated in 2001, ones that have consequences for the viability of the system, are underway.

School QCS means and standard deviations in principle might provide further insight, if we could assume that these parameters are on a comparable scale from one year to the next. If this is a poor assumption, we will not gain any understanding of whether participation is becoming more restricted in range.

To look at this we have used linear modelling of each of these parameters from

- the category of school size (small, medium and large)
- the proportion OP eligible
- the proportion of small groups
- the number of subject groups
- the correlation of QCS and Within School Measure
- · the regional area
- an index of relative social disadvantage
- the year (as a count of the number of years since 1992).



The data set was restricted to those schools for whom we have measures on all these data elements, where the size of the school was at least 21 and where the school QCS standard deviation was not less than 10 and not more than 80.

The results are shown in the following tables.

This analysis suggests that higher **QCS means** are associated with being a larger school with a higher proportion of OP eligible students, fewer small groups, a higher QCS/WSM correlation, being a school with a high IRSD and being outside major cities and very remote areas. When these associations are taken into account there appears to be small upward trend associated with the number of years since 1992.

A similar analysis of school QCS standard deviations follows.

- Call: Im(formula = School.QCS.mean ~ Size + Proportion.OP.eligible +
 ProportionSmallGroups + NumberSubjectGroups + QCS.WSM.correlation
 + Regional.area + scale(IRSD) + I(year 1992), data = subset(qld.2,
 Year12Count > 20 & !is.na(Regional.area) & School.QCS.sd < 80 & School.
 QCS.sd > 10))
- Residuals

Min	1Q	Median	3Q	Max
-37.025	-4.216	0.055	4.100	28.599

• Residuals standard error: 6.6005 on 6240 degrees of freedom

Multiple R-Squared: 0.4083Adjusted R-Squared: 0.4071

• F-statistics: **358.7707** on 12 and 6240 DF. P-value: **0**.

Coefficients

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	146.95020	1.03202	142.391	< 2e-16 ***
Sizemedium <=150	1.98984	0.34684	5.737	1.01e-08 ***
Sizelarge>150	3.43760	0.49348	6.966	3.60e-12 ***
Proportion.OP.eligible	19.29191	0.70935	27.197	< 2e-16 ***
ProportionSmallGroups	-3.02562	0.76746	-3.942	8.16e-05 ***
NumberSubjectGroups	-0.07797	0.02605	-2.994	0.00277 **
QCS.WSM.correlation	14.36252	0.59006	24.341	< 2e-16 ***
Regional.arealnner Regional Australia	3.58896	0.22095	16.243	< 2e-16 ***
Regional.area Outer Regional Australia	2.37508	0.24945	9.521	< 2e-16 ***
Regional.area Remote Australia	2.02124	0.88090	2.295	0.02179 *
Regional.area Very Remote Australia	-10.03085	1.73131	-5.794	7.22e-09 ***
scale(IRSD)	2.34528	0.11069	21.188	< 2e-16 ***
I(year - 1992)	0.19115	0.01617	11.818	< 2e-16 ***
i(year - 1992)	0.19113	0.01017	11.010	\ ZE-10

⁻⁻⁻ Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Analysis of Variance Table

Response: School.QCS.mean

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
Size	2	4855	2427	55.7143	< 2.2e-16	***
Proportion.OP.eligible	1	125866	125866	2889.0619	< 2.2e-16	***
Proportion SmallGroups	1	332	332	7.6157	0.005803	**
Number SubjectGroups	1	61	61	1.4047	0.235983	
QCS.WSM.correlation	1	20745	20745	476.1606	< 2.2e-16	***
Regional.area	4	5651	1413	32.4283	< 2.2e-16	***
scale(IRSD)	1	23970	23970	550.1936	< 2.2e-16	***
I(year - 1992)	1	6085	6085	139.6697	< 2.2e-16	***
Residuals	6240	271854	44			

⁻⁻⁻ Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

- Call: Im(formula = School.QCS.sd ~ Size + Proportion.OP.eligible +
 ProportionSmallGroups + NumberSubjectGroups + QCS.WSM.correlation
 + Regional.area + scale(IRSD) + I(year 1992), data = subset(qld.2,
 Year12Count > 20 & !is.na(Regional.area) & School.QCS.sd < 80 & School.
 QCS.sd > 10))
- Residuals

Min	1Q	Median	3Q	Max
-28.14	-3.86	-0.51	3.27	41.58

Coefficients

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	37.38813	0.98522	37.949	< 2e-16	***
Sizemedium <=150	0.57343	0.33111	1.732	0.083356	
Sizelarge>150	0.48774	0.47111	1.035	0.300564	
Proportion.OP.eligible	9.05543	0.67719	13.372	< 2e-16	***
Proportion SmallGroups	2.32978	0.73266	3.180	0.001480	**
Number SubjectGroups	0.09215	0.02487	3.706	0.000213	***
QCS.WSM.correlation	-31.72163	0.56331	-56.313	< 2e-16	***
Regional.area Inner Regional Australia	0.75228	0.21093	3.566	0.000365	***
Regional.area Outer Regional Australia	0.85498	0.23814	3.590	0.000333	***
Regional.area Remote Australia	-1.77835	0.84095	-2.115	0.034497	*
Regional.area Very Remote Australia	4.26024	1.65280	2.578	0.009972	**
scale(IRSD)	-0.02168	0.10567	-0.205	0.837457	
I(year - 1992)	-0.01286	0.01544	-0.833	0.405141	

- --- Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
 - Residuals standard error: 6.3012 on 6240 degrees of freedom
 - Multiple R-Squared: **0.3572**
 - Adjusted R-Squared: **0.356**
 - F-statistics: 288.9998 on 12 and 6240 DF. P-value: 0.

Analysis of Variance Table

Response: School.QCS.sd

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
Size	2	2737	1368	34.4618	1.305e-15	***
Proportion.OP.eligible	1	1498	1498	37.7208	8.665e-10	***
ProportionSmallGroups	1	231	231	5.8163	0.01591	*
NumberSubjectGroups	1	2809	2809	70.7526	< 2.2e-16	***
QCS.WSM.correlation	1	128947	128947	3247.6371	< 2.2e-16	***
Regional.area	4	1443	361	9.0832	2.591e-07	***
scale(IRSD)	1	5	5	0.1205	0.72854	
I(year - 1992)	1	28	28	0.6931	0.40514	
Residuals	6240	247759	40			

--- Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

This analysis suggests that higher QCS **standard deviations** are associated with being a larger school with a higher proportion of OP eligible students, more small groups, a lower QCS/WSM correlation, being a school outside major cities and remote areas. When these associations are taken into account there is no association with the number of years since 1992.

In both cases, if we add the QCS parameter into the model there is a negative association – higher QCS means are associated with lower QCS standard deviations and vice versa.

The associations of higher correlations of individual QCS scores and Within-school Measure (WSM) estimates with higher QCS means and lower QCS standard deviations invites comment. In theory, all other things being equal, we would expect a higher QCS/WSM correlation to be associated with groups of students who are relatively consistent across the subjects they study – and, it seems possible, therefore mostly develop more across the common curriculum elements tested by the QCS. Conversely, lower QCS/WSM correlations are consistent with students being inconsistent performers across their school subjects, leading to QCS scores with a lower mean but greater variability. A look at the weighted average QCS means²⁶ and weighted average QCS standard deviations from 1992 to 2012 shows indeed a tendency to a lower QCS mean and higher QCS standard deviation.

The increase in the number of small groups and the decrease in QCS/WSM correlations, taken together, suggest that a decrease in the range of participation and achievement of eligible students – although the year 12 group as whole has increased.

This is reflected in references to such changes in QSA documentation to changes in participation patterns. For example, "Due to the QCE and other factors, it is now very common for fewer than half of the rungs on the Form R6 to be covered as OP-eligible students don't tend to remain in subjects where they are not likely to achieve an SA or higher."

Decline in participation - alternative means

Firm figures do not appear to be readily available but it appears that schools give considerable prominence to entry ranks determined for students who complete year 12 without being eligible for an OP. This began as a process for exceptional cases but appears to be becoming more common²⁷. The more that this route is taken – for whatever reason – the more restricted the range of participation of OP eligible students.

There are also anecdotal reports of schools negotiating direct relationships with particular institutions. To the extent that this happens (if it does) it cuts across a principle of the OP system of providing a means of comparing applicants on the same basis across the whole state.

Bonus schemes and FPs

Several universities have instituted bonus schemes – whereby students who complete studies in specific subjects are awarded bonus points. The original intention of FPs was to provide a selection mechanism based on the types of subjects studied – bonus schemes can cut across this design element where it is intended that selection (not recruitment or encouragement to choose a particular institution) is based on the specifics of a student's subject choices.

This is sum (OPeligiblecount * QCS mean) /sum(OPeligiblecount)

²⁷ In 2009, 1506 OP ineligible students were offered a place based on their year 12 results the previous year. This rose to 2511 in 2013.

Pressures to closely align Levels of Achievement and SAIs

Current documentation of QSA end-of-year procedures operationalise an expectation of alignment of SAIs and levels of achievement and gradations within those levels. The more stringent in practice of such alignment the less that it is possible to use Levels of Achievement as a check on SAIs.

Public discourse

It is easy to find references in public discourse about the system to ideas such as "OP Score", references to weighting subjects and a range of claims at variance with the published material explaining the system. Public understanding of and confidence in any system are a continuing challenge – there are new students and parents every year. While a search of the web can find examples of the 'myths' identified by the QSA, there are plentiful examples on student discussion forums of accurate and reasonable comments on the system. The focus on the distribution of OPs (in the absence of meaningful information) as an indicator of school quality fosters concerns about validity.

The need for change and renewal

There do not appear to have been any significant changes or enhancements to the current system for over ten years, although there have been significant changes in patterns of participation in that time.

Conclusions and implications

The OP system is an integral part of Queensland's system of externally moderated school-based assessment. It has significant strengths in design and in practice but also has some significant weaknesses, some of which are a consequence of changes in patterns of student participation. This means that some changes are required, a need that was identified in the Pitman Report in 2001.

Mature systems need periodic review of their principles and their practices. Their replacement brings renewal and responsiveness to changing contexts. The OP system is a mature system.

The development of changes to the current system can be done through identifying feasible²⁸ combinations of variations on the key elements and key assumptions listed above. Such combinations can then be evaluated against criteria of fairness, appropriate curriculum backwash effects and likely durability in terms of the changes anticipated in senior secondary studies during the next decade. These are matters for a further paper in this series.

What will be feasible will also depend on the nature and extent of other changes to the approach to subject assessment and the role of the school.



Paper 5

An account of the inner workings of standards, judgement and moderation

A previously untold evidence-based narrative

CM Wyatt-Smith & PJ Colbert April 2014

Paper commissioned by ACER as part of the Queensland Review of Senior Assessment and Tertiary Entrance



An account of the inner workings of standards, judgement and moderation

A previously untold evidence-based narrative

Professor Claire Wyatt-Smith

Executive Dean, Faculty of Education and Arts Learning Sciences Institute Australia

&

Peta Colbert

Research Fellow, Faculty of Education and Arts

2014

Standards, judgement and moderation

1 | Page

Contents

Findings	
Part 1: Standards formulation and use System: standards and judgement	
Panellists: using standards to arrive at judgements	
Part 2: Quality assuring student achievement	
Work program approval	
Monitoring	
State and District Review Panel Chair's Report – Monitoring 2014	
Verification	
State and District Review Panel Chair's Report – Verification 2013	
Comparability	23
State Review Panel Reports	23
Comparability LOA Review Summary	24
Unresolved reviews	24
Extraordinary reviews	25
Across the span of system quality assurance processes	25
Part 3: Assessment systems in Queensland secondary schools – Five Eras	30
Era 1: 1873–1969	30
Era 2: 1970–1978	31
Era 3: 1979–1985	32
Era 4: 1986 to 2010	34
Era 5: 2011 to future	36
Stengthening Queensland Senior Schooling: Recommendations	39
Methodology and design	
Design principles	
Participants	
Data collected	
Milestones	46
Poforance	62

2 | Page

Senior schooling context

Appendices

Appendix 1	43
Appendix 2	47
Appendix 3	48
Appendix 4	
Appendix 5	
Appendix 6	
Appendix 7	
Appendix 8	
Appendix 9	54
Tables	
Table 1: Direct costs of externally moderated school-based assessment for QSA	27
Table 2: Expenditure on the moderation system 2000 and 2013	27
Table 3: Senior Education Officers, schools and subject groups 1991,	
2000 and 2013	
Table A1: Data collected to inform the Investigation	
Table A2: Milestones and deliverables	46
Table A3: Frequency of District and SEO Support information provided in 2014 Monitoring reports	40
Table A4: Frequency of District and SEO Support information provided in 2013	40
Verification reports	40
Table A5: Comparability supported and unsupported in 2013 for nine subjects LOA SA	
Table A6: Unresolved reviews by Authority-Subjects 2010-2013	
Table A7: Extraordinary reviews 2009-2013	
Table A8: Composite of data collected for the investigation	
Figures	
Figure 1: Syllabus extract on awarding exit levels of achievement	9
Figure 2: Quality assurance processes involving the work of teachers on panels	
Figure 3: Monitoring reporting of outcomes flowchart	
Figure 4: Verification reporting of outcomes flowchart	
Figure 5: Comparability reporting of outcomes flowchart	
Figure 6: QSA senior schooling quality assurance processes	26
Figure 7: Development of assessment practices on two dimensions, Queensland,	0.0
1912–2007	30
Figure 8: Key dimensions of assessment for student learning and reporting with confidence	27
confidence	
Figure A1. Senior schooling quality assurance processes	
Figure A3: Student profile examples	
Figure A4: QSA Form R3 (2013)	

Standards, judgement and moderation

3 | Page

Investigation of Queensland Senior Schooling

Context and focus

This paper was commissioned to inform the Review of Queensland Senior Assessment and School Reporting and Tertiary Entrance Processes undertaken by Australian Council for Educational Research (ACER). Specifically, the lead Investigator was tasked to address the hypothesis that the Queensland Studies Authority's (QSA, also referred to as system) approach to specifying assessment criteria and standards remains dominant and salient across disciplines. It was also to consider the holistic and analytic judgement models that operate in District and State review panels.

The original aims were therefore to consider the nature and function of standards in informing teacher judgements as reported through moderation panel processes. In support of this focus, the paper is both empirically informed and conceptual in nature, each in turn examining the nature and function of standards in judgements in senior schooling moderation contexts.

QSA's moderation panel processes as they involve standards-referenced judgements are of central concern as they are the means through which reliability, validity, comparability and transparency are realised in the senior schooling context. The District and State panels have responsibilities for:

- review and recommendation for approval of School Work Programs,
- monitoring teacher judgements using standards (mid-band decision-making) with reference to student achievement evidence from Year 11 (first year of senior schooling),
- the verification of student achievement assessed against exit achievement standards (mid-band and threshold), and certification of student achievement on course completion, and
- comparability with particular feed-forward for improvements in the operation of standardsreferenced assessment and moderation in high-stakes assessment.

Consistent with the contract, the guiding questions for the paper are:

- What is the role of Expert Teacher panels in quality assuring assessment tasks for formative and summative purposes?
- How do standards function in panel judgements and decision-making?
- Do panels consider school characteristics and for comparability purposes, issues including like and unlike schools in considering portfolios?
- What are the official expectations about how standards are formulated and how they are to be used to arrive at judgements of quality in a range of disciplines?
- What assessment evidence is brought forth in a wide range of disciplines?
- What is the influence of the Standards Matrix in how standards and criteria are formulated for use in assessment tasks in Years 11 and 12?
- To what extent is the Matrix a controlling influence in the design and terminology of task-specific criteria and standards specifications?
- How do panels within disciplines and across disciplines operationalize the matrix approach, especially in regard to arriving at overall judgments of folios containing assessment evidence of different types?
- How do teachers in panels treat compensations or trade-offs evident in student folios and how do they relate this thinking to the Exit Achievement Standards?
- What are the characteristics of panel judgements using standards at threshold levels, with particular attention to Sound Achievement at the threshold?

For details of the methodological design guiding this investigation, the participants informing the data collection and the timelines for completion see Appendix 1.

4|Page Senior schooling context

Standards, judgement and moderation in Queensland Senior Schooling

Findings

Standards, judgement and moderation provide the lens for this discussion of the data collected to consider the expert panels charged with verifying judgement decisions for senior schooling and the processes in place to support this work. The discussion is organised into three main parts:

Part 1 considers how standards are formulated by panellists to inform judgements about student achievement.

Part 2 considers the quality assurance processes including work program approval, moderation including for monitoring and verification purposes, and comparability.

Part 3 presents a record of the history of externally-moderated standards-referenced assessment as practised in Queensland since its inception and looks back to the past for source information about the origins and foundation principles of the system, as well as potential for reinvigorating it. Like Parts 1 and 2, the discussion in Part 3 also represents an original contribution, though earlier versions have appeared in Smith's doctoral research (1995), and then in Wyatt-Smith and Matters (2007). As the latest historic record, Part 3 connects the main findings from the investigation to a suite of actions for consideration in strengthening the system going forward. It presents the view that the assessment model in Queensland has reached a further critical crossroads, heralded first in 1995 and again in 2007, though earlier action was not taken. The reasons for this are beyond the scope of the paper. It is worth emphasising here that this situation reflects how practice has continued to move well ahead of theory building as a continuing feature of the assessment model to date.

In this introduction readers are offered some background information to the present inquiry. At the commencement of the project it became clear that the work called for access to a considerable body of data. However, data sets or archival records of the type necessary for the work in many cases were not available, though the Investigators understand that some are in development. This situation meant that some data sets necessary for the work had to be purpose-built. The data had to be sourced, compiled, synthesised and examined to inform the discussion in Parts 1 and 2, and as such, this paper represents original work. It breaks new ground in how it constitutes a corpus of data not previously available in the form presented here. Further, this data-building approach was essential to constitute the empirical basis for the analysis. It has enabled a current and new, evidence-based account of the inner workings of the system. This situation reflects the limited nature of the digital assessment records relating to standards and moderation held by the QSA and the lack of sustained research and analysis into the system's quality assurance checks and balances and associated archival records.

The Investigators therefore wish to acknowledge the high level of cooperation of the Acting Director of QSA, the staff of QSA who gave generously of their time and also the teacher panellists who showed dedication and high levels of commitment to moderation for monitoring, verification and comparability purposes. The willingness of these participants to source and provide documents, some online and mostly hard copy, and to share their knowledge of system processes has been essential to the completion of this work.

Standards, judgement and moderation

5 | Page

Findings and recommendations are provided later in the paper. One recommendation is, however, worthy of pulling forward namely that the collection, collation and analysis begun in this work be built into QSA processes and practices as part of the necessary bolstering of the system. The continuation of QSA as a trusted accrediting and certifying agency hinges, in part, on this much needed work. Further, while it may have been appropriate in early implementation for practice to move ahead of theory building, mentioned earlier, the need for the necessary theory building and empirical data systems relating to standards and moderation are now high priority. The fact remains that a fully-theorised evidence-informed account of externally-moderated standards-referenced assessment in Queensland is not yet available, some 40 years after its introduction. The international interest in the model is well recognised, and there should be confidence that such research would be of high policy interest to a wide range of countries currently confronting issues of how to redesign assessment models to bring forth a wider range of assessment evidence (e.g., team work, problem-solving and creativity) than can be produced in time restricted pencil and paper examinations.

Reading the findings: Links to the guiding questions and recommendations

A key feature of the following discussion is the links created to the purposes of the informing paper and the recommendations reached in efforts to strengthen validity, reliability, comparability and transparency of Year 11 and 12 assessments and reported achievement. These links are signalled to the reader in two



Key findingThe key findings heading on the left edge of the page signal direct links between findings and the recommendations.

In addition to these features of the discussion, in many instances, readers are directed to the appendices for substantive data analysis informing the discussion.

The purpose for creating these links is to assist readers as coverage of content occurs in numerous places and discussion of findings is informed by, but not restricted to, the guiding questions.

6 | Page

 $Senior\ schooling\ context$

Part 1: Standards formulation and use

This part of the paper provides comments about how standards are formulated in syllabus documents. It also presents reported and observed practices about how teachers and panellists use standards in forming judgements of student achievement. The discussion extends to consideration of the nature and function of Profile Sheets as a managerial tool for recording judgements against criteria/dimensions and for combining grading decisions on these to formulate an overall or onbalance judgement.

What are the official expectations about how standards are formulated and how they are to be used to arrive at judgements of quality in a range of disciplines?

To what extent is the Matrix a controlling influence in the design and terminology of task-specific criteria and standards specifications?

System: standards and judgement

In looking at the syllabus advice about the formulation of standards and the information supporting teachers about forming judgements on student achievement, the following 18 Authority-Subject syllabuses were considered:

1. Accounting (2010)

2. Biology (2004)

3. Chemistry (2007/2014)

4. Dance (2010)

5. Drama (2013)

6. Economics (2010)

7. English (2010)

8. English Extension (2011)

9. English for ESL Learners (2007/2009)

10. Film, Television and New Media (2005)

11. Mathematics A (2008)

12. Mathematics B (2008)

13. Mathematics C (2008)

14. Modern History (2004)

15. Music (2013)

16. Music Extension (2008)

17. Physics (2007)

18. Visual Art (2007)

In looking across the syllabuses, there was high consistency in use of the matrix cell design for presentation of the defined syllabus criteria/dimensions and standards. Terms used to refer to the matrix showed slight variation across syllabuses including Standards Matrix or Standards Associated with Exit Criteria. In all cases, the matrix showed a table layout with criteria/dimensions on the first column, and standards at intervals or levels across the page. The intention is to represent the intersection of the criteria/dimensions and standards written as verbal descriptors of quality. The consistent feature in design is that the standards are represented as mid-band descriptors. As discussed later in this paper, this feature—mid-band descriptors—necessarily falls short of guiding teacher's judgements at threshold levels.

There was a predominance of a continuum representation of each standard descriptor across A to E standards with common characteristics at various relative levels appearing in each cell. However, the design of the matrix in Mathematics A, B and C paid greater attention to distinguishing features of individual standards with the layout focused on aspects of performance expected for that standard with some cells remaining unfilled. This omission was deliberate so that, for example, B standard could be more readily distinguished from another level. The change in representation was not dependent on the year of syllabus development, that is, later years versus earlier years adopting either approach, but appeared to be subject specific in the subjects viewed (i.e. Mathematics). The carry forward of this to schools was not evidenced with school samples showing the predominance of the continuum representation of standards in criteria.

There are *multiple representations of standards* throughout the system's quality assurance processes. These have potential to compete for teacher attention, detracting from the proper influence of the

Standards, judgement and moderation

7 | Page

standards for awarding grades on course completion. Subject syllabus *Standards Associated with Exit Criteria* provide a five-level letter-grade A to E representation of standards, with a formulaic means for translating this to a five-category VHA to VLA representation. At Verification, the five-category VHA to VLA representation becomes a five-category VHA to VLA representation with ten differentiations of performance at each standard. Thus performance becomes represented against 50-rungs and recorded as VHA3 for example, showing the combination of categorical and relative rung representation.

In schools, teachers are guided by syllabus exit criteria when creating task specific representations of criteria and standards (i.e. the five-level letter-grade A to E). In practice, teachers move from the five-level representation through use of mathematical symbols to a fifteen-level representation with differentiation of performance (thresholds) indicated by use of plusses and minuses (i.e. +, -) with no official guidance provided. This fifteen-level representation of performance shows the combination of letter-grade and symbols. Student Profile examples provided in Appendix 2 show teacher's movement between these various representations of standards, with Verification prompting them to move to the five-category VHA to VLA representation with ten differentiations of performance at each standard for recording grades for summative assessment purposes. Teachers' movement between representation of standards recognised at the school level by students and parents and representations required at system level is an area for further investigation.

What is the influence of the Standards Matrix in how standards and criteria are formulated for use in assessment tasks in Years 11 and 12?

In school's assessment packages submitted for Monitoring, Verification, and Comparability the matrix cell design was clearly dominant. However, on several occasions, panellists were observed to be 'grappling' with the school's method for representing criteria and standards especially with their efforts to discern the demands of tasks or questions. The rigour and validity of assessment instruments were recurring subjects of panellists' discussion, especially in cases where tasks were considered to limit students' opportunities to demonstrate achievement against the full range of standards.

Overall, the language of the system has changed over time. A few specific examples include:

- use of the term *criteria/criterion* in syllabuses prior to 2010 with a movement toward using *dimensions/dimension* in syllabuses released during 2010 or later, and
- use of terminology of Standards Matrix and Dimensions and standards descriptors (i.e. English 2010) in some syllabuses, with others (i.e. Biology) referring to Standards Associated with Exit Criteria.

The variation in terminology reflects the period of development of the syllabus and approach in place at that time. Recently developed syllabuses use dimensions and Standards Matrix.

Consistency was evident in the category level of criteria/dimensions within some disciplines. For example, Mathematics (A, B and C) had common dimensions, as did Chemistry and Physics. Subject specific characteristics were however clear in the actual formulation of the matrices including subject content requirements at the various levels.

Syllabus advice provided to schools and teachers about the *method for determining exit levels of achievement* was highly consistent in 15 of the subjects examined. The preferred approach to guide student exit level of achievement decisions was the formulaic guide shown in Figure 1 (drawn from the 2007/2014 Chemistry syllabus, p. 30) noting that in syllabuses developed from 2010, the use of the term dimension/dimensions replaced criteria/criterion in this table.

Figure 1 points to the dominance of the analytic approach to arriving at on-balance judgement. The apparent assumption is that the judgement of overall quality of a student folio can be derived by adding achievement on component parts. In effect, the judgement of the whole is the same as the sum of the parts; judgement is a technicist operation of combining parts according to the specified

8 | Page Senior schooling context

formula.

Awarding exit levels of achievement

VHA	Standard A in any two criteria and no less than a B in the remaining criterion
НА	Standard B in any two criteria and no less than a C in the remaining criterion
SA	Standard C in any two criteria and no less than a D in the remaining criterion
LA	At least Standard D in any two criteria
VLA	Standard E in the three criteria

Figure 1: Syllabus extract on awarding exit levels of achievement

The two subjects forming the exception to this approach are English and English Extension. These subjects took what could be described as consistent with holistic approaches to judgement and decision-making. So in this approach, the judgement of the whole portfolio is based on considering the work as a whole, judging it against the stated requirements of the standards at the various levels. The standards themselves are required to carry the messages about how teachers are to arrive at discriminating judgements that the work satisfies the requirements of the higher or lower standard. In this judgement practice, the overall grade cannot be arrived at by adding or summing up achievement in distinct criteria as component parts. In short, the whole can potentially be more than the sum of the parts. Also of note is that English was the only syllabus that provided Minimum requirements for sound achievement. The empirical evidence which was used to inform this supposedly sharpened statement of standard at the minimum or threshold standard is not known.

Key findings The matrix cell design for representing five standards is the dominant approach in syllabuses and in school assessment instruments. With few exceptions (identified in the preceding discussion), the standards are represented as existing on a continuum with each cell populated. The underpinning assumption is that quality exists on a continuum and that the focus of judgement is on discerning the degree to which prespecified features are present or absent.

> Currently two terms are used to record indicators of quality, criteria and dimensions. As a consequence there is terminological variation across syllabuses in how standards are framed. Definitional clarity is needed.

There are two discernible approaches to teacher judgement implicit in syllabus documents namely analytic and holistic. There is limited information in syllabuses about how teachers and panellists are to arrive at overall judgements of quality beyond the type of information provided in Figure 1 above. For example, no information is provided about compensations or trade-offs in judgement whereby stronger features of performance can be used to offset weaker aspects.

While limited attention is given to judgement in syllabus documents, the assumption is made that it is possible to anticipate and prespecify all relevant features of quality. There is no official recognition of emergent criteria or those criteria that may not be prespecified but that may emerge legitimately in the course of evaluating actual student work, be it a single piece or portfolio. The syllabuses and other official materials used during panel activities are silent on such judgement issues, even though judgement research suggests that in arriving at judgements, stated criteria and standards may combine with previously unstated or latent criteria that can influence decision-making.

Standards, judgement and moderation

9 | Page

Panellists: using standards to arrive at judgements

What assessment evidence is brought forth in a wide range of disciplines? How do teachers in panels treat compensations or trade-offs evident in student folios and how do they relate this thinking to the Exit Achievement Standards?

In moderating judgements of student work, panellists drew on a *range of documents* including: the relevant syllabus and standards matrix, student profile sheets and student work samples. During monitoring, panellists also drew on blank assessment tasks in efforts to familiarise themselves with the task for multiple reviewing purposes.

The Student Profile was a key device for mapping the assessment tasks scheduled in the Work Program and for recording judgements for formative and summative purposes through to awarding exit levels of achievement. Across subjects, there was *high consistency in the information contained on Student Profiles* reflecting QSA requirements for the profile to correspond to the assessment plan. Information on Student Profiles included:

identifying information (school, subject, student),

in four subjects are shown in Appendix 2.

- assessment instruments indicated by a number and/or topic/unit that aligns with and allows
 identification back to the Work Plan, sequentially placed according to plan and Year/Semester,
- · spaces to record
 - o standards achieved for each criterion/dimension for each instrument,
 - o on-balance judgement according to each criterion/dimension,
 - Level of Achievement (LOA) for Monitoring, Verification and the recommended level of achievement at exit or course completion, and
- indication of the purposes of assessment, both formative or summative.

 Using this information, panellists were able to track the standards (A-E) awarded for individual criteria/dimensions for each assessment at verification and monitoring. Examples of student profiles

Student Profiles acted as a managerial tool that served two main purposes for panellists, namely as a trigger or cue for closer scrutiny of assessment instruments, and as a formula for combining reported grades. These profiles were used in both monitoring and in verification panels. Examples drawn from observations in Information Technology Systems, Mathematics, and Physics follow:

- One panellist looked across all of the Profile Sheets as a record of teacher judgements with the
 purpose to "get a feel" for whether one assessment task was more discriminatory than others: "I
 get a feel across if enough time". The panellist's stated purpose was to identify if there was one
 assessment task common across folios that allowed him to discriminate the work of different
 standards. It was this task that became a concentrated focus for attention allowing him to
 manage or sort the considerable volume of material to be reviewed.
- One panellist reported referring to the Student Profile only after judging the student responses: "I only look at the summary and compare to my own judgement of the student. If it meets, then good. If not, I have to go back and look for the places of mismatch to examine the evidence against the standards". In this instance, the Exit Achievement standards acted as the main reference point for judgement. In other cases, however, the profiles had a pervasive presence providing short-hand recordings of a series of judgements on components of tasks. This reduced judgement making to a formula whereby a string of letter grades with + and (e.g., C, C+, B-) were used in a type of private compensation or trade-off scheme, with the rules remaining unstated.
- One panellist described the following: "I examine more fully student samples at A, C & E to see if my judgement is in line with the teacher and I can confirm their judgement by the evidence. I then glance at B & D samples. Then I look across the student's profile sheet: A A B = A with an eye on positively feeding back to student."
- A panellist looking at a Profile Sheet commented on a further use: B B A A = A "I focus on the trend too. If they are lower grades earlier, then get better as the assessment instruments get harder, then I lean toward the higher level. This is important at verification where we have to consider placements look at the trending of students across the year/s if one is trending As

10 | Page Senior schooling context

and the other is not, that helps with placement decisions". The latter refers to placement within the standard band and relative rungs.

The dominance of the Profile Sheet requires further investigation. Student achievement on all assessment tasks are represented on the Profile Sheet. Panellists reported that assessment tasks did not always offer opportunities for students to demonstrate achievement against the full-range of standards. This raises issues of the validity of the assessment instruments themselves. The Profile Sheet in effect sits between the panellists, the assessment instruments and the student work in the portfolios. This can dilute panellists' attention away from the student folios to the process of how to combine recorded teacher judgements across instruments, criteria and effectively 15 standards.

Panellists adopted an *individual approach to working across the assessment products* in efforts to form overall on balance judgements. For instance, examples below [recounted] are provided from Mathematics, Physics, Drama, and English:

- I would look at the task and see where that dimension is represented and then I would work out the emphasis I would give it. So I might say that a D was given in 1B but it was a question that did not show differences in responses not developed enough of a question or it was very early on [in the year] and the same skills/knowledge are brought forth in a later instrument or in other questions in another assessment task and that was answered much more in depth by the student.
- I look at the Work Program first then all of the student work in each instrument. I average overall.
- I familiarise myself with the task, looking for questions relating to each dimension. Then I go to the student responses. I go through the A sample writing dimensions, then I tick when in questions, then I turn to the overview sheet [Student Profile].
- I look at clean assessments and standards of questions before looking at student responses.
- I get the syllabus out looking at the annotated standards. I look at the blank assessment task or A folio. I examine samples and determine where it sits: "you get an on-balance feel, you just know". I then look at the profile sheet and examine in tasks where the teacher has placed her ticks on the matrix to see whether I agree with the on-balance judgement for the task. I also view the teacher's comments to see whether the comments are at "loggerhead" with the ticks in the matrix. When looking through a sample, I get a good feel for whether the student is meeting the A standard, bumps stand out. Then focus is on interpreting the difference I look across tasks to see what the student is having difficulty with. They may have been demonstrating a descriptor in another task, so they can do it.
- I familiarise myself with the assessment task. Then I go to the student work and read the teacher's comments, bearing in mind whether the comment is picky. I then look at the match between the teacher's comments and the teacher's judgement. When looking through, plot is not as important to me as implying, so there are key elements of the dimensions that are more important to me.
- I look at the Work Program overall, examining whether the tasks are challenging and appropriate. Then I look through the A student to match descriptors to the work. I examine the work task specifically if there is a discrepancy, I take a step back and look at the overall folio, then I look at the Profile Sheet. I then repeat this process for a lower standard-level student. After this, I examine a threshold case. If all is ok after that, and I can confirm the teacher's judgements in these three cases, then no problems across the lot.

These examples show a range of approaches to working with the assessment evidence before panellists charged with the duties of monitoring and verifying judgements. Each example reveals an attempt by the panellist to manage the amount of information, applying individual discerning criteria, using compensations or trade-offs, and implicit weightings to tasks [type or sequentially based] or questions [dimension/criteria based].

Panellists' were observed repeatedly referring to the stated criteria and standards with an eye on *matching evidence in student work samples to features of standards*. In all observations undertaken, panellists were focused on finding evidence of criteria and features of standards in students' responses. An example from observations made during comparability shows two panellists scanning for evidence to support the school's judgement. They were observed to point physically to the identified features in the standard undertaking a running check together:

Standards, judgement and moderation

11 | Page

Evidence linked to feature	Panellist 1	Panellist 2
This has	Yes	Yes
This has	Yes	Yes
This has	Yes	Yes

Two further examples of panellists talking during verification showed similar focus:

- "the criteria [sp] specifically states ...", "where did he do that?"
- "do we have other evidence that the student is as SA versus an LA".

In instances when panellists viewed deficiencies with assessment task design, especially where it was considered to place limitations on the student's opportunities to demonstrate a higher standard of work, panellists sought evidence of that criterion in other assessments of the student's work. That is, though the criterion was indicated in the Work Plan to be assessed in the assessment task they were examining at the time, there were observed occasions when the criterion was not evident. As this was viewed as an assessment design issue, panellists sought evidence that the student had met the criterion in a different assessment task. In effect, the panellists worked to compensate for the flaws of assessment task design, where these occurred, to avoid disadvantaging students. This feature of panellists' work is further discussed in Across the span of system quality assurance processes later in these findings.

Typically, *on-balance judgements were reached by combining* the suite of letter grades awarded to individual summative assessment items. In their efforts to calibrate their judgements, panellists drew heavily on the format of the Student Profile as an easy reference record of these grades.

In practice, they relied on a range of different *methods for combining the individual grades*. These included frequency based decision-making, cancelling out and averaging. It as also noted that the overall decision about level of achievement was more demanding in those cases where the quality was considered at *threshold levels*. Consider, for example, the following statements:

- "On balance judgement all these Cs, then C. If a D and B amongst Cs, then cancel out the D and B, becomes a C."
- "My maths thinking, five questions worth A, then 2/3 time show an A get an A".
- "B _ _ _ (_ = no response) = B [student 1]
 B B B B B = B [student 2]

These are two different students. Syllabus says B in two dimensions required. Not met by first student. I would still do some sort of averaging (C) as the above two cases are miles apart.

BBE

BBB

Probably both a B but B- for first one and B for second."

 One panellist had rewritten the teacher judgements as recorded on the Profile Sheet, essentially reproducing a table showing the assessment instrument and the judgement for each dimension without the on-balance judgement of the teacher. In doing this, the panellist ensured that the on-balance judgement of the school did not influence her own on-balance judgement. The panellist was observed to have written on a blank page:

	KCU	ΙP	EL
1B	D	Ċ	D
2B	C-	D+	С
3B	D+	C-	D+
4B	С	C-	С
5B	C-	B-	С

She reported that she would look across the teacher's judgements to form her own overall judgement. In the example here, she said "they had more Cs than Ds, therefore a C student" ignoring relative placement judgements (+ & -).

12 | Page

 $Senior\ schooling\ context$

These data point to how panellists rely on a range of judgement approaches to combine and trade-off reported judgements. More fundamentally, it shows the tension between the panellists working with the school's reported judgements and their own analysis of the evidence presented to them. It was clear that panellists understood their primary role as looking for evidence to support schools' reported judgements. This suite of insights is consistent with assessment research that shows that judgement of achievement can involve the interplay of explicit or stated assessment criteria and standards, latent or tacit criteria, and meta-criteria (readers are advised to see Wyatt-Smith & Klenowski, 2013).

What are the characteristics of panel judgements using standards at threshold levels, with particular attention to Sound Achievement at the threshold?

Do panels consider school characteristics and for comparability purposes, issues including like and unlike schools in considering portfolios?

Panellists sought to work in compliance with the official requirements of the standards in various syllabuses. It was also clear that some were challenged by the notion of the strength of adherence to a standard when reaching overall judgments as shown in the following English teacher's talk:

I suppose one of the biggest things that we had to overcome, or that some people had to overcome, was not wanting to penalise kids further for perhaps one particular skill that they obviously were weak in, like spelling, or punctuation and grammar, you know, having to look at it in a more holistic light, just honing in and saying 'But she can't possibly be VHA because she can't always spell correctly.' Whereas there's a lot more to it than making a few spelling errors.

Little research has been undertaken in the Queensland approach to standards-referenced assessment or in other assessment regimes into the largely private practice of arriving at judgements that involve trade-offs or compensations where stronger features of performance compensate for weaker aspects. In this investigation, the demands made of panellists were considerable as they worked to reconcile the teachers' comments and grades with their own appraisals of quality, as well as the talk of panel members, where a second opinion was sought. The demands were also increased by the range of quality that was considered acceptable within each of the standards. It is clear that there is a wide range of quality within each of the standards. That is to say, a threshold Sound represents work of discernibly different quality from work at high Sound. Further, threshold decision-making made particular demands on panellists well aware that their decision-making was consequential.

While syllabus and other materials produced by QSA provided detail on determining a standard, making achievement decisions and reaching on-balance judgements, they did not explicitly refer to placement higher or lower within the standard, that is, A+/A/A-. A decision about *relative achievement within a standard* was reported in the Form R3 in 2013, and then in Form R6 where achievement is transferred to a 10-point rung placement within a level. While no formal advice is provided in current syllabuses, a senior QSA officer indicated that production of two videos was being developed that addressed more directly placement within standard, that is, relative achievement decisions. Specifically the content of these materials were identified as pertaining to: *making 'relative achievement decisions' and decisions leading to placement on the Form R6*, and *making judgments where the student response matches more than one standard*. Videos addressing relative achievement decisions and completing the Form R6 are available through QSA's website (see www.qsa.qld.edu.au/29442.html).

