Implications for moderation of proposed changes to senior secondary school syllabuses[1]

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Moderation is best considered as one component of an overall process of quality assurance. In a school-based assessment system such as Queensland's, moderation is essential for delivering comparability of results in high-stakes assessments. Queensland has an elaborate system of quality assurance, including sophisticated moderation processes, that has been developed over the past 35 years of school-based assessment and it has been shown to produce high levels of comparability. This paper provides an overview of those quality assurance processes as well as new processes being introduced coincident with the Queensland certificate of Education (QCE). Some of the challenges for quality assurance, and particularly for moderation, posed by proposed changes to the senior curriculum are considered along with some ways in which these challenges might be addressed. It is suggested that some modification to current processes would be necessary and possible without abandoning the key components. Once decisions have been made about the final curriculum framework, an appropriate mix of quality assurance strategies can be designed.

Moderation is the lynchpin of the school-based assessment system for senior secondary school certification in Queensland. It is the main means of quality assuring the achievement results reported on the Senior Certificate (SC), in future to be reported on the student's Record of Achievement and to contribute to award of the Queensland Certificate of Education (QCE). Some achievement results also contribute to the calculation of Overall Positions (OPs) and therefore form the basis for tertiary selection decisions. Moderation is therefore important for making sure that the achievement results are fair and appropriate and for maintaining public confidence in the SC/QCE and OPs.

In the 35 years since the introduction of school-based assessment in Queensland, and especially in the 25 years since the refinements of the Review of School-Based Assessment (ROSBA) a decade later, public confidence in the system has indeed been maintained. Moderation started as a collaborative activity involving consultation between schools but moved under ROSBA to an expert panel process involving advice to schools on the appropriateness of their assessment procedures and standards. Since then, various modifications and improvements have been made to operational procedures but the basic principles and processes have remained constant. Current procedures are well entrenched, have substantial support and are managed effectively and efficiently.

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The current moderation processes can be seen to have stood the test of time and to have been extraordinarily successful. Any changes should not be made lightly. Any changes need to be considered carefully to ensure that quality is enhanced rather than diminished. Proposed changes to the structure of the senior curriculum make some changes necessary but it would be preferable to retain as much as possible of the current system so that continuity and confidence are maintained through familiarity. Even so, it is timely to review whether some aspects of the current moderation processes can be modified beneficially. Processes that have been in place for such a long time can ossify.

One particular concern is that current moderation processes, in fact more generally current assessment processes, have become 'the way we 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 few existing materials for this. The main body of theory supporting school-based assessment practices is found in the Assessment Unit Discussion Papers 1–21 from 1986–87, now over 20 years old and not updated to reflect current concerns and language <http://www.qsa.qld.edu.au/yrs11_12/assessment/discuss.html>. These discussion papers touch only incidentally on moderation.

Current moderation processes are described in Moderation Processes for Senior Certification, the 'handbook' for schools and teachers detailing step-by-step procedures http://www.qsa.qld.edu.au/publications/yrs11_12/moderation/moderation_processes.pdf. However, this document focuses on processes not rationale. Moderation does not have any systematic body of theoretical justification and has been largely unresearched. This is not to say that current processes are unjustified, only that the public explanation is thin.

In discussing moderation, therefore, it is necessary to fill in some of the gaps in theoretical justification by reference to common understandings, professional interpretations, conference presentations and related documents. Filling in these gaps is important if moderation is to be soundly based rather than ad hoc.

What is moderation?

Moderation is a form of quality assurance for delivering comparability in evidence-based judgments of student achievement. 'Delivering comparability' implies action before the results are final, not simply checking whether they were satisfactory after the fact.

Defining moderation as a form of quality assurance directs attention to its purpose rather than its practice. This allows the possibility that other forms of quality assurance may suit some circumstances rather than moderation per se.

'Quality assurance', in its broadest usage, typically refers to methods for establishing confidence in the quality of procedures and outcomes. Here, the focus is assessment procedures and outcomes not other types of institutional or program procedures and outcomes. Quality assurance is often used in a narrower sense to refer only to procedures and not to outcomes, or in an even narrower sense to 'feed-forward' processes where the application of well-defined procedures is considered sufficient to deliver the desired outcomes without checking that it does so in the particular circumstances.

Confidence is always a matter of degree. More stringent quality assurance is required

where the stakes are higher and more confidence is needed. Where less confidence can be tolerated, quality assurance can be less stringent.

The more restricted term 'quality control' (or quality management) can refer to procedures adopted to monitor and endorse, and where necessary to adjust or correct, the actual implementation of some activity while it is occurring and before it is completed. In this sense, moderation is a form of quality control, where assessment procedures and outcomes are checked in some way to ensure that there is consistency in the resulting outcomes before they are reported. This is the terminology adopted in the ACACA principles for certification (ACACA 1999). However, quality control can suggest top-down surveillance rather than shared responsibility. It therefore seems preferable to use the broader term quality assurance. The proactive and monitoring aspects of assessment moderation are well signaled by reference to 'delivering comparability'.