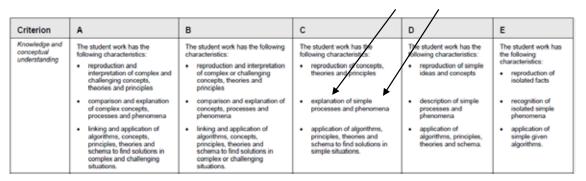
During observations, much discussion occurred about relative placement on individual criteria or more specifically, on a feature or element of that criterion. One example occurred between two panellists in Physics with the focus of the discussion generally about placement decision-making before moving to consider a student's achievement to decide if it was higher or lower within C standard on one element:

And if there's consistency, if you can see it is, typically, you know, you open up a sample and you look at it and it's got typical of the B standard descriptors, then it's a B standard. If it's consistent with a little bit extra ... you might look at it as a top. And then, you know, Standards, judgement and moderation 13 | Page

there is, I guess, around the thresholds there's some judgement to be made about is it consistently B standard or is it a little more A standard, so it becomes a low A rather than a high B, or VHA/HA. But that's a judgment to be made with an eye on the standards descriptors.

[The panellists then indicated, by physically pointing, movement within the C standard while talking about a feature of the student's work. Relative placement was discussed as needing to be moved lower on the feature of the standard.]

"That should be further down".



This example shows the close scrutiny that panellists gave to matching the work to the required specifications of the matrix.

Other panellists, in commenting specifically about factors they consider in threshold judgments, referred to the demands and modes of assessment instruments and the conditions under which the assessment was completed:

- If threshold "I also look at whether the assessment is an assignment or an exam I give more weight to the exam as they can get help with an assignment."
- Also consider assignment versus exam in threshold "I give more weight to exams, but I also
 consider exams. If someone gets an A for the assignment and a C for tests, it is definitely a pass –
 but where is it placed, B or C?" [This remained an unanswered question.]

While relative placement decisions were made, during verification panellists were observed drawing on other means for *confirming placement*. One example, drawn from two panellists in Physics during verification shows an attempt to combine letter and numeric grade indicators in order to confirm placement.

Α	В	С	D	Ε
14	11	8	5	2

(C-)	KCU	7+8+5+11 = 31/4	7.5
(C)	IP	11+7+5+12 = 35/4	8.1
(C-)	EC	2+9+7+12 - 30/4	7.3

[&]quot;Just doing the #s which is an indication."

In this example, the panellists had reviewed the student work and arrived at a provisional judgement of placement as threshold C. They moved to then write the letter and numerical scores as they confirmed the judgement.

Overall, it was observed that *panellists use a variety of means to confirm their own judgements* including those based on formulaic calculations, their own evaluative experience, and their talk and interaction with other panellists. Different means for confirming placement were evident within panels. Some observations across each of the quality assurance processes include:

During monitoring, panellists' talk tended to concentrate on supporting the school's judgements
and confirming the placement of folios at mid-band standard. In some cases, direct comparisons
were made between school placement decisions and the individual panellists' own evaluative
history in their own schools in locating folios within the bands. One example provided by two

14 | Page Senior schooling context

- panellists making a comparison to another school provides a salient example: "The other school [folio] I reviewed was much higher than this, however, both are an A standard".
- During verification, panellists adopted very explicit means of checking or confirming their own judgements using a range of methods, such as in the example above and in calibration checks with other panellists.
- During monitoring, verification and comparability, panellists were observed to draw on their own
 evaluative experience and they reflected on teacher judgements recorded for other schools.
 When placement became a paramount focus of discussions, these relative observations tended to
 increase, though there was no explicit talk of like and unlike schools.

What assessment evidence is brought forth in a wide range of disciplines? How do panels within disciplines and across disciplines operationalise the matrix approach, especially in regard to arriving at overall judgments of folios containing assessment evidence of different types?

While many individual differences were identified in panellists approach to working with standards and assessment evidence in making judgements, a number of discipline differences were discernible. These observed differences related to the mode of assessment evidence and the varying emphases placed on certain aspects of the student portfolios.

- Mode of assessment evidence A number of disciplines provided student assessment responses in electronic format. Panellists would work between hard copy materials in portfolios (Student Profile, assessment tasks and student responses) and electronic files provided on CD or DVDs (movie files, photos, website files). These files were observed to be used with copy materials in folios in conjunction with performance components in other media. This was observed in several subjects including dance, Drama, Music, Film, Television & Media, and Physical Education.
- Relative emphasis on parts of the assessment package Panellists in Drama reported giving
 particular value to teachers' comments to inform their valuation of the student's assessment
 piece and for contextual information. When recorded student performance was the assessment
 evidence, teacher's comments provided useful information to support the panellists' appraisal of
 the performance captured in media files or other software. Panellists voiced the concern that
 when viewing recordings of student's performances for assessment, they could miss subtleties in
 the live performance. The teachers' comments addressed the difference between a live
 performance involving an audience and a record, digitally captured.

In cases where there was electronic evidence, the performance was watched routinely by one or more panellists who would give a running commentary of how the performance was matching against the expected features of quality. The critical need for ensuring panellists have suitable software is highlighted here. There were observed instances were panellists could not access the student response due to technological and software difficulties.

By far the dominant mode for panellists to work with assessment evidence was through print, hand-writing their judgements and advice to schools. This reliance on print or hard copy extended the time necessary for return of information to QSA. The much needed move from a paper-based system is discussed further in Part 2.

Key findings

The Student Profile is a dominant assessment product that is used as a managerial tool by panellists. The profile records letter grades on which teachers rely, with no formal guidelines about how to combine what is in effect fifteen standards.

Panellists use a variety of means to confirm their own judgements, including those based on formulaic calculations, prior evaluative experience, and their attempts to calibrate the judgements across panellists. The latter would increase in cases where the judgements of panellists did not agree with each other or the school.

Standards, judgement and moderation

Judgements of student achievement at the threshold rely heavily on the panellists' tacit or in the head standards.

The dominant mode for panellists work is print-based, however, some subjects where live performance or demonstration is assessed, have moved to submitting digital records of student work. These include, for example, Dance, Music, Health and Physical Education, and Drama. In these subjects, teachers on panels worked between achievement data in different modes, with panel time including panellists' review of the performances themselves.

Part 2: Quality assuring student achievement

This part of the findings considers the four quality assurance processes undertaken by State and District panels. Consideration is given to the means through which reliability, validity, comparability and transparency is realised in the senior schooling context through these processes. Further, this part considers factors that span the four processes.

What is the role of Expert Teacher panels in quality assuring assessment tasks for formative and summative purposes? How do standards function in panel judgements and decision-making?

The work of teachers on panels occurs during four distinct quality assurance processes (see Figure 2). The discussion that follows focuses on each of these processes in turn, drawing on a range of data sources to inform the findings. The processes include: 1) Work Program Approval, 2) Monitoring, 3) Verification, and 4) Comparability.

Work Program Approval

July of Year prior to implementation Online

Purpose: "provides recommendations to the QSA about the suitability of the work program for approval" (QSA, 2010, p. 10).

Monitoring

February of Year 12
District face-to-face
meeting

Purpose: "process by which review panels consider a school's implementation of a course and assessment decisions in subjects" (QSA, 2010, p. 10).

Verification

October of Year 12
District face-to-face
meeting

Purpose: "process by which review panels advise schools about Year 12 student achievement relative to syllabus standards descriptors" (QSA, 2014, p. 2).

Comparability

November of Year 12 State face-to-face meetina

Purpose: "process by which state review panels collect information about the extent to which judgments made in schools about levels of achievement are comparable across Queensland" (QSA, 2013, p. 19).

Figure 2: Quality assurance processes involving the work of teachers on panels

Work program approval

Work Programs are submitted the year prior to implementation in Year 11 (around July) by all schools in two circumstances: 1) when there is a new syllabus or 2) if the school is newly offering the subject to students. Work Programs include the following information: course organisation, outline of intended student learning, assessment plan, and sample student profile. At the time of Work Program submission, assessment instruments are not provided to the QSA for approval. This means that students are undertaking assessments for both formative and summative purposes without the instruments themselves having been checked or validated prior to use. This omission is of note, and

16 | Page

as indicated, has direct implications for how panels work to compensate for task design weaknesses, where these occur.

Outcomes of the Work Program approval process through the district and state panellists are fedforward via the Form R2 to the school and QSA. The SEO uses this advice to schools to inform professional development content, or in some cases, instigate other actions as required, an example being school contact. It was reported that *contact with schools occurs throughout the year*, with 75% (approximately 366 schools) receiving some contact at least once per year. Following receipt of the Form R2 advice from the District Panel Chair, QSA makes contact with the school to "touch base" about actions they undertook as a result of the panel advice on the Work Program. The timing and requirements of Work Program Approval merit more detailed investigation. This work could focus on the assessment schedule in particular, how tasks for formative and summative assessment purposes build over the period of study, and the schools' refinements or improvements to assessment instruments where these have occurred.

Key finding

Work Program approvals do not include formal systematic quality assurance processes applied to assessment instruments before they are implemented. While a school receives feedback about the quality of the curriculum, the assessments themselves are not subjected to review. This omission is of concern for several reasons. At the heart of the current model is teacher judgement and in particular, how judgement is standards-referenced. Currently, however, the review of Work Programs does not focus on teacher judgement and decision-making in assessment task design and the use of standards as applied to individual tasks and to folios. In effect, curriculum, teaching and assessment evidence are dislocated in the approval process.

Monitoring

District Panel Chair meetings for Monitoring purposes were held on 18-21 February 2014. Observations were made at the following six panels over this period: Chemistry; Drama; English; Information Technology Systems; Mathematics A; and Physics.

During these observations, discussions occurred with the six Panel Chairs and 29 panellists. These observations and interviews with QSA personnel are drawn on in the following discussion, along with additional materials prepared and provided to the Investigators. *Reporting of outcomes* from Monitoring (see Figure 3) occurs in the following way:

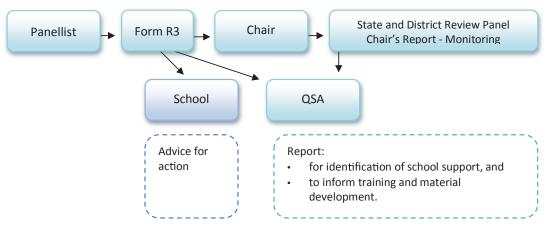


Figure 3: Monitoring reporting of outcomes flowchart

The flow of information as represented in this figure was confirmed by QSA staff in the Quality Assurance Unit as an accurate representation on 30 April 2014.

Standards, judgement and moderation

State and District Review Panel Chair's Report - Monitoring 2014

The State and District Review Panel Chair's Report – Monitoring 2014 for 45 subjects were provided by QSA to the Investigators on 12 March 2014. The following analysis concerns only the sample provided.

The reports prepared by the District Panel Chairs contained information about the quality of school submissions and emerging issues of concern in schools' assessments and judgements. In turn, the information in reports was provided to the SEO for follow-up. The information requested by the form includes: school code, school, and tick select option for identifying issues with Assessment, Matching of syllabus standard descriptors, or interim Level of achievement (LOA) with no space allocated for further information. The following discussion considers the findings of a frequency analysis of issues identified in the reports (see Appendix 3 for the frequency table). In summary, the reports considered were from 45 Authority-Subjects considered by 367 District Panels with 3,857 panellists during monitoring 2014.

First time analysis undertaken by the Investigators showed that from these 367 district reports, there were:

- 767 reported instances of issues related to the school's assessment,
- · 664 reported instances of issues related to the matching of syllabus standard descriptors, and
- 521 reported instances of issues in school submissions related to interim LOA decisions.

Of the schools identified for follow-up by the SEO, 73% were relative to assessment design matters, 63% were relative to matching syllabus standard descriptors, and 77% were relative to interim LOA judgement, which indicates that schools were identified for follow-up on one or more issue. As there are only 489² Year 12 schools undertaking Authority-Subjects, it is also evident that schools were identified for follow up on one or all three matters in one or more subjects. Of note is that there were 95 districts (26% of districts) where no significant issues were reported.

On the completed reports, *provision of specific information relative to the issues* of concern was limited. As a result of the information requested on the form (described earlier), the majority of reports provided little or no information about the issue. Where there was information provided, it was apparent that Chairs adopted a similar manner of reporting to that requested on the Verification Chair Reports paperwork (discussed in *Verification* next).

When comments were made, several demonstrated *signalling to the system* through the SEO the importance of assistance required by the school in that subject. Examples included:

- "high concern"
- "big concerns"
- "(Priority 1) They need help."
- "Many issues. Student work is not following task sheets. Task sheets are not following the work program. Criteria sheets are not following the syllabus. Understanding of the syllabus is not present. I have sent a letter as an offer of help – they need a lot of it."

Other information provided on these forms related to:

- limitations of the assessment to provide opportunities for students to meet the related criteria/dimensions (or features of),
- alignment of assessments to the approved Work Program,
- alignment of the assessment to syllabus expectations, and
- explanations of circumstances obtained through contact with schools for instance: "Lots of staffing issues last year. They should hopefully be back on track for 2014. I will be offering support throughout the year".

¹ It is noted that to date there has been no comprehensive analysis of District State Panel Chair Reports – Monitoring as a

² Figure provided by QSA 10 March 2014. Schools identified have one or more students in Year 12 as at 2014 (QSIS data).

18 | Page Senior schooling context

The monitoring feedback also included instances of reporting non-alignment to the school's Work Program with the Year 11 assessments as implemented throughout the year.

A discussion with an SEO about the use of these forms for *informing school support* provides an *important contextualisation of reported issues*. It also brought to light the vital role played by various written reports, all currently existing in print form only. This importance was identified by one SEO who referred to the how these reports served to *filter* the flow of information across the QSA, panels and schools. The Chair's Report was characterised as acting as a 'first filter' reflecting advice provided to schools and identification of those schools to be followed up by QSA though the SEO. Using the identification of the school, the SEOs then referred to the panel's specific advice reported to the school on the Form R3. The Form R3 acted as the 'second filter'. The Form R3 was reported to be interrogated for the identified schools to ascertain the "severity and extent" of the issue of concern. In this way, monitoring acted as a mechanism for "feed[ing] into further support mechanisms". Effectively these filters worked to assist in managing the flow of information from in excess of 3,700 panellists across the 13 districts through to 20 SEOs in QSA who oversee 2-3 authority subjects and associated authority registered subjects (provided 29 January 2014 by P-12 Implementation Branch QSA).

What this meant in practice was that for a district in subject English where 23 schools were reported as having an issue requiring system support, upon interrogation of the Form R3 by the SEO, only 4 were confirmed as requiring support. Instances such as these are reflective of many factors including Chair experience or syllabus stage for instance and therefore, SEO expertise is relied on to interrogate and suitably action reported issues of concern.

While weaknesses have been highlighted in this discussion, strengths of the system are also noted as exemplified through the tracking of schools for support by the SEOs. An area for further work includes the work of SEOs, the action taken in schools in response to panel feedback, and closing the loop on necessary changes, especially as these relate to assessment task design.

Key findings

Monitoring provides an opportunity to provide feedback to schools on assessment undertaken for formative assessment purposes after these have been completed. Similarly, panellists have opportunity to identify issues with summative assessment after they have been implemented in classrooms and grading, as discussed further below. This timing for the validating or checking of assessment tasks to determine construct validity and cognitive demand is raised here as a matter for priority attention.

Currently monitoring focuses on expected quality at mid-band levels of the standards. This is a missed opportunity to strengthen the consistency of panel judgements at the necessary threshold levels. The rigour of monitoring would be increased with a shift in focus to the required features of quality for standards at threshold levels, and further at the tipping point into the higher standard. This would sharpen judgement capability across the full band width of each standard.

Standards, judgement and moderation

Verification

District Panel Chair meetings for Verification purposes were held on 21 October 2013. Observations were made at the following nine panels over this period: Accounting; Biology; Business Communication & Technologies; English; English Extension; Geography; Mathematics B; Music; and Physics.

During these observations, discussions occurred with the Panel Chairs and panellists. These and interviews with QSA personnel are drawn on in the following discussion, along with materials prepared and provided to the Investigators. *Reporting of outcomes* from Verification (see Figure 4) occurs in the following way:

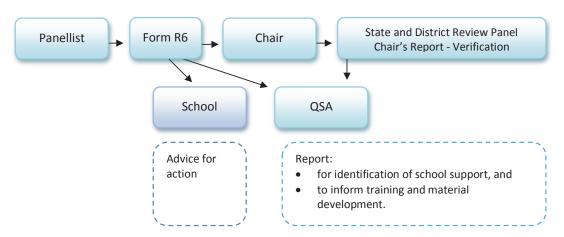


Figure 4: Verification reporting of outcomes flowchart

The flow of information as represented in this figure was confirmed by QSA as an accurate representation on 30 April 2014.

State and District Review Panel Chair's Report – Verification 2013

The State and District Review Panel Chair's Report – Verification 2013 for 45 subjects were provided by QSA to the Investigators on 26 February 2014. The following discussion concerns only the sample provided.

The reports prepared by the District Panel Chairs contain information on significant issues in school subjects that require follow-up by the Chair and SEOs in QSA. The requested information includes: school name, tick select option to indicate issues relative to LOA or Assessment, with space allocated for Chairs to provide specific information on the issue. The following discussion considers the findings of a frequency analysis³ of issues identified in the reports (see Appendix 4 for the frequency table). In summary, the reports considered were from 45 Authority-Subjects considered by 344 District Panels with 3,717 panellists during verification 2013.

In these 344 district reports there were:

• 485 reported instances of issues in school submissions related to LOA decisions, and

• 374 reported instances of issues related to the school's assessment.

Of the schools identified for follow-up by the SEO, 77% of the reasons for contact related to LOA, and 60% were concerned assessment design matters. Follow-up for both LOA and Assessment were required for action post-verification. As there are only 489⁴ Year 12 schools undertaking Authority-Subjects, it is evident that schools were identified for follow up on both matters for one or more

At the time of writing there had been no comprehensive or sustained analysis across District State Panel Chair Reports – Verification. This investigation represents the first consideration of the body of reports for identification of issues.
 Figure provided by QSA 10 March 2014. Schools identified have one or more students in Year 12 as at 2014 (QSIS data).
 Page Senior schooling context

subjects. Of note is that there were 100 districts (29% of districts) where no significant issues were reported.

LOA issues were related to discrepancies between the evidence in the student work and the proposed standards assigned by the school. That is, differences were identified between school judgement of the standard of student work and that of the panellists. Comments made about LOA include "school judgement in [criteria/dimensions]", "inconsistent application of criteria", "decisions regarding [criteria/dimension] were not substantiated with evidence in the folios", "upward movement", "downward movement", and "the evidence in folio A does not match syllabus descriptors for an A standard" as examples.

Assessment issues covered a range of design and judgement matters including:

- suitability of demands of assessment tasks "assessment didn't provide students with opportunities to meet syllabus standards across all dimensions", "'A' level opportunities limited", and "tasks lack challenge";
- syllabus interpretation "not following sampling requirements", "use of syllabus conditions on tasks", "categorising elements of task to correct dimensions", "assessment instruments do not meet syllabus requirements";
- matrices "criteria sheets not derived from exit standards", "matching exit standards to task", and "criteria sheets do not reflect syllabus standards descriptors";
- teacher judgement "poor alignment of standards to assessment task", "matching evidence to descriptors", "lacking evidence", "incorrect application of standards", and "inconsistent judgements against criteria"; and
- teacher experience "lack of understanding of standards and the intent of the syllabus by the teacher", "they need further support on their assessment", and "new teacher".

During verification, the observed practice was that panellists identified and reported issues to the Chair who, in turn, made a decision about reporting to QSA. The mechanism for doing this is the *State and District Review Panel Chair's Report – Verification* form providing a record of the *Significant Issues*. This process of reporting of issues raises several considerations. First, the issues carried forward from panellists through to QSA were determined by Chairs. It was reported that Chairs consider the information provided to them by panellists to determine the nature of the issue and the appropriateness of the information prior to inclusion. This points to the role of the Chair as a critical mediator in the flow of information across District and State Panels, individual schools and QSA. Second, the information recorded about the issues varied in both quality and utility. The feedback ranged from Chair's simply using the QSA provided 'tick' option (LOA, Assessment) with no or little elaboration of the nature of the issue to detailed description and references to related evidence in school submissions.

These observations provide an opening for reconsidering as among the highest priorities the selection and training of State and District Panel Chairs, and more broadly, the opportunity for them to become accredited for the role within QSA.

In Monitoring, a process for filtering information reported by panellists and Chairs was described. The *process for identification of schools for support* during verification similarly involves a process of filtering. Chair Reports act as the first filter, with the Form R6 acting as the second filter. However, it was reported that the purposes for verification were different from those of monitoring, and subsequently the Chair communicates more directly with the school in resolving issues of student placement within standards and on the related rungs. This once again highlights the important role of the Chair and recognises the expertise and time commitment of the Chair to this position.

As suggested earlier, *effective communication between the SEO and the Chair is essential* for effective feedforward from panels to the schools and in turn to QSA. This communication channel also highlights the depth of expertise required of the SEO in terms of discipline knowledge and assessment expertise. This extends to the use of standards in judgement and decision making and assessment

Standards, judgement and moderation

task design. Once the panel report is received, SEOs draw on the report and Form R6 within their subject portfolio to identify actions for supporting Chairs and schools. The SEOs map actions from the paper-based reports onto a recording system (word table, or Excel worksheet) to track contacts with schools. In this process the Investigators were advised that up to the time of this investigation, there was no holistic review and analysis of the performance issues across subjects for the purposes of identifying recurring and emerging system-wide assessment issues. Clearly the reports could be used for this analysis and represents a valuable opportunity for rigorous data mining as routine in QSA operations. Such analysis would inform both operational and strategic priorities.

The above observations regarding the role of the Chair and SEOs working with school staff points to the current heavy reliance of standards-referenced assessment on both assessment and discipline expertise, and the relational cultures within panels and between panels and schools. This was evident in cases where the finalising of agreement on school submissions at verification was undertaken by the Chair outside of panelling activities. The reliance of QSA on the Chair's critical work in resolving issues (e.g., judgements of level of achievement and matches between evidence and standards), merits further investigation.

Key findings

It is currently not routine practice to undertake comprehensive systematic analysis of District Panel Chair reports to inform State Panel Chair Reports – Verification. This is the case even though verification records provide critical information about key assessment knowledge, design issues, syllabus application and standard usage on student performance for the system to self-monitor.

The Chair has a key role during verification, working with schools to finalise agreement on reported achievement against defined standards for the award of exit achievement. This action is taken outside panel meetings, as occasion requires. In this regard, Chairs carry with them valuable corporate memory of the operation of panels.

SEO expertise is critical for ensuring appropriate and effective follow-up of issues identified through reporting. Their work serves to connect the moderation processes between Chairs and schools. As discussed later in this paper, it is timely to review how the vital operational role of Chairs is best undertaken, given that it is routinely undertaken by teachers and Heads of Department who have full-time teaching and leadership roles.

22 | Page

Comparability

State Panel Chair meetings for comparability purposes were attended by the Investigators on 4 and 6 November 2013. Observations were undertaken at the following 13 panels over this period: Biology; Dance & Drama; Economics; English; Film, Television & Media; Home Economics; Mathematics A; Mathematics B; Mathematics C; Modern History; Music; Physics; and Visual Arts. These observations along with interviews and documentation provided by QSA inform this discussion.

Reporting about the outcomes of comparability takes two forms: 1) State panellists complete Form C2 recording the outcomes of judgements for comparability purposes, and 2) State Chairs distil the information recorded by panellists on the Form C2, synthesising the strengths and areas for attention across the state. State Chairs and SEOs work together in preparing the published report of comparability namely the State Review Panel Reports. The *flow of reporting* during comparability (see Figure 5) occurs in the following way:

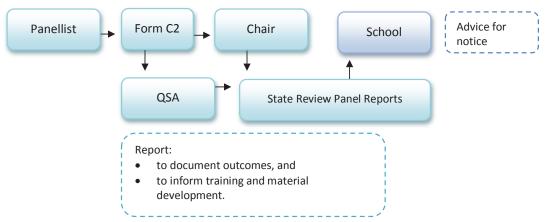


Figure 5: Comparability reporting of outcomes flowchart

The flow of information as represented in this figure was confirmed by QSA as an accurate representation on 30 April 2014.

In addition to undertaking comparability checks across threshold samples across the state for each subject, State Panels are charged with examining unresolved cases. Reviews of unresolved cases are required when the District Panel did not reach agreement on the LOA after three panellists' reviews.

Each of the processes of reporting outcomes of comparability is discussed further below.

State Review Panel Reports

This Investigation considered 2011, 2012 and 2013 *State Review Panel Reports* prepared for public dissemination of the outcomes of state comparability of judgement of student outcomes. The public reports present outcomes from the State Panel meetings for comparability purposes by subject.

From a review of the information provided across 34 subjects, advice in these reports was shown to adopt two descriptive styles:

- advisory, whereby information about the moderation process was provided through a number of
 examples prefaced with should, need to, must etc. Reports based on this style do not provide
 sufficient information on the performance of the State throughout the moderation processes.
- reflection, whereby comment was made in general terms about the performance of the State.

In the main the reports lacked specific information about the outcomes of comparability (i.e. number of supported/unsupported threshold judgements) instead opting to draw on general qualifiers; reports contained little or no evidence about frequencies or illustrative cases. Instead, comments of a general nature were used and included: evidence was found, significant variety, significant agreement,

Standards, judgement and moderation

significant alignment, sometimes incorrectly matched, in general, in most cases, and generally, for example.

The majority of the reports examined in 34 subjects across the three years of publication reviewed (2011-2013) incorporated both styles of reporting. As such, they could not be described as evidence-based accounts of validity, reliability and comparability and so their utility for informing panel operations is problematic. This observation suggests a need for evaluating the purposes and audiences of these reports.

What are the characteristics of panel judgements using standards at threshold levels, with particular attention to Sound Achievement at the threshold?

Comparability LOA Review Summary

Comparability LOA Review Summary (Form C2) records the outcomes of panellists' review at comparability. The Investigators were provided with Form C2s for the following nine subjects in the Sound (SA) LOA in 2013: Agricultural Science; Ancient History; Drama; English; Information Technology Studies; Mathematics C; Physics; Study of Religion; and Technology Studies. In these subjects across the 92 Districts providing assessment packages as samples to the State Panel, 159 (88.8%) were supported and 20 (11.2%) unsupported (see Appendix 5). The unsupported samples were restricted to four subjects. While the sample considered here is small, it included unsupported LOAs where the student samples were judged to be of higher quality, rather than at the threshold. When focus is placed on samples of work not supported in the judged LOA, it does not always follow that samples were judged at comparability as representing a lesser quality of work according to the standards. Instead, some samples were identified for higher placement in the standard.

Considering the high-stakes nature of senior schooling, judgements that have been agreed by the school and subsequently supported by two district panellists yet are unsupported at State Panel in comparability checks point to a number of concerns. These include understanding and application of standards by the District Panel, reliability of recorded student outcomes, and common or shared expectations of performance for standards at thresholds. At this point in the process of assuring student outcomes, unsupported LOAs do not affect the student's exit LOA. Comparability checking as currently undertaken does not constitute an element of quality assurance in the operation of standards-referenced assessment. Its primary purpose is to feed-forward to inform panel training and material development.

As these samples were submitted as meeting the requirements of standards at thresholds, comments elsewhere in this paper relating to the importance of how teachers' and panellists' understand and interpret thresholds when making judgements of student work according to standards (see *Standards formation and use*) apply here also. Overall it is clear that the focus on judgement of standards at the threshold requires priority attention. To complement this, there could be a focus on the features of quality that characterise the full band of the standard—at the lowest level (lower threshold), and the highest level (tipping point into the next standard). Suitable chosen illustrative exemplars of student folios could address this need.

Unresolved reviews

Unresolved reviews are required at State Panel during comparability in cases where the District Panel cannot reach agreement on the school's judged LOA after three panellists' reviews. The number of unresolved reviews for each Authority-Subject (38 subjects) for four years is 70 in 2010, 62 in 2011, 56 in 2012, and 52 in 2013 (see Appendix 6 for subject frequencies).

These figures show a reduction in unresolved cases by 26% in the last four years, with a reduction in cases reported each year over this period. This trend could be a positive indication of the traction of:

- valid assessment design,
- reliable application of standards for judging the quality of student work; and

24 | Page Senior schooling context

quality assurance processes.

The frequency of unresolved reviews is also an indicator for further investigation. Seven subjects (out of the 38) had more than 10 recorded unresolved cases in total across the four years. The three subjects with the highest number of cases were: Visual Art (29), Biology (15), and Legal Studies (15). Tracking of reviews longitudinally with comparison against other factors such as syllabus timeframe, Chair experience, panellist experience, and training could be considered when interpreting this data. Data systems including historic records of moderation outcomes are limited, restricted to comparability checks and records of extraordinary reviews. Public confidence would be better served through establishing data systems that permit the tracking of issues relating to the use of standards in moderation over time in individual subjects and curriculum domains.

Extraordinary reviews

Extraordinary reviews are conducted after comparability when agreement has not been reached between the State and the school. Information provided by QSA on 26 February 2014 documented the extraordinary reviews required in the last five years as: three in 2009, two in 2010, and nil required from 2011-2013 (see Appendix 7 for breakdown by subject).

The fact that no extraordinary reviews have been undertaken in the last three years is however a positive outcome of the work of QSA and schools in reaching agreement on judgements of student work and grades for award on exit or completion of a course of study. The work of the Chairs and SEOs in communicating panel advice and working with schools in reaching agreement is recognised in this outcome. Such agreement of itself should not however be taken as evidence of reliability, construct validity of assessment instruments or comparability.

Key findings

State Review Panel Reports provide little specific information on comparability outcomes in subjects. The reported information is of variable quality and utility in informing interventions at the school level.

Comparability checking as currently undertaken does not constitute an element of quality assurance in the operation of standards-referenced assessment. Its primary purpose is to feed-forward to inform panel training and material development.

A reduction by 26% in unresolved reviews is a positive trend, however, this finding should be considered in relation to outcomes of comparability reporting discussed earlier.

No extraordinary reviews for the last three years indicate the system secures agreement with schools on student outcomes at certification. The preceding discussion about unsupported judgements of placements within standards however shows a need for concentrated focus on the characteristics of quality at threshold levels, and as also suggested, the quality expectations at the top of each standard. Very High Achievement 4 to 10, for example, could be a particular focus, along with the top levels of High and Sound Achievement.

Across the span of system quality assurance processes

Organisation of panellists for review of school submissions varied based on the Panel Chair. In the main, panellists were organised around three criteria: experience, standards, and partnerships. There were strategies in place to ensure novice panellists were working with their more experienced colleagues, and that panellists experienced variety in terms of the standards they were examining and the colleagues with whom they worked in meetings.

The *experience of sitting on a panel* was reported as a means for improving teacher's knowledge of the criteria and standards, and for developing notions of quality at different standards. Working with

Standards, judgement and moderation

the standards and criteria, exposure to assessment instruments and professional conversations were reported to be invaluable for personal development. The recognised value of this was captured in a District Chair (DC) focus group:

DC1: What it is, I say, is it's great professional development doing this process.

I think it makes us much more literate in terms of assessment, what

makes good assessment.

And I have to say, I was, before I joined a panel I was sort of floating

around not knowing what ...

DC2: Hit and miss.

DC1: Yeah, but once you get on a panel you can actually see, you get to see

everyone else's work and get ideas. And you go, oh.

The QSA system of eternally-moderated standards-referenced moderation is process-driven and paper-based. The schedule of quality assurance processes spans the entire year as shown in Figure 6 (described by senior staff during interviews; Investigators' representation). Central to this work are the key moderation processes: Work Program Approval, Monitoring, Verification and Comparability. The organisation required to support the 13 Districts and over 3,700 panellists meeting to discuss student submissions is extensive, as are the preparations required to support the State panel processes. In addition to the specific moderation processes described, the quality assurance schedule includes preparation of professional development and training, the annual Moderation Conference and a number of key areas of development.

	November	October	August	July	May	March	February
Qual assurar activit	Comparability Unresolved State Panel Report	Verification	RPC meetings	Moderation Conference - training - key messages	QA AR Moderation meetings		Monitoring Random sampling
Train		DRPC training	Panel training			SRPC Working Party Panel Training (biennial)	
Areas developme	Use of data - District trends - % not agreed		Leadership - workflow - reviewing	Virtual moderation		(bletimal)	Online panel training modules

Figure 6: QSA senior schooling quality assurance processes

The paper-based nature of the system impacts efficiencies, with over 8,000 Form R3s (Monitoring) and Form R6s (Verification) reported to be submitted each year. The quality of completed documentation, as signalled elsewhere, was varied, impacting on the usefulness of the information in all reports provided to QSA. While intensive focus and energy are committed to processes, limited attention is given to data analysis at the key points of monitoring, verification and comparability. With the volume of information provided in paper-based form, an online system for immediate data capture and database storage is an advance that would make it possible to feed-forward monitoring and verification information, and permit longitudinal tracking of achievement data.

Information provided by QSA shows that direct costs have remained at a stable 22 to 24 per cent of the annual administration grant as shown in Table 1 prepared by the Policy Coordination Branch QSA. Of note in this table is that additional direct costs have been identified in some years and omitted in others, and amounts of expenditure have shifted markedly during this period. While detailed analysis of budget provisions for moderation in senior schooling is beyond the scope of this report, some

26 | Page

evidence-based commentary on budget was considered appropriate, in light of observations about current limitations in the system.

The flat lining of overall direct costs in Senior Schooling assessment system is of note when considered in relation to QSA responsibilities in curriculum and testing. These include developing curriculum resources for P-10 to support the move to the Australian Curriculum and Achievement Standards, and NAPLAN testing and reporting.

Table 1: Direct costs of externally moderated school-based assessment for QSA

Description	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Total
QCIA	67,954	119,485	108,637	129,430	138,389	49,809	33,944	35,358	30,670	32,087	27,482	773,247
Services Co-ordination - Services	1,458,461	1,457,250	1,502,753	1,618,009	1,576,438	1.803,106	2,004,515	2,108,453	2,241,191	2,326,395	2,333,718	20,430,290
Panel Training	83,827	65,166	58,868	91,150	64,372	88,958	78,490	131,716	163,074	92,805	101,447	1,019,873
QCE Branch Directorate - Senices	1,508,667	1,779,402	1,823,795	2,013,773	2,156,144	2,676,236	175,277	189,947		-	- 1	12,323,240
Panel Chairs Conferences & Seminar	214,235	220,688	205,106	223,789	237,045	266,215	222,241	227,536	207,523	216,955	194,861	2,436,195
Work Program Approvals	299,279	176,072	358,560	459,371	134,774	330,649	515,789	301,336	385,835	281,076	175,885	3,418,627
Monitoring	489,868	604,085	602,008	695,608	680,820	766,694	803,452	850,637	628,745	645,083	839,721	7,606,722
Verification	491,804	610,759	625,239	726,406	727,385	802,016	855,204	873,600	1,010,115	1,082,761	978,228	8,783,520
Random Sampling	20,853	24,001	16,410	33,155	35,884	45,683	69,701	70,211	111,275	87,291	97,695	612,160
Comparability Meetings	95,314	98,311	103,786	106,067	104,645	116,912	128,809	130,039	130,857	117,473	108,232	1,240,446
School Support - Services	27,811	17,326	17,497	16,544	9,163	5,642	1,965,665	2,253,898	2,497,221	2,608,892	2,582,993	12,002,652
QA Auth Registered Subjects	-	-			81,551	128,260	50,553	97.519	59,092	63,149	21,607	501,732
Learning Projects - WC&S	· · · · · · · · · · · · · · · · · · ·		and the		66,659	43,758	10,410	3,233	1,435		June 18 M	125,496
Total	4,758,072	5,172,547	5,422,660	6,113,303	6,013,269	7,123,939	6,914,049	7,273,486	7,467,035	7,553,968	7,461,871	71,274,198
Administered Grant	21,803,900	22,973,100	24,555,000	26,108,000	28,242,000	29,616,000	30,211,000	31,217,000	32,413,000	33,410,623	32,221,000	312,770,623
	22%	23%	22%	23%	21%	24%	23%	23%	23%	23%	23%	23%

Notes:

supplementation for redundancy payments.

- * SES staff are not included in the figures above
- * No indirect (corporate) costs are included in the above figures
- * 2001-2002 were \$5,044,131 (23% of the Administered Grant funding for BSSSS, TEPA & QSCC)

While costs in most categories have increased, some significantly, notable exceptions are Panel Chairs, Conferences & Seminars, and Work Program Approvals. Both of these categories show a reduction in expenditure in the period 2012-2013, with funding being less than in 2002-2003. This could reflect the cycles of syllabus development, though further comprehensive analysis would be required to consider the impact of this cost reduction in light of the preceding comments on Work Program approvals and the lack of attention given to assessment tasks in these processes. It should be noted here that the Investigators were advised by QSA staff that historically, there had been no requirement to provide sample assessment tasks as part of approvals. However, the first author has direct experience of this requirement as part of accreditation processes applied to Work Programs.

Information on full-costs provides a more informed picture, with the focus on dollar per student, school and subject group as shown in Table 2 (prepared by QSA) and Senior Education Officers and subjects in Table 3 (prepared by QSA).

Table 2: Expenditure on the moderation system 2000 and 2013

Year	\$ per student	\$ per school	\$ per subject group
1999/2000	278	30,710	1,467
2012/2013	268	28,814	1,542

Notes:

- the number of students is the number who completed Year 12 (including visa students)
- a subject group is the group of students in an individual school undertaking the same subject
- expenditure has been corrected for inflation using Reserve Bank of Australia, inflation calculator and is in 2013 dollars

Table 3: Senior Education Officers, schools and subject groups 1991, 2000 and 2013

Year	Review/Senior Education Officers	All schools	Small schools (<50)*	Authority subject groups	Authority- registered subject groups
1991	26	293	15	6049	1949
2000	23	351	25	7350	3580
2013	20	452	52	8444	3219

Notes:

- the number of small schools is included as they typically require a disproportionate level of support and assistance, mainly due to the small number of experienced staff and the greater impact of staff turnover
- a subject group is the group of students in an individual school undertaking the same subject.

Table 2 shows that expenditure per student and per school has decreased while there has been an increase in expenditure per subject group. While direct expenditure has remained stable, Table 3 clearly shows that there are decreasing numbers of SEOs in place to support the growing number of schools and subjects in the quality assurance processes.

Additional information provided by QSA about costs associated with research positions clearly shows that since phasing out the Research and Policy Unit over the period of 2005-2007, there has only been one year of expenditure that has an allocation for such staff. The lack of a coherent approach to data-driven interrogation of moderation has been noted throughout these findings. It is therefore timely to revisit the foundation principles of the assessment approach, discussed in the next section, and examine the sufficiency of the investment in and the staffing profile for effective implementation.

QSA's moderation processes are currently understood as based on a *partnership* between itself and the school (QSA, undated ppt). In this partnership, schools are expected to develop high quality Work Programs consistent with syllabus requirements, implement valid assessment instruments and formulate and report judgements about student performance using stated standards. QSA has the role of on ensuring reliability and comparability though syllabus development and enacting the four key quality assurance processes. This report indicates it is timely to revisit this partnership and consider in particular the accountabilities of schools and QSA in quality assurance processes and more specifically, the requirements of the assessments that students undertake throughout their period of senior schooling. This observation extends to assessment for both formative purposes and summative purposes. An initiative to strengthen the model would be the inclusion of summative assessment instruments in School Work Program Approvals.

This paper raises questions about the absence of attention currently given to assessment task design and to assessment tasks for summative purposes, in particular. This omission in Work Program Approvals has the effect of weakening quality assurance overall. The paper has also brought to light instances where panels have noted issues with task design, including cases where limitations of assessment instruments have been raised in panel reports in successive years, with little or no action reported to be taken in the school. As discussed later in this paper, establishing a bank of high quality assessment instruments as exemplars of expectations of instruments, together with a commentary on how they match syllabus requirements, is one way to address this current gap in quality assurance.