'Comparability' has two meanings (Sadler 1986b, p.11):

- the results must be 'compare-able', that is, 'able to be compared'

- achievements reported by the same code ('grade' or 'level of achievement') must be 'equivalent' in terms of the standard they represent.

'Compare-ability' requires assessment against common characteristics or criteria, such as provided by a subject syllabus or other frame of reference, that is, the assessments are about the same qualities or 'essences'. 'Equivalence' requires consistency in the application of common standards so that all achievements given the same grade or level of achievement have reached the same standard. This necessarily means that standards must be defined and disseminated in such as way as to lead to common interpretation.

Alternative definitions of moderation cover similar concepts but not as efficiently. Thus, for example, an interstate conference of moderators (QBSSSS 1991) defined moderation as:

> A range of procedures aimed at enhancing the quality of, and the degree of comparability between, various statements of student performance or achievement. These achievements may be within:

- different classes following the same syllabus within a school

- classes following the same syllabus in different schools

- different courses in the one domain or discipline or even (in certain circumstances) across the domains of learning.

This definition refers to 'quality enhancement' as well as student achievement and comparability. 'Quality enhancement' does not have the force of 'quality assurance', suggesting only an attempt to improve but not to guarantee. It also reminds us that moderation can be within school and, some suggest, also between subjects (though 'in certain circumstances'?). In Queensland, moderation always has been seen as within subject (both within and between schools) but not between subjects. Scaling between subjects to produce an Overall Position (OP) is not considered to be moderation and has nothing to do with quality assurance.[2]

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[2] Scaling for OPs makes no claim about comparable standards of performance in different subjects. Rather, it is concerned with how to add together results in different subjects when different students take different

QSA's current documentation gives a couple of definitions. *Moderation Overview*, <http://www.qsa.qld.edu.au/yrs11_12/mod/index.html> says:

> Moderation is the name given to the quality assurance process for senior secondary studies used by the QSA to ensure that:
>
> - Authority subjects taught in schools are of the highest possible standards,
>
> - student results in the same subject are comparable across the state, and match the requirements of the syllabus, and
>
> - the process used is transparent and publicly accountable.

This mentions quality assurance, comparability and student results but not assessment, judgment and achievement. Instead, it mentions ensuring the highest possible standards of *teaching* (which implicitly includes assessment but shifts the focus somewhat) as well as process transparency and accountability (important characteristics for any assessment system since the purpose is the produce confidence in the outcomes).

Another document, *Moderation of achievements in school-based assessment* (QSA no date but current) answers the question 'what is moderation?' thus:

> Moderation is the set of processes designed to:
>
> - provide comparability in the system of school-based assessment
>
> - form the basis for valid and reliable assessment in senior secondary schools
>
> - involve the QSA and schools in cooperation and in partnership
>
> - maintain the quality of school-based assessment and the credibility, validity and acceptability of QSA certificates.

This definition is tied explicitly to the Queensland senior secondary school system of school-based assessment. That makes it less generic but very practical. It has an explicit focus on producing comparability and implies quality assurance ('maintain the quality … credibility, validity and acceptability') but does not tie comparability to achievement, assessment and judgment. In fact, the reader might ask 'comparability of what?'

The reference here to 'cooperation and partnership' is an important aspect of moderation in the Queensland school-based assessment system where schools assume responsibility for assessment of students and share overall responsibility for the assessment and certification system with the central authority. While this is an important feature of the Queensland system, and perhaps of any school-based system, it is not a defining characteristic of moderation per se, since moderation can also be between teachers (as assessors) within a school and also between markers of external examinations. The defining circumstance for moderation is several assessors making independent judgments of student achievement against the same standards.

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combinations of subjects and there are no common standards across subjects. The QCS Test determines the baseline general capability on to which to scale subject results. The problem is how to compare results equitably in different subjects. This problem does not result from school-based assessment. All Australia States and Territories undertake scaling using much the same rationale. Some states call such scaling moderation but it seems preferable for moderation to refer to comparable standards of performance within a subject and to use a different term, such as scaling, to refer to statistical comparisons between subjects.

School-based assessment

External tests and examinations need quality assurance processes to ensure that assessor (marker) judgments are comparable. However, these processes usually are not labeled moderation. Typically, moderation refers to quality assurance in school-based assessment. School-based assessment has several additional layers of complexity beyond the multiple assessors (markers) of external examinations. Not only are there different assessors whose judgments need to be comparable but the assessment processes themselves can differ between schools, sometimes between classes within a school, and potentially even between students within a class. Even if some assessment were undertaken using common assessment tasks, there would still remain a component of assessment idiosyncratic to each school—otherwise it would not be school-based assessment. Therefore, 'compare-ability' has to be established through reference to defined and commonly understood assessment criteria and performance standards.