Supporting schools was a premise underlying the quality assurance work of panels, as reflected in predominance in the talk of panellists that they were "looking for evidence to support the school", and "trying to agree with what the school said; we try not to rock the boat". This recurring message had a number of influences.

Panellists supporting students in cases of poor assessment task design – Panellists were observed
to search though student responses in other assessments to find evidence of the capability
represented in a criterion when it was not evident in the assessment. This was the case where the
assessment task created to capture that performance failed to do so due to limitations in
assessment design.

28 | Page

- Panellists refrained from reporting details of issues with assessment instruments during monitoring panellists were observed to refrain from providing fine tuning advice or comments on the design of a particular assessment instrument, especially when the schools' on-balance judgement did not change for the student as a result. One panellist commented: "end of day, is school on track. If at verification, I would question it a bit more".
- Panellists viewed changes to Reports as 'channelling' their decision-making panellists reported that changes to monitoring paperwork from 2013 to 2014 narrowed their options for recording judgements and providing feedback to schools. The 2013 form represented five standards, VHA to VLA with threshold indicators, essentially allowing placements of students in 15 LOA (see Appendix 8 for 2013 Form R3). In 2014, this changed to five standard representation leading one panellist to comment, "they want us to agree with the school".

Overall, it appears that the quality assurance feed-forward aspect of the system is not leading to improvements in practice. That is, the loop is not always closing. Questions are therefore raised about whether: the system has the capability with its current mechanisms for information management or the regulatory capacity to close the loop; or schools have the willingness or capability to attend to the feedback provided. Some evidence informing this discussion includes the following extracts:

- District Chair Monitoring Reports:
 - "Schools ignoring panel advice?".
 - "attributes ticked [for school action] but were not done, it's chronic, it's the second successive year."
 - "school still has made no amendment for verification folios to meet syllabus requirements ... I am just 'flagging' this early, as feedback was delivered at Verification 2013, but no adjustment has been forthcoming".
 - "... evidence has consistently not met A standard for a number of years."
 - o "... has had these issues raised now for several years..."
- District Chair Verification Reports:
 - "They need further support on their assessment."
 - "Assessment tasks still lack rigour and depth..."
 - o "Ongoing issues with the [school], being handled at SEO level...".
 - "The school has been given previous advice about this."
 - "There are ongoing issues..."
 - "The school has continued to have difficulty with how to put together a submission using QSA guidelines. This was raised in Monitoring earlier this year and was not addressed in the verification package."
- Investigator observations also confirmed that Chairs and panellists reported that some schools did
 not take up the advice offered by the panel, with reoccurrence of the same issue/s occurring in
 some cases for several years.

A number of possible contributing factors are identified:

- The paper-based nature of the system prevents timely data capture and follow-up of issues. Some examples follow.
 - Issues for follow-up, identified by panellists and reported to QSA by Chairs, are reliant on quality and clarity of information, which is varied. Chair synthesis of panellist advice and timely provision to QSA are all factors affecting import of messages about improvements.
 - Issues are transcribed by SEOs onto a tracking excel database with synthesis of issues recorded.

The intensive process-driven nature of the system, with QSA staffing committed to this work while less attention is given to analytic and evaluative work.

Noting QSA and individual Chair's committed efforts, further investigation should be undertaken to examine the factors that impact on how schools attend to panel feedback and the workforce needs of QSA staff to inform school action through to changes in assessment practices, if required.

Standards, judgement and moderation

Key findings

Currently there are no archival databases established for the purpose of longitudinal tracking, analysis and evaluation of moderation practices and protocols involving standards in disciplines and knowledge domains.

The ability of Chairs to communicate effectively with schools and SEOs about issues identified in packages submitted for quality assurance is critical.

Panellists report that participation in moderation panels substantially contributes to teachers' knowledge and skills in assessment design, syllabus understanding and application of standards in judgement of student work.

An underpinning notion of the work of moderation through each of the quality assurance processes undertaken by panels was that it was locating evidence to support school judgements.

While the percentage of the annual administration budget allocated to direct costs associated with externally-moderated school-based assessment has remained stable over the last 10 years, the numbers of Senior Education Officers to support the growing number of schools and subjects has decreased.

There are examples where school submissions come to panels at verification showing that required assessment changes as noted in earlier panel reports have not been undertaken.

In Part 2 of the findings, many features of the current model of externally moderated standardsreferenced assessment have been considered. A Panel Chair identified the system's strength as allowing the "flexibility to design and implement teaching and assessments to suit [their] students". This flexibility is critical in ensuring a broad range of assessment opportunities for summative assessment, including traditional pencil and paper examinations done under wholly supervised conditions, performances and demonstrations, assignments undertaken over time, and multimodal assessments. This broader range of assessment evidence is achieved through explicit connection of summative assessment requirements with defined standards in syllabuses. It is the standards that hold as the common yardstick across schools. It is also true that teacher judgement in classes and in moderation panels lies at the heart of the system. It is long overdue for QSA to address the uneven quality of assessment evidence coming from schools, including variability in the quality of school submissions of student folios to panels. The fact is that the assessment tasks for formative and summative purposes are of variable quality, with some having potential to limit student opportunities, mentioned above. Assessment task design is a critical issue for priority attention. It is also time for formally recognising the demands made of District and State Panel Chairs and panellists, and the high level of assessment literacies they need to bring to moderation. Attention now turns to consider assessment in Queensland secondary schools across five eras, with recommendations presented in the concluding section.

Part 3: Assessment systems in Queensland secondary schools – Five Eras

Introduced in the early 1980s, the current system can be considered as developing across five eras or phases. An overview of these phases is provided in the following discussion, originally published by Smith (1995), with an update in Smith and Matters (2007).

Era 1: 1873-1969

Public examinations were first held in Queensland secondary schools in 1873 and persisted for most of the following century. The examinations had a primary function as gate-keeping, the practice being that the examination worked to sort students for the purposes of determining (non-) entry into

30 | Page

education pathways and the workforce. The examinations were traditional in that they relied on students working within fully supervised, time restricted conditions, with no access to resources other than pencil and paper. The setting of the examinations was done centrally. The University of Sydney was responsible for setting the Senior Public Examination until 1912 when The University of Queensland took over this role after coming into existence as Queensland's first university.

Over time, the examinations had an inevitable and strong backwash effect on the curriculum and classroom teaching, learning and assessment. Routinely the teaching year was staged to build student knowledge of the type required for display in the examination, with rehearsal for the type of questions and for managing time restrictions in examination conditions. In large part, the examination items focused on student control of content knowledge, the time restricted examination genre not permitting opportunities for problem-solving or evaluative thinking that require more extended time and access to material resources. In retrospect, it is fair to state that irrespective of the quality of the examination in any given year, the scope of the knowledge, skills and capabilities assessed was very narrow, relative to that routinely taught and assessed in accordance with current Queensland syllabus materials. Also of interest here is how the examinations worked to define the roles of the teacher and student as both pitting themselves against the demands of the examinations, with past papers providing rehearsal opportunities. Further, the grading of student work relied on numeric scoring tied to a reporting framework using letter-grades, in the absence of any sense of quality represented in standards stated as verbal descriptors. In the latter phase of the public examination system in Queensland, student results in the form of letter grades were published in newspapers, the grade appearing with the student name. In part, as a legacy of this era, there remains in the community and to some extent in the media residual understandings that numeric scores captured as percentages have an absolute or at least intrinsic meaning.

Era 2: 1970-1978

By the late 1960s however, 'teachers, students, the press and the public at large [had become] increasingly disenchanted with the public examination system' (Sadler, 1991:3). In July 1969, the State Government established an expert committee, chaired by Dr William C. Radford, Director of the Australian Council for Educational Research, to review the system. In May the following year, the Committee submitted its report, which contained 47 recommendations for change. One of these recommendations called for the abolition of public examinations at both Year 10 and Year 12 levels, and the introduction of a system of school-based norm-referenced assessment. In 1970, the Government of the day accepted the recommendations, and made appropriate legislative provision for their implementation. The fully school-based assessment system was introduced in 1971 and became known as the Radford Scheme.

The Radford Scheme represented a radical change, which was without precedent in Australia, and pioneered norm-referenced school-based assessment using teacher-made tests. In essence, the scheme involved a significant devolution of authority for assessment to the classroom teacher, the school and review panels, and a shift in emphasis from terminal (final) to continuous (ongoing) assessment. No longer was it the teachers' responsibility to prepare students as candidates for external, centrally controlled examinations. Rather, for the first time in the history of secondary education in Australia, Queensland teachers were required to document the main aspects of a course of study; to develop and implement a range of test instruments including assignments and examinations; and to report on student achievement using a norm-based method.

The determination of grades under norm-based procedures appeared simple in principle. The distribution of grades in each subject for the State as a whole was fixed, and more or less followed a normal (bell-shaped) curve. Teachers ranked students and allocated grades from 7 (highest) to 1 (lowest). The Radford Scheme also involved selected teachers in a review or moderation process, the express purpose of which was for teachers to check that each school's proposed grades were roughly comparable with those proposed by other schools. The process was managed by the Board of Secondary School Studies (BSSS) and required that each school appoint a teacher representative (usually the Subject Master) to attend a moderation meeting. At the meeting, each representative

Standards, judgement and moderation

presented sample work from students in Years 10 to 12, and it was 'moderated' or compared with work from other schools. Responsibility for assessment was therefore vested in the teaching profession as a whole, not within a central bureau or agency, even though the BSSS played a significant organisational role.

Sadler (1991:3) made the point that 'the change from external examinations to school-based assessment has been described in retrospect as the greatest influence on the professional development of secondary teachers in Queensland's history'. The Radford System was not without its problems, however, as was evident in two research studies (Campbell et al., 1975; Fairbairn, McBryde, & Rigby, 1976) undertaken to inquire into the implementation of the system. The reports of both studies (Some Consequences of the Radford Scheme for School, Teachers and Students in Queensland, Campbell et al., 1975; Schools Under Radford, Fairbairn et al., 1976) concluded that norm-referenced school-based assessment had not realised many of the expectations of the Radford Committee. Furthermore, they indicated that tests and examinations had, contrary to expectations, increased in frequency, while the norm-based awarding of grades contributed to unhealthy competition and even animosity among students. One of the primary concerns was the erosion in teacher–student relationships caused by school-based assessment practices.

In February 1976, the BSSS commissioned an expert panel chaired by Professor Edward Scott to review the two research reports named above, together with Board members' comments thereon, 'with a view to advising the Board on implications of the reports for Board Policy and practices' (Scott et al., 1978). In April 1978, the panel tabled its final report entitled A Review of School-based Assessment in Queensland Secondary Schools (acronym ROSBA). In 1979, the Queensland Cabinet accepted in principle the ROSBA report. Implementation did not begin until 1981, after which it occurred in three successive phases, each phase involving an increasing number of schools. By 1986, all Queensland secondary schools had come 'on line'.

What follows does not attempt to provide a detailed analysis of the differences and similarities between the Radford Scheme and the current system, ROSBA, as this is outside the scope of this paper. It focuses, however, on the conceptual transition teachers were required to make in this second change-over.

Era 3: 1979-1985

Under the Directorship of John Pitman, this era was marked by the shift from a norm-based to a criteria-based approach to assessment. Some of the principles of the Radford Scheme are retained in ROSBA. For example, assessment is to be continuous, and teachers' responsibilities are to include the planning and implementation of an approved course of study and the reporting of student achievement. However, the similarities between the two systems were not sufficient for school personnel to make an easy and trouble-free transition from one system to the other. Scott et al. (1978:3) pointed to the substantial nature of the transition:

We believe that, while maintaining the spirit of the Radford Report, some major changes in the implementation of that spirit are essential.

Essentially, the transition from Radford to ROSBA required that teachers make a significant conceptual break from a norm-based approach to assessment, which relied heavily on direct inter-student comparisons for determining quality, to an objectives-driven curriculum and a criteria-based system of assessment. For the latter, direct comparisons among students were replaced by criteria and standards as the yardstick for awarding grades and reporting student achievement.

Whereas the Radford Scheme pioneered school-based assessment, ROSBA did the pioneering for non-norm-referenced assessment. In particular, ROSBA explicitly set out to focus teacher attention on curriculum objectives, and the performance criteria for those objectives against which students should be assessed (Scott et al., 1978). In part, this was (and is) achieved by requiring teachers to write comprehensive and detailed school Work Programs that specify various aspects of a course of study.

32 | Page

These aspects include: the variety of learning experiences to be undertaken; the available resources necessary for satisfactory completion of the course; the range of assessment items and the conditions under which they will be undertaken; and the means by which the teachers will determine grades on course completion. In its role as the centralised certifying authority, the then Board of Secondary School Studies (BSSS) accredited Work Programs if they fulfil syllabus requirements and cater for the interests, needs and abilities of the schools' students.

As previously mentioned, a major distinction between the Radford and ROSBA schemes is that teacher judgments about student work no longer rely on direct inter-student comparisons, ranking of student performances, or the aggregation or weighting of schools. The comparison is between the work to be assessed (either a single piece or a representative sample) and defined criteria and standards. A basic premise of the system is that student performance can be improved if teachers make available the criteria to be used in judging the quality of student performance. In practice, ROSBA requires that teachers prescribe and publish detailed criteria prior to students commencing an assessable task. Whether teachers use letters, grades or other symbols to communicate summary judgments of performance on a task or a collection of tasks is a matter determined by individual schools.

A small study of the early period of ROSBA implementation was undertaken by a 12-member research team headed by Professor W. Jack Campbell (Campbell et al., 1983) concluded that many school personnel were not prepared for the conceptual break from Radford to ROSBA. The study reported that school staff considered that 'they were engaged in a major innovation without a sufficient understanding of the philosophical and psychological rations' for such change (Campbell et al, 1983:25).

Teachers' ill-preparedness for the change-over can be accounted for, in part at least, by the fact that the implementation of ROSBA did not take place within an established theoretical framework. The assumption was that practice would, and indeed in some respects, should proceed ahead of theory. To illustrate this point, it is useful to contrast the finding of Campbell et al. (1983) concerning the lack of preparedness of those responsible for the implementation, with the BSSS's perception of the demands made on teachers in the implementation of the ROSBA system. Speaking as the Director of the BSSS, Pitman exhorted teachers to 'see themselves as embarking upon a trail-blazing exercise' during which important insights related to the implementation of ROSBA proposals would be generated (Pitman, cited in Campbell et al., 1983: 3). Referring to the BSSS, he also claimed that 'we are quite prepared to admit we are learning at the same time as the Phase I schools are learning', and 'the Board openly admits that there are areas in which decisions cannot be made at this stage for lack of information' (Pitman, cited in Campbell et al., 1983:3). Taken together, these comments indicate that the expectation, at least on the part of the BSSS, was that teachers were the pioneers of a new approach to assessment. As such, they were 'licensed' to work through the curriculum and assessment implications of so-called criteria-based assessment, outside any existing theoretical framework for the system.

In hindsight the wisdom of this aspect of implementation can be called into question because of the assumptions it made about the relevance of teachers' experience in a norm-referenced system to one requiring a criteria-based approach to assessment. Consider, for example, the assumption concerning teachers' understanding of ROSBA's five Levels of Achievement, which replaced the Radford 7-point scale. The labels for these categories are: Very High Achievement; High Achievement; Sound Achievement; Limited Achievement; and Very Limited Achievement. Although many teachers had considerable experience in, and therefore felt comfortable with, the Radford procedure of rankordering students for grading purposes, they were inexperienced in determining individual achievement by matching a sample body of work with standards that are 'non-numerical, and made according to multiple criteria using the human brain as the primary evaluative instrument' (Sadler, 1987: 191). Campbell et al. (1983: 29) made the point that 'the belief that teachers know, either intuitively or from experience, what constitutes a Very High Achievement or any other qualitative assessment is not well founded'. He further claimed (Campbell et al., 1983: 37) that 'the attention of the Board concentrated too narrowly on the details of implementation and action'. Accordingly, the Campbell report advised that 'high level and continuous reconceptualisation of what standards-based Standards, judgement and moderation **33** | Page assessment means in practice' was essential. Sadler (1986: 4) similarly pointed out that the Queensland system of school-based assessment was 'sufficiently distinct from the most fully developed existing varieties of criterion-referenced assessment in the USA for it to require independent developmental work'.

Work on the conceptualisation of what criteria- and standards-based assessment means in practice was formally begun in 1985. Pitman argued for funds to establish a four-person 'think tank' known as the Assessment Unit. The Unit was established in 1986 with a brief to:

establish a sound theoretical foundation for a school-based assessment system using defined criteria and standards; and

clarify and make suggestions about the practical aspects of such as system in secondary schools. (Board of Secondary School Studies, Brisbane, 1986:1)

Era 4: 1986 to 2010

Since 1986, a school-based approach to assessment, known as criteria-based assessment, has been implemented in all Queensland secondary schools. A key feature of the Queensland model of criteria-based assessment is that, in judging the quality of student work (either a single piece or a representative sample), teachers no longer rely on direct inter-student comparisons, ranking of student performances, or the aggregation or weighting of scores. The comparison is rather between the work to be assessed and explicit criteria and standards.

A basic premise of this approach is that student performance can be improved if the teachers define and make available to students the criteria against which assessable work is to be judged. In principle, this means that students no longer need to guess at teacher expectations for a successful performance. Another related premise is that, in criteria-based assessment, students will feel as if their performance has been more judged against the specified criteria than against the teacher's implicit criteria (and standards).

This fourth era was characterised by developments in the conceptualisation of school-based assessment that took as its centre stated criteria, and in turn, defined standards, written as verbal descriptors of quality. This conceptualisation and consideration of the policy and practice implications were undertaken initially in the Assessment Unit. Between 1986 and 1989, the Unit produced a number of Discussion Papers that addressed some of the theoretical issues confronting school personnel in their implementation of the system. These included such matters as defining achievement levels, the autonomy of the school in school-based assessment, the nature of standards; and the value of teachers' qualitative judgments. Indeed, it was in one of these papers that the meaning of the terms criteria and standards as used in ROSBA and as defined below, came to be understood by Queensland secondary teachers.

criterion: A distinguished property or characteristic of any thing, by which its quality can be judged or estimated, or by which as decision or classification may be made. (From Greek kriterion, a means for judging).

standard: A definite level of excellence or attainment, or a definite degree of any quality viewed as a prescribed object of endeavour or as the recognised measure of what is adequate for some purpose, so established by authority, custom, or consensus. (From Roman estendre, to extend). (Sadler, 1987:194)

The Unit's discussion papers were written primarily for an audience of teachers, and in 1986, multiple sets of the papers were distributed to each Queensland secondary school. If the ideas and, more importantly, answers contained in these discussion papers had been disseminated to schools earlier, the implementation of ROSBA could have been considerably more effective and efficient, and the gross ill-preparedness of teachers to use criteria and standards may have been avoided. However, although the Assessment Unit Discussion Papers have gone some way to providing a theoretical framework, a comprehensive and fully articulated version of the underlying theory of criteria- and standards-based assessment in Queensland is not available some fourteen years after the

implementation of ROSBA. This situation can be accounted for, not only because the Assessment Unit was disbanded in the late 1980s as a result of funding cuts but also because that powerful model of partnership between academe and the bureaucracy has not been able to be repeated. Since then, there have been no significant developments in the underlying theory of the system, from either a curriculum perspective or its assessment dimension. The set of 21 discussion papers were again made available to schools and the general education community in the mid-1990s but the extent to which these valuable documents were read and digested would not appear to be great.

Although many of the ideas of the discussion papers have influenced the organisation and administration of system and, indeed in the formulation of policy, as yet they have not been endorsed as Queensland's official assessment policy. However, they are 'recommended to the teaching profession for consideration in the formulation of curriculum and assessment policy within secondary schools' (Board of Secondary School Studies, 1986:2). Whether teachers have read the papers, and indeed, how their interpretations have an impact on classroom practices remain unclear. For example, one of the principles underpinning criteria-based assessment, as presented in those papers is that by making criteria and standards explicit, students would feel more judged by the standard than by the teacher (Sadler, 1986). There are two assumptions related to this: that defined criteria and standards could make teachers' grading practices more explicit and hence more accountable, and that available, agreed-upon criteria and standards could enhance the reliability and credibility of teachers' judgments. As mentioned previously, it is not yet known whether the principles and assumptions underpinning criteria-based assessment match those underpinning classroom practices as there has been no sustained research on the issue of the organisation of the Queensland assessment system as a whole and its potential to impact on classroom. Relevant discussion papers, including McMeniman (1986a, 1986b), make clear that in principle, ROSBA enlists criteria in the service of instruction and the improvement of learning (formative assessment), as well as the more traditional use of evaluative criteria to judge learning outcomes (summative assessment). ... It should be mentioned here, however, that formative assessment cannot be directly equated with diagnostic assessment, although it shares with the latter an interest in checking on student progress. Specifically, formative assessment refers to those tasks completed by a student that will not form the basis of reporting achievement on course completion. Hence, formative⁵ assessment has a teaching focus, whereas summative assessment is exclusively concerned with the reporting and certifying functions of assessment.

A key premise underlying this organisational feature of the system is the proposition that formative and summative assessments are not mutually exclusive but complementary approaches to providing a reliable indication of student achievement (McMeniman, 1986b). A related premise is that classroom teachers are in the ideal situation to monitor their students' learning, and also to provide informed judgements and reports on student achievement. To date, the distinction Queensland secondary teachers make between formative and summative assessments in particular subject areas and how they stitch the two together have not been the subject of research. Similarly, the role of stated standards in how grades are awarded has not been researched, although the move to link assessment criteria and standards did become firmer in the final era, as discussed below.

Towards the end of this era there was a discernible move in research, policy and to a lesser extent practice, to move stated standards and the issue of quality to the centre. One catalyst for this move was the Viviani Report (Viviani, 1990) that called for establishing an evidentiary base reflective of the education system's efforts to subject itself to scrutiny and to provide data useful for evaluative and improvement purposes, which resulted in the formation of an Evaluation, Research and Development function within the (then) Board of Senior Secondary School Studies. There were two other noteworthy catalysts for the increasing emphasis on standards-based assessment (for commonly applied tasks as well as for teacher-devised tasks); namely, the New Basics research project (Queensland Department of Education and the Arts (DETA), 2004) and the work done under the banner of Education Queensland's Assessment and Reporting Framework Implementation Committee (2002–05). Although these two initiatives were radically different in nature, purpose and scope,

35 | Page

⁵ It is the case in practice in Queensland that formative assessment can have a summative function. Standards, judgement and moderation

common to them was the commitment to install a system that aligned curriculum, assessment and reporting, with the strong focus on teacher knowledge of task demands and stated standards. Indeed, it is worth noting that the current policy priority relating to alignment across these three facets—curriculum, assessment and reporting—existed in Queensland well in advance of the federal government decision about a common standards reporting framework, and well in advance of the Queensland Curriculum Assessment and Reporting Framework developments.

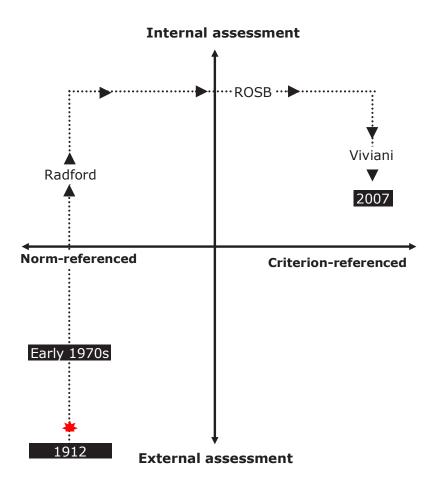


Figure 7: Development of assessment practices on two dimensions, Queensland, 1912–2007

(Source: Adapted from John A Pitman, QBSSSS, 2002)

Era 5: 2011 to future

The preceding historical overview has profiled the historic shifts in Queensland senior schooling away from public examinations to school-based assessment, known in its first iteration as Radford, and then on to an internationally distinctive form of standards-referenced assessment. Recurring observations across the eras include:

- practice has moved ahead of theoretical development of the system;
- little sustained research has been undertaken into the operation of the system, including approaches taken to standards-referenced assessment in classrooms and in moderation; and
- increasing emphasis on process management with considerably less attention given to developing system infrastructure and self-evaluation.

The absence of a well-developed theoretical rationale and a sustaining infrastructure could be expected to cause difficulties, including for teachers. It has led to a current situation where practical application has moved well in advance of model building and system theorising.

36|Page Senior schooling context

Opportunities exist to reinvigorate the assessment system as identified in findings already discussed. Focus now turns to consider the key elements of this paper to bridge the gap between theoretical framing and accountability measures currently in place. Figure 8 provides a means to capture the four key elements of practice applied in this system: assessment, standards, judgement and moderation. These elements, taken together in a coherent approach, hold promise for the new era to realise the enabling power of assessment.

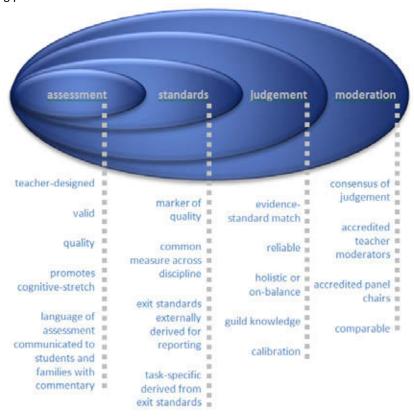


Figure 8: Key elements of assessment for student learning and reporting with confidence

A focus on quality assessment is central to reform efforts. Quality teacher-designed assessment that is valid and allows students to stretch cognitively and have opportunities to demonstrate their learning across all standards is not only critical, but the right of students. Inducting students into the language of assessment through the provision of assessments with stated standards as represented in questions, accompanied by exemplars with teacher commentary about features of performance is a related priority. Exemplars of this type could then be used to communicate to parents and the wider community, thereby building a local assessment community that is distinguishable from others.

Exit achievement standards representing markers of quality should continue to inform task design and guide task-specific standards as applied in teachers' assessments. This is the integral linking of quality expectations from individual task to assessment portfolio. However, it is time to challenge the dominant matrix as the one-size fits all approach. How standards are represented should be discipline specific, ensuring that key features of quality are clearly identifiable, providing a clear sense of level—what is a B and what is a D, for instance. It is a reasonable expectation that the same standards that work to facilitate judgements of students' achievement, should work to inform the student about how they could self-monitor and improve their own learning.

With a focus on consensus of judgements at a system level, focus turns to ensuring appropriately trained and experienced moderators. Accrediting teacher moderators and panel chairs recognises the expertise that is built and continually developed to assure comparability of judgements of student achievement across the state.

Standards, judgement and moderation

The recommendations discussed next call forward a strengthening of quality assurance processes to ensure that the state can deliver meaningful information marked by high-quality assessment instruments and a strong focus on standards that meet the needs of high levels of construct validity, reliability and comparability. Essentially, the proposition on offer is that the Queensland model of externally-moderated standards-referenced assessment has moved through the identified eras to a point of readiness for clarified, considerably strengthened messages about assessment literacy in the context of standards-referenced assessment and moderation. These include but are not restricted to:

- teacher judgement as being at the heart of the approach taken to externally-moderated standards-referenced assessment
- deliberate alignment of curriculum, learning and teaching, and assessment
- standards as external referents of quality—common yardsticks for determining quality
- assessment criteria and standards and the role they play in making available information about desirable features of performance at the task level and within folios
- features of high quality assessment task design and construct validity, ensuring that all students have opportunities to demonstrate achievement across the full range of the standards
- the notion of senior schooling as a period during which students' meta-cognitive abilities are developed as they are given explicit opportunities to use standards and related exemplars for improvement purposes.

Finally, in regard to standards-referenced moderation, the preceding paper indicates the clear need for clarifying authority relations between the QSA and schools. The discourse of panels 'supporting' school and teacher judgements has become potent. While recognising that the partnership between the Authority and schools is central, the discourse of accountability through rigorous valid assessments, reliable judgements and quality assurance systems needs to be reasserted and evidenced to sustain and build the confidence of parents, students, the wider public and the teaching workforce in Queensland senior schooling.

38 | Page

Stengthening Queensland Senior Schooling

Recommendations

The distillation of key findings, identified throughout the *Findings* section of this paper, point to a number of recommendations and related actions for strengthening moderation processes and practices.

It is recommended that years of duration of panel service be reviewed to ensure a sustainable approach to maintaining a cadre of well qualified and trained Chairs and teacher panellists.

Actions to consider relate to:

- Timeframe of service as a panellist restriction of panellist service to three to five years could ensure that a panel would maintain a mix of expert and novice panellists throughout the syllabus cycle.
- Timeframe of service as a Chair service as a Chair could be restricted to the syllabus cycle for the subject. On implementation of a new syllabus, an existing panellist with five years' experience could be one requirement for the Chair position.

It is recommended that teacher's service on panels be formally recognised as a measure of professional esteem confirmed through membership to an *Institute of Accredited Assessors*.

Actions to consider relate to:

- Service recognition formal accreditation of teacher panellists.
- Mentoring expert panellists would adopt a mentor role for novice panellists to assist in inducting
 them into the processes of quality assurance with a focus on ways of working across the source
 documents including the syllabus, standards matrix from the syllabus, student profiles,
 assessments, student responses, and the relevant quality assurance forms.

The work of panellists is valued systemically, however, it is accompanied by limited professional recognition. While panellists' expertise in this high-stakes moderation context is critical, there is also high benefit to schools. Both the knowledge obtained through the act of training and exposure to varied assessments and targeted professional conversations, and the skills developed to identify syllabus expectations in assessments and judge student work against standards, places these panellists in an expert group.

It is recommended that professional development of Chairs and panellists occur each year, rather than the current two-year cumulative cycle.

Actions to consider relate to:

- Cycles of training two layers of training are required for panellists in order to support previous
 recommendations. Each year, one layer would be for novice panellists with the second layer of
 training for more experienced panellists.
- Content of training Chair training should include a specific focus on calibrating judgement
 against standards, managing communications and ensuring quality expectations in reporting.
 Similarly, panellists require calibration training about making relative achievement decisions
 within standards and according to rungs, where relative placement is required. Specific

Standards, judgement and moderation

- calibration training on how to apply the standards at threshold levels and in moderation discussions should also occur.
- Resource site development a bank of high-quality assessments tasks and related statements of standards and exemplars of student work should be established. A further option is for the exemplars to be annotated and be accompanied by 'a cognitive commentary' (Smith, 1995; Wyatt-Smith & Bridges, 2008) that describes how judgement was arrived and the influence of compensations or trade-offs in applying the standards.

As procedural forms are the communication linchpin between the aspects of quality assurance being undertaken and follow up of issues identified, panellist and chair training could extend to expectations for accurate and effective communication of assessment design matters and those related to level of achievement. This would attend to the gap identified in the findings about the high variability of actionable information in Chair reports.

It is recommended that judgement at thresholds be a concerted focus of action. An aim would be to ensure common understanding of how aspects of performance can be combined, including the process of matching work with the requirements of standards. Related areas for attention include the typical features of work considered to be at the highest or aspirational levels (e.g., Very High Achievement levels 6– 10).

Actions to consider relate to:

- Create a bank of assessment examples of student work at threshold level panellist training
 should be supported through provision of a bank of assessment work samples recognised as
 illustrative of quality at threshold levels. These could be accompanied by a brief cognitive
 commentary about on balance judgement with a particular focus on compensations or trade-offs,
 as they influence decisions about grading.
- Undertake research into alternative approaches to formulating and promulgating standards as suited to disciplines. This will involve critical investigation into the continuing utility of the continuum representation of A to E standards and the dominant matrix approach.

It is recommended that information management systems for moderation be implemented to ensure time efficient capture of data for research, analysis and reporting purposes.

Actions to consider relate to:

- Development of a central database information captured should be stored in a central database.
- Development of online forms all stages of the quality assurance process should be linked to an online capture of information. Online forms fit for purpose are required to be developed, ensuring that all information feeds into the central database.
- Development of database reporting automated reporting should be implemented to allow information to be drawn from the database relative to reporting purposes.

An online system of data reporting in moderation processes is essential and would allow timely access to data at key junctures. The findings indicate that forms are not always accurately completed, they sometimes lack sufficient information to ensure useful feed forward functions, and are at times not submitted to QSA as required. An online process for capturing data, with required fields of information, would assist in addressing this gap. Online capture of information would also allow for internal tracking of issues for follow up by the SEOs as identified during panelling and reported by Chairs. Additionally, this recommendation and associated actions allow for development of an archival record to permit system and self-analysis as more fully considered next.

40 | Page

It is recommended that a Research and Development Data Analysis Unit be established to undertake sustained and ongoing quantitative and qualitative research and analysis into standards-referenced moderation.

A data analysis unit would facilitate deeper understanding, tracking and reporting of issues for intervening in practice. When considered alongside the recommendation concerning information management system development, the opportunities for information capture and timely use point to the critical need for development of such a unit. An established R and D Unit would enable the QSA to undertake systemic and continuous review of the system in operation. Key data capture moments could include Work Program Approvals, Monitoring (DPC Reports), Verification (DPC Reports), Comparability (SPC Reports), and Random Sampling. This unit would also act in support of key positions, including Chairs and the SEOs who work as the linchpin between the panels and the schools.

The findings identified key stages in the operation of senior schooling assessment where there is no systematic analysis of the advice provided by Chairs. Opportunities exist at these stages to collect rich empirical evidence into the operation itself, enabling self-monitoring and the identification of needed improvements in ways currently not available.

Beyond the process and data-driven analysis opportunities already described, the Unit could also undertake wider investigations concerning areas of need to ensure appropriate, accurate and transparent communication of information. Some opportunities include:

- Research and description of relative achievement decisions about placement within standards and according to the 10-point rung.
- Determining how classroom teachers understand, engage with and interpret syllabus documents
 and publicly available State Review Panel Reports. The purpose here is to consider effective
 strategies for disseminating findings from moderation processes to teachers to further inform the
 use of standards and how assessment aligns to curriculum and learning and teaching at the school
 level.
- It is recommended that priority should be placed on developing and implementing common terminology across syllabuses.

It is recognised that the language of the system has changed over time with different terminology adopted as shown by the use of Standards Matrix and Dimensions and standards descriptors versus Standards Associated with Exit Criteria in syllabuses. While this is a consequence of timing of syllabus development, common terminology would assist in ensuring consistent understanding and reference across schools and the wider community.

It is recommended that Work Program Approval processes make explicit provision for reviewing assessment instruments for construct validity and fitness for purpose.

Actions to consider relate to:

- Submission of the suite of assessment instruments at Work Program Approval, schools could be
 asked to submit a sample of assessment instruments illustrative of those used for formative
 assessment purposes, as well as the suite of assessment instruments used for summative
 assessment purposes.
- Digital folios as exemplars digital exemplars could be developed in schools, with these available to students and parents as concrete examples of the standards and expectations of quality.

This recommendation recognises that currently, no quality assurance checks are applied to the full range of Year 11 and Year 12 assessment instruments during Work Program Approval processes and prior to the assessments being implemented in classrooms. Findings indicate that assessment instruments have a direct impact on opportunities for students to demonstrate achievement against the full range of achievement standards. Beyond the curriculum, it is clear that there are many

Standards, judgement and moderation

contextual factors involved in schools' own review of assessment tasks. These should not diminish the common expectation of demonstrated construct validity and the requirement for fitness for purpose.

A final recommendation relates to clarifying assessment purposes especially as they relate to formative and summative assessments over the course of the senior program of study. This would, in turn, ensure that standards could be reinstated as being as much concerned with student learning improvement as with reporting achievement on course completion. In short, the system could realise the potential envisaged for it more than four decades ago in centring on standards to inform learning and student self-monitoring, as well as being the stated, common yardstick for measuring student achievement.

42 | Page

Appendix 1

Methodology and design

Design principles

A number of design principles informed the data collection for the investigation.

- 1. Staging of data collection was consistent with the schedule in place for quality assuring school-based assessment in Years 11 and 12. Ensuring a diverse range of views were represented in the corpus of data was a priority to ensure a balanced view.
- 2. The participants invited to contribute to the data considered included panellists at State and District levels, and other staff in relevant sections of QSA who were key to the ongoing development, delivery, and maintenance of processes to support quality assurance processes.
- 3. A main focus was the extent to which policy was carried forward through to practice. This focus required attention to the official policy messages and the enacted messages.
- 4. While there are 10 discipline areas, with 49 subjects falling within, specific emphasis was placed on English, Mathematics and Science subjects with lighter sampling around other subjects in parts of the data collection and analysis supporting this investigation. The focus in the targeted analysis was to reveal discipline differences in materials and practices.

Participants

Participants included panellists working on State and District panels for monitoring, verification and comparability purposes, and key staff in QSA. Participants in formal interviews or focus groups were provided with an information sheet and consent form (see Appendix 9).

Data collected

As QSA quality assurance processes were influential in the data collection, an interview was held with senior QSA staff who described the range of processes supporting senior schooling processes (see Figure A1 for the Investigator's representation). Opportunities for data collection were identified with a focus on ensuring that the investigation considered as many components of the quality assurance cycle as possible within the timeframe available.

February	March	May	July	August	October	November	
Monitoring Random sampling		QA AR Moderation meetings	Moderation Conference - training - key messages	RPC meetings	Verification	Comparability Unresolved State Panel Report	Quality assurance processes
	SRPC Working Party Panel Training			Panel training	DRPC training		Training

Figure A1: Senior schooling quality assurance processes

To ensure sufficient depth and breadth of coverage of these processes, data included observation, interviews, focus groups and document collection. Figure A2 maps the data informing this investigation as aligned to the quality assurance processes. In terms of observations, the following three quality assurance processes were attended:

 District Panels for verification purposes were attended at Ipswich Girls Grammar School and Ipswich Grammar School on 21 October with nine disciplines areas observed, a focus group undertaken with five Panel Chairs, and two individual interviews.

Standards, judgement and moderation

- State Panels for comparability purposes were attended at QSA and Nudgee on 4 and 6 November with 13 disciplines areas observed as well as training for panellists relating to comparability and unresolved cases.
- State Panels for monitoring purposes were attended on 18-21 February 2014 with six subjects observed.

Table A1 provides more information on the corpus of data collected; Appendix 10 provides a tracking of all data informing this investigation.

Table A1: Data collected to inform the Investigation

DATA CATEGORY	DETAILS	BREAKDOWN			
Observation	District Panel Chair meeting for Verification purposes 21 Oct 2013	Accounting Biology Business Communication & Technologies English English Extension	Geography Mathematics B Music Physics		
	State Panel Chair meeting for Comparability purposes 4 & 6 Nov 2013	Biology Dance & Drama Economics English Film, TV & Media Home Economics Mathematics A Mathematics B Mathematics C	Modern History Music Physics Visual Arts Chair Chats Unresolved Training Comparability Training		
	District Panel Chair meetings for Monitoring purposes 18-21 Feb 2014	Chemistry Drama English	Information Technology Systems Mathematics A Physics		
Interviews	Verification 21 Oct 213	Biology Music	Mathematics A, B, C Science		
	QSA personnel 4 Nov 2013	Assistant Director, P-12 Implementation Branch and Manager, Quality Assurance Unit			
Focus groups	Verification 21 Oct 2013	Mathematics A, English, Chemistry, Physics an Biology			
Document collection	Senior Syllabuses	18 syllabuses exami	ned		
	Package 1 prepared by QSA 4 Nov 2013	Assorted materials			
	Package 2 prepared by QSA on request	Forms R3 & R6 plus Forms C2; school support materials for Ancient History			
			nt instruments, original nd a completed Tool for		
		Report on Building P Educational Assessm	Professional Capacity in nent by Paul Kilvert		
		PD materials from Rin Districts 2013	eview Panel Chair meeting		
	Package 3 prepared by QSA delivered 7/2/14	State and district rev Verification 2013 (34	view panel chair's report – 44 reports)		
	Package 4 prepared by QSA delivered 12/3/14	State and district rev monitoring 2014 (36	view panel chair's report – 7 reports)		
	QSA email 1/2/2014	Review Officer (RO),	s and work profiles for the Standards and Assessmen enior Education Officer (SE		

44 | Page

DATA CATEGORY	DETAILS	BREAKDOWN
	QSA email 26/2/14	Information on extra ordinary reviews for the last 5 years
	QSA email 10/3/14	Information on: unresolved reviews for last 4 years, and schools undertaking Year 12 Authority-subjects in total and by subject
	QSA email 3/3/14	Financial information related to the cost of quality assurance of Year 11 and 12

An important qualification is required at this point as it is pertinent to reading of the findings. Due to the timing of the review and this subsequent investigation, data collection began with verification observations in October 2013. Data considered could not be tracked in a linear fashion—for instance, from monitoring through verification through comparability—thus preventing specific identification of matters from origin to finalisation. Mapping of the data collected according to the quality assurance processes of QSA is shown in Figure A2.

	February 2014	November 2013	October 2013	August 2013	July 2013	May 2013	March 2013
	Monitoring	Comparability	Verification	RPC meetings	Moderation Conference	QA AR Moderation	SRPC Working
	Observations	Observations	Observations			meetings	Party
	Chemistry	Biology	Accounting	Documents	Documents		Panel
	Drama	Dance & Drama	Biology	PD materials	Moderation	Documents	Training
	English	Economics	Business Comm'n	from Review	Conference	Introducing	
	Information	English	& Technologies	Panel Chair	July 2013	the Old	Documents
	Technology	Film, TV & Media	English	meetings in	materials	system in Yrs	Meeting of SRPC
	Systems	Home Economics	English Extension	districts	Study of	11-12 – slides	SEO Booklet
	Mathematics A	Mathematics A	Geography		Society	Training and	Participant
	Physics	Mathematics B	Mathematics B	Assorted	SEO Handbook	support	Booklet
		Mathematics C	Music	materials		materials	
	Interviews	Modern History Music	Physics		Assorted	Monitoring	Panel training
	Chair chats	Physics			materials	review notes	packages
		Visual Arts	Interviews			2013	Panel training
	Documents	VISUAL ALLS	Biology			Extract from	slides
.	Random	Unresolved	Music			assessment	Panellist
t	Sampling Project Report	Training				workshops	handbook
		Comparability	Focus Groups				
	District Chair Reports in 45	Training	Biology Chemistry				
colle	subjects		English				
COIR	Subjects	Interviews	Mathematics A				
a		Chair chats	Physics		2013	December	
	February						
	2013	Documents	Documents		om QSA website	abus information fr	Syli
qı		Unresolved State	District Chair				
assui	Documents	Panel Reports	Reports in 45				Document
	Form R3 for	2011-2013	subjects		vision and New Media		Accounting
proc	Ancient History		Form R6 for			Mathemat Mathemat	Biology Chemistry
	Agriculture		Ancient History			Mathemat	Dance
	Science		Agriculture Science			Modern H	Drama
	Dance		Dance		istor y	Music	Economics
	Drama		Drama		ension	Music Exte	English
			Information				English Extension
	Information		IIIIOIIIIduoii				
	Technology		Technology			earners Visual Art	English for ESL Le
	Technology Studies					earners Visual Art	English for ESL Le
С	Technology Studies Mathematics A, C		Technology Studies Mathematics A, C			earners Visual Art	English for ESL Le
	Technology Studies		Technology Studies			earners Visual Art	English for ESL Le

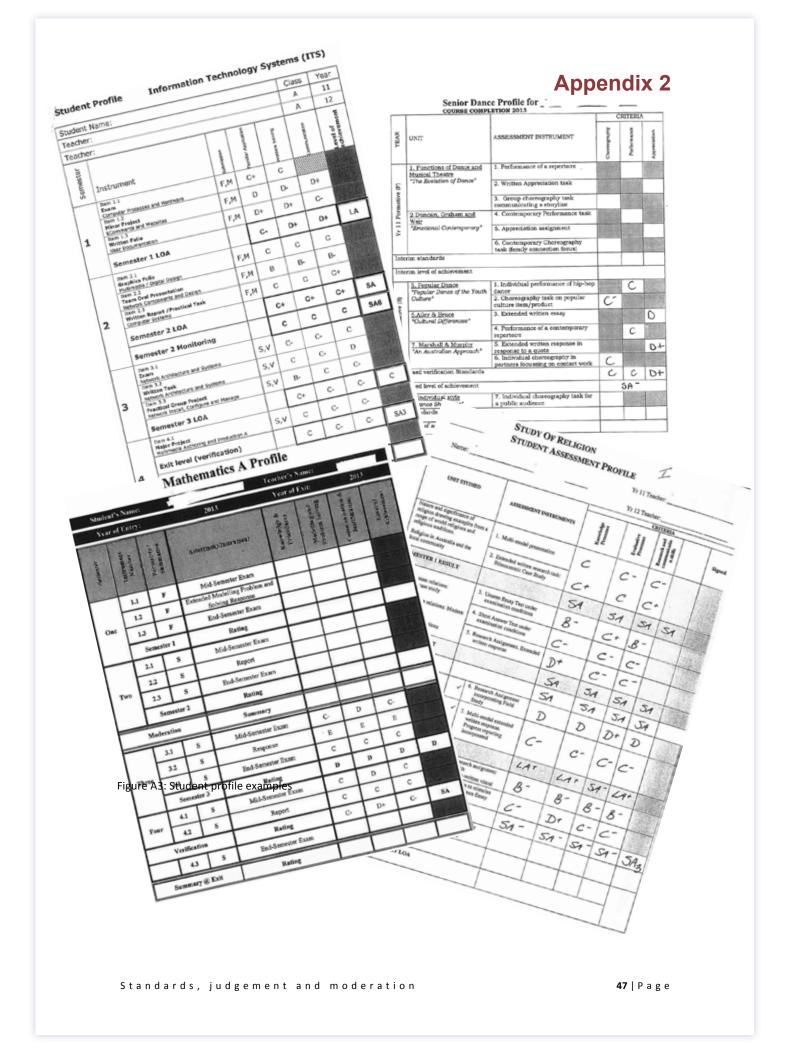
Figure A2: Data collected across system quality assurance processes

Milestones

Information on the investigation's milestones are specified Schedule 1 of the subcontract. The work met all of the deliverables as specified in the subcontract as shown in the following table (Table A2).

Table A2: Milestones and deliverables

TIMELINE	MILESTONE	DELIVERABLES	COMPLETION
	Appoint Sub-Contractor	Appointment	Completed
	Sign contract	Signing of contract	
	Revise and refine methodology/project plan	Methodology discussion	
31 Dec 2013	First oral briefing	Emerging findings	Completed 12 Dec 2013
31 Mar 2014	Second oral briefing	Contents of informing paper	Completed 15 Apr 2014
30 Apr 2014	Final written report	Informing Paper	Completed 24 April 2014



Appendix 3

Table A3: Frequency of District and SEO Support information provided in 2014 Monitoring reports

.a.cio. Frequency of District and SEO Su	- POI C IIII	ati0	on provided in 2014 Monitoring reports						
	DISTRICT		SEO SUPPORT REQUESTED					SCHOOLS	
				<u>s</u>					
	γı	sts	ıt	Matching syllabus standards	S S		(0 0)	ect	<u>s</u>
	# Reports	Panellists	Assessment	Matching Ibus standa	Interim LOA decisions	# Schools	Districts no issue	per subject	% schools with issue
	Sep	anı	ess	atc ıs sı	erin ecis	Sch	istr o is	ır sı	sch th i
	#	# #	Ass	M abu	nte de	#	ے م	be	% <u>×</u>
61 ID IE 62			_ `	syll	_				
SUBJECT									
Aboriginal & Torres Strait Islander Studies	1	4	1	1	2	2	0	12	16.7
Accounting	13	106	11	10	4	12	8	243	4.9
Aerospace Studies ²	1	8	0	0	0	0	0	17	0
Agricultural Science	4	29	2	3	1	4	3	52	7.7
Ancient History ¹	13	117	29	27	23	37	3	263	14.1
Biology	13	199	28	19	13	32	5	405	7.9
Business Communication & Technologies	13	101	45	30	14	49	0	218	22.5
Business Organisation & Management	6	45	19	10	13	24	1	123	19.5
Chemistry	13	181	57	30	29	61	1	384	15.9
Chinese	3	26	8	5	4	10	0	54	18.5
Dance	7	75	22	21	7	32	2	141	22.7
Drama	13	170	33	40	26	55	2	350	15.7
Economics	9	61	15	6	9	20	1	113	17.7
Engineering Technology	1	11	0	0	0	0	1	42	0
English	13	215	33	44	32	64	4	419	15.3
English for ESL Learners	1	14	5	1	1	5	0	33	15.2
Film, Television & New Media	10	81	18	12	13	19	5	165	11.5
French	4	31	5	13	7	15	1	63	23.8
Geography⁴	13	126	28	17	11	34	1	264	12.9
German	2	14	3	2	2	3	0	45	6.7
Graphics ³	13	144	27	28	28	38	2	283	13.4
Health Education	6	41	15	8	6	16	1	93	17.2
Home Economics	13	97	25	22	20	31	4	195	15.9
Hospitality Studies	3	22	8	7	2	9	0	47	19.1
Indonesian	1	4	2	2	2	2	0	8	25
Information Processing & Technology	12	76	16	7	6	18	5	146	12.3
Information Technology Systems	7	75	14	14	13	23	1	149	15.4
Italian	1	8	3	1	1	3	0	24	12.5
Japanese	10	84	10	9	6	16	4	170	9.4
Legal Studies	13	134	19	18	14	31	3	313	9.9
Marine Studies	6	35	6	5	3	7	2	68	10.3
Mathematics A ¹	13	187	49	24	25	60	2	420	14.3
Mathematics B ¹	13	185	25	19	20	26	6	400	6.5
Mathematics C	13	152	22	20	7	25	7	313	8
Modern History	13	150	28	25	23	43	3	317	13.6
Music	13	143	32	55	50	61	1	311	19.6
Other Languages	1	9	0	0	0	0	1	18	0
Philosophy and Reason	1	7	5	5	4	7	0	17	41.2
Physical Education	13	178	33	27	14	44	2	388	11.3
Physics ¹	13	157	13	19	13	22	3	373	5.9
Science21	7	43	12	5	5	13	2	83	15.7
Studies of Religion	6	50	17	13	5	20	1	96	20.8
Study of Society	1	8	1	1	1	1	0	29	3.4
Technology Studies ⁴	9	55	5	4	7	8	4	115	7
Visual Art	13	199	18	35	35	43	3	378	11.4
Totals	367	3857	767	664	521	1045	95		

¹ district/s did not indicate number of panellists; ² Chair did not identify support reason-asked SEO to contact to discuss; ³ school identified for follow-up on 'other' matter; ⁴ No information about issue provided for one or more district.

48 | Page

Table A4: Frequency of District and SEO Support information provided in 2013 Verification reports

Table A4. Frequency of District and SEO Suppor								CCIA	0016
	DIST	RICT		UPOR	RT REQI	JESTE	:D	SCH	OOLS
SUBJECT	# Reports	# Panellists	LOA Decisions	Assessment	# schools identified	# Districts no issues	% Districts no issue	# per subject ⁵	% schools with issue
Accounting ²	12	117	5	13	14	4	33.3	243	5.8
Agricultural Science	4	28	0	0	0	4	100	52	0
Ancient History	13	138	23	17	27	3	23.1	263	10.3
Biology	12	171	26	11	28	3	25	405	6.9
Business Communication & Technologies	12	101	10	9	14	4	33.3	218	6.4
Business Organisation Management	6	44	7	2	8	2	33.3	123	6.5
Chemistry	13	195	15	30	31	5	38.5	384	8.1
Chinese ⁴	3	27	0	1	1	1	33.3	54	1.9
Dance ⁴	7	65	11	6	15	2	28.6	141	10.6
Drama	13	166	20	16	24	4	30.8	350	6.9
Economics ⁴	8	57	11	7	12	3	37.5	113	10.6
Engineering Technology	1	10	0	0	0	1	100	42	0
English ³	13	219	20	13	24	1	7.7	419	5.7
English Extension ⁴	3	26	8	1	8	0	0	63	12.7
English for ESL Learners	1	15	0	2	2	0	0	33	6.1
Film, Television & New Media ⁴	4	31	6	5	6	0	0	165	3.6
French	3	23	5	7	7	0	0	63	11.1
Geography	11	121	25	19	27	2	18.2	264	10.2
German ⁴	3	23	3	3	4	1	33.3	45	8.9
Graphics ³	13	150	50	26	53	1	7.7	283	18.7
Health Education	5	29	10	7	13	0	0	93	14
Home Economics	11	85	19	18	23	1	9.1	195	11.8
Hospitality Studies	3	20	2	3	5	1	33.3	47	10.6
Indonesian	1	5	1	1	1	0	0	8	12.5
Information Processing & Technology ⁴	12	79	6	6	9	4	33.3	146	6.2
Information Technology Systems	5	45	4	6	7	2	40.0	149	4.7
Italian ³	1	10	2	1	4	0	0	24	16.7
Japanese ⁴	9	73	4	2	4	4	44.4	170	2.4
Legal Studies ¹	12	113	17	13	18	3	25	313	5.8
Marine Studies	6	34	2	0	2	4	66.7	68	2.9
Mathematics A	13	211	17	26	32	5	38.5	420	7.6
Mathematics B	13	202	8	10	12	6	46.2	400	3
Mathematics C	13	155	9	8	14	8	61.5	313	4.5
Modern History	12	132	22	5	23	3	25	317	7.3
Music	13	150	30	18	39	2	15.4	311	12.5
Music Extension	7	57	5	6	10	3	42.9	129	7.8
Other Languages	1	7 7	0	0	0	1	100	18	0
Philosophy & Reason	1		6	3	7	0	0	17	41.2
Physical Education ³	10 11	153 153	19 18	14 20	23 28	2 1	20 9.1	388 373	5.9 7.5
Physics Science 21	7	37	4	6	28 6	2	28.6	83	7.5 7.2
Study of Religion ^{1 4}	5	37 39	4	6	6	2	28.6 40	96	6.3
Study of Religion Study of Society	1	39 10	1	1	2	0	40	29	6.9
Technology Studies	10	70	13	3	13	4	40	115	11.3
Visual Art ³	7	114	17	3	19	1	14.3	378	11.5 5
Totals	344	3717	485	374	13	100	29.1	3/0	<u> </u>
Totals	244	3/1/	400	3/4		TOO	29.1		

¹district/s did not indicate number of reviewers; ²school/s identified for follow up on matters not related to LOA or Assessment; ³district/s did not identify issue; ⁴no information-back page blank; ⁵2014 Year 12

Standards, judgement and moderation

49 | Page

Table A5: Comparability supported and unsupported in 2013 for nine subjects LOA SA

SUBJECT	DISTRICTS ¹	SUPPORTED	UNSUPPORTED	NO SAMPLE
Agricultural Science	4	8	0	0
Ancient History	13	26	0	0
Drama	13	20	4	2
English	13	26	0	0
Information Technology Studies	7	14	0	0
Mathematics C	13	22	1	3
Physics	13	17	9	0
Study of Religion	6	12	0	0
Technology Studies	10	14	6	0
Totals	92	159	20	5

¹ In some subjects District panels were combined.

Table A6: Unresolved reviews by Authority-Subjects 2010-2013

SUBJECT	2010	2011	2012	2013	TOTAL
Accounting		1			1
Ancient History	4	4		1	9
Biology	4	5	4	2	15
Business Communication & Technologies			1		1
Business Organisation & Management		1	1	2	4
Chemistry	2	1	4	2	9
Chinese				1	1
Dance	1		1		2
Drama	2		1	1	4
Economics	2	1	3	2	8
English	4	2	3	4	13
English Extension	2			3	5
Film, TV and New Media		2	2	1	5
French				2	2
Geography	1	3	1	2	7
Graphics	2	2	4	2	10
Health Education	1	2		3	6
Home Economics	4	1		2	7
Hospitality Studies	1		1		2
Indonesian		1			1
Information Processing & Technology	1		2	3	6
Information Technology Systems	4	1	1		6
Japanese	1	2	1		4
Legal Studies	4	4	5	2	15
Marine Studies			1		1
Mathematics A	1	1		1	3
Mathematics B	2	1	2		5
Mathematics C		2	2	3	7
Modern History	1	1			2
Multi strand science	1	2			3
Music	2	1	2	1	6
Music Ext	5	2	2	3	12
Physical Education		1	3		4
Physics	4	1	2	1	8
Science 21	2	2			4
Study of Religion	2	5	2	2	11
Technology Studies	2				2
Visual Art	8	10	5	6	29
TOTAL	70	62	56	52	

Table A7: Extraordinary reviews 2009-2013

	"
YEAR	#, SUBJECT
2009	1 Indonesian submission
	1 Graphics submission
	1 Marine Studies submission
2010	1 English Extension submission
	1 Information Technology Systems submission
2011-2013	Nil



Form R3 (Year 11)

School proposal for interim levels of achievement

-		_					
	Interim levels of		School:	School code:			
	achieve-		Subject:	Subject code:	0		
1	ment of sample		District:	Panel code:			
	achieve me nt	أ	The focus of the monitoring review is to provide advice to the school about implei judgments concerning student achievement at this time. Five students should be and placed appropriately to indicate the interim Level of Achievement. Further int the submission is available in The Moderation Handbook.	identified by code lette	r A. B.	C. D	. E
	hieve	1	Number of students completing subject at Year 11:				
	h ac		School comments:				
	hig	ŀ					
	Very high		Signed by the Principal	Date: /	/		
	High achievement		conditions of assessment • appropriateness	dard of assessment ins of assessment criteria levels of achievement it achievement		nts	
		İ					
	eut	ŀ					
	achievement	ŀ					
	je je						
	a	ŀ					
	Sound	ŀ					
	S	ŀ					
		ŀ					
	±	ŀ					
	Le L	ŀ					
	achievement	ŀ					
	<u>=</u>	ŀ	Recommended action(s):				
		ŀ	Necommended action(3).				
	Limited	ı					
	<u> </u>	ı					
		Ì					
	_	1					
	Jel	ı					
	achievement		Signed by Chairfor □ state, or □ district review panel.	Date: /	/		
1	o o	Ļ	· · · · · · · · · · · · · · · · · · ·				
1	limited		Copies: • Before meeting: Original, duplicate and triplicate forward Quadruplicate retained by school when making initial sub	ded with samples to b mission.	oe rev	riewe	ed.
	\ ≱		 After meeting: Original returned to school. Duplicate retained by Chair. 	ained by Chair and re	eturne	ed to	
	\Box						

Figure A4: QSA Form R3 (2013)

53 | Page



Disciplinarity of Judgement

INFORMATION SHEET

Project team and contact details

Professor Claire Wyatt-Smith
Executive Dean of Education and Arts
Australian Catholic University
Claire.Wyatt-Smith@acu.edu.au

Peta Colbert
Research Fellow & Doctoral Candidate
Faculty of Education and Arts
Australian Catholic University
peta.colbert@acu.edu.au

Please contact members of the team if you have any questions.

Project focus

This research is being undertaken as part of the approved review of school-based assessment in senior schooling. The research focuses on how stated criteria and standards are used by experienced teachers to arrive at judgements of quality in different discipline areas and in the context of standards-referenced moderation. The main focus is on standards, judgement and disciplinarity. The research will provide essential information about discipline responsive ways in which experienced teachers apply stated standards in the work they undertake on moderation panels.

They will be gathering information in the course of moderation meetings next week. They will also be seeking your agreement to participate in individual interviews or focus group meetings. Their attendance at the moderation meetings will be for observing standards-based judgement in operation. They are also interested to hear from teachers who would agree to be interviewed, either individually or in focus group meetings.

What this means for teachers involved in the QSA verification processes

The researchers will be undertaking observations of panel meetings and are seeking teachers willing to participate in interviews and focus groups held during the day.

The interviews are planned to take approximately 15 minutes each and focus groups 30 minutes each with each recorded with permission to allow the researchers to refer to responses to ensure accuracy of representation. Copies of the recordings can be provided to individual participants upon request.

All data are de-identified to ensure no details are contained in the materials that would assist in identification of participants. *Please note:*

- that participation in this research is voluntary and you are free to withdraw at any time, without comment or penalty;
- that all data from schools and staff will be confidential and de-identified:
- pseudonyms will be applied in publications to ensure the privacy of schools and teachers.

Communication of the findings

Data from observations, interviews and focus groups will be used in the informing paper written by Professor Claire Wyatt-Smith. Please note that names of individual teachers will not be used in reporting and thus no teacher, school or student will be individually identified. Findings will be focused on disciplinarity differences in applications of standards to student work to reach judgements about quality.

54 | Page

Senior schooling context



Disciplinarity of Judgement

PARTICIPANT CONSENT FORM

Research team and contact details

Professor Claire Wyatt-Smith Executive Dean of Education and Arts Australian Catholic University Claire.Wyatt-Smith@acu.edu.au Peta Colbert
Research Fellow & Doctoral Candidate
Faculty of Education and Arts
Australian Catholic University
peta.colbert@acu.edu.au

Please contact members of the team if you have any queries about the project.

Participant consent

By signing below, I confirm that I have read and understood the *Information Sheet* and in particular have noted that:

- I understand that all information collected will be treated confidentially and the anonymity of myself will be maintained in any data, reports or publications resulting from this research;
- I have had any questions answered to my satisfaction;
- I understand that no foreseeable risks are involved for myself;
- I understand that my participation in this research is voluntary;
- I understand that I am free to withdraw at any time, without comment or penalty;
- I understand the risks involved, having read the information provided to me; and
- I understand that if I have any additional questions I can contact the research team.

Name:	
Signature:	Date:

Standards, judgement and moderation

55 | Page

Table A8: Composite of data collected for the investigation

DATA TYPE SO Observation Dis	SOURCE	DETAILS	
Ve	District Panel meeting for	Areas observed:	 English Extension
	Verification purposes	 Accounting 	 Geography
		Biology	 Mathematics B
		 Business Communication & Technologies 	Music
		 English 	• Physics
Sta	State Panel meeting for	Areas observed:	Mathematics C
Ō	Comparability purposes	Biology	Modern History
		Dance & Drama	Music
		Economics	 Physics
		 English 	Visual Arts
		Film, TV & Media	Chair Chats
		Home Economics	 Unresolved Training
		 Mathematics A 	 Comparability Training
		 Mathematics B 	
Dis	District Panel meeting for	Chemistry	 Information Technology Systems
Mc	Monitoring purposes	Drama	 Mathematics A
		English	 Physics
Interviews	Verification	Biology	
		Music	
QS	QSA personnel	 Assistant Director, P-12 Implementation Branch 	
		 Manager, Quality Assurance Unit 	
Focus groups Ver	Verification	Chairs present from Mathematics A, English, Chemistry, Physics and Biology	ind Biology
Document collection Ser	Senior Syllabuses –	 Accounting (2010) 	 Film, Television and New Media (2005)
op	downloaded from QSA	 Biology (2004) 	 Mathematics A (2008)
We	website	 Chemistry (2007) 	 Mathematics B (2008)
		 Dance (2010) 	 Mathematics C (2008)
		 Drama (2013) 	 Modern History (2004)
		 Economics (2010) 	 Music (2013)

56 | P a g e

	Music Extension (2008)	 Physics (2007) 	2009) • Visual Art (2007)				nunication and consistency								communication Aug 2013					ation 2013 (form)	ch 2013		tion March 2013			otes		p guide	uide	
DETAILS	 English (2010) 	 English Extension (2011) 	• English for ESL Learners (2007 trial, amended March 2009)	 QSA Organisation Structure 	Verification Timeline	 Diagram of moderation process 	 Authority Themes and Strategies 2013 – theme comm 	 Previous Themes and Strategies 2008-2012 	 Meeting of state review panel chairs 10 May 2013 	 SEO Booklet 	 Participant Booklet 	 Moderation Conference July 2013 	 Study of Society 	 SEO Handbook 	 Review panel chair meetings – Consistent and quality communication Aug 2013 	 Sample of completed R6 at exit 	 Review panel chair workflow 	 Verification workflow 	 Verification – Preference for RTS (form) 	 State and district review panel chair's report – Verification 2013 (form) 	 Panel training packages – Quality Assurance Unit March 2013 	 Panel training – Subject package 3 (slides) Oct 2013 	 Panellist handbook – Extract of A-Z of Senior moderation March 2013 	 Panel chair letter – verification update 	 Panellists letter 	 Verification review notes 2013 – Part B-Pre-review notes 	 Moderation protocol – Form R6 advice 	• Form R6 process – Verification to exit – A step-by-step guide	 Preparing a verification submission – A step-by-step guide 	 Verification submission checklist
SOURCE				QSA package 1																										
DATA TYPE																														

171

Verification – Frequently asked questions

DETAILS

SOURCE

DATA TYPE

DATA TYPE	SOURCE	DETAILS
		• Marine Science 2013 – Work program requirements – revised April 2013
		 Comparability Meetings – QAU Officer Handbook November 2013
	QSA package 2	 10 Packages containing Form R3-Year11, Form R6-Year12, Student Profile, Comparability LOA Review Summary, Database list of Issues and actions for –
		o Agriculture Science (Brisbane South, Toowoomba, Rockhampton (2), Wide Bay)
		 Ancient History (Rockhampton, Brisbane South, Mackay, Brisbane East, Wide Bay, Gold Coast, Cairns)
		o Dance (Brisbane Central, Brisbane South (2), Brisbane North (2))
		o Drama (Brisbane South, Brisbane Central, Brisbane-Ipswich, Toowoomba, Gold Coast)
		 Information Technology Studies (Brisbane South, Brisbane North, Mackay, Townsville/Cairns, Townsville)
		 Mathematics A (Toowoomba, Brisbane South, Wide Bay, Mackay, Rockhampton)
		 Mathematics C (Brisbane South, Rockhampton, Brisbane North, Brisbane Central, Cairns)
		 Physics (South Coast/Gold Coast, Sunshine Coast (2), Brisbane South, Brisbane East)
		 Study of Religion (Rockhampton, Brisbane Central, Ipswich-Brisbane, Brisbane East, Brisbane North)
		 Technology Studies (Wide Bay, Ipswich-Brisbane, Sunshine Coast (2), Toowoomba)
		 Published assessment instruments, original school documents and completed Tool for Schools including:
		 Physics 2007 sample assessment instrument
		 Senior Assessment Hub – Quality assuring senior assessment instruments: A tool for schools (t4s)
		 Physics
		 English
		o 2013 Verification # overview
		 Breakdown of Panel membership by district, state and sector as at 22 January 2013
		o Application for membership of a review panel – form
		o Application for review panel chair position
		 Economics 2010 – sample assessment instrument and student response
		o English Yr 12 Sem 1, 2012 sample assessment and annotated student response and judgments across dimensions
		 Information Processing and Technology 2012 – sample assessment instrument and A tool for schools
		 Meeting paper – QSA – 19 June 2013 – Review panel system and extended experimental investigations
		• Building Professional Capacity in Educational Assessment – Chief Executive Study Leave Report – Paul Kilvert – April 2012
		 Professional development materials from Review Panel Chair meetings in districts 2013 – presentation, Key Messages and participant booklet (Consistent and quality communication August 2013).
	QSA materials in response to email request 29 January	• Random sampling project - 2013 Report on random sampling of assessment in Authority subjects (rec 30 January 2014)
	1	

173

	oring 2014	 Hospitality Studies 	 Indonesian 	 Information Processing & Technology 	 Information Technology Systems 	• Italian	• Japanese	 Legal Studies 	 Marine Studies 	 Mathematics A 	 Mathematics B 	 Mathematics C 	 Modern History 	Music	 Other Languages 	 Philosophy and Reason 	 Physical Education 	 Physics 	• Science21	 Studies of Religion 	 Study of Society 	 Technology Studies 	Visual Art		quality assuring Year 11 and 12 Senior Schooling
DETAILS	State and District review panel chair's report – Monitoring	 Aboriginal & Torres Strait Islander Studies 	 Accounting 	 Aerospace Studies 	 Agricultural Science 	 Ancient History 	 Biology 	 Business Communication & Technologies 	 Business Organisation & Management 	 Chemistry 	Chinese	Dance	Drama	Economics	 Engineering Technology 	 English 	 English for ESL Learners 	 Film, Television & New Media 	• French	 Geography 	German	• Graphics3	 Health Education 	 Home Economics 	Financial information about the costs associated with quality assuring Year 11 and 12 Senior Schooling
SOURCE	QSA package 4 delivered 12	March 2014																							QSA email 3 March 2014
DATA TYPE																									

References

- Board of Secondary School Studies (BSSS). (1986). Introduction to discussion paper. Brisbane: Author.
- Campbell, W.J., Archer, J., Beasley, W., Butler, J., Cowie, R., Cox, B., Galbraith, P., Grice, D., Joy, B., McMeniman, M., Sadler, R., & Wilkes, R. (1983). *Implementation of ROSBA in schools*. Unpublished report to the Minister for Education, Brisbane.
- Campbell, W. J., Basset, G. W., Campbell, E. M., Cotterell, J. L., Evans, G. T., & Grassie, M. C. (1975). *Some consequences of the Radford Scheme for schools, teachers, and students in Queensland*. Final Report of Project. Brisbane: Australian Advisory Committee for Research and Development in Education.
- Fairbairn, K., McBryde, B., & Rigby, D. (1976). Schools under Radford: A report on aspects of education in secondary schools in Queensland since the introduction in 1971 of school-based assessment. Brisbane: Department of Education.
- McMeniman, M. (1986a). A standards schema (Discussion paper 3). Brisbane: Assessment Unit, Board of Secondary Schools Studies.
- McMeniman, M. (1986b). Formative and summative assessment: A complementary approach. Assessment Unit Discussion Paper 6. Brisbane: Board of Secondary School Studies.
- Pitman, J. (2002). *The Senior Certificate: A new deal*. Brisbane: Education Queensland and Board of Senior Secondary School Studies.
- Queensland Studies Authority (QSA). (2010). School-based assessment: The Queensland system. Brisbane: Author.
- QSA. (2013). A-Z of senior moderation. Brisbane: Author.
- QSA. (2014). What is verification (ppt). Brisbane: Author.http://www.qsa.qld.edu.au/2138.html
- QSA. (Undated). Quality-assurance processes (ppt). Brisbane: Author.
- Sadler, D.R. (1986). *Subjectivity, objectivity, and teachers' qualitative judgments*. Assessment Unit Discussion Paper 5. Brisbane: Board of Secondary School Studies.
- Sadler, D.R. (1987). Specifying and promulgating achievement standards. *Oxford Review of Education*, 13(2), 191-209.
- Sadler, D.R. (1991). Rethinking certification policies for school leavers. Paper presented at the Annual Conference of the Australian Association for Research in Education, Gold Coast, 29 November. Scott, D.R., Berkeley, G.F., Howell, M.A., Schuntner, L.T., Walker, R.F., & Winkle, L. (1978). A review of school-based assessment in Queensland secondary schools. Brisbane: Board of Secondary School Studies.
- Smith, C.M. (1995). Teachers' reading practices in the secondary school writing classroom: A reappraisal of the nature and function of pre-specified criteria. Unpublished PhD Thesis. Brisbane: University of Queensland.
- Viviani, N. (1990). The review of tertiary entrance in Queensland 1990. Submitted to the Minister for Education, Queensland Board of Senior Secondary School Studies, Brisbane.
- Wyatt-Smith, C. M., & Bridges, S. (2008). *Meeting in the middle assessment, pedagogy, learning and students at educational disadvantage*. Final Evaluation Report for the Department of Education, Science and Training on Literacy and Numeracy in the Middle years of Schooling.
- Wyatt-Smith, C., & Klenowski, V. (2013). Explicit, latent and meta-criteria: types of criteria at play in professional judgement practice. *Assessment in Education: Principles, Policy and Practice, 20*(1), 35-52.
- Wyatt-Smith, C., & Matters, G. (2007). *Proposal for a new model of senior assessment: Realising potentials*. Report prepared for the Queensland Studies Authority. Brisbane: Griffith University and Australian Council for Educational Research.

Standards, judgement and moderation

62 | Page





Appendices

Appendix	c 1: Key Stakeholder Organisations	180
Appendix	c 2: Consultations	181
2.1	Initial meeting of key stakeholders with ACER 12 September 2013	181
2.2	Key Stakeholder Forum: No change, some important changes, or fundamental change? – 13 March 2014	183
2.3	Emerging directions and details: Presentation by ACER reviewers and Q & A session – 29 April 2014	187
2.4	Closed consultation: ACER reviewers with CEO or equivalent of key stakeholder organisations – 18 June 2014	191
2.5	Schooling sector consultations	192
2.6	Meetings of ACER reviewers with interested parties	201
Appendix	3: Public submissions	209
3.1	List of Submissions	209
3.2	Collation of responses from key stakeholder organisations to	
	eight focus questions	211
3.3	Level of support for proposals	231
Appendix	c 4: Stakeholder survey	242
4.1	Analysis of survey responses	242
4.2	Survey instrument	256

Appendices 179

Key Stakeholder Organisations

Association of Heads of Independent Schools of Australia, Queensland Branch Australian Catholic University

Bond University

Catholic Secondary Principals Association of Queensland

Central Queensland University

Christian Heritage College

Education Queensland

Federation of Parents and Friends Associations of Catholic Schools in Queensland

Griffith University

Independent Schools Queensland

Isolated Children's Parents' Association Qld Inc.

James Cook University

Queensland Catholic Education Commission

Queensland College of Teachers

Queensland Council of Parents and Citizens Associations / P&Cs Qld

Queensland Independent Education Union of Employees

Queensland Secondary Principals' Association

Queensland Studies Authority

Queensland Teachers' Union of Employees

Queensland Tertiary Admissions Centre

Queensland University of Technology

Southbank Institute of Technology

Southern Cross University

TAFE Queensland

University of New England

University of Queensland

University of Southern Queensland

University of Sunshine Coast

Initial meeting of key stakeholders with ACER 12 September 2013

Organisation	Name	Position
Association of Heads of Independent Schools of Australia, Queensland Branch	Helen Sinclair	Principal, Stuartholme
Australian Catholic University	Professor Jim Nyland	Associate Vice-Chancellor
Catholic Secondary Principals Association of Queensland	Dale Morrow	Principal
Department of Education, Training and Employment	Dr Jim Watterston	Director-General
Department of Education, Training and Employment Queensland Studies Authority	Patrea Walton	Deputy Director-General
Federation of Parents and Friends Associations of Catholic Schools in Queensland	Matthew Campbell	Deputy Chair
Griffith University	Kathy Grgic	Academic Registrar
	Emma Liversidge	Principal Adviser, Academic Quality
	Professor Donna Pendergast	Head and Dean, School of Education and Professional Studies
Independent Schools Queensland	Mark Newham	Director Education Services
	Jenene Rosser	Executive Manager
	Janelle Wills	Director (Teaching and Learning)
Independent Schools Queensland Queensland Studies Authority	David Roberston	Executive Director
Isolated Children's Parents' Association Qld Inc.	Wendy Hick	Vice-President
James Cook University	Professor Sally Kift	Deputy Vice-Chancellor Academic
Queensland Catholic Education Commission	Bob Knight	Executive Officer Education
	Dr Lee-Anne Perry, AM	Principal, All Hallows School
	Mandy Anderson	Director
Queensland College of Teachers	John Ryan	Director
Queensland Council of Parents and Citizens Associations, P&C Qld	Dan Smith	President
Queensland Independent Education Union of Employees	Adele Schmidt	Research Officer
Queensland Secondary Principals' Association	Norm Fuller	President
	Jeff Major	Principal, Wavell SHS

Organisation	Name	Position
Queensland Studies Authority	Neil McDonald	Acting Chief Executive Officer
	John McGuire	Assistant Director, Policy Coordination Branch
Queensland Teachers' Union of Employees	Kevin Bates	President
Queensland Tertiary Admissions Centre	Phillip Anthony	Manager, Assessment Services
Queensland University of Technology	Professor Karen Nelson	Director, Student Success and Retention
Southbank Institute of Technology	Dr Adrian Thomas	Academic Dean
University of Queensland	Maureen Bowen	Director, Academic Services Division and Academic Registrar
	Margaret Fairman	Directors of OPSSSE
	Dr Kerryn McCluskey	Program Director BEd (Secondary)
University of Southern Queensland	Vicki Farwell	Lecturer, Education
University of Sunshine Coast	Associate Professor Jennifer Rowe	Associate Dean

Key Stakeholder Forum: No change, some important changes, or fundamental change? – 13 March 2014

Organisation	Name	Position
Association of Heads of Independent Schools of Australia, Queensland Branch	Helen Sinclair	Principal, Stuartholme
	Ken Turnbull	Director Teaching & Learning
Australian Catholic University	Professor Jim Nyland	Associate Vice-Chancellor
	Joy Margee	Assistant Academic Registrar
	Claron Driscoll	Manager, Admissions
	Adjunct Professor Graham Maxwell	
Bond University	Duane Kelaart	General Manager, Admissions
Catholic Secondary Principals Association of Queensland	Br Paul Creevey	Principal, St Theresa's Catholic College
Central Queensland University	Professor Helen Huntly	Dean, School of Education and the Arts
	Jenny Roberts	University Secretary
Christian Heritage College	Faye Crane	Registrar
Department of Education, Training and Employment	Gabrielle Sinclair	Deputy Director-General, Policy and Programs
	Wayne Stephens	Director, Skills Participation and Pathways
Education Queensland	Mark Campling	Assistant Director-General State Schooling Implementation
Federation of Parents and Friends Associations of Catholic Schools in Queensland	Carmel Nash	Executive Director
	John Beaton	Executive Officer
Griffith University	Kathy Grgic	Academic Registrar
	Mary Forster	Acting Senior Admissions Manager
	Professor Adam Shoemaker	Academic Provost
	Associate Professor Ray Brown	Acting Head of School, School of Education and Professional Studies
	Professor Glenn Finger	Dean (Learning and Teaching), Arts, Education and Law
Independent Schools Queensland	Mark Newham	Director Education Services
	Jenene Rosser	Executive Manager, Australian Curriculum
	Mark Schumann	BGS Dean of Studies
	Laura Duffield	Director of Teaching, Learning and Innovation

Organisation	Name	Position
gou	Dale Nicholas	BGS Director of Student Services
Isolated Children's Parents' Association Qld Inc.	Andrew Pegler	President President
	Wendy Hick	Vice-President
	Natalie Kenny	Queensland Councillor
James Cook University	Professor Sally Kift	Deputy Vice-Chancellor Academic
	Professor Nola Alloway	Pro-Vice-Chancellor
Queensland Catholic Education Commission	Mandy Anderson	Director Education
	Lyn Hedemann	Academic Coordinator, Mathematics, St John Fisher College
	Yve Rutch	Executive Officer – Aboriginal and Torres Strait Islander Education, QCEC
	Bob Knight	Executive Officer – Education, QCEC
	Dr Lee-Anne Perry, AM	Principal, All Hallows School
	Paul Ould	Curriculum Advisor, Townsville Catholic Education
	Cathy O'Kane	Deputy Principal – Studies St Rita's College
	Gerard Hore	Assistant Director - Faith Education, Teaching and Learning Services Toowoomba Catholic Education Office
	Brett Rangiira	Senior Education Officer – Curriculum Toowoomba Catholic Education Office
	Paul Mead	Vice Principal – Teaching and Learning Villanova College
	Peter Wall	Director of Studies, Villanova College
	Pat Elsworthy	Deputy Principal – Curriculum Loreto College
	Clancie Neilson	Deputy Principal St Mary's Catholic College, Cairns
	Helen Royan	Director, Learning and Teaching Services, Brisbane Catholic Education
	Mary Tsourounakis	Principal Education Officer, Learning and Teaching Services, Brisbane Catholic Education
	Andrea Merrett	Senior Education Officer, Curriculum, Learning and Teaching Services, Brisbane Catholic Education
	Michael Barra	Education Officer Curriculum (Secondary), School Services North, Brisbane Catholic Education