The Australian Qualifications Framework (AQF) ascribes responsibility for the 'integrity, credibility and authenticity' of the state and territory senior certificates of education to the relevant state or territory certification authority. The AQF identifies 'three levels of quality control typically exercised in the interaction between the statutory authorities and the schools: curriculum development to achieve the best possible range of skills and knowledge and to identify explicit standards as a basis for reliable assessment; a process of registration and accreditation to control consistency of standards and the currency of the qualification; and moderation procedures to achieve comparability of student results' <http://www.aqf.edu.au/quality.htm>. This paints a broad canvas for quality assurance.

The document *Principles for the integrity, quality and long-term credibility of certificates of achievement* (ACACA 1999) provides the most widely accepted guidelines for quality assurance of senior secondary school certification especially in relation to school-based assessment. This adopts the language of quality control rather than quality assurance. Quality control is seen as essential for the worth of certificates. Three levels of control are suggested covering guidelines (curriculum specifications), plans (for teaching and assessment) and results (to achieve comparability). Procedures relating to results include moderation procedures, requiring scrutiny of demonstrated achievement so that 'the same result on the same learning program means the same thing across the state'.

Other points made in this document are:

- the highest level of quality control is needed for those assessments with the highest stakes, that is, should be 'matched to the importance to students and users of the results recorded on the certificates' (p.11)

- 'checks on accuracy of assessments involve expert and accountable scrutiny of the validity and reliability of assessment, as well as verification of student results' (p.11)

- The central authority issuing the certificate has to 'set up quality control procedures that allow it to take responsibility for the substantive truth of the … result on the certificate' (p.11)

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- The central authority issuing the certificate has to 'set and monitor a balance, consistent with the need for accuracy of results, between central standardisation and factors such as local flexibility and responsiveness' (p.18)

- An important component of quality control in school-based assessment is approval of school learning programs, to quality assure that program and also to hold schools 'accountable for the programs they teach and the results they provide' (p.38)

- School-based assessment requires a partnership between the certification authority and the schools responsible for the school-based assessments. 'characterised by active self-scrutiny as well as expert peer review of the quality, equity and comparability of these assessments' (p.55).

Shared responsibility was explored further in a paper by Pitman, O'Brien and McCollow (1999). They argued that 'accountability should be infused into, rather than imposed on top of, an assessment regime and system. With infusion, accountability is devolved, in a way not possible with imposition, to the many levels (classroom, school, district, system, regime) and dimensions (fairness, comparability of results, quality, cost effectiveness) of assessment' (p.5). Such 'infusion' rather than 'imposition' is important for the success of school-based assessment because teachers need to feel that that are a valued component of the system and that their professional expertise is respected. Successful quality assurance therefore needs to support and sanction professional expertise and confidence while at the same time exercising appropriate monitoring and verification of the quality of processes and outcomes.

Pitman, O'Brien and McCollow (1999) discussed how this is achieved in Queensland:

In an externally moderated school-based assessment system, schools take responsibility for implementing assessment but participate in procedures through which teaching and assessment programs are endorsed. They agree to the outcomes of these and other procedures for the review of standards of student work and verification of results. Schools also agree to make teachers available to participate in these procedures, which are undertaken at meetings of panels of local teachers (review panels).

The curriculum and assessment authority is responsible for quality control of assessment outcomes and for establishing and maintaining community acceptance of a certificate issued at the completion of senior secondary schooling. It is not a teacher-employing authority and so does not have a teacher supervisory role—this remains with principals of schools on behalf of the employing organisation.

Critical discussion of assessment tasks with colleagues is part of internal (within-school) moderation. School administrators have supervisory and support roles involving review of assessment methods, materials and results. Together with teachers they have a responsibility to the school community to provide maximum opportunities for each student to learn and achieve. Review panels, supported by officers of the authority, have a crucial role as external (to the school) moderators. Review panels provide advice to schools about the suitability of assessment tasks and outcomes proposed by schools.

Thus, the system provides a structure within which school and teacher decisions about programs of study and assessment, and the actual assessment of student work itself, are verified. It involves a partnership between schools and a systemic curriculum and assessment authority. The shared goal of the authority and schools, and the fundamental

reason for the partnership, is the accurate, coherent, comparable and valued certification of results. (pp.5-6)

Some of this is rhetorical flourish. Nevertheless, it points to the lesson that such shared responsibility is possible. The balance of responsibilities is a key aspect of the system, though schools can be 'called to account' by the central authority. Even so, the central authority has to exercise its overall control in such a way that school authority is not thereby destroyed. Negotiations with schools need to undertaken firmly but sensitively.