Organisation	Name	Position
Organisation	Graeme Akers	Senior Education Officer, Learning
	Graeme Akers	and Teaching Data, Brisbane Catholic Education
	Brad Barker	Assistant Principal Curriculum, Carmel College, Thornlands
	Wayne Chapman	Deputy Principal Curriculum, Mary Mackillop College, Nundah
	Anne Wagner	Academic Coordinator, English, Emmaus College, Jimboomba
	Terry Neibling	Deputy Principal, Lourdes Hill College
	Peter Keightley	Assistant Curriculum, St Joseph's College, Toowoomba
	John Walsh	Education Officer Curriculum (Secondary), School Services South, Brisbane Catholic Education
	Chris Mayes	Acting Principal St Joseph's College, Gregory Terrace
Queensland College of Teachers	John Ryan	Director
Queensland Council of Parents and Citizens Associations, P&Cs Qld	Kevan Goodworth	CEO
Queensland Independent Education Union of Employees	Adele Schmidt	Research Officer
	Jennifer Winn	IEUA-QNT Education Committee Member
Queensland Secondary Principals' Association	Andrew Pierpoint	President
	Julie Tabor	Vice-President
	Ray Johnson	Vice-President, Learning and Teaching
	Jeff Major	Principal, Wavell State High School
Queensland Studies Authority	Neil McDonald	Acting Chief Executive Officer
	John McGuire	Assistant Director, Policy Coordination Branch
	Leesa Jeffcoat, AM	Chair of the Queensland Studies Authority
	Brian Nott	Acting Deputy Director, Assessment and Reporting Division
	John McGuire	Assistant Director, Policy Coordination Branch
	Leanne Rolph	Assistant Director, P-12 Implementation Branch
	lan Fyfe	Assistant Director, VET Branch
	Kathryn Tully	Acting Deputy Director, Curriculum Services Division
	Graham Smith	Deputy Director, Corporate & Information Services Division
Queensland Teachers' Union of Employees	Kevin Bates	President
	Leah Mertens	Research Officer

Name	Position
Phillip Anthony	Manager, Assessment Services
Pat Smith	Manager, PR & Information Services
Professor Carol Dickenson	Senior Deputy Vice-Chancellor
Shard Lorenzo	Registrar
Bruce McCallum	Director, Student Business Services
Professor Karen Nelson	Director, Student Success and Retention
Dr Judy Smeed	Senior Lecturer, Faculty of Education
Jane McPhee	General Manager, Training and Delivery across Southbank Institute of Technology, Metropolitan South institute of TAFE and Brisbane North Institute of TAFE
Dr Christina Hong	Executive Director, Chief Academic Officer
Janine Schubert	Director, TAFE Queensland
Professor Sarah Roberts-Thomson	Associate Dean Academic, Faculty of Health & Behavioural Sciences
Dr Clare Hourigan	Office of Planning
Dr Kerryn McCluskey	Program Director (Secondary), Director Professional Experience, Business Education Coordinator
Adjunct Professor John A Pitman, AM	
Professor Stephen Winn	Head of School (Teacher Education and Early Childhood)
Pat Allen	Director, Student Administration
	Phillip Anthony Pat Smith Professor Carol Dickenson Shard Lorenzo Bruce McCallum Professor Karen Nelson Dr Judy Smeed Jane McPhee Dr Christina Hong Janine Schubert Professor Sarah Roberts-Thomson Dr Clare Hourigan Dr Kerryn McCluskey Adjunct Professor John A Pitman, AM Professor Stephen Winn

Emerging directions and details: Presentation by ACER reviewers and Q & A session – 29 April 2014

Organisation	Name	Position
Association of Heads of Independent Schools of Australia, Queensland Branch	Helen Sinclair	Principal, Stuartholme
	Ken Turnbull	Deputy Principal, Director Teaching and Learning
	Andree Rice	Deputy Principal, Director Mission
Bond University	Duane Kelaart	General Manager, Admissions
Catholic Secondary Principals Association of Queensland	Dr Kerrie Tuite	President
	Br Paul Creevey	Principal, St Theresa's Catholic College
Christian Heritage School	Faye Crane	Registrar
Education Queensland	Meredith Wenta	Principal, Kirwan State High School
	Simon Riley	Principal, Ipswich State High School
	Jeff Major	Principal Wavell State High School
	Robyn Rosengrave	Director
	Leanne Nixon	Acting Assistant Director- General, State Schools Performance
	Jim Box	Principal, Caboolture State High School
	Jo Hughes	Acting Principal, Kenmore Sate High school
	Jacqueline Wilton	Deputy Principal, Brisbane State High School
Federation of Parents and Friends Associations of Catholic Schools in Queensland	Carmel Nash	Executive Director
Griffith University	Kathy Grgic	Academic Registrar
	Professor Adam Shoemaker	Academic Provost
	Dr Stephen Norton	Senior Lecturer in Mathematics Education, School of Education and Professional Studies
Independent Schools Queensland	David Robertson	Executive Director
	Mark Newham	Director Education Services
	Jenene Rosser	Executive Manager, Australian Curriculum

		5
Organisation	Name	Position
Independent Schools Queensland	Pr Ron Wooley	Headmaster, Citipointe Christian College
	Helen Moore	Head of Secondary, Citipointe Christian College
	Geoff McLay	Principal of West Moreton Anglican College
	Dale Nicholas	BGS Director of Student Services
	Mark Schumann	BGS Dean of Studies
	Kathy Bishop	Dean of Studies, Ipswich Girls' Grammar School
James Cook University	Kathy-Lee Maudsley	Manager of Admissions
Queensland Catholic Education Commission	Mike Byrne	Executive Director
	Mandy Anderson	Director, Education
	Dr Lee-Anne Perry, AM	Principal, All Hallows School
	Bob Knight	Executive Officer – Education, QCEC
	Paul Ould	Curriculum Advisor, Townsville Catholic Education
	Andrea Merrett	Senior Education Officer, Curriculum, Learning and Teaching Services, Brisbane Catholic Education
	Gayle Cunningham	Assistant Director, Curriculum Catholic Education, Diocese of Rockhampton
	Mary Tsourounakis	Principal Education Officer, Learning and Teaching Services, Brisbane Catholic Education
	Gerard Delaney	Executive Officer, Communications for QCEC
	Diane Moyle	Deputy Principal - Learning/ Teaching St Ursula's College Ltd
Queensland College of Teachers	John Ryan	Director
	Peter Levett	Senior Research Officer
Queensland Independent Education Union of Employees	Adele Schmidt	Research Officer
	Jenny Winn	Senior Research Officer
Queensland Secondary Principals' Association	Andrew Pierpoint	President
	Julie Tabor	Vice-President
	Ray Johnson	Vice-President (Learning and Teaching)
Queensland Studies Authority	Chris Rider	Chief Executive Officer
	Leanne Rolph	Assistant Director, P-12 Implementation Branch
	lan Fyfe	Assistant Director, VET Branch
	Kathryn Tully	Acting Deputy Director, Curriculum Services Division
	Graham Smith	Deputy Director, Corporate & Information Services Division

Organisation	Name	Position
Organisation	Name Brian Nott	
	DIIdII INULL	Acting Deputy Director, Assessment and Reporting Division
	John McGuire	Assistant Director, Policy Coordination Branch
	Janice Chee	Assistant Director, Australian Curriculum Branch
	Peter Antrobus	State Review Panel Chair Mathematics B
	David Austin	State Review Panel Chair Physics
	Judith Beausang	State Review Panel Chair Accounting
	Edna Galvin	State Review Panel Chair English
	Meredith Gleadhill	State Review Panel Chair Home Economics
	Brad Greene	State Review Panel Chair Business Organisation & Management, Business Management
	Anthony Hytch	State Review Panel Chair English Extension
	Trevor Jones	State Review Panel Chair Chemistry
	Helen Leyden	State Review Panel Chair Music
	Joanne MacDonald	State Review Panel Chair Geography
	Kevin McAlinden	State Review Panel Chair Modern History
	Anthony Muller	State Review Panel Chair Engineering Technology
	Dianne Nichols	State Review Panel Chair Earth Science
	Bevan Penrose	State Review Panel Chair Mathematics C
	Shane Roberts	State Review Panel Chair Health Education
	David Shapland	State Review Panel Chair Philosophy & Reason
	John Thomas	State Review Panel Chair Study of Religion
	Wayne Van Den Bos	State Review Panel Chair Graphics
	Debbie Wall	State Review Panel Chair Drama
Queensland Teachers' Union of Employees	Leah Mertens	Research Officer
Queensland Tertiary Admissions Centre	Dr John Griffiths	Chief Executive Officer
	Phillip Anthony	Manager, Assessment Services
	Pat Smith	Manager, PR & Information Services
Queensland University of Technology	Professor Peter Coaldrake	Vice-Chancellor & President

Organization	Nama	Docition
Organisation	Name	Position
	Carly Chapman	Associate Director Business Services
	lan McFadden	Admissions Manager, Chair, QTA Forum
	Lenore Adie	Senior Lecturer Course Coordinator
	Professor Margaret Lloyd	Faculty of Education
	Dr Judy Smeed	Senior Lecturer, Faculty of Education
	Dr Theresa Bourke	Lecturer Faculty of Education, School of Curriculum
Queensland University of Technology	Professor Carol Dickenson	Senior Deputy Vice-Chancellor
TAFE Queensland	Janine Schubert	Director, TAFE Queensland
University of Queensland	Maureen Bowen	Academic Registrar and Director, Academic Services
	Dr Matthew Dean	Affiliate Academic, School of Mathematics
	Adjunct Professor John A Pitman, AM	
University of Southern Queensland	Professor Stephen Winn	Head of School, Teacher Education and Early Childhood
Australian Council for Educational Leaders	Dennis Mulherin	Assistant Director, Lutheran Education Queensland
	Norman Hunter, OAM	Vice-President
Hubbard's School	Helen Stevens	Principal
	Maureen Anderson	Teacher, Science and Maths
Australian Family Association, Qld Branch	Tempe Harvey	Media and Research Officer
Australian College of Educators	Gail Rienstra	Committee Member
National Civic Council	Luke McCormack	Qld President, former ACE Brisbane Metro President and State President
Brisbane Christian College	Alex Shiliahov	Head of Maths and Science
	Andrew Smith	Science and Biology Teacher
	Brad Ahern	Chemistry and Science Teacher
	Peter Jordan	Parent

Closed consultation: ACER reviewers with CEO or equivalent of key stakeholder organisations – 18 June 2014

Key stakeholder organisation	Representative/Observer
Association of Heads of Independent Schools of Australia Queensland Branch	Robyn Bell, Qld Board Director of the National AHISA Board
Catholic Secondary Principals Association Qld	Dr Kerrie Tuite, President
Christian Heritage College	Faye Crane, Registrar
Department of Education, Training and	Dr Jim Watterston, Director-General
Employment	Andrew Walker, Executive Director, Indigenous Policy and Strategic Innovation
	Michael Shephard, Acting Director, Strategic Initiatives
Federation of Parents and Friends Associations of Catholic Schools Qld	Rev Dc Russ Nelson, Qld Bishops' Nominee to State Committee
Griffith University	Prof. Adam Shoemaker, Academic Provost
	Kathy Grgic, Academic Registrar
Independent Schools Queensland	David Robertson, Executive Director
	Mark Newham, Director Education Services
Isolated Children's Parents' Association Qld	Andrew Pegler, President
Queensland Catholic Education Commission	Mike Byrne, Executive Director
	Mandy Anderson, Director Education
Queensland College of Teachers	John Ryan, Director
Queensland Council of Parents and Citizens Associations, P&Cs Qld	Kevan Goodworth, Chief Executive Officer
Queensland Studies Authority	Chris Rider, Chief Executive Officer
	John McGuire, Assistant Director, Policy Coordination Branch
Queensland Teachers' Union of Employees	Leah Mertens, Research Officer
Queensland Tertiary Admissions Centre	Dr John Griffiths, Chief Executive Officer
Queensland University of Technology	Prof. Carol Dickenson, Acting Vice-Chancellor
	Shard Lorenzo, Registrar
State Schools (DETE)	Patrea Walton, Deputy Director-General
TAFE Queensland	Janine Schubert, Director Product Workstream
University of Queensland	Prof. Joanne Wright, Deputy Vice-Chancellor (Academic)
University of Southern Queensland	Prof. Stephen Winn, Head of School
University of Sunshine Coast	Prof. Emeritus Merv Hyde AM, Acting Head of School, Education
Apologies (position on review proposals known)	
Queensland Secondary Principals' Association	
Central Queensland University	

Schooling sector consultations

Conducted by Yvana Jones, Review Consultation Manager, November 2013 – February 2014.

The following consultations were held:

- School-based career counsellors and guidance officers a meeting
- Queensland Teachers' Union
 Two meetings organised by the Queensland Teachers' Union
 (an Executive Council meeting and a special focus group)
- Christian Schools Association
 A meeting with the Christian Schools Association, Sunshine Coast
- ISQ Education Advisory Committee
- State School Principals
 A meeting of state school principals organised by the Deputy Director-General, State Schools, DETE
- QCEC Deputy Principals
 A meeting with Deputy Principals (senior school curriculum and assessment)

Participants' responses to material used to stimulate discussion were organised under headings that correspond to ACER's eight focus questions. Participants at each forum selected the focus areas they wished to discuss. The two focus areas that attracted most attention in all seven meetings were moderation and external assessment.

(NB: What follows is the participants' original statements.)

Summary of the discussion (in note form) from school sector consultation

Views on school-based assessment

- Teacher professionalism is the central focus of Queensland's current system.
- School-based assessment is highly valued.
- Significant additional investment is required to improve the validity and reliability of teacher-devised assessments.

Views on moderation

- Teacher judgment is valued in the current system.
- Panels provide opportunities for professional learning.
- Greater quality and consistency of panel judgments and advice can be achieved by:
 - having explicit criteria sheets with task-specific descriptor
 - QSA having more effective processes to identify and manage inconsistent judgments and advice

- increasing the support provided to panel members by reviewing workloads, increasing opportunities for professional development, providing more resources, setting and maintaining realistic timelines
- broadening quality assurance processes to seek feedback from teachers as well as panel members
- providing greater distance between teachers who want to appeal panel decisions and the panel involved
- considering regional rather than district panel structures
- considering the changing and increasing pressures on teachers when selecting reforms.

Views on external assessment

- There is the potential for reduced teacher work and student assessment load by subsuming some teacher-devised assessments into external assessments.
- There is the potential for increasing the value of each subject.
- Avoid a two-tier system.
- Ensure a transparent fit between external and school-based assessments.
- Maintain a balanced curriculum and current focus on teacher professionalism.
- Monitor impact on students.
- Clarify expectations at the outset.

Views on finer scale for school assessments

Supported

Views on key cross-curriculum capabilities testing

- KCCCs embedded within school-based and external assessments
- Consider links Year 10 is considered part of the senior years.

Views on separation of responsibilities at the secondary-tertiary interface

- A global and national view
- The fundamental role of the senior years of school
- Making subject choices
- University entrance should not distort subject content or narrow the curriculum in schools
- Not canvassed in depth more part of other discussions

Views on governance

• Participants chose not to provide feedback on this.

The final section provides a summary of the key points organised under the eight focus questions.

Participants at each forum selected the focus areas they would like to discuss. The two focus areas that attracted most discussion in all forums were moderation and external assessments.

The record of consultation meetings represents the extent to which the reviewers have engaged with stakeholders and interested parties both by request and in response to invitation

Findings from school sector consultations

About school-based assessment

The majority of participants expressed significant support for preserving school-based assessments. In each meeting, however, there were one or two people who were either concerned about the quality of current school-devised assessments or who preferred external exams.

What is valued about the current system:

- Teacher professionalism being the central focus of Queensland's current system
- Teachers know their students and communities and therefore are best placed to devise relevant assessments that reflect both content and context.

How we can enhance teacher-devised assessments:

- Significant additional investment is required to improve the validity and reliability of teacher-devised assessments.
- Some teachers in the senior years are highly skilled and experienced at devising assessments while others are not.

Most frequently mentioned suggestions:

- Ongoing professional development in devising quality (valid and reliable) assessments that are capable of supporting finer scaled ratings
- An assessment bank containing a range of assessments across learning areas, quality assured by QSA and including annotated exemplars of student work showing differences between levels
- Opportunities for teachers to mentor and share effective practice with other teachers

About moderation

Strong support was expressed for strengthening current moderation processes. Although the Queensland system has within school, district and state moderation processes, discussions focused on district panels. While moderation was highly valued, significant concerns were also voiced.

Advantages of current model

• Teacher judgment is valued.

Professional learning

 Involvement in district panels presents a good opportunity for professional development. Cross-pollination and sharing of best practice is an important way to develop our profession.

How we can strengthen moderation processes

This topic stimulated the most discussion across all forums.

- Improve the clarity of standard descriptors within syllabuses.
- Standards descriptors are too general and therefore open to interpretation.
 Criteria sheets are too broad they don't include task-specific descriptors.
 What is needed: clearer syllabuses and standards supported by explicit criterion sheets with task specific descriptors (ones that teachers and students can understand). Some participants viewed this lack of clarity as the main weakness in the current system.

- Improve the consistency of judgments and advice provided by panels.
- Participants acknowledged inconsistencies in judgments and advice within and between panels and from year to year. They noted the absence of effective processes from QSA to identify and manage these inconsistencies.
- Panellists need more skills in giving professional feedback. Currently feedback is provided through generic statements that are often too general to be helpful.
- Some participants wanted more constructive and detailed feedback on their work programs. Some said that monitoring of student work (quality assurance of assessments) was too late in February (students in Yr 12)

 it would be better to have teacher-devised assessments approved up front with the work programs. This would increase the work load for state panellists. There used to be a '60 page' guideline for work program approval which has now been condensed to 7 to 8 pages. No one is keen to go back to the 60 pages.
- One participant mentioned QSA has a very good resource an audit tool
 to help schools quality assure assessments, criteria sheets and student
 exemplars.
- Increase support provided to panel members.
- Four main areas were noted: review panel workloads; increasing opportunities for professional development; providing more resources, and; setting and maintaining realistic timelines.
- Excessive workloads were identified as a significant contributor to an increase in the turnover of panel members. Less experienced teachers are now frequently on panels.
- This turnover, along with limited opportunities for professional development and little to no resources to support panels were seen as significant contributing factors to the increase in inconsistencies within and between panels.
- Resourcing has declined significantly over time. Schools are not provided with sufficient resources to release panel members to review materials.
- Time and timing is an issue. Some panel chairs only require that panel members read the materials on the day of the meeting. At times QSA has required thirty-minute turn-around times to review work.
- A practice reported is not to challenge panel decisions in October but to
 wait until exit statement time. R7s have a turnaround time of between three
 to four days, which is very rushed.
- Timely release of information is also important. QSA can release unexpected updates and requirements which can cause extra work and strain on schools.
- Broaden quality assurance processes to seek feedback from teachers as well as panel members.
- There is a view that QSA relies too much on feedback from panels as part
 of quality assurance processes. Panels may not always be best placed to
 provide impartial advice back to QSA for example, QSA asks panels how
 things are going and panels may respond 'just fine'.
- QSA needs to actively collect feedback from the field and use this to continually refine and monitor assessment (both external and schoolbased) and moderation.
- Provide greater distance between teachers who want to appeal panel decisions and the panel involved.

- Some panel members may interpret appeals as a personal affront which
 can then result in interpersonal tensions. The sentiment 'panels pitting
 colleagues against each other' was expressed in three of the seven forums.
 This issue was raised by teachers from regional districts where numbers in
 Authority-registered subjects are relatively small. The current system may
 discourage teachers from appealing panel decisions either from the outset
 or, as one participant described, having been through the process once they
 would be reluctant to do this again.
- Restructure panels.
- Some participants favoured reverting to a system of state-wide moderators and key coordinators to support consistency of panel judgments and advice. The focus was on having fewer expert panels to quality assure assessments and validate work programs rather than thirteen district panels. A limited term of office with staggered turnover, similar to the federal senate, was suggested.
- In regional areas there are a small number of teachers to serve on panels.
 Having district panels chaired by a member of a state panel could be of
 great assistance (i.e., seven people on a state panel for a subject, each of
 these seven chair seven regional panels around the state).
- Acknowledge panel members.
- Being a district panel member could be recognised by the Queensland College of Teachers for professional development and accreditation requirements.
- Panel members could receive a grant paid to their school to release them from other duties.
- Panel members require more training to improve consistency of judgments and advice.
- Acknowledge the changing and increasing pressures on teachers.
- In the last three to four years, teacher workloads and responsibilities have increased. Some of the examples provided: OH&S requirements, more paper work, more meetings, and the introduction of the Australian Curriculum P-10. Significant numbers of teachers have retired.
- Concerns that a rigorous moderation system would result in more work for teachers and students were expressed.

About external assessment

Participants in all forums asked for clarification of the differences between exams and assessments and the purpose and role of external assessments.

Advantages of external assessment

- External assessments can become the "common enemy" uniting the teacher and students which can be good for teaching.
- Reduced teacher work and student assessment load
- External assessments can replace some teacher-devised assessments and may negate the need for a QCS type test if the external assessments embed the KCCCs. The desire to allocate more time to teaching and learning and less on marking was expressed.
- · Focus on the value of each subject.
- It is important to focus on academic rigour. An increased focus on the value of subjects is welcomed.

Important considerations

- Avoiding a two-tier system
- External assessments may be viewed as more rigorous. Subjects that have an external exam may be perceived as having more value by the general public and universities.
- What will an external assessment value? Example: how can Creative Arts be assessed externally?
- League tables can be published showing how schools fared in external assessments.
- Ensuring a transparent fit between external and school-based assessments
- Aggregating an overall rating for school-based and external assessments may be complex if they are assessing different aspects of a subject.
 Significant discrepancies could be expected. How will these be managed effectively and efficiently?
- Maintaining a balanced curriculum, maintaining a focus on teacher professionalism
- Teacher professionalism can be reduced when teachers teach to preset exams and student work is marked and moderated by others.
- Assessment drives teaching. An external assessment will have significant
 impact on teaching and learning programs. Currently each school can
 develop units of work and assessments that reflect local contexts. It may
 not be possible for an external assessment to be relevant to students in
 Brisbane and Mt Isa.
- How much curriculum time will be taken in preparing students for external assessments? Schools need to have the flexibility to maintain school-based programs including religious studies.
- Exams shouldn't be set by academics from university they need to be developed by or in conjunction with teachers.
- Currently schools with small cohorts of Year 11 and 12 students combine classes. They run an A–B cycle (alternating content and assessments every two years). Would having external assessments mean that Year 11 and 12 classes couldn't be combined?
- Closely monitoring the impact on students
- The amount of assessments (external and school-based) will need to be monitored closely.
- Our system needs to be cognisant of what the data on student anxiety, pressure and suicide is like in jurisdictions that have external exams.
- Having online assessments (as the only delivery option) creates significant
 equity issues. Many schools have issues with bandwidth and there are
 equity issues for our most disadvantaged and marginalised.
- Clarify expectations at the outset.
- External assessments should be stipulated in the syllabus so teachers know the:
 - focus content, links to syllabus, quantum will the assessment cover two years or just Year 12
 - timing which school term, whether there will be an exam week
 - connection with teaching methodologies the assessment type will influence teaching methodologies
 - conditions under which external assessments will be administered sight unseen, supervised, high stakes.

About finer scale for school assessments

Participants supported this proposal. Related comments can be found in the section "School-based assessment".

About cross-curriculum capabilities testing

Participants supported the embedding of CCEs throughout the curriculum.

- KCCCs as part of school-based and external assessments.
- Most participants preferred having the KCCCs embedded within schoolbased and external assessments rather than as an additional assessment as per the QCS. Some expressed the view that the current QCS was like an additional subject due to the time taken to prepare students.
- Opinions were mixed. Others said that CCEs and KCCCs offer cohesion and weight.
- Year 10 is linked to the senior years.
- Consideration needs to be given to how changes will feed back into Year 10 and junior secondary. Examples: Will finer scales be needed in Year 10?
 Should KCCCs be introduced in Year 10?

About separation of responsibilities at the secondary-tertiary interface

Considerations:

- A global and national view
- It is important that Queensland is in step nationally and internationally, that
 there is agreement about what we want our senior students to achieve as
 people as well as academically.
- Transparency is critical as is careful monitoring for unforeseen possible backwash effects.
- The fundamental role of the senior years of school
- Education and Training Reforms for the Future (ETRF) have resulted in the vast majority of 16 year olds remaining at school through to the end of Year
 12
- The majority of students completing senior do not go to university. Any
 reforms to the current system should not disadvantage the cohort of
 students who do not currently attain an OP 1–15. Having different pathways
 for completing senior is important.
- What are the purposes of schooling? Example: should P-10 provide a general education and Years 11-12 provide students with the opportunity to specialise?
- Making subject choices
- Most participants wanted the number of subjects that counted towards university entrance to be reduced to three or four. This would allow some students to experience a mixed curriculum. Example, four 'Authority' subjects and two VET certificates while other students could allocate more time to specialise in core subjects.
- Fewer subjects studied at greater depth can de-clutter the curriculum and result in more rigour.
- · Non-authority subjects must be valued.
- Subjects should be weighted as some are harder than others.
- The amount of pressure placed on 15 year old students to make career choices warrants consideration. While students who know what career they want to pursue may be able to select specialised subjects, this can be an issue for students who do not yet have that clarity.

- Potential impacts for students who change subjects midstream (occurs frequently) need to be considered.
- University entrance should not distort subject content or narrow the curriculum in schools.
- Participants would like to see a national, regulated process for university entrance. It is important that universities have similar entrance requirements

 having too much diversity would be difficult to manage for families, students and schools.
- Any changes would need to ensure that entrance requirements set by universities did not influence schools in a way that caused a narrowing of curriculum. University entrance requirements should not override authorised curriculum.

About scaling and the construction of rank orders

More detail is required for participants to make comments additional to those already recorded.

About governance

Participants chose not to provide feedback on this.

Other comments

The desire for ACER or the department to provide clear statements about the drivers for change and what improvements the system is striving to achieve was expressed at four of the seven forums. It is important that much of what is positive and effective in our current system is acknowledged.

All participants at the forums see the current system as significantly underfunded. Issues may arise if changes are not well supported and if changes require additional funding by schools.

Summary – Key Points

School-based assessment

- Teacher professionalism is the central focus of Queensland's current system.
- School-based assessment is highly valued.
- Significant additional investment is required to improve the validity and reliability of teacher-devised assessments.

Moderation

- Teacher judgment is valued in the current system.
- Panels provide opportunities for professional learning.
- Greater quality and consistency of panel judgments and advice can be achieved by:
 - having explicit criterion sheets with task specific descriptors
 - QSA having more effective processes to identify and manage inconsistent judgments and advice
 - increasing the support provided to panel members: reviewing workloads; increasing opportunities for professional development; providing more resources, and setting and maintaining realistic timelines
 - broadening quality assurance processes to seek feedback from teachers as well as panel members
 - providing greater distance between teachers who want to appeal panel decisions and the panel involved

- considering regional rather than district panel structures
- Considering the changing and increasing pressures on teachers when selecting reforms

External assessment

- Potential for reduced teacher work and student assessment load by subsuming some teacher-advices assessments into external assessments
- Potential for increasing the value of each subject
- Avoid a two-tier system
- Ensure a transparent fit between external and school-based assessments
- Maintain a balanced curriculum and current focus on teacher professionalism
- Monitor impact on students
- Clarify expectations at the outset

Finer scale for school assessments

Supported

Cross-curriculum capabilities testing

- KCCCs embedded within school-based and external assessments
- Consider links Year 10 is considered part of the senior years

Separation of responsibilities at the secondary-tertiary interface

- A global and national view
- The fundamental role of the senior years of school
- Making subject choices
- University entrance should not distort subject content or narrow the curriculum in schools

Scaling and the construction of rank orders

• Not canvassed in depth - more part of other discussions

Governance

Participants chose not to provide feedback on this

Appendix 2.6

Meetings of ACER reviewers with interested parties

This record of consultation meetings represents the extent to which the Chief Investigators met and engaged with key stakeholders and interested parties, both by request from ACER and in response to invitations from stakeholders and interested parties. The list does not record the many one-on-one meetings that took place.

Disclaimer: The information provided in the list of consultation meetings is as accurate as possible, including names and position titles, based on information collected at the time of meetings.

Australian Council for Educational Leaders Queensland Executive

Helen Starr. President

Norm Hunter, Vice-President

Dorothy Andrews, Secretary

Chris Jack

Martyn Savage

Jane Wilkinson

Miles Ford

Joan Conway

Deb Kember

Biology Heads of Department Brisbane North

Tracey Monteith, Brisbane Girls Grammar School, Head of Biology

Alison Young, Anglican Church Grammar, Head of Biology

Sally Hart, St Joseph's College Gregory Terrace, Head of Biology

Stuart Gillett, St Joseph's College Gregory Terrace, Teacher of Biology

Marilyn Love, All Hallows' School

Cheryl Geck, Marist College Ashgrove

Karyn Negus, St Joseph's College Gregory Terrace, Former Head of Biology

Central Queensland University

Professor Scott Bowman, Vice-Chancellor and President

Jenny Roberts, University Secretary

Professor Hilary Winchester, Deputy Vice-Chancellor Academic and Research

Professor Helen Huntly, Dean, School of Education and the Arts

Philip Bell, Senior Planning and Policy Officer

Susan Raschle, Manager, Student Admissions, Advice and Retention Centre

Professor Andy Bridges, Dean, School of Human, Health and Social Science and Head of Campus Bundaberg

Professor Fiona Coulson, Dean, School of Medical and Applied Science

Professor Leone Hinton, Dean, School of Nursing and Midwifery

Professor William Guo, Dean, School of Engineering and Technology

Professor Le Di Milia, Dean, School of Business and Law

Department of Education, Training and Employment

Dr Jim Watterston, Director-General

Patrea Walton, Deputy Director-General, State Schools

Department of Education, Training and Employment Queensland Schooling Sectors CEOs Forum

Dr Jim Watterston, Director-General

Patrea Walton, Deputy Director-General, State Schools

David Robertson, Executive Director ISQ

Mike Byrne, Executive Director QCEC

Education Queensland Principals

Meredith Wenta, Kirwan SHS

Kirsten Dwyer, Rockhampton SHS

Jeff Davis, Varsity College

Julie-Ann McCullough, Springwood SHS

Wade Haynes, Brisbane SHS

Jeff Major, Wavell SHS

John Fitzgerald, Kenmore SHS

Simon Riley, Ipswich SHS

Jim Box, Caboolture SHS

Raelene Fysh, Central Office DETE

Leanne Nixon, Central Office DETE

Dion Coghlan, Central Office DETE

Federation of Parents and Friends Associations of Catholic Schools in Queensland

Geebung Stafford Murrumba Principals

Brett Burgess, Principal, Bribie Isla nd State High School

David Friis, Principal, Deception Bay State High School

David Munn, Principal, Aviation State High School

Deb Murphy, Principal, Tullawong State High School

Janelle Amos, Principal, Morayfield State High School

Janelle Deakin, Principal, Pine Rivers State High School Jeanette Gentle, Principal, Sandgate State High School

Jeff Hennessey, Principal, Bracken Ridge State High School

Jeff Major, Principal, Wavell State High School

Jim Box, Principal, Caboolture State High School

John Schuh, Principal, Dakabin State High School

John Searle, Principal, Mitchelton State High School

Katrina Larsen, Principal, North Lakes State High School

Lisa Starmer, Principal, Clontarf State High School

Lyn Ruttley, Principal, Albany Creek State High School

Mark Breckenridge, Principal, Ferny Grove State High School

Mark Farwell, Principal, Craigslea State High School

Myron McCormick, Principal, Kedron State High School

Paul Pengelly, Principal, Murrumba State High School

Regan Neumann, Principal, Kelvin Grove State High School

Russell Pollock, Principal, The Gap State High School

Shona McKinlay, Principal, Redcliffe State High School

Sue Wallace, Principal, Everton Park State High School

Griffith University

Professor Ian O'Connor, Vice-Chancellor and President

Professor Adam Shoemaker, Academic Provost

Kathy Grgic, Academic Registrar

Professor Sue Spence, Deputy Vice-Chancellor Academic

Professor Donna Pendergast, Dean and Head, School of Education and Professional Studies

Associate Professor Cheryl Sim, Director Teacher Education & Professional Practice

Dr Glenda McGregor, Senior Lecturer, School of Education and Professional Studies

Harry Kanasa, Lecturer in Science Education

Professor Nicholas Buys, Dean, Learning & Teaching

Professor Ramon Shaban, Professor and Chair in Infection Control and Infectious Diseases

Dr Suzzanne Owen, Health Development Coordinator

Associate Professor Ruth McPhail, Primary Program Director, Bachelor of Business

Associate Professor Kathryn Tonissen, Academic Staff, School of Natural Sciences

Louise Maddock, Senior Program Development Consultant

Independent Education Union of Australia

Adele Schmidt, Research Officer

Paul Giles, Assistant Secretary

Education Committee members

Independent Schools Queensland

David Robertson, Executive Director

Mark Newnham, Director, Education Services & Acting Director, Teaching and Learning

Dr Janelle Wills, Director Teaching and Learning

Jenene Rosser, Manager, Australian Curriculum

Adrian Wiles, Head of College, St Peters Lutheran College

Andrew Johnson, Christian Schools Australia State Executive Officer

Anna Owens, Deputy Principal Academic, Brisbane Girls Grammar School

Anthony Micallef, Headmaster Brisbane Grammar School

Anthony Mueller, Faith Lutheran College, Redlands Principal

Brian Savins, Clayfield College Principal

Craig Bassingthwaighte, Headmaster Somerset College

David Bliss, Immanuel Lutheran College Principal

Dawn Lang (Chair) Caloundra City School Governing Board Representative

Donna Anderson, Canterbury College Head of College

Dr Philip Moulds. The Rockhampton Grammar School Headmaster

Elaine Rae, Uniting Church Schools Commission Executive Officer

Florence Kearney, Principal, Somerville House

Gary Smith, YMCA Vocational School Head of School

Geoff Hemphill, Director of Administration (Years 10-12)

Geoff McLay, Principal, West Moreton Anglican College

Geoff Newton, Hillbrook Anglican School Principal

Lisa Delaney, Deputy Head of College, St Peters Lutheran College

Lynne Doneley, Gulf Christian College Board Chair

Mark Ash, Suncoast Christian College Principal

Nigel Fairbairn, Blackheath and Thornburgh College Principal

Peter Foster, John Paul College Headmaster

Peter Hauser, Headmaster, Toowoomba Grammar School

Richard Carmp, Director of Curriculum, Matthew Flinders Anglican College

Robyn Bell, Principal, Cannon Hill Anglican College

Ron Woolley, Headmaster, Citipointe Christian College

Ros Curtis, Principal, St Margaret's Anglican Girls School

Steve Uscinski, Deputy Headmaster Teaching & Learning, Brisbane Grammar School

Independent Schools Queensland Education Advisory Sub-Committee

Adrian Wiles (Chair), Head of College, St Peter's Lutheran College

Mark Newnham, Director, Education Services & Acting Director, Teaching and Learning

Donna Anderson, Head of College, Canterbury College

Mark Ash, Principal, Suncoast Christian College

Craig Bassingthwaighte, Headmaster, Somerset College

David Bliss, Principal, Immanuel Lutheran College

Dr Peter Britton, Principal, Ipswich Girls' Grammar School

Ros Curtis, Principal, St Margaret's Anglican Girls School

Linda Evans, Principal, Fairholm College

Nigel Fairbairn, Principal, Blackheath and Thornburgh College

Andrew Johnson, State Executive Officer, Christian Schools Australia Queensland

Phillip Moulds, Headmaster, The Rockhampton Grammar School

Anthony Mueller, Principal, Faith Lutheran College Redlands

Geoffrey Newton, Principal, Hillbrook Anglican School

Elaine Rae, Executive Officer, Uniting Church Schools Commission

Gary Smith, Head of School, YMCA Vocational School

Johannes Solymosi, Principal, Victory College

Andre van Zyl, Executive Director of Business, St Paul's School

James Cook University

Professor Sally Kift, Deputy Vice-Chancellor, Academic

Professor Nola Alloway, Pro-Vice-Chancellor, Faculty of Arts, Education and Social Sciences

Professor Jeff Loughran, Pro-Vice-Chancellor, Faculty of Science & Engineering

Professor Robyn McGuiggan, Pro-Vice-Chancellor, Faculty of Law, Business and the Creative

Julie Woodward, Director, Student & Academic Services

Professor Richard Murray, Head of School, Medicine & Dentistry

LNP Education Policy Committee

Dr Barry Arnison OAM (Chair) Peter Finch Andrew Pegler A Barr John Phelan Robin Hutchings Dom Cacciola Joanna Lindgren Robyn Quick Rod Campbell Helen McAllister William Ricketts Michael Carman Penny McDonald Peter Ridd William Church Benjamin Nance Richard Williams

Natalie Davis Rhonda Paige

Parliamentary Inquiry into "The assessment methods used in senior mathematics, chemistry and physics in Queensland schools", Education and Innovation Committee

Chair Mrs Rosemary Menkens MP, Member for Burdekin

Deputy Chair Mrs Desley Scott MP, Member for Woodridge

Mr Steve Bennett MP, Member for Burnett

Mr Mark Boothman MP, Member for Albert

Mr Ray Hopper MP, Member for Condamine

Mr Michael Latter MP, Member for Waterford

Mr Neil Symes MP, Member for Lytton

Queensland Catholic Education Commission

Mike Byrne (Director)

Mandy Anderson (Director Education)

BRISBANE CATHOLIC EDUCATION SECONDARY PRINCIPALS AND CURRICULUM LEADERS

Helen Royan, Director Learning and Teaching Services

Cathy Jackson, Director School Services North

Paul Allen, Director School Services South

Mary Tsourounakis, Principal Education Officer Learning and Teaching

David Greig, Principal Education Officer Learning and Teaching

Pat Coughlan, Area Supervisor

Andrea Merrett, Senior Education Officer Curriculum

Marisa Dann, Senior Education Officer Curriculum

Sue Cronan, Senior Education Officer Curriculum

Mary-anne Fleming, Senior Education Officer, Literacy and Numeracy

Graeme Akers, Senior Education Officer, Learning and Teaching Data

Kathy Shelton, Senior Education Officer, Student Well Being

John Walsh, Education Officer

Michael Barra. Education Officer

David Gall, Education Officer

Helen Hennessy, Education Officer

John Pedrazzini, Education Officer

CATHOLIC RELIGIOUS INSTITUTE PRINCIPALS

Mandy Anderson, Director Education

Other attendees

EDUCATION COMMITTEE

Bob Knight (Chair), Executive Officer

Mandy Anderson, Director Education

Helen Royan, Director, Learning and Teaching Services, Brisbane Catholic Education

Carmel Nash, Executive Director, Federation of Parents and Friends Associations of Catholic

Schools in Queensland

Ursula Elms, Assistant Executive Director, Learning and Teaching Cairns Catholic Education Services

Gayle Cunningham, Assistant Director, Curriculum

Gerard Hore, Assistant Director, Faith, Education and Curriculum

Ernie Christie, Assistant Director, Religious Education, Townsville Catholic Education

Kevin Eastment, Senior Education Officer, ATSI, Brisbane Catholic Education Office

Dr Kerrie Tuite, Principal, Mt Alvernia College, Nominee representing Catholic Religious

Alison Terrey, Principal, Mt St Michael's College, Nominee representing Catholic Religious Australia

SENIOR SCHOOLING TASKFORCE

Mandy Anderson (Chair), Director Education

Bob Knight, Executive Director Education

Carmel Nash, Executive Director, Federation of Parents and Friends Associations of Catholic Schools in Queensland

Andrea Merrett, Senior Education Officer, Curriculum, Learning and Teaching Services

Gayle Cunningham, Assistant Director Curriculum

Paul Ould, Curriculum Advisor, Townsville Catholic Education

Yve Rutch, Executive Officer, Aboriginal and Torres Strait Islander Education

Peter Keightley, Assistant Curriculum, St Joseph's College, Toowoomba

Terry Neibling, Deputy Principal, Lourdes Hill College

Tony McCulkin, Deputy Principal, St James College

Clancie Neilson, Deputy Principal, St Mary's Catholic College, Cairns

ROCKHAMPTON CATHOLIC EDUCATION OFFICE

Gayle Cunningham, Assistant Director Curriculum, Catholic Education Diocese of Rockhampton

Others by teleconference

Queensland College of Teachers Board Meeting

Dr Joe McCorley OAM (Chair), Nominee of the Minister

John Ryan, Director

Craig Allen, DETE Nominee of the Director-General

Perry Anderson, Guidance Officer EQ

Professor Nola Alloway, Pro-Vice-Chancellor JCU

Melissa Burke, Teacher EQ

Samantha Colbert, Teacher EQ

Aleisha Connellan, QIEU

Sue Forsyth, QPSU

Roger Hunter, ISQ VP

Margaret Leary, QCPCA

Alota Lima, Teacher

Amy Lunney, Deputy Principal, Spinifex State College

Marise McConaghy, Deputy Principal, Brisbane Girls Grammar School

James McGowan AM

Stephanie Munday-Lake, Deputy Principal Hillbrook Anglican School

Lisa Siganto, Federation of Parents and Friends Associations of Catholic Schools and

Queensland Independent Schools Parents Council

Kevin Twomey, Deputy Executive Director, Brisbane Catholic Education Office

Queensland Curriculum and Assessment Authority staff

Chris Rider, CEO

Neil McDonald, former Acting CEO

Jacqui Wilton, Director Curriculum Services Division

Claude Jones, Director Assessment and Reporting Division

John McGuire, Assistant Director, Policy Coordination Branch

Leanne Rolph, Assistant Director, P-12 Implementation

Brian Nott, Acting Deputy Director, Assessment and Reporting Division

Kathryn Tully, Acting Deputy Director, Curriculum Services Division

Graham Smith, Deputy Director, Corporate & Information Services Division

Ian Fyfe, Assistant Director, VET Branch

Natalie Carrigan, Manager, Quality Assurance

Kevin McAlinden, State Review Panel Chair

Terry Gallagher, Senior Education Officer

David Madden, Senior Education Officer

Jo Butterworth, Principal Education Officer

Terry McPherson, Principal Education Officer

Queensland Studies Authority Governing Body Meeting

Leesa Jeffcoat (Chair), Director, Catholic Education Diocese of Rockhampton

Patrea Walton, then CEO

Trevor Schwenke. DETE

David Robertson, Executive Director, ISQ

Professor Robert Lingard, School of Education, University of Queensland

Alan Finch, Pro-Vice-Chancellor (Students and Academic Support), Bond University

Margaret Leary, QCPCA

Tricia Neate, Principal, Elanora State School

Daryl Hanly, Principal, St Joseph's Nudgee College

Gail Young, Teacher, Holland Park State School

Kyle Thompson, Head of Senior School, Brisbane Boys' College

Samantha Pidgeon, Honorary Vice-President, Queensland Teachers' Union

Dr Paul Giles, Assistant Secretary/Treasurer, Independent Education Union of Australia

Deidre Stein, Director, Education and Training, The Bremer Institute of TAFE

David Rogers, Principal, Southport Special School

Alan Waldron, Training Manager, Hutchinson Builders

Queensland Curriculum and Assessment Authority (formerly QSA) State Review Panel Chairs

Peter Antrobus, State Review Panel Chair Mathematics B

David Austin, State Review Panel Chair Physics

Judith Beausang, State Review Panel Chair Accounting

Edna Galvin, State Review Panel Chair English

Meredith Gleadhill, State Review Panel Chair Home Economics

Brad Greene, State Review Panel Chair Business Organisation & Management, Business Management

Anthony Hytch, State Review Panel Chair English Extension

Trevor Jones, State Review Panel Chair Chemistry

Helen Leyden, State Review Panel Chair Music

Joanne MacDonald, State Review Panel Chair Geography

Kevin McAlinden, State Review Panel Chair Modern History

Anthony Muller, State Review Panel Chair Engineering Technology

Dianne Nichols, State Review Panel Chair Earth Science

Bevan Penrose, State Review Panel Chair Mathematics C

Shane Roberts, State Review Panel Chair Health Education

David Shapland, State Review Panel Chair Philosophy & Reason

John Thomas, State Review Panel Chair Study of Religion

Wayne Van Den Bos, State Review Panel Chair Graphics

Debbie Wall, State Review Panel Chair Drama

Queensland Deans of Education Forum

Professor Wendy Patton (Chair), Executive Dean, Faculty of Education QUT

Professor Helen Huntly, Dean, School of Education and the Arts CQU

Associate Professor Deborah Heck, Education USC

Associate Professor Leanne Dalley-Trim, Dean, School of Education JCU

Dr Karen Trimmer, School of Linguistics, Adult and Specialist Education USQ

Marilyn McKay, Operational Support Officer USQ

Patricia Fadian, SCU

Professor Peter Renshaw, Head, School of Education UQ

Dr Robert Herschell, Dean CHC

Dr Warren Midgley, Head of School, Linguistics, Adult and Specialist Education USQ

Louise Myers, Learning Adviser JCU

Queensland Higher Education Forum

Professor Jim Nyland, Associate Vice-Chancellor (Brisbane) ACU

Professor Tim Brailsford, Vice-Chancellor & President, Bond University

Professor Scott Bowman, Vice-Chancellor & President CQU

Professor Ian O'Connor, Vice-Chancellor & President GU

Professor Sandra Harding, Vice-Chancellor & President JCU

Professor Peter Coaldrake, Vice-Chancellor & President QUT

Professor Peter Høj, Vice-Chancellor & President UQ

Professor Jan Thomas, Vice-Chancellor & President USQ

Professor Greg Hill Vice-Chancellor & President USC

Dr Jim Watterston, Director-General

Gabrielle Sinclair, Deputy Director-General

Greg Thurlow, Secretary to Higher Education Forum Tertiary Education and Training

Queensland Secondary Principals' Association Conference

Conference delegates

Queensland Tertiary Admissions Centre Board

Carl Rallings (Chair), Deputy Vice-Chancellor Students & Communities USQ

Dr John Griffiths, CEO

Jenny Roberts, University Secretary CQU

Kathy Grgic, Academic Registrar GU

Julie Woodward, Director Student & Academic Services JCU

Bruce McCallum, Director Student Business Services QUT

Professor Joanne Wright, Deputy Vice-Chancellor Academic UQ

Professor Birgit Lohmann, Deputy Vice-Chancellor USC

Gabrielle Sinclair, Deputy Director-General

Ian McFadden, Qld Tertiary Admissions Forum Chair & Manager Admissions QUT

Sandra Stuckey, Company Secretary QTAC

Queensland Tertiary Admissions Centre Forum

Ian McFadden (Chair), Admissions Manager QUT

Pat Smith, Manager, PR & Information Services, QTAC

Phillip Anthony, Manager, Assessment Services, QTAC

Rod Varnham, Assessment Services Manager, QTAC

Sandra Stuckey, Corporate Services Manager, QTAC

Dianne Keene, Manager, Planning & Data Services, QTAC

Alyce Connell, Admissions Officer USQ

Anne Jackson, Coordinator Tertiary Admissions Centres AMC

Bruce McCallum, Director Student Services QUT

Claron Driscoll, Manager Admissions ACU

Duane Kelaart, Manager Admissions Bond

Faye Crane, Registrar CHC

Fiona Wright, Senior Manager, Student Management Unit SCU

Gauri Lakhia, Admissions & Marketing Coordinator QIBT

Janine Mortimer, Senior Student Relationship Officer, Admissions) USC

Kath Hughes, Manager Admissions & Scholarships and Forum Deputy Chair USC

Kathy Maudsley, Manager Admissions JCU

Kylie Delrayne, Manager Admissions USQ

Margaret Price, Senior Admissions Manager GU

Mark Campbell, Manager Admissions UQ

Mary Forster, Deputy Manager, Admissions GU

Meena Issar, Admissions Manager QIBT

Mel Cross, Senior Admissions Officer UQ

Pat Allen, Director, Student Administration USC

Peter Hillman, A/Senior Program Manager TAFE Qld

Susan Raschle, Manager Student Contact Centre CQU

Queensland University of Technology

Professor Peter Coaldrake, Vice-Chancellor & President

Professor Val Klenowski, Faculty of Education, Learning

Dr Lenore Adie, Senior Lecturer, Faculty of Education

Dr Judy Smeed, Senior Lecturer, Faculty of Education

Professor Ann Farrell, Head, School of Early Childhood

Associate Professor Mary Ryan, Faculty of Education

Associate Professor Catherine Doherty, Faculty of Education

Jeffrey Holmes, Manager, Load Forecasting

Nerida Spina, Research Assistant, Faculty of Education

Donna Gibson, Faculty of Education Manager

Gillian Harrison, Liaison Librarian

Dr Terry Lyons, Associate Professor in Science Education

Adjunct Professor Peter Fensham, Faculty of Education

Dr Donna King, Senior Lecturer, Faculty of Education

Mary Kelly, Equity Director

University of Queensland

Professor Peter Høj, Vice-Chancellor & President

Professor Joanne Wright, Deputy Vice-Chancellor Academic

Maureen Bowen, Academic Registrar

Dr Clare Hourigan, Director Planning

Mark Campbell, Manager Admissions

Professor Peter Adams, Associate Dean, Academic

Margaret Fairman, Office of Prospective Students, & Student Equity

Professor Cindy Shannon, Pro-Vice-Chancellor Indigenous Education

Professor Bob Lingard, Professorial Research Fellow

Dr Matthew Dean, Affiliate Academic, School of Mathematics

Michael McManus, Foundation Professor of Pharmacology

Associate Professor Peter Sutton, Engineering, Architecture & Information Technology

Professor Sarah Roberts-Thomson, Health & Behavioural Sciences

Associate Professor Julie Duck, Humanities & Social Sciences

Associate Professor Geoff Marks, Medicine & Biomedical Sciences

Professor Peter Adams, Associate Dean, Academic, Faculty of Science

Associate Professor Kim Bryceson, Associate Dean, Academic, Faculty of Science

Appendix 3.1

List of Submissions

Key stakeholders

Australian Catholic University Professor Pauline Nugent

Department of Education, Training and Employment Dr Jim Watterston

Griffith University Kathy Grgic

Independent Education Union of Australia Qld

Adele Schmidt
Independent Schools Queensland

David Robertson

Isolated Children's Parents' Association

Natalie Kenny

James Cook University Professor Sally Kift

P&C Qld Peter Levett

Queensland Catholic Education Commission Mandy Anderson

Queensland Secondary Principals' AssociationAndrew PierpointQueensland Studies AuthorityJohn McGuire

Queensland Teachers' UnionKevin BatesQueensland Tertiary Admissions Centre LtdDr John Griffiths

Queensland University of Technology Professor Carol Dickenson

TAFE Queensland Jodi Schmidt

University of Queensland Professor Joanne Wright
University of the Sunshine Coast Professor Birgit Lohmann

Other Organisations

Australian Council for Educational Leaders Norm Hunter, OAM

Queensland

Brisbane Catholic Education Office Pam Betts
GSM Group of Secondary Principals Mark Farwell
Hubbard's School Helen Stevens

LNP Education, Training and Employment Policy Dr Barry J Arnison Committee

P&C of Qld Academy for Science Mathematics and David Cunningham

Tempe Harvey

lech.

The Australian Family Association (Qld)

Individual Submissions

Alan Phillips Macgregor (two separate submissions)

Alison Pound Jeff Bones
Allan Carman Jenny Spring
Anne McInerney Jill Lawson
Anonymous Jim Scott

Anonymous Joanne Weymouth
Barry Flowers Karen Sterling
Bob and Myrna Healy Karyn Negus
Brad Ahern Leon Voesenek
Brian Joye Li Zhuang
Bruce Nickel Matt Dean

Cecily MacAlpine Maureen Anderson Chris Blundell Paul Fitzgerald Chris Da Silva Peter Jordan Christine Ahern Peter Ridd Daniel Hart Raylene Dore David Best Robert de Weger David Fisher Robert Nelder David Munn Rowan Shann

Elizabeth Saunders Sam Dhinakaran Jayaseelan

Elke Benz Stephen Crapnell

Geoffrey Dean Susan Kirk Gerry Mullane Susan McGuire Graham Goodhew Sylvia Huxham Greg Cudmore Tim Croxford Greg Strahorn Tom Bourke Heather and Paul Symoniw Tony Sanchez Jade Winter Vincent J Creagh Jan Finch William Hall Jeevan Soorya Dhas William P Fox Jeff Major Paul Ould

Name supplied but wished to remain anonymous Name supplied but wished to remain anonymous Name supplied but wished to remain anonymous Name supplied but wished to remain anonymous Name supplied but wished to remain anonymous

Appendix 3.2

Collation of responses from key stakeholder organisations to eight focus questions

The reviewers sought short-form responses to eight questions based on their deliberations to 27 February 2014. The questions had three purposes:

- To summarise ACER's interim position on a subset of the terms of reference
- To form the basis of discussion with key stakeholder organisations and other interested parties
- To provide a structure that might be useful for written submissions to the review.

What follows is the eight questions followed by a collation of responses to those questions from key stakeholder organisations.

Focus questions

1 School-based assessment

We have suggested that school-based assessment be preserved. What is your response to this suggestion? What value do you place on assessment instruments devised and marked by teachers and, whether or not you value teacher assessments, what specifically would you do to enhance the validity and reliability of teacher-devised assessments?

2 External assessment

We have suggested that an externally set and marked assessment be used in some or all Authority subjects and that this assessment contribute up to 50% of a student's result in a subject. What is your response to this suggestion? What do you see as the advantages and disadvantages of including an External Assessment?

3 Moderation

We have suggested that current moderation processes be strengthened. What do you see as the advantages and strengths of the consensus model of moderation that is currently operating? Do you agree that current moderation processes need to be strengthened and, if so, what specifically would you change?

4 Finer scale for school assessments

We have suggested that school assessments be reported on a 15-point scale based on five described and illustrated achievement levels (1 to 5, with 1 being the highest) within each of which teachers make finer-grained distinctions (+, 0, -). The process would recognise that teachers may arrive at a student's overall result by adding marks on different assessments and interpreting the resulting scores qualitatively by reference to the described achievement levels. What is your response to this suggestion? Do you believe teachers will be able to use their assessment evidence to make meaningful and comparable finer-grained distinctions of this kind?

5 Cross-curriculum capabilities testing

We have suggested that a small number of capabilities essential to study and work beyond school, which we call key cross-curriculum capabilities (KCCC), be tested and that KCCC test results be reported alongside subject results. What is your response to this suggestion? What do you see as the role, if any, of these test results in university entrance decisions?

6 Separation of responsibilities at the secondary-tertiary interface

We have suggested that the responsibilities of QCAA (formerly QSA) and the universities be separated so that QCAA's role is the certification of student achievement upon

completion of Year 12 and the universities' role is to decide how this and other evidence is used in selection decisions (e.g., constructing rank orders of applicants, specifying pre-requisite subjects, giving greater weight to results in certain subjects). What is your response to this suggestion? What do you see as the advantages and disadvantages of a separation of responsibilities?

7 Scaling and the construction of rank orders

We have suggested that it is the responsibility of universities to decide what evidence they will use to select students for entry into competitive courses and how that evidence will be used to rank applicants. We have also suggested that the construction of a single rank order (e.g., OP or ATAR) of all applicants to all courses in all universities no longer seems appropriate. While it would be a decision of the universities whether or not they construct such a rank order, the responsibility for doing so would rest with the university sector. A consequence is that a scaling test (the QCS Test), schools' provision of SAIs, and QCAA scaling processes would no longer apply. What is your response to this suggestion? What are your predictions of effects on schools, teachers, universities and QTAC?

8 Governance

These suggestions have implications for the work of the QCAA. Changes to QCAA's legislated functions would be necessary. A number of responsibilities would be removed (e.g., the calculation of the OP and FPs) and a number of responsibilities would be added (e.g., the development and marking of external assessments). This may have implications for capacity building within that Authority. What do you see as the implications of our suggestions for the QCAA?

These suggestions also have implications for the work of QTAC. As the agency of the universities, QTAC would be responsible for implementing universities' student selection policies. QTAC would receive Subject Results and KCCC results from QCAA and would use these (and other evidence as agreed) to produce rankings of applicants to competitive university courses. What do you see as the implications of our suggestions for QTAC?

Responses to focus questions

Queensland Catholic Education Commission (QCEC)

1 School-based assessment

- Strong support for preservation of school-based assessment
- Enables flexibility to cater for diversity of learning needs, to assess students across a broad range of conditions and provide better quality feedback to students
- Teacher-devised assessment can be contextually based, engages students with their local setting, provides flexibility and can assess practical skills unable to be demonstrated appropriately through external assessment
- Accompanying recognition that support is required to do school-based assessment well
- Need further professional learning and support in a number of areas
- Review provides opportunity to enhance validity, reliability and credibility of school based assessment, improve consistency in assessment load across schools and subjects and increase comparability across schools of student standards of achievement

2 External assessment

- Some form of external assessment is supported in-principle, but more detail is required
- More layers of assessment are not needed
- Crucial question of how internal and external results are combined is not yet addressed
- Recognise advantages of external assessment
- Increased credibility and consistency
- Transparency: if results were based purely on marks rather than scaling
- May enable move away from current QCS Test and avoid a third 'tier' of assessment
- Identified disadvantages include:
- Impact on teaching and learning (teaching to the test)
- Unable to adequately capture various skills or to be tailored for some groups, e.g. Indigenous students
- Do not allow feedback that informs teaching practices
- Potential privileging of certain subjects
- Costs and resourcing
- Ensure costs are not at the expense of building teacher capacity
- Essential for QCAA to be properly resourced if it is responsible for external assessment

3 Moderation

- Strong overall support for strengthening current moderation process (some Catholic schooling authorities seek for the model to be re-designed or changes)
- Consistent recognition for professional development opportunities, capacity building, collaboration, sharing and professional dialogue provided by the system
- However, key themes are:
- Lack of resourcing
- Absence of professional learning opportunities to ensure teachers understand the model and apply the theory consistently
- Suggested simple enhancements:
 - Increase very short time frames for panel work
- Adequate pre-reading time
- Allow panel chairs to provide more meaningful comment
- More sample folios
- Remove student and school identifiers from samples
- Adequate panel remuneration and resourcing
- Suggestions for radical change:
 - Panel composition and training (key issue)
 - Reinstate 'subject area specialists'
- Credential panel members
- Vary panel composition and chairing
- Greater cross-state panel interaction and consistency

4 Finer scale for school assessments

- A 15-point scale is generally supported
- A well-functioning, strengthened moderation system could support consistency provided there is a clear understanding of criteria and standards and how these articulate with 15-point scale
- Key issue is not with finer-grained 15-point scale, per se, but with what it would be used for and how reliability and validity of the teacher-allocated standards would be ensured if high-stakes use is proposed
- Seeks greater clarity on suggestion of adding marks on different assessments and interpreting results qualitatively by reference to achievement levels

5 Cross-curriculum capabilities testing

- · No support for this
- Adds an additional layer of assessment without clear purpose or use

6 Separation of responsibilities at the secondary-tertiary interface

- Separation strongly supported so long as there is a fair and transparent process for tertiary entrance
- Agree QCAA should not be responsible for ranking students for university entrance, resources better spent supporting assessment, moderation, certification
- Strong support of tertiary education providers for ATAR is noted. Suggest universities be provided with results data and capacity for central calculation of ATARs

7 Scaling and the construction of rank orders

- Equity/consistency requires at least some elements to be undertaken by central agency ensures no students are disadvantaged (particularly in non-metropolitan areas)
- No support for universities to set their own separate entrance exams
- Reasonable level of endorsement for proposal that scaling processes (QCS Test, SAIs) no longer apply for purposes of creating a single rank order
- Avoids burden of a 'seventh Year 12 subject'; some perception that SAIs are open to manipulation
- No clarification as to what may replace these processes

8 Governance

- Priority of QCAA should be supporting schools in assessment and certification
- Appropriate resourcing is required
- Need to avoid cost-shifting between QCAA and QTAC
- Cautiously supportive of removing responsibility for calculation of OPs and FPs from QCAA, and adding responsibility for developing and marking some form of external assessment

• Premature to identify implications for QTAC without sufficient detail of what results might be provided to them, the reliability and validity of those results and how they might be used

Independent Schools Queensland (ISQ)

1 School-based assessment

- Value in retaining some school-based assessment because it allows for teachers to vary content assessed to suit current events, local conditions and interests of students
- Also provides teachers opportunity to develop quality (valid, reliable, discriminating) assessment tasks that are coherent and aligned with T&L that has occurring in the classroom
- However, varying levels of expertise and experience of teachers in developing assessment tasks can affect validity and reliability of tasks
- If school-based assessment is to remain the main type of assessment, with some subjects possibly having no component of external assessment, it is imperative more support and training be provided to teachers in generating quality assessment tasks that assess syllabus standards

2 External assessment

- Feedback from sector indicates general acceptance, subject to technical details
- Quality external assessment could well inform development of school assessments
- Any external assessment would need to assess full range of general objectives in the syllabus and not simply those easily assessable by external assessment
- PD would be needed to support teachers to effectively prep students for external assessments
- Any external assessments should be informed by improved moderation processes in order to align both types of assessments where appropriate

3 Moderation

- Current moderation processes at breaking points in terms of rigour and consistency
- Provides a valuable PD opportunity for teachers but is increasingly hard to populate panels with expert teachers particularly in regional areas
- Significant resources to support the process come from schools. There is little support for schools to release teachers to work on panels
- Inconsistencies in panels have undermined teacher confidence in the process
- If current moderation processes to remain, need greater remuneration and use of smaller, more expert panels that review submissions across a greater number of schools over a period of a few days
- These smaller expert panels could turn over a third of the members every three years to avoid becoming insular and self-referential

4 Finer scale for school assessments

- Teachers are able to make comparable and meaningful distinctions on a 15-point scale
- Unclear what 'adding marks' means in a standards based system

5 Cross-curriculum capabilities testing

- If similar format to QCS Test, then no desire for cross-curriculum testing
- General capabilities should be embedded in subject areas and assessed implicitly
- Removing QCS type test would free up time and funds for subject and other learning

6 Separation of responsibilities at the secondary-tertiary interface

- Some concern about this, though hard to comment without further details
- Advantages mainly lie in freeing up (for use in T&L and assessment) resources used by schools to generate data needed for OP system
- Particularly concerned regarding impact on curriculum offerings and student subject choices if TE procedures became solely a matter for unis

7 Scaling and the construction of rank orders

- Some support for removal from schools of role of ranking students via assignment of SAIs, but concern about unintended consequences
- Subjects with preferential weightings for university selection means some subjects may be privileged over others, backwash effect on school subject selection and narrowing of curriculum
- Currently a range of varied pathways exist for universities to select students, including early offers and principal recommendations

8 Governance

- Key focus of the Authority should be ensuring the system's continued high quality and consistency while implementing the agreed senior assessment system
- QCAA should lead in developing, implementing and maintaining any systems and procedures decided by Government
- QCAA needs to be well-resourced, focused and highly-respected in its future roles, including research, in relation to senior assessment and TE procedures

Department of Education, Training and Employment (DETE)

1 School-based assessment

- Acknowledges that the current externally moderated school-based assessment system has merit
- The review of this system is considered timely and necessary to maintain integrity and validity

2 External assessment

- Supports consideration of two independent assessments of student achievement in a subject a school-based component and an external component
- · Issues for consideration:
- How external assessment will provide opportunities to demonstrate achievement in all subjects, particularly those with a practical dimension
- Needs to allow for a range of assessment techniques including but not limited to supervised examinations
- Need to articulate if it is to be used as a mechanism to validate school assessment; degree of contribution; if used for scaling - how will it contribute?

3 Moderation

- Supports a review of current review panel system
- Consider the need to attract expert, experienced teachers as panel members
- Review current panel structure, need to align with QSA districts?
- Review syllabuses to ensure they are emphasising centralised standards and syllabus mandates

4 Finer scale for school assessments

- Will 15 point scale:
- replace 5-point exit standards?
- be written as a set of standards descriptors?
- be used to make individual assessment grade decisions; level of achievement decisions; or both?
- Further clarity required as to whether a standards-based system of assessment would continue – DETE supports a standards-based system for making judgements of student achievement

5 Cross-curriculum capabilities testing

- Does not support proposed assessment of cross-curriculum capabilities
- Considered this assessment does not have a clear purpose (e.g. would not provide group results for scaling)

6 Separation of responsibilities at the secondary-tertiary interface

• It is acknowledged that universities should be free to use a range of evidence to select students for entry into courses and that in Queensland many universities do use evidence other than the OP and the FPs

7 Scaling and the construction of rank orders

- Supports an overall score to be used by Universities and ensuring consistency across Australia for this score (i.e., ATAR)
- · Calculation of this score to include both school assessment and external assessment
- Universities to ensure there is transparency in the evidence that is used to make course entry decisions
- · Need to consider:
 - Number of subjects and semesters a student must complete to be eligible for tertiary entrance
 - Combination of Authority and Authority-registered subjects that may be studied to be eligible
- Need for a common scaling mechanism is there a need, particularly if an external assessment could meet this function?

8 Governance

• It is acknowledged that universities should be free to use a range of evidence to select students for entry into courses and that in Queensland many universities do use evidence other than the OP and the FPs

Queensland Studies Authority (QSA)

1 School-based assessment

- · Preserve school-based assessment
- Broadens the ways students can demonstrate learning
- Allows teachers to align what is taught, how it is taught, assessed and reported
- Refers to benefits of continuous assessment, taking account of diverse learning needs, assessment of deep knowledge and higher order cognitive processes, use of a variety of assessment technique and conditions, assessment that is adequate, comprehensive and effective
- In future, strengthen school-based assessment by measures such as:
- Improving the explanation of assessment practice in syllabus documents
- Researching best practice in writing of standards
- Using a variety of professional development strategies
- A comprehensive communication strategy for schools and the broader community

2 External assessment

- This is the key proposal arising from reviewers' deliberations, so far
- Could add rigour and help restore public and stakeholder confidence in student outcomes
- Must only be used alongside internal assessment and combined to form a single score
- Purpose must be clear
 - must not be privileged over internal components of assessment
- should be used for adding valuable but different evidence of achievement
- should complement internal assessment
- should be applied as per the 'rhythm' or scope and sequence of each subject
- Strongly oppose using external assessment to scale internal assessment
- Risk that subjects with 50% external component are seen as more rigorous than those with <50%
- Need to determine how results will be used, e.g., could be used as a prescribed requirement to get a VHA, must score A on centrally-set exam
- Highlight possible practical impacts, e.g. conduct of concurrent assessments may limit student's subject choice; impact school's ability to organise the sequence of student learning; holding external assessment earlier in the year may enable time for feedback on results
- Highlights cost impacts must be proportionate to benefits

3 Moderation

- Outlines key features of consensus moderation
- System should be reconsidered to see whether core activities need to be conducted differently, at different times, or dispensed with altogether and replaced with new processes
- Could strengthen assessment capability by panellist accreditation (recognised by schooling sectors, QCT), early conduct of professional development and workshops, further on-demand training
- QSA/QCAA needs greater capacity to intervene and assist schools to develop high quality assessment programs
- QSA/QCAA, not the school, should identify from school data the student portfolios to be submitted for review at Verification stage (would eliminate need for post-hoc random sampling)
- Panels could review folios from different geographical locations
- Post-hoc process to confirm comparability of judgements

4 Finer scale for school assessments

- Many schools effectively use a 15-point scale (A+, A, A- and so on) as well as the 50 point scale of the R6 to inform SAIs
- Supports assessment scores being interpreted qualitatively by reference to described achievement levels
- Simply increasing the scale to 15 points does not necessarily increase reliability of assessment information need to implement improvements to syllabus and moderation

 Need clarification as to how the 15-point scale would be applied (would require reconceptualization of current process, with on-balance judgements across three syllabus dimensions)

5 Cross-curriculum capabilities testing

- Existing system allows for triangulation using three sources of student date (SAI, Levels of Achievement and QCS Test) to identify anomalies and support adjustments
- If an additional test (in place of QCS Test) were included it should:
- not be used for scaling
- be non-compulsory
- be an individual not group result
- be treated as an additional subject that contributes to a tertiary entrance rank and QCE requirements
- Need to be sure data gathered would be worth expense
- Notes potential additional workload for students

6 Separation of responsibilities at the secondary-tertiary interface

- Acknowledges that present process for calculating tertiary entrance ranks is under stress
- An independent authority should remain responsible for development of any rank
- Existing separation offers best conditions for appropriate ranking model to be created
- Minimises risk that interests of only some end-users will be served (e.g., high-demand courses)
- Avoids development of many customised methods for discriminating between applicants
- Reduces potential curriculum backwash, e.g. privileging achievements in discrete set of subjects

7 Scaling and the construction of rank orders

- Agree, in principle, that a profile of results is a more authentic representation of student achievement, if used to its potential, than a single rank, however, acknowledge that some form of ranking appears inevitable
- Model should be independent of subject choice (stop curriculum backwash) and not based on administrative convenience
- OP is under pressure because in Qld we have multiple ranks or alternative pathways for TE. In most states students usually get an ATAR for TE
- Revised system needs to be easily understood and fair, and facilitate the transition of all students seeking a range of post school pathways
- Replace current system where results in only one category of learning (i.e., Authority subjects) are eligible with a system that is more inclusive. All learning certified on QCE could be used but weighted in various ways
- Qld is only state where VET does not contribute directly to the primary TE rank
- More inclusive rank would make full use of rich source of info collected. This rank could be on a scale equivalent to ATAR
- Alternatively, could have multiple ranks, e.g. humanities rank, maths-science rank or VET rank, academic rank

8 Governance

- Clear communication strategy needed that includes clarifying the roles and responsibilities of QSA/QCAA
- Despite removing QCS Test and calculation of ranks, external assessments and strengthening moderation would more than offset any cost savings
- QSA/QCAA needs to be able to conduct research to develop the system
- QTAC would need to grow in size and expertise to take on role of developing rankings
- QTAC would become a focus for disputes with parents or students could backwash (real
 or perceived) on school curriculum

Queensland Tertiary Admissions Centre (QTAC)

1 School-based assessment

 Acknowledges that teachers are well placed to provide valuable assessment information on students' ongoing performance

2 External assessment

- May provide an independent verification of knowledge and performance
- Will assist in providing finer discrimination regarding student achievement
- May be hard to get assessment info in all areas, e.g., languages and performing arts

- However, proposal for up to 50% of result to be externally assessed would benefit from more discussion as to what proper weighting should be
- Any inclusion of external data in most if not all subject areas needs to avoid undue effects on curriculum i.e., external assessment data would need to be representative of the curriculum and appropriately weighted and scaled
- Concerns with possible imposition on teachers' time and timing of internal assessment, students may lose large amounts of instruction time, may be required to finish school-assessment early to make way for external exam preparation

3 Moderation

• Supports strengthening of these processes

4 Finer scale for school assessments

- Supports will provide much needed info to students and parents about individual performance
- Will ideally avoid cases wheregarding students with HA grades in all their Authority subjects receive OPs between 2 and 16

5 Cross-curriculum capabilities testing

- While KCCC testing would provide additional info for selection, since it would only be available for Queensland students, it wouldn't have comparability or currency across the country, and would be of no benefit in consideration of half QTAC's applicants including those from outside Queensland
- Question how KCCC tests would be managed within an already crowded assessment schedule

6 Separation of responsibilities at the secondary-tertiary interface

- TE policy and procedures are responsibility of universities. In principle support for separation of responsibilities as not all students want to immediately go to tertiary study
- However, in era of lifelong learning, all students need to be able to have their achievements considered to allow for them going on to tertiary study later
- Institutions should be responsible for how subject results are used when it comes to admission to their courses

7 Scaling and the construction of rank orders

- Support a single order rank for tertiary admission, to accommodate cases where supply of places is less than demand. Multiple rank orders (particularly those giving greater weight to some subjects) are problematic
- Support for an ATAR as it would facilitate national admissions
- Components of ATAR should reflect a broad range of assessment completed by school leavers with results providing meaningful feedback regarding relative achievement, this would benefit the broader Year 12 cohort
- There is an opportunity to ensure broader skill sets can be ascertained for tertiary study
- Need to avoid situation where schools and students select pathways for wrong reasons
- School input regarding student achievement must have enough breadth/depth to deal with between subject and school relative performance, also need to ensure a level of validity and reliability that is supported by the ITI Technical Committee
- Process needs to have support of public and school community
- Significant further work needed to determine how ATAR would be calculated, e.g., need to be able to explain to an unsuccessful applicant why they did not get offered a place
- Organisation calculating ATARs needs enough time to undertake sufficient analysis, corrections, anomaly detection, calculations and reporting

8 Governance

- Supports capacity building for QSA/QCAA to implement necessary processes for an improved system
- QTAC would continue to be responsible for implementing universities student selection policies – it would receive Subject Results (on a finer scale) and KCCC results from QSA/ QCAA, and would use these (and other evidence as agreed) to produce rankings of applicants to competitive university courses
- QTAC recommends that any changes to current system of certification and tertiary entry be supported by an expert committee made up of key stakeholders
- QTAC would be pleased to be part of any Expert Group to assist implementation of review outcomes

Queensland Teachers' Union of Employees (QTU)

1 School-based assessment

- Strong support for externally moderated school-based assessment model as main mechanism for determining Qld student educational achievement in senior subjects
- Highly regarded for its quality assurance of educational standards and for confirming role
 of teachers as highly skilled professionals
- Support assessment devised by teachers as part of the learning process
- QCAA must continue its important role in supporting teachers, e.g., by providing sample assessment items to show how assessment types are constructed and standards applied

2 External assessment

- Opposed to assessment models which are norm-referenced, external to the school, standardised or national
- Endorses models which are criteria-based, standards-referenced, school-based, continuous and developmental, dependent on a range of assessment techniques and relate to students as individuals
- Opposed to high-stakes external assessments while acknowledging support for external exams making a 50% contribution to a student's result
- External exams are a one-size fits all model; do not allow for targeted differentiation
- Prep for multiple external assessments will have major impact on teaching time
- Cost of introducing new system will be significant
- Significant costs for QCAA; will need to engage experts to develop subject specific external exams
- Schools and QCAA would need funding to allow teachers and admin to be offline to learn any new system, modify planning and work programs, and undertake tailored PD
- May result in publication of 'league tables' for subjects and schools increased pressure on students, teachers, school leaders, parents and school community
- Must be restricted to Year 11-12 (not Year 10)
- External assessments should not be used to scale school based assessments

3 Moderation

- Support use of moderation practices across all formal years of learning as best practice
- Should occur at individual and cluster schools to support teachers to develop consistency of judgement of assessment
- DETE should provide schools with appropriate funds to allow moderation to occur in school time
- Further funding for QCAA needed to allow further training and development of teachers involved in moderation
- Also support for increased remuneration for panellists and increased and better resourced time release to allow panellists to adequately perform their role
- A strong and collaborative model for moderating student work between schools is supported

4 Finer scale for school assessments

- No opposition to the expansion of existing 5-point scale (acknowledging that Year 12's are put on a 200-point scale for large groups, and a 50-point scale for small groups – albeit for a different purpose)
- 15-point scale is too fine requiring higher level of accuracy in teacher judgements
- Any expansion would require all points to be sufficiently referenced and described in terms of standards of achievement
- A 15 point scale is a high, maybe unattainable, expectation of syllabus developers
- Should be confined to senior years of schooling
- Currently imprecision exists at the four boundary points of the 5-point scale increasing the number of points will increase the number of judgement boundaries and increase likelihood of inaccuracy in decision-making

5 Cross-curriculum capabilities testing

- Opposed to introduction of KCCCs testing as an additional item of external assessment
- · No clear purpose for it
- Concern that KCCC tests would be used for scaling purposes similar to interstate models, and would be used to resolve disagreements between school-based and external assessment, even though not the original intent of the KCCC testing

6 Separation of responsibilities at the secondary-tertiary interface

Concerns about making universities responsible for selection, it may impact on diversity
of current Qld senior curriculum; result in a lack of equity for Qld young people leaving

school and wanting to study at uni; and result in a lack of coordination in selection mechanisms

7 Scaling and the construction of rank orders

- Not opposed to exploring alternative mechanisms for determining tertiary entrance offers
- Any new system must include the following elements:
 - Equitable treatment of students both across schooling sectors and throughout Qld
- Tertiary offers continue to be offered through a central agency, e.g., QTAC
- Tertiary selection procedures have no significant deleterious effect on the diversity of the Qld senior school curriculum
- No additional workload for schools (and teachers) without satisfactory resourcing
- Consideration is given of effects on students of any new tertiary selection process (particularly workload and mental health considerations)
- Capacity exists for recognition of student achievement in vocational education courses

8 Governance

Concerns about making universities responsible for selection – it may impact on diversity
of current Qld senior curriculum; result in a lack of equity for Qld young people leaving
school and wanting to study at university; and result in a lack of coordination in selection
mechanisms

Independent Education Union of Australia (IEUA)

1 School-based assessment

- Supports current system of school based assessment and its underlying premise that a key determinant of quality assessment is support and engagement of teachers
- Involvement of classroom teachers in design and implementation of assessment tasks ensures quality T&L targeted, locally responsive assessment tasks and techniques
- Professionalism of teachers ensures accuracy; system allows for contextual flexibility of programs; system better enables students to demonstrate their skills and understanding
- Recent survey shows majority of IEUA-QNT teachers support current system
- Any dissatisfaction linked to two key factors: lack of consistency in understanding and application of processes; and a sense that teachers not given enough preparation and correction time
- QSA/QCAA has a significant role to play in providing strong support and training to address these issues

2 External assessment

- Opposed to use of external exams for scaling of school-based results
- Validity and reliability of school-based assessment is already high; QSA has a long history
 of working to ensure further improvement
- Fear that although not intended for the purpose, once in place, external exams could easily be used for scaling purposes
- Introduction of external exams would provide an opportunity for universities to gain control over school curriculum undesirable
- Results may be published in league-table formats and collated for each school, increasing
 pressure on students, parents, teachers and school leaders
- Fails to recognise only 39% of Qld graduates proceed directly to university study senior secondary schooling is about more than university preparation, reflecting increasing diversity of students within the senior secondary cohort and consequent diversification of post-secondary study and work pathways

3 Moderation

- Teacher-led moderation is best practice survey of IEUA-QNT members shows -70% support of practising teachers
- It can be improved, however; QSA/QCAA-led training and development programs should form an important part of any reform process
- Teachers need to be provided with adequate time and remuneration

4 Finer scale for school assessments

- Moving to a 15-point scale is questionable psychological studies that show maximum number of categories individuals are capable of recognising in practice is 5-7
- Not enough justification is given for the move
- Current system allows a further 10 levels of discrimination between bands via SAIs
- A+ to E- scale is already a 15-point scale

- Current processes involved in translating A-E grades to exit levels of achievement and SAIs are already creating extra work for teachers therefore it is questionable whether more work should be made for teachers in changing to a 15-point scale
- Any argument that the need for transformation of A+ to E- grades is necessary for statistical purposes is untenable. The data remains categorical, regardless of how it is coded. ACER has argued that subject specific results do not require transformation and can stand on their own – therefore, transformation of grade data should be the domain of QTAC, not teachers in schools