Pitman, O'Brien and McCollow (1999) elaborate further on how this works:

> Moderation by review panels places bounds on the extent to which teachers exercise freedom in deciding standards of student work. In this way comparability of results is sought through consultation, negotiation and partnership between teachers and schools on the one hand and the broader system on the other. Consistent and valid moderation depends on standards, evidence and consensus; that is:
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> > • the use of official statements describing standards at each level (which may be embedded in a criteria and standards matrix in which standards descriptors appear at each level for each criterion)
> >
> > • the use of actual student work as the evidence upon which judgments are made about standards of student work
> >
> > • the attainment of consensus among the judges that the work tendered matches the standards.
>
> Fredericksen and Collins (1989, p.30) suggest the need for a 'training system for scoring tests' in order to maximise reliability within an assessment system. A moderation process provides substantially more than mere training. Teachers not only submit their work programs and samples of the student work to review panels, they also consult and negotiate with review panels about the advice received from them. Where there is dispute, teachers engage in debate about matters such as the alignment of assessment programs with syllabus requirements, the appropriateness of assessment items, and the standards of student work. Information accumulated through the moderation process is fed back into the process of syllabus implementation and future development. (p.10)

There is reference here to both short-term and long-term processes. Short-term processes are directed at assuring the quality of each year's results. Long-term processes are directed at continual improvement in the quality of syllabuses, teaching and assessment. The provision of quality frameworks and materials as well as the training of teachers in their use are important components of overall quality assurance along with the moderation processes directed at monitoring and verifying assessment outcomes.

On the matter of shared responsibilities, QSA (2006, pp.4–5) clearly enunciates the separate expectations of the partnership:

> The QSA operates a moderation system that is built upon a close partnership with senior schools and cooperation from other bodies (universities, industry). *The arrangements are renewed each year with school principals indicating agreement to follow QSA moderation procedures and to forward data to permit students to receive the Senior Certificate* [italics added].
>
> The partnership requires each party to contribute resources and accept responsibilities.
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> The QSA provides resources and accepts responsibility for:

- designing, operating and supporting the system of externally moderated, school-based assessment
- preparing and disseminating syllabuses
- procedures and resources for work program and study plan preparation and approval
- establishing and training panels
- providing professional development to support the implementation of syllabuses
- collection processes for student achievement data
- certification of student achievement
- the integrity, quality and long-term credibility of the Senior Certificate.

Senior schools provide resources and accept responsibility related to:
- developing and implementing work programs and study plans that satisfy syllabus and moderation requirements, and judging student achievement against statewide exit standards
- establishing and implementing procedures for reasonable and accountable decision-making by teachers in senior subjects (internal moderation)
  – appointing a school moderator (principal or nominee) and subject moderators
  – analysing decisions and identifying areas where further school checks should occur before sending materials or data
- collecting samples of student work, assessment tasks and data necessary for students to receive Senior Certificates
- providing teachers to staff panels and carrying out moderation procedures
- accessing the professional development opportunities provided by the QSA
- providing members for QSA committees and subcommittees
- communicating school decisions and processes to students and parents.

The renewal of arrangements each year (see italics in quote) is an important aspect of the system. This is in the form of an application from each school principal for issuance of the SC/QCE to the school's exiting Year 12 students. The conditions imposed involve agreement to abide by and participate in the QSA's requirements and processes for moderation and certification. This agreement should be counted as part of the QSA's overall processes of quality assurance. Currently, it does not rate a mention in any of the documentation on moderation. This is probably because its main function is to allow a school to signal each year *at the beginning of Year 12* that the school has students in Year 12 who will complete their senior studies at the end of the year and will need to be issued a QSA certificate. In view of the current changes to senior certification (especially the introduction of the registration of students and the record of learning), this purpose seems irrelevant or could be accomplished by other means. The other aspects of the form, relating to compliance with QSA procedures for moderation and certification, are worth preserving as part of an overall approach to quality assurance but are misplaced at the beginning of Year 12. Some of the compliance requirements, especially the requirement to follow procedures for the approval of work programs, are on a longer time-frame, including Year 11 (and possibly now Year 10) and are long past for the current Year 12.

Consideration should be given to making such a form a more deliberate part of the quality assurance processes, perhaps asserted every few years. In addition to incorporating some of the present procedural requirements, this could include a check-list of processes that the school has or will put in place to ensure that teaching and assessment follows the agreed work program and is of the highest quality. Items relating to high quality assessment could be drawn from the ACACA document on *principles for*

the integrity, quality and long-term credibility of certificates of achievement (ACACA 1999). In essence these would be analogous to the management standards of the International Standards Organisation (ISO 9000 and ISO 14000) in the sense that they are the bedrock of processes considered necessary for delivering a quality product. As with the ISO standards, these standards would deal with processes not outcomes, that is, with the practices that should be in place for delivering quality outcomes. They would apply to the school as a whole. The ISO system involves independent audit that the business is in conformity with the standards. Independent audit could be considered as part of the overall system. Even so, self-audit is an important precursor to external accountability and directs attention to desirable features of school-based assessment and internal moderation processes that the school should follow.