5 Cross-curriculum capabilities testing

- No in principle objection to replacement of the current four QCS tests with three new exams, nor to test results no longer being used to scale subject-specific results because employers and tertiary institutions have a genuine interest in obtaining info about generic skills of graduates
- Survey showed members are frustrated with lack of time for preparation of work programs and assessment so, primary concern is that intro of KCCCs will require additional teaching time
- Also, regardless of intention, test results might end up being used for scaling and to resolve disagreement between school-based and external assessment, as per interstate models
- Some question as to suitability of online platforms for delivery and marking while online testing can be administered more efficiently and securely than paper-based tests, online marking may not be appropriate for anything but simple multiple choice and short answer questions
- If aim of KCCCs is to test students' general capabilities, then some element of more complex questioning and extended writing tasks is a likely requirement
- Loss of opportunity to participate in marking also removes valuable PD for practising teachers

6 Separation of responsibilities at the secondary-tertiary interface

• Support for any mechanism that streamlines the workload of teachers – as such, no opposition to allowing universities to be responsible for selection to their programs

7 Scaling and the construction of rank orders

- Steps must be taken to ensure equitable treatment of students from each of the schooling sectors, all regions, and different academic and vocational streams
- As such, TE offers should continue to be administered by central agency like QTAC
- Agree that students receive subject-specific results; agree that translation of these results into rank order or other university-entrance statistics, best performed by universities or QTAC
- Universities are already generating their own entrance assessments from school results (e.g., through allocation of bonus ranking points for students undertaking specific subject areas)

8 Governance

- QSA/QCAA has a significant role to play in providing strong support and training to address issues with school-based assessment
- Needs to be clear and unambiguous articulation of processes and timelines for investigations and discrepancies, and decisions clear and equitable guidelines
- If the Authority is to undertake discrepancy analyses, it needs adequate funding and additional resources
- Any expansion of the voluntary involvement of teachers in conducting 'discrepancy analysis' (detecting significant disagreement between school-based and external assessment), should be adequately funded and resourced
- While alignment of subject-specific results with entry requirements for particular courses is likely to reduce workload of teachers, the determination of course content, delivery and assessment in the senior school should remain under the control of practising teachers and QSA/QCAA

Queensland Council of Parents and Citizens Associations (P&C QLD)

1 School-based assessment

- Fully support preservation of school based assessment as a unique and effective system external processes are limited in their extent
- However, tends to over-assess students placing them and their teachers under great stress

- Teachers can place students in rank order based on their in-class performance testing should only be used for greater precision in this
- Too many lengthy assignments assignments should be short since they are best used to assess students' ability to reason
- Validity and reliability depends on professionalism, impartiality and skills of both teachers and HODs (and HOCs, in large schools), and supervising ARDs, who play a significant role in in-school moderation these qualities need to be reinforced within the system

2 External assessment

- Use of it alone would not assess the capabilities of students as well as the current model of continuous school-based assessment
- Encourages 'teach-to-the-test' pedagogy, which is undesirable (e.g., NAPLAN)
- No obvious advantage in an additional component to the assessment process a simpler process means a more transparent and easily understood process
- Question why it is not possible for external tasks that would be set by QSA/QCAA to be set within school assessment parameters

3 Moderation

- Support for strengthening current moderation process as part of support for keeping senior assessment process simple
- Current processes need to be strengthened through a continuous improvement agenda
- Current system allows for professional development by peer review this should continue
- Resourcing for this needs urgent attention

4 Finer scale for school assessments

- Can be used effectively to further distinguish attainment so long as an effective moderation process is in place to ensure validity and reliability
- Teachers, historically, are adept at fine scale marking of student assessment, e.g. on a scale of 1-100

5 Cross-curriculum capabilities testing

- Against this another complicating test, placing more stress on teachers and students and limiting delivery of effective classroom teaching
- KCCC tests could be delivered within the assessment regime of a school
- Should not be used as a replacement for current Queensland Core Skills Test

6 Separation of responsibilities at the secondary-tertiary interface

• In principle support – however, decisions in this regard should be based on consultation between Government, QSA/QCAA and universities

7 Scaling and the construction of rank orders

- Process should be simplified, while retaining complexity needed to discriminate
- Current university access model is confusing for all outside (and sometimes, within) the system
- Change is desirable since current OP system is open to manipulation and, inter alia, used as a marketing tool and to create league tables that inappropriately drive public perception

8 Governance

• With reform comes changes to governance – this should be negotiated between the relevant bodies, the Government, QSA/QCAA and QTAC

Isolated Children's Parents' Association Qld Inc (ICPAQ)

1 School-based assessment

- Any processes must not disadvantage rural, remote or geographically isolated students, irrespective of their mode of schooling or geographic location
- Many parents and students represented by ICPA have very little understanding of current senior assessment methods or TE processes
- Need to provide quality information and support to rural and remote families

2 External assessment

• As per comment on school-based assessment

3 Moderation

• As per comment on school-based assessment

4 Finer scale for school assessments

· As per comment on school-based assessment

5 Cross-curriculum capabilities testing

• As per comment on school-based assessment

6 Separation of responsibilities at the secondary-tertiary interface

As per comment on school-based assessment

7 Scaling and the construction of rank orders

• As per comment on school-based assessment

8 Governance

As per comment on school-based assessment

Queensland Secondary Principals' Association (QSPA)

1 School-based assessment

- School-based assessment has led to a strong professional culture
- Quality of teacher assessment is varied. However, quality is effective where teachers are experienced or have access to external support
- The panel process has strongly supported school-based assessment
- If school assessment was submitted to panel a year prior to its implementation, validity and reliability would improve
- Need to increase number and availability of teachers seconded to QSA/QCAA, as per past practice
- Quality of panellists has diminished over time need time and remuneration to encourage the best teachers to be involved
- To boost consistency, panels should not be restricted to geographic areas

2 External assessment

- Hard to comment without more details
- Oppose HSC-style model where external component is used to scale school results
- Hard to see value if it is to assess only one aspect or limited aspects or parts of a course
- Reporting of the two (School based and External) types of assessment is problematic. If reported separately, it is highly likely external assessment will be valued more highly due to perceptions of reliability and validity
- Concern that a school's entire focus will move to preparation for external assessment
- Workload and stress on students and staff would need to be carefully considered

3 Moderation

- Panellists' skills need strengthening in order for current system to operate as intended
- Not enough time spent on reviewing or reaching panel consensus panels are rarely able to make decisions as a whole, usually it is one or two panellists
- Perceived poor panel practices are well documented by QSA
- Panel decisions need to be supported via enforceable outcomes, not just advice
- Appeal process should be reconsidered

4 Finer scale for school assessments

- Teachers already make finer-grained decisions when producing SAIs and when placing students on the 50 rungs of an R6
- Likely to be problems with moderation of grades at this level of precision
- QSPA has significant reservations about the level of comparability of a 15-point scale across schools without some means of scaling
- Using marks is not problematic alone. The validity of marks as precise measures that are comparable across schools is problematic

5 Cross-curriculum capabilities testing

- Cannot see value in adding KCCCs to the assessment regime
- Major concern is that KCCCs will greatly increase stress on students and schools
- Capabilities need to be contextualised and embedded in subject assessments
- A one-off capability test, if required for university entrance, should be administered by the tertiary institutions

6 Separation of responsibilities at the secondary-tertiary interface

- Strong support for this notion
- However, would need to be some checks on universities to ensure:
- Changes to selection processes are made with sufficient time for schools to adjust and provide advice to students
- Assessment of backwash on schools through privileging of subjects and narrowing of curriculum

7 Scaling and the construction of rank orders

- Role of schooling is to teach and develop the whole individual
- Universities and QSA/QCAA, not schools, should be responsible for ranking for entry to tertiary courses; rating students relative to criteria should be the work of schools
- Separation would have a very positive effect on work of teachers in their relationship with students – teachers would be able to solely focus on having each student achieve their very best without focusing on creating rank orders

8 Governance

 Strong support for appropriate resourcing of each organisation in adjusting their functions and staffing to carry out new roles

University of Queensland (UQ)

1 School-based assessment

No comment

2 External assessment

No comment

3 Moderation

- Moderation of subject results that occurs prior to scaling needs to be transparent, equitable and free from bias
- Members of panels must have requisite skills and training to ensure moderation processes are as robust and equitable as possible and the selection of panel members needs to be representative of the diversity of the secondary school sector
- Needs strengthening at all stages of the moderation process, including approval of a school's assessment program for all subjects

4 Finer scale for school assessments

- Whatever range is chosen, it must be on a wide enough scale to allow for calculation of an ATAR
- In the VCE, results are provided on a scale of 1-50. In NSW, 1-100
- Suggest that specialist statistical opinion be obtained as to what scale is optimal for ATAR calculation

5 Cross-curriculum capabilities testing

No comment

6 Separation of responsibilities at the secondary-tertiary interface

- This approach used successfully elsewhere in Australia and may work well in Qld too
- Advantage is that universities would have more control over calculation and use of rank orders than is currently the case
- Even though ATARs are calculated for Qld school leavers, UQ can only access that data for admissions in selected cases with pre-arranged permission from QSA
- Sensible for this to be undertaken by QTAC with a common agreed approach to the calculation of an ATAR
- Would need to consider transfer of funding to university sector and a transition plan with appropriate lead times

7 Scaling and the construction of rank orders

- Disagree with proposition that construction of a single rank order for all applicants is no longer appropriate
- Centralised admission system is an efficient approach to assessing large volumes of applicants, mostly over a period of only one week
- Process allows flexibility for other selection tools (Undergraduate Medicine and Health Sciences Admission Test [UMAT], pre-requisites, bonus schemes)
- While aggregated Year 12 performance does not always indicate university performance, it is one of the strongest predictors available
- Use of a single rank order provides transparent and easy to understand basis for selection
- Lack of a single rank would introduce further complexity that would create significant barriers to entry, especially for students limited with social and cultural capital
- Scaling can occur without scaling test like QCS Test
- In both VIC and NSW, scaling occurs by comparing achievement of students in different subjects
- Regardless of methodology, approach must be transparent, equitable, and not open to manipulation

8 Governance

- If responsibility for deciding how Year 12 results used for TE is transferred to unis, UQ believes QTAC is best body to undertake this work
- Need to consider transition and resource implications

Queensland University of Technology (QUT)

1 School-based assessment

- Supports the preservation of school based assessment if the rationale is made explicit and clearly communicated to teachers, principals, students, parents and community
- Teacher-devised assessment helps schools address local needs and fosters development of teacher learning communities
- Validity and reliability of teacher-devised assessment would be enhanced with central guidelines, quality control and assurance measures
- There are currently concerns regarding validity, reliability and dependability. Teachers lack skills to develop appropriate/challenging assessment tasks
- Lack of ongoing professional development. Need to develop and sustain teachers' knowledge and repertoire of strategies
- Current practice of giving exemplars of assessed work should be strengthened, with detailed statements of expected standards
- Lack of community confidence due to issues of equity, fairness, complexity and transparency
- Perception that students are over-reliant on teacher feedback and scaffolding creates lack of confidence in the authenticity of summative student work
- Weightings of some criteria needs attention, e.g., criterion of communications is assessed in all subjects some common elements need not be assessed in every subject
- Gender assessment preferences are not sufficiently addressed; females prefer more openended and extended response tasks; males, short answer, multiple choice types of tests

2 External assessment

- Provides a degree of reliability. However QUT recognises the need for a range of assessment types to meet diverse curriculum goals and student needs
- Marking criteria and standards need to be explicit to have the confidence of teachers, principals, parents, students and broader community
- Transparency is also important on part of agency responsible for development and marking
- Also, use of weightings will need to be done carefully will subjects with 50% vs 10% external component be considered equal? Will universities have access to external assessment results?
- If test is to be used as a scaling exam, calculation and assignment of cut-offs need to be transparent and clearly communicated
- Lack of a scaling process between subjects may see institutions prescribing very specific prerequisites could lead to backwash effects on school curriculum
- Expertise of people involved in setting external assessment will need to be made clear to

3 Moderation

- Need more details of how these processes would be strengthened
- Consensus model of moderation provides opportunity for teachers to defend judgements, quality assurance and professional learning opportunities
- These processes allow teachers a forum for cross-fertilisation of ideas
- Currently a lack of confidence in the system due to lack of adequate review and institutionalisation of particular and idiosyncratic patterns of behaviour and management of panels
- Lack of comparability between regions, lack of experienced panel members lead to advantages and disadvantages for those in small and intermediate groups
- Need guidelines/protocols and more explicit training to ensure consistency
- Experience and ability of panel members need consideration
- Role of State Panel Chairs should be independent from QSA/QCAA need to make critical and specific recommendations
- State Panel Chair reports should be published uncensored by QSA/QCAA
- Current representative panels should be replaced by expert subject panels
- Should be an outside body to randomly select schools and send evidence to expert subject panel. Random sampling should not be strategic

4 Finer scale for school assessments

- The availability of finer-grained measures common to all applicants (e.g., ATAR) or to selected applicants (e.g., finer-grained subject results) would improve the ability of universities to tailor selection decisions to the available places in the course
- Concerns that flexibility in arriving at student's overall result may lead to major issues in terms of teacher interpretation of achievement levels and comparability between assessors
- Standards should be applied when assigning original marks or grades. There should be no second tier of qualitative interpretation of the standard
- Not a straightforward process; will require professional development, resources and training opportunities
- Ideally, introduction of any finer-grained measures to aid universities with entrance decisions will be drawn from existing secondary school datasets to avoid the backwash impacts of new measures, e.g. schools focusing on past university exams rather than a broad curriculum

5 Cross-curriculum capabilities testing

- Current QCS Test results have no use in selection decisions at QUT and it is unlikely KCCC test results, even with a degree of granularity, would feature in future QUT selection decisions without greater clarity of the aim and intention of the proposal
- Questions several aspects of the proposal, such as:
- Ownership of the data and how it will be used
- Access by agencies to the data
- Reporting of results
- If additional assessment elements (like KCCCs) are not used, will universities be given access to external exam data to assist in selection decisions?
- Would non-OP students also be required to sit KCCCs testing?
- Need to avoid teachers focussing on KCCC tests instead of the broad curriculum

6 Separation of responsibilities at the secondary-tertiary interface

- Support for a connection between school achievement and TE school sector needs to be actively involved in the manner in which outcomes of schooling are considered
- Avoid backwash effects where university entrance comparability mechanisms become a
 de facto senior curriculum
- Removing focus from school data and redirecting it to other comparability mechanisms will devalue senior curriculum
- Could be a two-tier subject ranking (subjects for university entry and subjects for senior certification)
- Better resourced schools will direct their efforts towards university entrance exams, for example, to the disadvantage of less well-resourced schools whose students may lack experience in these assessment mechanisms
- Welcomes clarity inherent in separation of responsibilities. An advantage of this would be the provision by QSA/QCAA of a primary piece of information for tertiary entrance decisions which draws on the outcomes of schooling activity (e.g., ATAR), using a methodology provided by the tertiary sector
- Alternatively, the tertiary sector could both devise methodology and calculate scores from Authority data but this would have resourcing implications and take time to implement
- Clarification of responsibilities needs to be accompanied by increased transparency of data from school to tertiary sectors, and a departure from the current limited data release so the sector can fully realise discretion in selection

7 Scaling and the construction of rank orders

- No evidence to support inappropriateness of a single rank order
- Queensland students deserve a transparent, single score which will be the primary piece
 of information for school age tertiary entrance to courses throughout Australia, i.e., an
 ATAR
- Queensland is currently out of line with rest of Australia in not having an ATAR as primary piece of information used for tertiary entrance
- Preferable that all school leavers receive an ATAR, and that school achievements contributing to the ATAR are as inclusive as possible
- Current system for construction of an ATAR in Queensland lacks transparency
- Alongside ATAR, tertiary sector will need other info for decisions for particular courses or decisions, including subject results and other school data, as well as other alternative evidence for selected courses (e.g. folios, auditions or interviews)

- Bonus schemes will remain compensatory mechanisms for social justice purposes
- QUT recommends an education campaign to prevent misunderstanding or misuse of any new score or any extension of the current score to a larger population

8 Governance

- QSA/QCAA will need to develop staff skills and expertise, and would need to provide materials, guidelines and professional development on changes arising from the review
- Responsibility by QTAC for calculation of an overall measure for tertiary selection (such as an ATAR) would require the relevant data from the school sector, and building capacity and expertise would take time and resources

Griffith University (GU)

1 School-based assessment

- Notes proposal to combine School Assessment on a 15 point scale and External Assessment as part of a single Subject Result and provides the following general observations:
 - Success of any new system will be contingent on its improved simplicity, clarity, cost-effectiveness and efficiency
- Introducing further complexity into a system that is already complex and poorly understood by stakeholders is undesirable
- Proposed changes will add overheads and costs in implementation and ongoing management for schools, students, parents and other stakeholders, and for universities in developing translation methodologies for calculating TE ranks

2 External assessment

• See general comment outlined under school-based assessment

3 Moderation

• See general comment outlined under school-based assessment

4 Finer scale for school assessments

• See general comment outlined under school-based assessment

5 Cross-curriculum capabilities testing

• See general comment outlined under school-based assessment

6 Separation of responsibilities at the secondary-tertiary interface

- Supports TE policy and procedures being responsibility of unis
- Universities should be responsible for how subject results are used to construct rank order lists for purpose of TE selection
- As is current practice, this may extend to utilising a range of other assessment criteria such as discipline tests, portfolios and auditions where appropriate

7 Scaling and the construction of rank orders

- Support for use of ATAR as the single ranking tool which will best enable seamless transferability and mobility of Qld students across Qld and interstate, and interstate students into Qld
- Since universities operate within a national admission network, any future system needs to expedite both intra and inter-state applicant transferability
- System should ensure an automatic ranking of students, in place of an opt-in or opt-out system since non OP-eligible students are disadvantaged (e.g., non OP-eligible students cannot apply for tertiary study interstate)

8 Governance

- Supports TE policy and procedures being responsibility of unis
- Universities should be responsible for how subject results are used to construct rank order lists for purpose of TE selection

Australian Catholic University (ACU)

1 School-based assessment

No comment

2 External assessment

No comment

3 Moderation

No comment

4 Finer scale for school assessments

- ACU supports a decision based on learnings from other states or territories
- If subject results need to be reported on a finer scale to facilitate calculation of an ATAR, then this is supported

5 Cross-curriculum capabilities testing

No comment

6 Separation of responsibilities at the secondary-tertiary interface

• TE policy and procedures are responsibility of higher education institutions

7 Scaling and the construction of rank orders

- · ATAR should be adopted in Qld
- Greater national consistency
- Enhanced student mobility. Supports students in course comparison and decision-making across multiple jurisdictions
- Reduce operational burden and improve transparency of decision making by multijurisdictional institutions like ACU
- Increase granularity in university entry standards
- Need for a single rank order such as ATAR in Qld, rather than a system which could see Qld students with ten or more different scores at ten different institutions
- Notes limitations of ranking systems (OP/ATAR), e.g. more closely correlated with socioeconomic factors than intellectual capacity
- Raises issue of universities artificially inflating course cut-offs (admitting students wellbelow advertised cut-offs). Need for regulatory reform to address this

8 Governance

• In relation to where the calculations take place (either QCAA or QTAC), a decision needs to be based on the best location in terms of data transmission, and in terms of economics regarding ongoing financial resourcing

TAFE - Queensland

1 School-based assessment

• No comment

2 External assessment

• Use of external component could provide a level of scaling

3 Moderation

No comment

4 Finer scale for school assessments

- A 15-point scale would provide institutions with greater information on student achievement (currently students with same level of subject achievement may have markedly different OPs)
- Would also provide more evidence to organisation tasked with calculating tertiary entrance rank
- Would provide more information for parents and employers
- Supports proposal for adding marks on different assessments and interpreting scores qualitatively by reference to standards

5 Cross-curriculum capabilities testing

No comment

6 Separation of responsibilities at the secondary-tertiary interface

- TAFE Queensland would oppose transfer of responsibility for calculation of a tertiary entrance rank from QCAA
- QCAA has an important role as a 'neutral player' in the tertiary entrance process
- While there is an argument for tertiary institutions being responsible for calculation of a tertiary selection rank, this creates a risk of confusion and inconsistent selection processes that are not well understood by stakeholders
- Transferring responsibility for tertiary entrance to the university sector is likely to increase costs for Year 12 applicants as universities look to defray costs once borne by QCAA
- TAFE Qld is opposed to reassignment of costs to either students or tertiary institutions

7 Scaling and the construction of rank orders

• Very supportive of single rank order for tertiary study, including all forms of senior studies (including Authority registered and VET studies)

- If moving to ATAR, an inter-subject assessment model could be developed and implemented to provide necessary scaling between students who have varying study patterns and loads
- Use of external component could also provide a level of scaling that could be used to produce an ATAR type rank
- Need to acknowledge articulation pathways that now exist between TAFE Qld and various universities
- Assigning greater weightings to particular subjects may result in different rank orders for the same student across various preferences – would be difficult to explain

8 Governance

- Transferring responsibility for tertiary entrance to the university sector is likely to increase costs for Year 12 applicants as universities look to defray costs once borne by QCAA.
- TAFE Qld is opposed to reassignment of costs to either students or tertiary institutions

University of the Southern Cross (USC)

1 School-based assessment

 Transparency of senior assessment processes and communication about the processes to universities, as well as to schools, students, parents and carers is essential

2 External assessment

· As per comment on school-based assessment

3 Moderation

• Unclear how, and with what measures, reliability or validity can be established and monitored and how new moderation processes will be conducted

4 Finer scale for school assessments

No comment

5 Cross-curriculum capabilities testing

• Unclear if and how the KCCCs test may factor in determining ranks

6 Separation of responsibilities at the secondary-tertiary interface

- QCAA should be responsible for determining how final valid, equitable and comparable assessments are made
- Construction of ranks should be the responsibility of universities, but QCAA should provide sufficient detail for ranking
- Against individual institutions being encouraged or required to create own parallel assessments, particularly at the 'higher' end of the ranking scale

7 Scaling and the construction of rank orders

- A unified ranking compatible with the ATAR used by other states and territories is essential
- Use of a single ATAR should be the predominant selection mechanism; further investigation is needed on of the use of additional elements for equity such as prerequisite requirements or weighting of subject results

8 Governance

• No comment

James Cook University (JCU)

1 School-based assessment

- Maintaining school-based assessment is non-negotiable
- Teacher-devised assessments could be enhanced by a program of professional development focusing on reliability and validity

2 External assessment

- Could boost public confidence in assessment validity and reliability
- Could be used as point of triangulation with teacher-devised assessments, but would need to be appropriately balanced with school-based assessment
- If implemented, it should be for all not just some Authority-subjects, unless clear assurance that lack of external assessment will not undermine validity of a subject
- Need to consider:
- Limited subject range in remote and regional areas
- A student may be only student taking a subject and may not be as 'stretched' as metropolitan counterparts
- Distance education

- Lack of equitable access to advice regarding consequences of subject-choice, resources, etc.
- Needs of particular equity groups
- Assumptions need to be made explicit, e.g., assessments for different learning styles and in different modes and mediums
- Needs clarity around how external assessment will operate, e.g. not a return to external exams

3 Moderation

• Merit in strengthening moderation on an evidenced-informed basis

4 Finer scale for school assessments

• Support valid and reliable finer-grained distinctions welcome – but will take advice of school sector

5 Cross-curriculum capabilities testing

- Any cross-curriculum competency testing would need to be very carefully constructed
- Cross-curriculum competencies are better judged in context
- Cross-curriculum competencies testing could be QCS Tests in disguise with same inherent problems
- KCCCs would need to be carefully assessed and guidance given as to how they are used
- Current preparation for QCS Test should not be replicated

6 Separation of responsibilities at the secondary-tertiary interface

- Endorses QCAA certifying school achievement and universities deciding how and what to use in selection decisions
- To a large extent this already occurs
- Universities must be given the best available evidence of student achievement to make selection decisions

7 Scaling and the construction of rank orders

- Agrees use of single rank order is not the most appropriate for many courses. However, where places are limited, a rank order that is consistent across State is transparent, understandable and expedient for choosing between eligible applicants
- Support the ATAR, if a rank order is to be calculated
- Whatever happens, critical community can understand the system
- Concern with potential delays if QTAC is required to calculate rank order following receipt of subject results from QCAA

8 Governance

- Proposals likely to result in significant transfer of work effort and cost to tertiary admissions centres, and in turn to the universities. May result in increase in tertiary application fees
- Calculation of rank orders is significant exercise for which QCAA currently has expertise and infrastructure
- Transitioning this process, or an alternative process, to another organisation would be a very significant project, requiring adequate time and resources

Appendix 3.3

Level of support for proposals

In April 2014, key stakeholder organisations were asked to respond to the emerging proposals using the survey shown below.

1. Senior Assessment - Revitalise School Assessment

Support (Yes) or do not support (No) a revitalisation of school assessment

2. Senior Assessment - Revamp Moderation

Support (Yes) or do not support (No) a revamp of current moderation processes

3. Senior Assessment - External Assessment

Support (Yes) or do not support (No) introduction of external assessment

4. Senior Assessment – Combine School Assessment and External Assessment for Subject Results

Support (Yes) or do not support (No) proposal to combine school assessment and external assessment for subject results, without using external assessment to scale the results of school assessment

5. Senior Assessment - Produce Subject Results on 15-Point Scale

Support (Yes) or do not support (No) producing subject results on a 15-point scale

6. Tertiary Entrance - OP No Longer Sustainable

Agree (Yes) or do not agree (No) that OP is no longer viable

7. Tertiary Entrance - Alternatives to OP/ATAR

Suggest (Yes) or do not suggest (No) alternative tertiary entrance models, other than the OP or the ATAR

8. Tertiary Entrance - Separate Functions

Support (Yes) or do not support (No) separation of responsibility for Year 12 results and tertiary entrance

FOR ALL QUESTIONS:

Level of support is coded.

Use of "—" means no view is expressed on this issue

"Yes(P)" or "No(P)" – means views are provisional, i.e., subject to a particular qualification or condition, as outlined under "Comment".

1. Senior Assessment - Revitalise School Assessment? **School sectors QCEC** Strong 'overarching support' for preservation of school-based assessment, but 'the need for Yes quality professional development ... is clearly identified' (p. 3). '... value in retaining some school based assessment' (p. 2) but 'if school based assessment **ISQ** Yes is to remain the predominant type of assessment with some subjects possibly having no component of external assessment, it is imperative that more support and training be provided for teachers in generating quality assessment tasks that assess syllabus standards' EQ 'Acknowledges the merits of an externally moderated school-based assessment system; Yes however, the review of this system is considered timely and necessary to maintain integrity and validity' (p. 1). Independent bodies "... externally moderated, standards-based, school-based assessment should be preserved" QSA Yes with 'value-adding changes (made to) benefit students' (p. 6). **QTAC** No specific position, but '... acknowledges that teachers are well placed to provide valuable assessment information on students' ongoing performance' (p. 3). Unions '... strongly supports the retention of an externally moderated school-based assessment QTU Yes model as the primary mechanism for determining Queensland student educational achievement'; and states that QCAA 'has an important role in supporting teachers' (p. 1). '... supports the current system of school-based assessment' and states that 'dissatisfaction **IEUA** Yes with the current system' was linked to 'a lack of consistency in understanding and application of processes and sense that teachers were not being provided with realistic allocations of preparation and correction time' (p. 1). **Parents** P&C Yes 'P&Cs Qld fully support the preservation of school-based assessment', but states that 'processes need to be reinforced by and within the system' to support the validity and Qld reliability of it' (p. 1). **ICPAQ** General response: '... any processes ... put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1). **Principals QSPA** Yes 'School based assessment has led to a strong professional culture and a deep understanding of assessment criteria in Queensland schools'; and with 'the quality of teacher assessment (being) varied', 'the panel process has ... strongly and effectively

Tertiary Institutions

of panellists', etc.

Tertiary Institutions				
UQ	_	No comment.		
QUT	Yes	" supportive of the preservation of school-based assessment if the rationale is made		
	(P)	explicit and clearly communicated to teachers, principals, students, parents and the community'; 'currently many concerns and misconceptions related to the validity, reliability and dependability of (current system)' (p. 2).		
GU	_	No comment, but general statement regarding process for arriving at subject results – 'The success of any new system will be contingent on its improved simplicity, clarity, cost effectiveness and efficiency' (p. 1).		
ACU	_	No comment.		
TAFE Qld	_	No specific comment, but note that ' adding marks on different assessments and interpreting the resulting scores qualitatively by reference to the described achievement levels will enable school based assessment to be preserved and produce defendable student outcomes' (p. 1).		
USC	_	No specific comment, but note that 'Transparency of the Senior Assessment process and communication of the process to HEIs, as well as to schools, students and parents/carers, is considered essential' (p. 1).		
JCU	Yes	' maintaining school-based assessment is non-negotiable' with 'teacher-devised assessments (able to) be enhanced (by) a supported program of professional development		

supported school based assessment' (p. 2). Improvements can be made regarding 'quality

focusing on reliability and validity' (p. 1).

2. Senio	r Assess	sment - Revamp Moderation?		
School se	ectors			
QCEC	Yes	'Very strong endorsement' for strengthening current moderation processes, 'but the practice in many instances appears to fall well short of the intentions' (with some individual schools having expressed particular concern about the functioning of the current panel system) (p. 7).		
ISQ	Yes	" current moderation processes are at breaking point in terms of rigour and consistency" (p. 3).		
EQ	Yes	'Supports a review of the current Queensland review panel system' (p. 1). It is 'considered timely and necessary to maintain integrity and validity (of the externally moderated school-based assessment system)' (p.2).		
Independent bodies				
QSA	Yes	" the moderation system is where important, targeted improvements could consolidate and enhance the assessment system in which school-based assessment continues to play a significant role" (p. 11). "It may be that the core activities need to be conducted differently, or at different times, or dispensed with altogether and replaced by new processes" (p. 12). " many options for strengthening the system" (p. 12).		
QTAC	Yes	' supports the strengthening of moderation processes' (p. 3).		
Unions				
QTU	Yes	' supports the use of moderation processes across all formal years of learning as best practice' and states that 'DETE should provide schools with appropriate funds to allow moderation to occur in school time' (p. 2).		
IEUA	Yes	' teacher-led moderation is best practice', but it 'could be improved and that QCAA-led training and development programmes should form an important part of any reform process' (p. 2).		
Parents				
P&C Qld	Yes	' support (for) the improvement of current moderation processes' and for a 'continuous improvement agenda' with 'resourcing (needing) urgent attention' (p. 1).		
ICPAQ	_	General response: ' any processes put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).		
Principal	s			
QSPA	Yes	'The intent of the current system is very sound, however, due to a lack of skill in panellists, it no longer truly operates as intended' (p. 3).; 'Panel decision need to be supported through enforceable outcomes and not just advice. The appeal process should be reconsidered' (p. 3).		
Tertiary I				
UQ	Yes	' moderation of subject results needs to be transparent, equitable and free of bias'; 'members of the moderation panel(s) must have the requisite skills and training to ensure moderation processes are as robust and equitable as possible and the selection of panel members needs to be representative of the diversity of the secondary school sector'. 'There needs to be a strengthening of all stages of the moderation process, including approval of a school's assessment program for all subjects'. (p. 3).		
QUT	Yes	'Currently there is a lack of confidence in the system' 'therefore, there is a need for guidelines and protocols so that panels are consistent in their operation'. 'There is a lack of comparability between regions'; 'the current system would benefit from the provision of more explicit development and training in protocols and expectations' (p. 4).		
GU	_	No comment, but general statement regarding process for arriving at Subject Results 'The success of any new system will be contingent on its improved simplicity, clarity, cost effectiveness and efficiency' (p. 1).		
ACU	_	No comment.		
TAFE	_	No comment.		
Qld				

'It appears unclear ... how and with what measures reliability and validity can be established and monitored and how any new moderation processes will be conducted' (p. 2).

 $^{\prime}...$ always merit in strengthening moderation processes on an evidence-informed basis $^{\prime}$ (p. 2).

USC

JCU

Yes

3. Senior Assessment - External Assessment?

School sectors

QCEC Yes (P)

Yes (P) '... some form of external assessment in subjects is supported in-principle' but 'caution is expressed ... because there is so little detail (given) around possibilities'. 'Far greater information and understanding is required before QCEC could provide beyond in-principle commitment to this proposal' (p. 5).

ISQ Yes

'Feedback from the sector ... is general acceptance, subject to the technical details' (p. 3). It will be '... crucial ... that ... full range of general objectives in the syllabus (are assessed)' (p. 3).

EQ Yes

'Supports consideration of two independent assessments of achievement in a subject: School Assessment and External Assessment' (p. 1). 'This would align Queensland with current practice in the majority of Australian states and territories' (p. 2). Questions for further consideration include: how it will provide opportunities for students to demonstrate their knowledge and understanding in a range of subjects; how a range of assessment techniques are allowed for; the full purpose of the External Assessment (e.g., is it to be used as a mechanism to validate school assessment results, what is its contribution to the overall subject result; how it might be used for scaling purposes) (p. 2).

Independent bodies

QSA Yes (F

Yes (P) '... could add rigour ... and assist in restoring public and stakeholder confidence in student outcomes'; but must not be 'privileged over the internal components of the assessment' (p. 14).

QTAC Yes (P)

"... may provide an independent verification of knowledge and performance ... (and) ... assist in providing finer discrimination regarding student achievement" (p. 3). "... further discussion as to what the appropriate weighting should be (is required)" (p. 3).

Unions

QTU No

'... opposes assessments which are norm-referenced, external to the school', etc. while acknowledging 'that there was support for external assessments to contribute up to 50% of a student's result in a subject' (p. 1).

IEUA No

'... concerned that ... provides an opportunity for universities to gain control over the school curriculum' and that 'senior secondary schooling is ... about more than university preparation' (p. 2).

Parents

P&C Qld No

'... sees no obvious advantage in an additional component to the assessment process' and questions why it is not possible for 'external tasks proposed to be set by QCAA, to be set within school assessment parameters' (p. 1).

ICPAQ

General response: '... any processes ... put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).

Principals

QSPA

"... difficult to comment on without the detail of how this might work" but "if it is to operate like the HSC ... and school results are scaled to the assessment, it is pointless as the internal assessment has no value" (p. 2). Other risks also listed.

Tertiary Institutions

UQ

Does not specifically address the issue.

QUT Yes

'The suggestion of an external exam has credit; but any scaling process needs to be transparent and clearly communicated'. While it 'provides a degree of reliability', there is 'a need for a range of assessment types to meet the diverse curriculum goals of the various syllabuses and differing needs of students' (p. 3).

GU

'Introducing further complexity into a system that is already complex and poorly understood by stakeholders is undesirable' and 'will add overheads and costs in implementation and ongoing management for schools; for students and parents and other stakeholders engaging with the system; and for universities in developing translation methodologies for calculating tertiary entrance ranks' (p. 1).

ACU

Does not specifically address the issue.

TAFE Qld Yes

'The use of the external component of the subject assessment would also provide a level of scaling that could be (used to produce) an ATAR type rank' (alongside an inter-subject assessment model to provide necessary scaling) (p. 3).

USC

'The grading from QCAA, be these from school assessments, subject results, external assessment, the QCS Test or a weighted combination, must be in a format such that an equitable and comparable ranking can be achieved' (p. 1).

JCU Yes

'... could boost public confidence in assessment validity and reliability'; 'would need to be appropriately balanced with school based assessment'; would need to 'be implemented for all, not just some, Authority subjects' (in order not to undermine validity of subjects without it); and would need to reflect '... valid and reliable assessment practices that truly reflect students' abilities and not put unreasonable pressure on students and staff' (p. 2).

4. Senior Assessment - Combine School Assessment and External Assessment for Subject Results?

and External Assessment for Subject Results?			
School sectors			
QCEC	No	Crucial question of how internal and external results would be jointed to create an overall grade has not been addressed. Some concern has been raised over the potential of using external assessment for statistical moderation of internal assessment results.	
ISQ	_	Does not specifically address the issue. Note generally that 'without more detail on possible recommendations, it is difficult to be too specific' (p. 1).	
EQ	Yes	'Supports consideration of two independent assessments of achievement in a subject: School Assessment and External Assessment' (p. 1). But requires further clarification on several issues, e.g. the degree to which it will contribute to the overall subject result; whether the external assessment is to be used as a mechanism to validate school assessment results; if the External Assessment is to be used for scaling purposes, how will it contribute? (p. 2).	
Indepen	dent boo	lies	
QSA	No	'Cannot be emphasised enough that if the achievement information acquired through the external component is to scale the achievement information from the internal component, this would be a negative outcome' (p. 14).	
QTAC	_	Does not specifically address the issue.	
Unions			
QTU	No	'There should be no scaling of school based assessments using external assessment items' (p. 3).	
IEUA	No	'IEUA-QNT opposed use of external examinations for scaling of school-based results' (p. 4).	
Parents			
P&C Qld	_	Does not specifically address the issue. In relation to external assessment generally, note that 'P&Cs Qld sees no obvious advantage in an additional component to the assessment process' (p. 1).	
ICPAQ	_	General response: ' any processes put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).	
Principa	ıls		
QSPA	No	'If it is to operate like the HSC (or similar) and school results are scaled to the assessment it is pointless as the internal assessment has no value' (p. 2).	
Tertiary	Institutio	ons	
UQ	_	Does not specifically address the issue. General comments on scaling, .i.e. 'Regardless of what methodology is used for scaling, the approach taken needs to be transparent, equitable and not open to manipulation'.	
QUT	Yes (P)	Notes that an advantage of including an External Assessment is that 'results can be used for comparison and scaling' (p. 3). General comment that 'If a test is to be used as a scaling exam, the calculation and assignment of cut-offs need to be made transparent and communicated clearly.' (p. 3).	
GU	_	'Introducing further complexity into a system that is already complex and poorly understood by stakeholders is undesirable' and 'will add overheads and costs in implementation and ongoing management for schools; for students and parents and other stakeholders engaging with the system; and for universities in developing translation methodologies for calculating tertiary entrance ranks' (p. 1).	
ACU	_	Does not specifically address the issue.	
TAFE Qld	Yes	'The use of the external component of the subject assessment would also provide a level of scaling that could be used in the production of an ATAR type rank' (p. 3).	
USC	_	Does not specifically address the issue.	
JCU	_	Does not provide a specific position on the issue. General comment that "External assessment can be used as a point of triangulation with teacher-devised assessment items, but would need to be appropriately balanced with school based assessment' (p. 2).	