Moderation processes in Queensland

The definitive statement on current moderation processes is *Moderation Processes for Senior Certification* (QSA 2005). This gives a detailed account of all procedures. The bulk of the handbook deals with processes for Authority subjects since this is where most moderation activity occurs. For completeness, the handbook includes statements about moderation processes for Authority-registered subjects, but these processes are restricted to approval of study plans where these follow Study Area Specifications or work plans where the subject is developed by a school.[3]

Authority subjects: The following extract from *Moderation Processes for Senior Certification* (QSA 2005, pp.7–8) summarises current moderation processes for Authority subjects.

> Senior external moderation is a set of processes designed to ensure that the levels of achievement in Authority subjects recorded on the Senior Certificate match the requirements of syllabuses. This involves the moderation of teacher judgments that are based on evidence of student achievement matched to syllabus criteria and standards.
>
> The aim of moderation is to promote consistency of teacher judgments with respect to levels of achievement. That is, students who take the same Authority subject in different schools and who achieve the same standard through the assessment programs based on a common syllabus will be awarded the same level of achievement.
>
> Moderation involves the processes of:
>
> - approving schools' work programs and study plans from which students' results may be recorded on Senior Certificates
>
> - monitoring (Year 11) progress of schools' implementation of syllabuses in Authority subjects
>
> - verifying (Year 12) judgments about student achievement in Authority subjects
>
> - confirming judgments made by schools on exit levels of achievement in Authority subjects
>
> - random sampling student exit folios in Authority subjects to assess comparability after exit levels of achievement have been awarded.

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[3] Changes are currently underway for Authority-registered subjects and these are discussed later.

Work program approval

Work program approval is a process of moderation. The Authority approves school programs of study in Authority subjects and Authority-registered subjects as programs for which the students' results may be recorded on Senior Certificates. In the case of Authority subjects, the relevant review panel checks the school's work program against the corresponding syllabus to ensure that the requirements of the syllabus have been met. In the case of Authority-registered subjects, study plans are reviewed by officers of the Authority.

The approval period is the span of years during which the teaching and learning based on a particular syllabus leads to student achievement being recorded on the Senior Certificate. For work programs, this is usually a period of seven years from the first Year 11 cohort to the final Year 12 cohort (four years for subjects in some stage of trial and for those with embedded vocational education).

Monitoring

Monitoring is the process by which review panels consider the schools' implementation of a course and standards of assessment in Authority subjects after approximately half of the course of study has been completed.

The focus of the monitoring meeting is on the quality of implementation of the course, and organisation of the submission. That is, monitoring is about answering the question: "How well is the school implementing the course of study?"

Review panels also provide schools with feedback on the quality of implementation of assessment and decisions about student achievement.

Verification

Verification is the process by which review panels advise schools on standards of Year 12 student achievement relative to syllabus descriptors of standards. The focus of verification is the quality of each school's decision-making informed by comparing standards of student work with the syllabus descriptors outlined in the criteria-and-standards matrix for determining exit levels of achievement. That is, verification is about answering the question: "How appropriate are the schools' judgments about students' achievements?"

If a review panel cannot substantiate the school's decisions, consultation and negotiation between the school and review panel take place.

Following verification, state review panels meet to examine sample verification submissions from schools in each district. This is to ensure that standards and levels of achievement in a subject are maintained across Queensland. The comparability phase concludes with the state review panel chairs signing off that agreement has been reached in terms of levels of achievement of sample student folios and district panel advice to the schools.

Confirmation

The period between receipt of schools' proposals for exit levels of achievement and the printing of Senior Certificates is referred to as the confirmation process of moderation. This involves district review panel chairs, state review panel chairs, and standards and assessment officers examining exit distributions of levels of achievement and may involve final review of nominated student folios.

Random sampling

Following senior certification, random sampling is part of the system of moderation that relates to confirmation of school decision-making. It provides information about how successful the QSA's moderation procedures are in providing schools with suitable advice about students, advice that leads to further action by schools.

At the end of the year following confirmation of results, the QSA extracts random samples of student folios for post-certificate analysis. This student work is reviewed by panelists in 'non-home' districts. Schools are given feedback in the following year.

In addition to the standard procedures detailed in this 'handbook', there are additional guidelines and procedures for schools on a variety of special issues, including:

- special consideration
- shared campuses
- variable progression rates
- year 12 students undertaking Year 11 semesters of study
- students discontinuing study in a subject
- atypical sample folios where work is missing.
<http://www.qsa.qld.edu.au/yrs11_12/mod/variations.html>

Of particular significance here are the Year 12 students taking Year 11 level studies and students discontinuing study in a subject (after 1, 2 or 3 semesters). These will be explored further later.

In terms of an overall approach to quality assurance, these moderation processes are both comprehensive and limited. They are comprehensive because there is detailed attention to all of the steps to be taken by schools and panels.[4] On the other hand, they are limited because restricted almost entirely to *Authority subjects* completed over four sequential semesters (though there attention to special issues elsewhere) and these processes are not positioned within a comprehensive approach to quality assurance; further, there is no mention of within-school moderation. A comprehensive approach to quality assurance would be preferable and would need to cover all aspects of quality assurance as well as all learning programs for which results are relevant to the QCE, with appropriate tailoring of quality assurance processes for each type of learning program.

Some important characteristics of these moderation processes are not captured in the current explanations of those processes. Yet they are important for understanding why these processes have been adopted and what effects are expected. These characteristics make the Queensland system distinctly different from some other systems of quality assurance and some other approaches to moderation. The following characteristics apply:

- The school principal, as school moderator, is responsible for all assessment and moderation within their school (but may delegate this responsibility) and appointment of subject moderators within the school

- Within-school moderation must precede any external moderation—all students studying a particular subject within a school constitute a single subject group and their results must be comparable

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[4] Some components (work program approval and random sampling) could be more appropriately seen as contributory to quality assurance but not to moderation per se if moderation is focused on comparability of results.

- Workshops are offered to teachers on implementation of new syllabuses and QSA standards and assessment officers are available for consultation by schools

- Training is provided for panel chairs and panel members (for application of standards and review of folios)

- Review panels consider only a small representative sample of folios for each subject group from each school

- Each folio is judged holistically against the relevant standards for the subject

- Results are awarded for actual achievement as evidenced by the student's folio, that is, what the student did, not what they could have done under different circumstances[5]

- Review panels *review* each school's judgments; they do not *re-mark*—rather, they look for evidence in the folio to substantiate the school's judgment

- Review panels adopt a positive approach to reviewing, that is, expecting to find the evidence to support the school's judgment

- Panels offer advice on quality of assessment and application of standards

- Panels do not adjust the school's results; the school retains control of and responsibility for the results

- Panels negotiate any differences of opinion directly with each school

- Schools are accountable for implementing these negotiated agreements

- QSA checks whether the agreements have been implemented

- Schools, not QSA, decide and enter the final results and are accountable for them

- QSA does not change any results but has ultimate authority for accepting (or rejecting) the results and issuing (or not issuing) the certificate

- QSA provides strong and positive support and advice to schools for assessment.

Authority-registered subjects: Inception of minimum standards for award of the QCE means that results in *Authority-registered subjects* now involve higher stakes than previously, though still less than for Authority subjects (because Authority subjects count towards an OP but Authority-registered subjects do not). In the document *Queensland Certificate of Education: Expect Success* (QSA 2005), new processes for quality assurance of Authority-registered subjects were announced (pp.32–34):

Quality assurance of Authority-registered subjects

Like teachers of Authority subjects, teachers of Authority-registered subjects make judgments of achievement. The basis for making these decisions is the criteria and standards of a study area specification (SAS) or, in the case of a school-based course, a

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[5] Special consideration may be given by the school to individual cases where adjustments to standard assessment requirements may be necessary to ensure equitable assessment. This can involve alternative arrangements or exemption. The student's folio must still be judged against the specified assessment criteria and standards. < http://www.qsa.qld.edu.au/yourqsa/policy/special-c/docs/spec-con.pdf>

work program.

Like judgments about Authority subjects, these judgments must be able to stand up to scrutiny.

The new quality-assurance processes for Authority-registered subjects build on existing practice.

Currently, the quality of achievement in Authority-registered subjects is assured in the following way:

• SASs used to develop courses of study are developed by the QSA

• QSA officers, such as standards and assessment officers and senior education officers (VET) help schools implement SASs

• study plans (Form R9) for SASs, or work programs, in the case of school-developed subjects, are reviewed by the QSA

• the QSA offers workshops to providers of a course developed using a SAS. These workshops provide information and advice concerning:

    - course development

    - updates and changes to VET

    - consistency of teacher judgments, including procedures for making decisions about a young person's performance, such as:

        - applying the principles of assessment

        - applying criteria and standards

        - basing decisions of achievement on evidence acquired.

To ensure consistency of teacher judgments in Authority-registered subjects, there will be new quality-assurance processes that include:

• application of the Quality Criteria to all courses

• a revised Study Plan (currently known as Form R9) that includes a self-audit process for providers and specific conditions for implementing an Authority-registered subject

• new requirements for a folio of student work to substantiate judgments of achievement

• expanded subject workshops so that teachers can discuss, analyse and validate achievement decisions

• new audit processes for schools offering Authority-registered subjects

• an expanded role for standards and assessment officers so that they can consult schools directly to ensure consistency across judgments of achievement

• new processes for making decisions on randomly sampled achievements in Authority-registered subjects.