5. Ser	nior Assess	ment - Produce Subject Results on 15-Point Scale?
Schoo	l sectors	
QCEC	Yes	'Consultation indicates that the proposal for teachers to use a 15-point scale for school assessment is well supported and a good fit with current practice' (p. 10).
ISQ	Yes	'It is believed that teachers are able to make comparable and meaningful distinctions on a 15-point scale' (p. 4).
EQ	_	Seeks clarification of several issues, e.g. whether a standards-based system of assessment would continue in Queensland; will the 15 point scale replace the existing 5 point scale for levels of achievement; will the 15-point scale be achieved via a set of standards descriptors; will the 15-point scale be used to make individual assessment grade decisions, level of achievement decisions at the end of semester, year or course of study, or both (p. 4)?
Indepe	endent bod	ies
QSA	_	Does not provide a specific position, but refer to support among schools: 'The notion of reporting on a 15-point scale would satisfy the desire of many schools for a greater degree of discrimination between students' (p. 18). Also note that 'simply increasing the scale to 15 points will not necessarily increase the reliability of the assessment information' (p. 18).
QTAC	Yes	'QTAC believes that fine scale discrimination will provide much needed information to students and their parents regarding individual performance' (p. 3).
Unions		
QTU	No (P)	'The QTU does not oppose the expansion of the existing 5 point scale of student achievement', but 'The QTU believes a 15 point scale is too fine and required higher level of accuracy in teacher judgements' and 'is a high, maybe unattainable, expectation on syllabus developers' (p. 2).
IEUA	No	'IEUA-QNT questions the necessity of changing the method of reporting to one based on a fifteen point scale, particularly when psychological studies indicate that the maximum number of categories individuals are capable of recognising in practice is 5-7' (p. 2).
Parent	:S	
P&C Qld	Yes	'Teachers, historically, are adept at fine scale marking of student assessment, e.g. on a scale of 1-100, by basing the assessment on recognisable, reliable and verifiable criteriaWe therefore propose a finer scale can be used effectively to further distinguish attainment' (p. 2).
ICPAQ	_	General response: ' any processes put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).
Princip	oals	
QSPA	No (P)	'QSPA has significant reservations in the level of comparability of the 15 point scale across schools without some means of scaling' (p. 4).
Tertiar	y Institutio	
UQ	Yes (P)	'We request that specialist statistical opinion be sought as to what scale is optimal for ATAR calculation' (p. 2).
QUT	Yes (P)	'The availability of finer-grained measures common to all applicants (e.g. an ATAR) or to selected applicants (e.g. finer grained subject results) would improve the ability of universities to tailor selection decisions to the available positions in the course. However, the current suggestion indicates a degree of flexibility which could prove to be problematic without greater exemplification' (p. 5).
GU	_	Does not specifically address this issue. Notes generally that 'Introducing further complexity into a system that is already poorly understood by stakeholders is undesirable' (p. 1).
ACU	Yes (P)	'ACU supports a decision based on learnings from other states and territories. Depending on such a review, it may be determined that subject results need to be reported on a finer scale to facilitate the calculation of the ATAR in Queensland' (p. 3).
TAFE Qld	Yes	'A 15-point scale would provide institutions selecting students for post Year 12 study with greater information around actual student achievement' (p. 1).
USC	_	Does not specifically address this issue.
JCU	Yes (P)	'JCU is happy to be guided by the school sector on this. Valid and reliable finer grained distinctions would be welcome – if they are assured as valid and reliable'.

6. Tertia	ry Entra	ance - OP No Longer Sustainable?
School se	ectors	
QCEC	_	No specific position on viability of the OP. Note that 'There is reasonable endorsement of the proposal that scaling processes (QCS test, SAIs and scaling) no longer apply'. But note that, if a single rank does not apply, 'it is unclear what measures universities might turn to in order to make their tertiary entrance determinations' (p. 13).
ISQ	_	No specific position on viability of the OP.
EQ	_	No specific position outlined, but indicates support '…ensuring there is consistency across Australia for this score (i.e., ATAR)', (p. 5).
Independ	dent bo	dies
QSA	Yes (P)	'The Authority acknowledges that the present approach to calculating tertiary entrance calculations is under stress, and that alternatives need to be considered' (p. 20).
QTAC	_	No specific position on the viability of the OP. Note generally that 'The review provides an opportunity to address concerns raised regarding the ability of Queensland Year 12 students (OP eligible and ineligible) to be equitably and consistently addressed' (p. 1).
Unions		
QTU	_	No specific position on the viability of the OP. Note on one hand 'QTU acknowledges the long term efficacy of the overall position score', but 'the QTU does not oppose exploring alternative mechanisms for determining tertiary education offers to young people who conclude senior schooling' (p. 3).
IEUA	_	No specific position on the viability of the OP.
Parents		
P&C Qld	Yes	'Change is desirable as the current OP system is open to manipulation and, inter alia, is used as a marketing tool and to create log [<i>sic</i>] tables that inappropriately drive public perception' (p. 2).
ICPAQ	_	General response: ' any processes put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).
Principal	S	
QSPA	_	No specific position on viability of the OP. However, support resulting removal of QCAT and SAIs, i.e. 'We belive universities and QSA, not schools, should be responsible for the ranking for entry to tertiary courses' (p. 5).
Tertiary I	nstituti	ons
UQ	Yes	'An increasingly frustrating component of the current system, however, is that the Overall Position (OP) does not provide us with a fine enough level of differentiation to fine tune our student selection appropriately' (p. 1).
QUT	Yes	Seek replacement of OP with an ATAR - 'Queensland students deserve a transparent, single score which will be the primary piece of information for school age tertiary entrance to Queensland courses and to courses throughout Australia: in short, an ATAR' (p. 7).
GU	Yes	'Griffith supports the use of ATAR as the single order ranking tool which will best enable seamless transferability and mobility of Queensland students across Queensland and interstate' (p. 1).
		'Griffith contends that the completion of senior schooling in Queensland should ensure an automatic rank for a student, rather than perpetuate the current opt-in or out system' (p. 1).
ACU	Yes	Seek replacement of OP with an ATAR - 'Most significantly, adoption of the ATAR system in Queensland would facilitate greater national consistency and transparency in university selection and admission processes. It would also serve to overcome notable issues with the current OP system' (p. 1).
		Note the lack of fine grained discrimination within each OP band, and that the OP does not take into account results in VET subjects (p. 3).
TAFE Qld	Yes	'The inclusion of all forms of senior studies including Authority registered and VET studies, and not just those that relate solely to performance in Authority subjects should be considered when looking to assign a single number for tertiary entrance' (p. 1).

that this ranking be the ATAR for national comparability and for supporting transferability and mobility of students between states' (p. 4).

'If a move to a single rank order like the ATAR is to proceed, the removal of the QCS and

Seek replacement of OP with an ATAR - 'If a rank order is to be calculated, JCU supports

Seek replacement of OP with an ATAR - 'USC considers that the use of a single ATAR

SAIs is a non-issue from an institution perspective' (p. 3).

should be the predominant selection criterion.... (p. 2).

USC

JCU

Yes

Yes

7. Tertiary Entrance - Alternatives to OP/ATAR?

School sectors

QCEC

No specific alternatives suggested. General comment that 'There is an underpinning assumption that student achievement results from school would inform tertiary entrance processes and a common agreed process for tertiary entry would be seen by a central body'; 'There would be no support for a tertiary entrance system where universities each set their own separate exams for entrance purposes' (p. 13).

ISQ

No specific alternatives suggested. Note that "Different subjects receiving preferential weightings for university selection brings the risk of some subjects being privileged over others with a subsequent backwash effect on school subject selection by students and a possible narrowing of the curriculum" (p. 5).

EQ

No specific alternatives outlined. States support for 'an overall score to be used by Universities as one element of evidence used for entry into courses and ensuring there is consistency across Australia for this score (i.e., ATAR)'; 'Universities ensuring there is transparency in the evidence that is used to make course entry decisions' (p. 4). Also raises the need to consider the impact of any proposals on Authority Registered

Also raises the need to consider the impact of any proposals on Authority Registered subjects and VET in schools (not currently included in calculation of OPs or FPs, but may be used by QTAC to calculate a Tertiary Selection Rank) (p. 6).

Independent bodies

QSA Yes (P)

Yes (P) Notes that '...the Authority agrees that, in principle, a profile of results is a more authentic representation of student achievement and, if used to its potential, is more useful for endusers than a single rank'.

Notes possibility of a more inclusive rank (not limited to Authority subjects); multiple ranks (e.g. academic and vocational ranks); possibly combined into an average rank (p. 23).

However 'A profile on its own may be easy to comprehend but when it is used in combination with a variety of entrance tests and specific course prerequisites, it may become unwieldy, especially when institutions are trying to discriminate at an exceedingly fine grained level. In this context, some form of ranking appears inevitable' (p. 20).

QTAC No

'There are significant benefits in certifying Queensland school leavers for tertiary entrance with an ATAR' (p. 1). 'QTAC believes the construction of Multiple Rank Orders, particularly those based on giving greater weights to some subjects is problematic as it would be difficult to explain and understand' (p. 4).

Unions

QTU

 No specific alternatives suggested. Notes general requirements for any new selection system (p. 3).

IEUA —

No specific alternatives suggested.

Parents

P&C Qld No specific alternatives suggested.

. _ _ . _

ICPAQ

No specific alternatives suggested. General response: '... any processes ... put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).

Principals

QSPA

No specific alternatives suggested.

QCEC

No specific alternatives suggested. General comment that 'There is an underpinning assumption that student achievement results from school would inform tertiary entrance processes and a common agreed process for tertiary entry would be seen by a central body'; 'There would be no support for a tertiary entrance system where universities each set their own separate exams for entrance purposes' (p. 13).

ISQ

No specific alternatives suggested. Note that "Different subjects receiving preferential weightings for university selection brings the risk of some subjects being privileged over others with a subsequent backwash effect on school subject selection by students and a possible narrowing of the curriculum" (p. 5).

EQ

No specific alternatives outlined. States support for 'an overall score to be used by Universities as one element of evidence used for entry into courses and ensuring there is consistency across Australia for this score (i.e., ATAR)'; 'Universities ensuring there is transparency in the evidence that is used to make course entry decisions' (p. 4).

Also raises the need to consider the impact of any proposals on Authority Registered subjects and VET in schools (not currently included in calculation of OPs or FPs, but may be used by QTAC to calculate a Tertiary Selection Rank) (p. 6).

Independent bodies

QSA Yes (P

Yes (P) Notes that '...the Authority agrees that, in principle, a profile of results is a more authentic representation of student achievement and, if used to its potential, is more useful for end-users than a single rank'. ; However, 'A profile on its own may be easy to comprehend but when it is used in combination with a variety of entrance tests and specific course prerequisites, it may become unwieldy, especially when institutions are trying to discriminate at an exceedingly fine grained level. In this context, some form of ranking appears inevitable' (p. 20).

Notes possibility of a more inclusive rank (not limited to Authority subjects); multiple ranks (e.g. academic and vocational ranks); possibly combined into an average rank (p. 23).

QTAC No

'There are significant benefits in certifying Queensland school leavers for tertiary entrance with an ATAR' (p. 1). 'QTAC believes the construction of Multiple Rank Orders, particularly those based on giving greater weights to some subjects is problematic as it would be difficult to explain and understand' (p. 4).

Unions

QTU

No specific alternatives suggested. Notes general requirements for any new selection system (p. 3).

IEUA — No specific alternatives suggested.

Parents

P&C

No specific alternatives suggested.

Qld

ICPAQ

No specific alternatives suggested. General response: '... any processes ... put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).

Principals

QSPA

No specific alternatives suggested.

Tertiary Institutions

UQ

'We disagree with the proposition that the construction of a single rank order for all university applicants is no longer appropriate' (p. 2).

Strong implied support for ATAR, e.g. 'We request that specialist statistical opinion be obtained as to what scale is optimal for ATAR calculation' (p. 2).

QUT

No

No

No specific alternatives suggested. Strong support for an ATAR: 'Queensland students deserve a transparent, single score which will be the primary piece of information for school age tertiary entrance to Queensland courses and to courses throughout Australia: in short, an ATAR' (p. 7).

GU No (P)

No specific alternatives suggested. Strong support for an ATAR: 'Griffith supports the use of ATAR as the single order ranking tool which will best enable seamless transferability and mobility of Queensland students across Queensland and interstate' (p. 1).

Supports more inclusive system: 'Griffith contends that the completion of senior schooling in Queensland in future should ensure an automatic rank for a student, rather than perpetuate the current opt-in or out system' (p. 1).

ACU No

No specific alternatives suggested. Strong support for an ATAR – 'While ACU recognises that no single ranking or admissions tool will be fully comprehensive for all courses or without limitations, ACU is of the strong view that the ATAR system should be adopted in Queensland on a number of grounds' (p. 1).

TAFE No Qld 'The concept of assigning greater weightings to particular subjects in numerous rank orders for the same student across various preferences would be challenging and difficult to explain to parents and employers. Any move to impose a process where performance in particular subjects studied in senior years at school can only result in a less flexible system where you will see students inadvertently removing themselves from consideration for particular programs through subject selection' (p. 2).

USC 'USC considers that the use of a single ATAR should be the predominant selection Yes criterion; however, further investigation on the use of additional equitable criteria such as prerequisite requirements or weighting of subject results is welcome at this early stage' (p.

2).

JCU Yes (P) 'JCU agrees that the use of a single rank order is not the most appropriate selection methodology for many courses. Indeed, for some time the single rank order has not been the only or primary selection criteria for many courses. However, JCU Also acknowledges that, where places in a course are limited, a rank order that is consistently calculated across the State is a transparent, understandable and expedient means of choosing between eligible applicants, particularly when combined with other selection criteria' (p. 4).

8. Tertiary Entrance - Separate Functions?

School sectors

QCEC Yes (P) Strongly supports the separation of QCAA's responsibility for certification of Year 12 student achievement from that of producing a rank ordering of student for tertiary entrance purposes' (p. 15); 'The need for equity and consistency would demand that at least some elements of the process be undertaken by a central agency' (p. 13).

ISQ No (P) 'Feedback from the independent sector indicates a level of concern about this proposal, although it is difficult to make comments without further details and development of the proposal' (p. 5).

No specific position. General acknowledgement that 'universities should be free to use a range of evidence to select students for entry into courses' (p.4).

Independent bodies

QSA

EQ

No specific position on separation. Notes generally that 'It is the Authority's proposition that an independent body should remain responsible for the development of any rank' (p.

QTAC

No specific position on separation. Notes that 'QTAC would receive Subject Results (on a finer scale than in the present system of senior assessment) and KCCC results from QCAA, and would use these (and other evidence as agreed) to produce rankings of applicants to competitive university courses' (p. 4).

Unions

QTU

No specific position on separation. Notes generally that 'In order to support the desirable amount of coordinated access to the variety of programs across the range of institutions, tertiary offers should continue to be primarily conducted through a central agency, e.g. QTAC' (p. 3).

IEUA Yes IEUA-QNT believes it is appropriate that students graduating from Queensland secondary schools receive subject-specific results and that translation of these to rank order, or other university-entrance statistics, is best performed by the universities and/or an independent administrating body such as QTAC' (p. 4).

Parents

P&C Qld

Yes (P) 'P&Cs Qld is, on face value, in agreement with the proposed separation of responsibilities but believes that such decisions are more the province of consultation between the Government, QSA/QCAA and the Universities' (p. 2).

ICPAQ

General response: '... any processes ... put in place following the review (must) not disadvantage rural, remote and/or geographically isolated students, irrespective of their mode of schooling' (p. 1).

Principals

QSPA Yes 'QSPA strongly supports this notion' (p. 4).

Tertiary Institutions

Yes

UQ

'This approach is used successfully in other states of Australia and we envisage that it could also work successfully in Queensland' (p. 2).

Yes (P) 'QUT welcomes the clarity inherent in the separation of responsibilities between the school QUT sector and the tertiary sector' (p. 7). But notes the school sector must still have input into ranking processes - 'QUT believes there is consensus between the school and tertiary sectors that there should be a connection between school achievement (or its equivalent) and tertiary entrance and that the school sector needs to be actively involved in the manner in which outcomes of schooling are considered in this process' (p. 6). GU 'Griffith supports the proposition that tertiary entrance policy and procedures are the Yes responsibility of the institutions' (p. 1). ACU 'In relation to where this calculation takes place (i.e. QCAA or QTAC), a decision needs to be based on the best location, both logically with respect to data transmission, and economically with respect to ongoing financial resourcing' (p. 3). **TAFE** No 'TAFE Queensland fees that there would be a financial impost on both students and institutions should the responsibility for the production of the tertiary entrance rank shift Qld from the Queensland Curriculum and Assessment Authority to the Queensland Tertiary Admissions Centre. TAFE Queensland would therefore oppose any such move on these grounds' (p. 1). **USC** Yes (P) 'While the construction and use of ranks should rightly be the responsibility of universities, it is important that QCAA provide sufficient detail for the development of such a rank or selection criteria' (p. 2). JCU Yes 'It would seem obviously desirable that QCAA certify school achievement and that the universities decide how and what to use in selection decisions. However, it is to be noted

that this in large part (is) what already occurs' (p. 3).

Appendix 4.1

Analysis of survey responses

Robert Lake

As part of the information gathering and stakeholder consultation for the Review, an online questionnaire covering a range of topics associated with the Review's focus questions was made publicly available from 30 October to 16 December. The online questionnaire was managed and hosted by the Department of Education, Training and Employment.

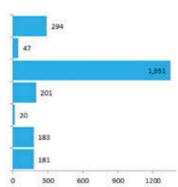
Who answered the questionnaire?

Mostly teachers answered the survey

By survey end 2,287 people had answered the survey. They could describe themselves as one of six categories (see Table 1). 59% identified as secondary educators, with the next category in size being parents (13%).

Table 1: Number of survey respondents by category

Category	Label	Count		
Parent of high school student (present or past)	HS parent	294		29
Student currently in high school	HS student	47	47	8
Educator/administrator – secondary system	Secondary educator	1,351		
Educator/administrator – university system	University	201		201
Educator/administrator - VET system	VET system	20	20	
Other	Other	183		183
Category not stated/incomplete surveys		181		181
			0	300

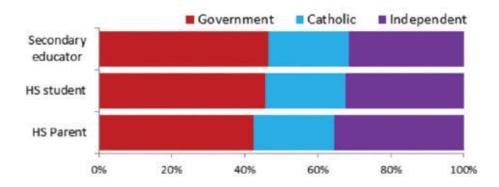


The 8% who identified as 'Other' (which is almost as large as university personnel) are likely general members of the public who reacted to the ministerial press release on 19 November. (See below: 'When did people respond to the questionnaire?').

A good mix across sectors

Respondents who identified with the secondary system (i.e., parents, students, teachers) were further asked which secondary schooling sector they had the most knowledge of or experience in, and there was a good mix across the three identified sectors.

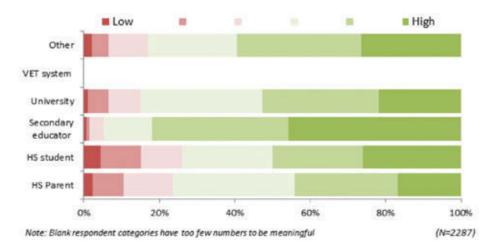
Figure 1: Sector involvement of people in the secondary system



A good (self-rated) knowledge of the current system

When asked to rate their knowledge of the current senior assessment system and tertiary entrance procedures, over half of respondents felt they had a good knowledge, with teachers being the highest (Figure 2).

Figure 2: Self-rated knowledge of current secondary system by type of respondent



Views of the OP system

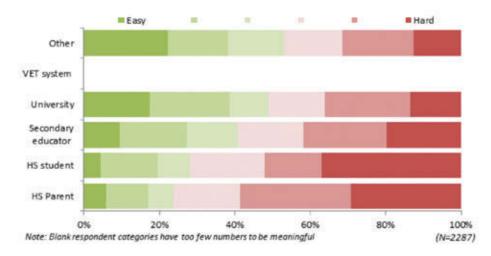
The OP system is hard to understand and hence to explain

As Figure 3 shows, on a scale from Easy to Hard most people, and especially students and parents, found the OP system hard to understand, and hence hard to explain.

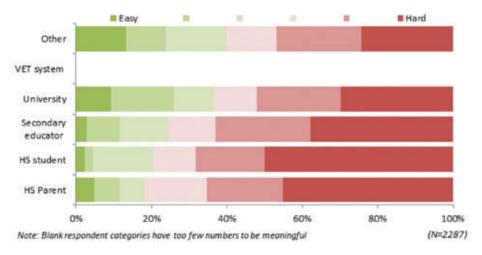
Unusually, a larger proportion of secondary teachers than university personnel found it hard to understand or explain the OP system. This is surprising given that such a large proportion of teachers self-rated as having a high knowledge of the current senior assessment system and tertiary entrance procedures (Figure 2). Among the 46% of teachers who rated themselves as having a 'High' knowledge, about a third said the OP system was hard to understand and almost 6 in 10 said it was hard to explain. This suggests that the high knowledge was actually of the assessment system and not the tertiary entrance procedures.

Figure 3: Ease of understanding the OP system

Ease of understanding the OP system



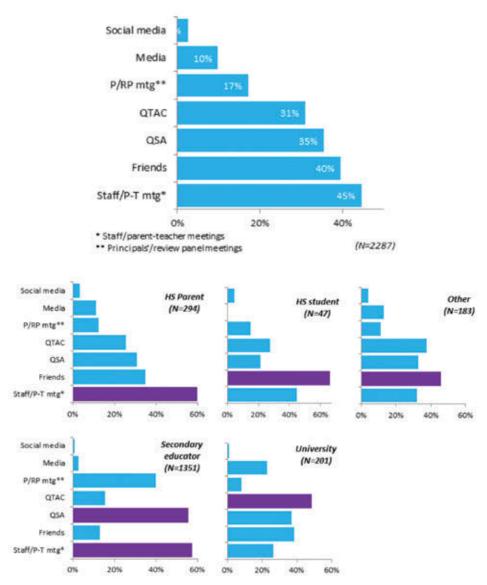
Ease of explaining the OP system



The primary sources of information about the OP depend on who you are

Parents find out about the OP system mainly from teachers; students find out from their friends (Figure 4). Teachers find out through staff meetings and QSA (now QCAA); university personnel find out from QTAC.

Figure 4: Source of OP information overall

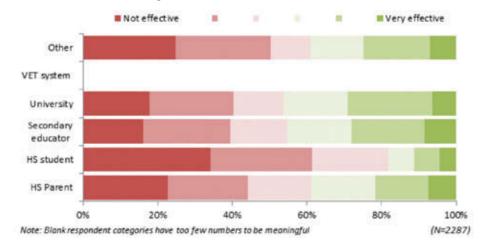


Mixed views on the effectiveness of various elements

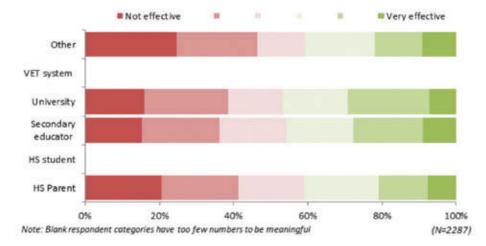
Under half of the respondents believe that the OP is effective in ranking Year 12 students and for tertiary selection (Figure 5). Parents (and students – though a small sample) have the most negative view; university personnel have the most positive view.

Figure 5: Effectiveness of OP for ranking and for tertiary selection

Effectiveness of OP in ranking Year 12 students

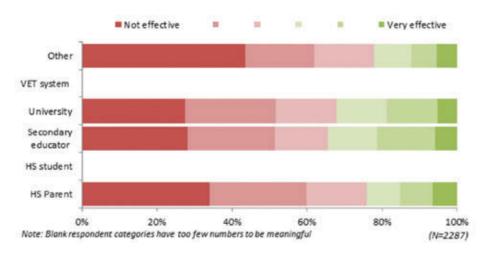


Effectiveness of OP in tertiary entrance selection



The view is similarly negative about the use of group results in scaling:

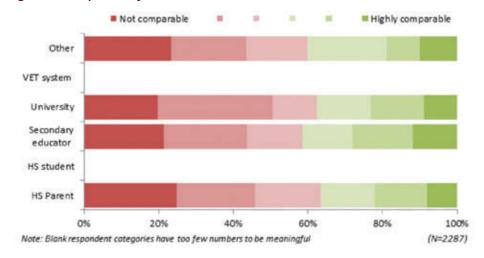
Figure 6: Effectiveness of group results in scaling



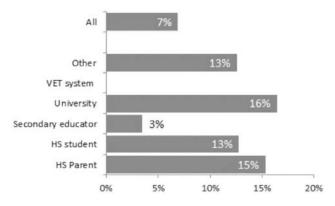
Comparability of assessment and processes

Most respondents had a negative view of comparability of assessment across schools (Figure 7, Upper panel) including secondary teachers, who are presumably in the best position to know about comparability. A significant proportion of non-teachers didn't know enough about result comparability to express a view (Figure 7, Lower panel).

Figure 7: Comparability of results

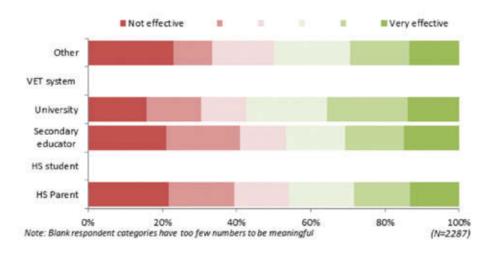


Don't know enough to express a vew

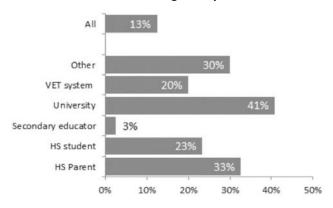


The question about the effectiveness of state and district review panels (part of the consensus moderation system that is intended to provide comparability of results) was answered mostly by teachers, as many people in the other categories didn't know enough to express a view (Figure 8, Lower panel). Teachers were split about 50:50 on the effectiveness (Figure 8, Upper panel).

Figure 8: Effectiveness of moderation panels

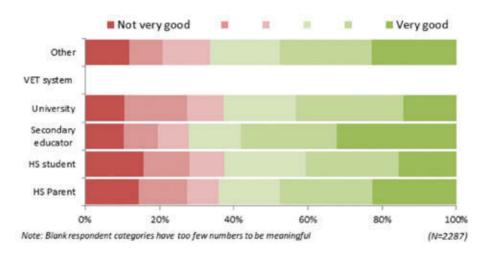


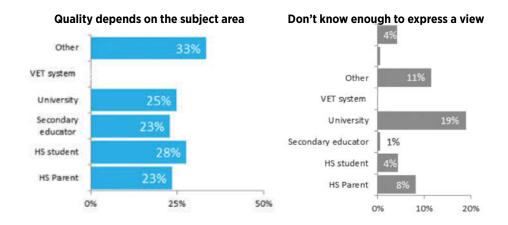
Don't know enough to express a vew



Unsurprisingly, teachers had a relatively strong opinion of the quality of their teacher-devised assessments (Figure 9). Notably, uniformly about a quarter of all respondents felt the quality of assessments depended on the subject area (although how this was so, or what subject areas, was not explored further due to the limitations of a web-based questionnaire).

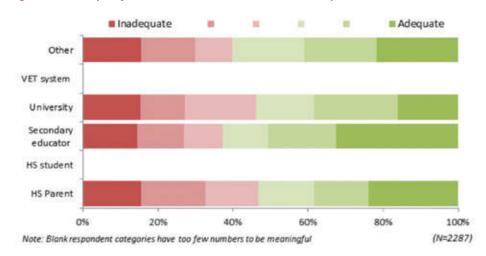
Figure 9: Quality of teacher-devised assessments





Teachers also had the most positive view of the adequacy of the process to determine exit levels of achievement (Figure 10).

Figure 10: Adequacy of current exit achievement levels process



Doing things differently

These questions explored options for doing things differently, such as other sources of information for tertiary selection, and how to express results.

The best information for tertiary selection

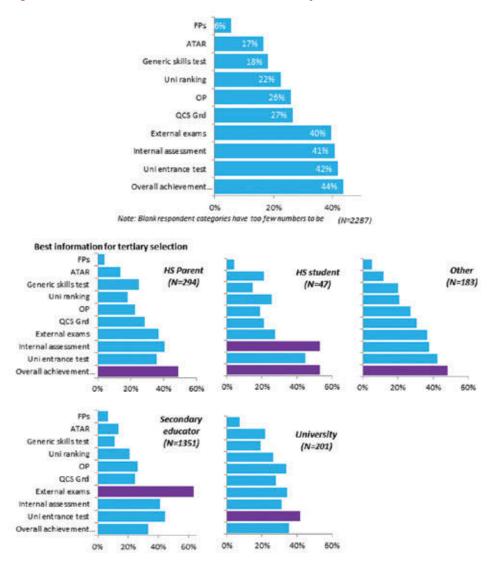
People's views on the top four ranked measures that would provide the best information for tertiary selection were: a measure of overall achievement calculated differently from the OP, university entrance tests, internal (within school) assessment of subjects, and external examinations of subjects (Figure 11, upper panel).

There were differences in the top ranked choice across categories of people (Figure 11, lower panels):

- teachers markedly favour external examinations (probably linked with their poor view of result comparability and the operation of moderation panels
- parents think some other measure of overall achievement is best
- university personnel favour a university entrance test.

The OP is not ranked highly by any category.

Figure 11: Sources of the best information for tertiary selection



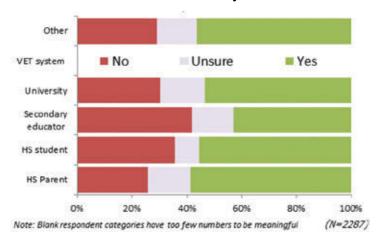
Use of the QCS grade

Students currently receive a grade from A to E reflecting their QCS test performance. As Figure 12 (upper panel) shows, most respondents (55%) felt more use could be made of the individual student's QCS grade in tertiary selection, with teachers least in favour (43%).

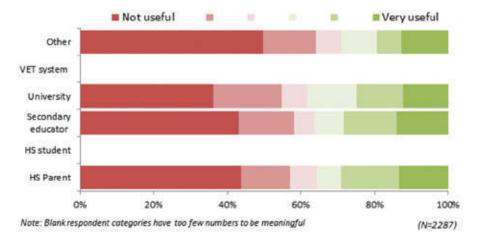
There was little support for more QCS grades (Figure 12, lower panel) perhaps in part because currently only about 1.3% receive an 'E'.

Figure 12: View on making more use of QCS grades in tertiary selection

Make more use of individual QCS in tertiary selection



Usefulness of more QCS grades



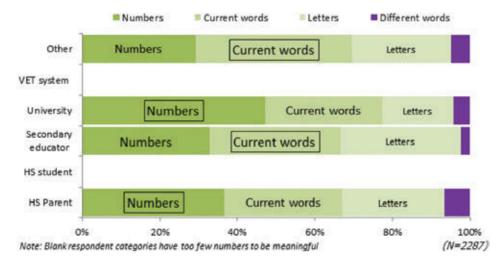
How to express subject results

There is a range of ways to express subject results:

- words (current system referring to level of achievement, or some other label system)
- letters (e.g., A, B, C ...)
- numbers (e.g., 1 to 7, a percentage)

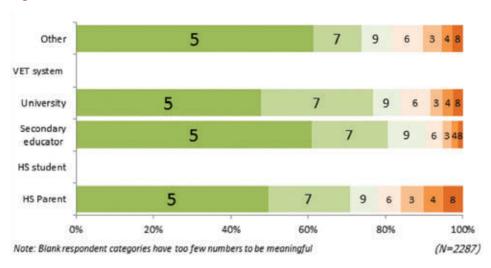
Using numbers was the dominant view of parents (Figure 13). Teachers marginally preferred (33% to 32%) the current words (e.g., High Achievement) to numbers.

Figure 13: Options on how to express subject results



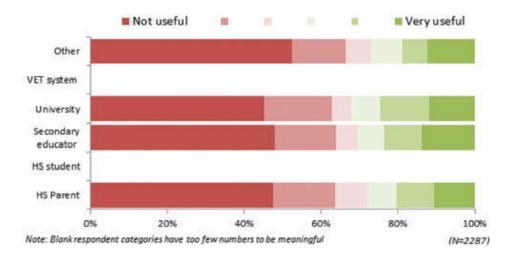
A separate question was how many levels of achievement to report, and people in all categories preferred the current five levels of achievement (teachers strongly so; 57%). Seven levels was the next most supported (Figure 14).

Figure 14: Preferred number of levels of achievement



Similarly, there was little support for more than the current 25 OP bands (currently 25 bands from OP1 to OP25)

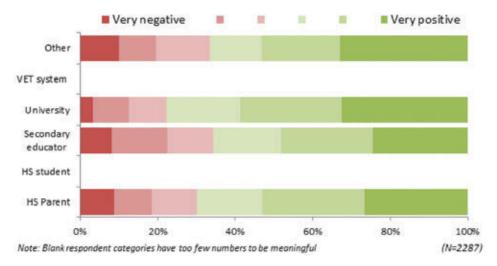
Figure 15: Support for more than the current 25 OP bands



Alternative pathways

The alternative pathway where students who do not have an OP can still apply for courses and compete for university places on the basis of a QTAC selection rank was generally supported (Figure 16). University personnel were most in favour.

Figure 16: View of the QTAC rank pathway



The Australian curriculum

A substantial proportion, except for secondary educators, don't know enough to express a view on whether the Australian curriculum would have an influence on the Qld assessment model (Figure 17, right panel) Of those who did, most felt it would have an influence (Figure 17, left panel).

Influence of Australian curriculum on Qld assessment model Don't know enough to express a view Significant Influence Other VET system University educator H5 student 20% 40% 60% 80% 0% 25% 50% 100% (N=2287)

Figure 17: Views on the influence of the Australian curriculum on the Qld assessment model

When did people respond to the questionnaire?

The existence of the survey was promulgated through a range of means, including consultation with stakeholder groups, an email from the D-G of DETE (15 November) and a press release from the Minister (19 November). After an initial surge in responses from 5 November there was another peak on 19 November, most likely in response to the Ministerial press release.

There was an interesting variation in when different categories completed the survey (Figure 19). Parents and 'Other' mainly answered around 19 November, in response to the press release. Teachers and university personnel answered early – probably in response to stakeholder meetings with a second spike for teachers after the press release.

Almost half of the 'Other' category answered on the day of the ministerial press release, most in the morning between 10 am and 1 pm. In their answers, the group they are most like is 'HS Parent'.

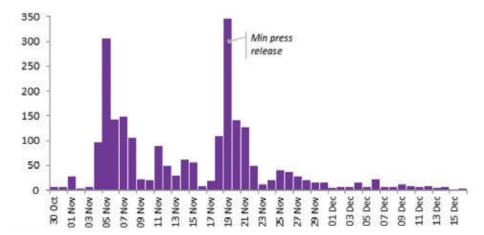


Figure 18: Response frequency by date (all respondents)

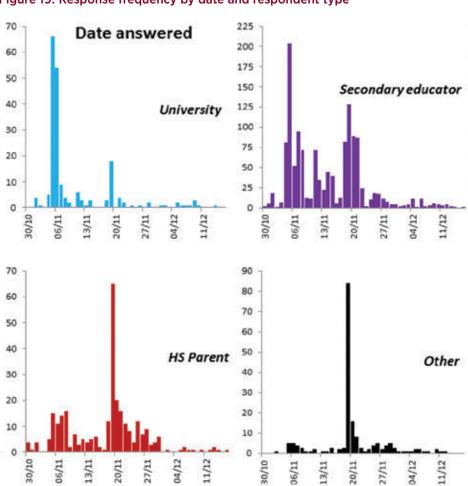


Figure 19: Response frequency by date and respondent type

Appendix 4.2

Survey instrument

The online survey hosted by DETE was conducted from 30 October to 16 December 2013. A copy of the survey tool is provided here for reference.

Queensland Review of Senior Assessment and Tertiary Entrance Processes (ACER)

The Queensland Government has commissioned the Australian Council for Educational Research (ACER) to carry out a review of the Queensland systems of senior assessment and tertiary entrance for students completing Year 12. The review will consider the effectiveness of the systems and identify ways to improve, revitalize or reform them.

This survey is one way for the reviewers to gather information from teachers, stakeholders and the wider community. Student responses are most welcome. This is your opportunity to express your opinion on various aspects of the current systems.

The information collected in this survey will be analysed and included in the ACER July 2014 report, which will include recommendations for the Queensland Government to consider.

To begin this survey, please click the 'Next' button.

The following abbreviations are used in this survey.

ATAR Australian Tertiary Admission Rank
CCE Common Curriculum Element
FP Field Position
OP Overall Position
QCS Queensland Core Skills

QSA Queensland Studies Authority

QTAC Queensland Tertiary Admissions Centre
VET Vocational Education and Training

1. Please rate the OP system in terms of how easy/hard it is for you to understand.

0	Easy
0	
0	
0	
0	
0	Hard
0	Don't know enough to express a view

2. Please rate the OP system in terms of how easy/hard it is for you to explain to others.

0	Easy
0	
0	
0	
0	
0	Hard
0	Don't know enough to express a view

3.		nich two (2) of the following best describe how you source information about the Property (Please select 2 only.)
		Newspapers, television, radio
		Social media
		Talking with friends QSA's website and/or publications
		QTAC's website and/or publications
		Staff meetings or parent-teacher meetings
		Principals' meetings or review panel meetings
4.		your view how effective is the OP in its current form in ranking Year 12 students?
	0	Not effective
	0	
	0	
	0	Very effective
		Don't know enough to express a view
5.		your view how effective is the use of group results on the QCS Test in 'scaling'
	sch	nool-based assessments for calculating OPs?
	0	Not effective
	0	
	0	
	0	Name of Carling
		Very effective Don't know enough to express a view
6.		your view how effective is the use of the OP in selecting students for tertiary
		trance?
	0	Not effective
	0	
	0	
	0	Vorusffeetive
		Very effective Don't know enough to express a view
7.		udents who do not have an OP are still able to apply for courses and compete for
		iversity places on the basis of a QTAC selection rank. What is your view of this
	-	thway to university?
	0	Very negative
	0	
	0	
	0	Very positive
		Don't know enough to express a view
8.	Th	e OPs are in 25 bands. How useful would it be in your view to have more bands?
		Not useful
	0	
	0	
	0	
	0	Very useful Don't know enough to express a view
9.		your view, should more use be made of the individual student's QCS grade in
		tiary selection?
		No
		Unsure Yes
		Don't know enough to express a view
10.		CS results for individual students are in 5 grades (A to E). How useful would it be in
		ur view to have more grades?
	0	Not useful
	0	
	0	
	0	Very useful
	0	Don't know enough to express a view

11.	which three (3) of the following measures would provide the best information for tertiary selection? (Please select 3 only.)
	□ OP
	□ FPs
	□ ATAR
	□ Internal (within school) assessment of subjects
	□ External examinations of subjects
	□ University entrance tests
	□ University-devised ranking of applicants
	☐ A measure of overall achievement calculated differently from the OP
	☐ Grade on the QCS Test
	Generic skills test (other than test of the CCEs)
12.	n your view how good are current teacher-devised assessments in Years 11 and 12?
	O Not very good
	0 0
	O Very good
	O Depends on subject area
	O Don't know enough to express a view
13.	n your view how effective is the operation of state and district review panels?
	O Not effective
	0
	0
	0
	0
	O Very effective
	O Don't know enough to express a view
14.	n your view how comparable are results across schools for students in Year 12?
	O Not comparable
	0
	0
	O O Highly comparable
	O Don't know enough to express a view
15	There are five levels of achievement for reporting student results on exit from Year 12
	How many do you think would be ideal?
	0 3
	0 4
	0 5
	0 6
	0 7
	0 8
	0 9
	O Don't know enough to express a view
16.	There are various ways of expressing results. Which of the following would be your
	most preferred way?
	O Words (Very High Achievement Very Limited Achievement)
	O Words (different from above) O Letters (e.g. A, B,)
	O Letters (e.g. A, B,) O Numbers (e.g. 7, 6,)
	O Don't know enough to express a view
17	In your view how adequate are current procedures for arriving at a student's exit leve
17.	of achievement within a school (i.e. where teachers combine results from different
	assessments using on-balance judgments)?
	O Inadequate
	O
	0
	0
	0
	O Adequate
	O Don't know enough to express a view

18.		w much influence do you think the Australian Curriculum will have on the seensland assessment model?
	0	No influence
	0	
	0	
	0	
	0	Significant influence
	0	Don't know enough to express a view
19.	WI	hich category best describes you?
	0	Parent of high school student (present or past)
		Student currently in high school
		Educator/administrator in the secondary system
		Educator/administrator in the university system
		Educator/administrator in the VET system Other
20	_	
20	vvı ?in	hich secondary schooling sector do you have the most knowledge of or experience
	0	Government
	_	Catholic
	0	Independent
21.	Ple	ease rate your knowledge/understanding of the current senior assessment system
		d tertiary entrance procedures.
	0	Low
	0	
	0	
	0	
	0	High
	0	High