Study plans and work programs for Authority-registered subjects are to be expanded to report the school's processes for self-audit and cover additional conditions for implementing study plans and work programs (such as policies for special consideration, appeals and late and non submission of assessments) (p.33). Processes for self-audit (using the expanded study plans or work programs), regular external audit and random

sampling for Authority-registered subjects are to be introduced from 2007 (pp.33–34).

All of these processes are in the process of being implemented by QSA. The enhanced quality assurance processes for Authority-registered subjects do not include external panel review. However, the processes for workshops, self-audit, external audit and random sampling are new.

What is the rationale for these processes?

As already discussed, school-based assessment delegates specific responsibilities to schools, but in order to achieve comparability of the achievement results some constraints are needed. Schools are responsible for, and therefore have latitude in, designing assessment programs for collecting evidence of student achievement and for making summative judgments of student achievement for purposes of certification, but the certificating authority (QSA) is responsible for setting the performance specifications against which achievement is judged (Sadler 1986a). The twin purposes of school-based assessment are 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 (Radford 1970).

Fundamental to these processes are the principles of *feedback and negotiation*. These are essential to preserving school-based responsibility for subject delivery and assessment within common parameters. QSA does not and cannot verify that all students have been appropriately taught and assessed. At best, it can provide guidelines and training, check that school are implementing appropriate assessment policies and practices, and provide advice to schools on the quality of their assessments and their application of standards. These can be accompanied by various degrees of accountability (for example, external audits and confirmation of results). However, these involve documentation and sampling. No amount of external surveillance can view the assessment of every student on every assessment. Moreover, assessments already undertaken cannot be replaced after a course is completed—only the judgments of selected folios can be reconsidered.

There is long-standing research evidence that inter-teacher agreement in *rank ordering* student performance is much higher than inter-teacher agreement on standards. Both require high levels of assessment knowledge and skill, but consistent inter-teacher rating against standards requires common understanding and application of the agreed criteria and the standards, what Sadler (1986b) referred to as 'guild knowledge'. QSA's quality assurance processes are directed at building fundamental knowledge and skills about assessment and at establishing 'guild knowledge' of criteria and standards. Workshops, work-program approval, self and external audits, and consultative advice provide the foundations for good assessment practices. However, the critical component is some form of external feedback and advice on judgments of standards. Also, the higher the stakes, the more accountability there needs to be for aligning judgments with the external feedback and advice.

For Authority subjects, QSA processes require schools to place students on rungs within levels. There are four underlying reasons for this. First, it recognises that teachers are more consistent in rank ordering than in standards placement. Second, it allows for easy

adjustment of the boundaries between levels when standards placement is queried. Third, the consequences for other students of adjustment to the placement of the sample folios can be checked. Fourth, ranking is of underlying importance for OP calculations.

For Authority subjects, *work program approval* is a key component of quality assurance because of the variety of ways that syllabuses can be implemented. For Authority-registered subjects following Study Area Specifications (SASs), variety is less an issue. Now that higher quality assurance for Authority-registered subjects is needed (for the QCE), study plans (and also work programs for school-based subjects) are being given a stronger function for self-audit. As already discussed, policy and practice that is school-wide could be transferred to a school-wide accreditation (audit) process leaving subject-specific processes for the study plans. Work programs might follow suit to some extent, especially if new syllabuses are more standardised.

Monitoring for Authority subjects is a useful process of feedback to schools at the half-way point for four-semester courses. Since all subjects are designed as four-semester courses, this currently applies to all subjects. Monitoring focuses on both quality of assessment programs and judgment of interim standards. It provides feedback to schools so that they can make corrections to their assessment and their standards well in advance of the end of Year 12. This mid-point check is especially important for new subjects, new teachers and new schools but the feedback to schools also serves a training function, that is, a way of engaging schools in further discussion on assessment and standards.

Verification and confirmation are the key process for Authority subjects. Again, schools receive feedback on their assessment and standards. In view of the short time between completion of verification and beginning of confirmation, there is little room for adjustment of the assessment program—although minor adjustments are possible and common and there is still in any case six weeks of assessment to occur. Strictly, the standards at verification are 'interim', though very close to final apart from some final assessments. Therefore, differences between verification and confirmation results must be justified. Negotiation occurs between panel chair and school to resolve any differences. At times, difficult cases might involve further central review of all folios for a school subject-group. Ultimately, with QSA's approval, the school enters the results and is accountable for them.

Random sampling is important for reviewing the success of the quality assurance processes and assuring the public of the quality of the SC/QCE. In the past, it has been restricted to Authority subjects and has played a limited role in long-term feedback for improvement in assessment and standards, being largely perceived as procedural. However, random sampling could play a much more deliberate role in public accountability and improvement by raising its profile, targeting identified weaknesses and reporting the outcomes of any resulting interventions.

How good are these processes?

The Queensland moderation processes have proved resilient; school-based assessment has lasted now for 35 years. This indicates some success. School-based assessment has never been seriously challenged in Queensland and is accepted as normal. However, any

serious erosion of quality assurance could change that.

There are only two sources of documentation on the degree of comparability achieved. One is the annual Random Sampling of Assessments in Authority Subjects (conducted since 1994).

Random sampling for Authority subjects has been conducted since 1994. Reports for the past seven years are on the QSA website. From 2000 to 2003 these report the percentage of randomly sampled *submissions* that were deemed to have no serious problems (97%, 93%, 96% and 92% respectively). From 2004 to 2006 the focus shifts to the percentage of *folios* whose level of achievement is supported (85%, 94% and 87% respectively) and the percentage where there is no more than one-third of a level of achievement difference in rung placement (92%, 93% and 87% respectively). Sampling error would require an confidence interval (unknown) to be placed around these figures. Within each chosen subject, random sampling of schools and students is stratified. Subjects are chosen strategically to assess the health of the system where it is most vulnerable (large subjects, new subjects, problematic subjects). Especially because of this bias, the statistics can be interpreted as revealing a very high level of comparability across the state. <http://www.qsa.qld.edu.au/yrs11_12/mod/review.html>

The other source of documentation on comparability is a research study by Masters and McBryde (1994). Pitman (2002, Level 5, Part C) summarises the findings:

> In the Masters & McBryde (1994) study, 546 student folios were each rated independently by two markers under each of three models. In the first model, folios were organised in school groups and markers worked without reference to the school's assessment criteria. In the second model, folios were organised in school-groups and markers were able to refer to the school's assessment criteria. In the third model, folios were distributed at random to markers, and markers were not able to refer to any school's assessment criteria. For each model, the inter-rater reliability index was .94. Masters & McBryde (1994, p. vi) concluded that these estimates represent "an exceptionally high level of agreement ... between [assessments]. These levels of agreement are significantly higher than the levels ... typically reported for independent assessments of student work—including independent assessments of [external] examination performances". (p.349)

So, the documentary evidence supports a conclusion that there is a high degree of comparability in the judgments of achievement in externally-moderated school-based assessment in Queensland. The documentary evidence is modest and some of it is dated. More systematic and continuing evidence would be desirable. Regular checkups are important for maintaining the health of the system and assuring public confidence. These checkups should be considered as part of the overall quality assurance processes.

What do other Australian States and Territories do?

The only other State or Territory with a wholly school-based assessment system is the ACT. The ACT adopts what it calls *structured, consensus-based peer review*:

> The process involves all Year 11 and 12 teachers from all colleges that offer the ACT Senior Secondary system. This moderation process takes place twice a year usually in early March and August. On each day portfolios of students' work in all subject areas are reviewed. In March the work from Year 11 semester 2 is reviewed and in August the work from Year 12 semester 1 is reviewed. This allows for the authentication of

standards for the same cohort over two consecutive semesters.

On each moderation day, presentations of units from T, A, V and M courses are presented for peer review at specified unit grade standards. These presentations include documentation of course unit delivery and a specified number of portfolios of student work according to the agreed requirements from different courses of study.

Teachers of each course, review another college's presentation and comment on:

- adherence to Board policies and course document requirements
- the quality and appropriateness of criterion referenced assessment tasks and marking schemes
- teacher judgments of student grade standards against system grade descriptors.

After conferencing, a consensus report is prepared on each reviewed presentation. This valuable feedback is forwarded to colleges and provides powerful data for use by teachers. Analysis of feedback from moderation days also provides the evidence base for identifying system curriculum and assessment issues.
<http://www.bsss.act.edu.au/moderation/act_grade_moderation_model>

This is a more participatory approach without the expert review, verification, confirmation and accountability aspects of the Queensland approach. Also, ACT has no common syllabuses and therefore no expressed standards. However, the ACT is very different from Queensland in terms of numbers and proximity of schools and therefore the opportunities for teachers to meet and share their 'guild knowledge'. In Queensland, regional teacher meetings could be a useful complement to existing processes rather than a replacement of them.

Other States and Territories have a combination of school-based assessment and external examinations. In most cases, there is statistical scaling of the internal (school-based) marks to the external marks and this is referred to as moderation. For example, the Victorian Curriculum and Assessment Authority (VCAA) says:

Statistical moderation is a process for adjusting the level and spread of each school's assessments of its students in a particular study, to match the level and spread of the same students' scores on a common external score. Because the external score is based on examinations done by all students across the State, it is a common standard against which schools' assessments can be compared.
<http://www.vcaa.vic.edu.au/vce/exams/statisticalmoderation/statmod.html>

This scaling process is foreign to Queensland's approach. In fact, such a process does not align performance standards in the subject across schools in the sense in which standards are defined in Queensland, that is, judgment against explicit performance targets so that the same result codes represent demonstrably equivalent achievement.

In other States and Territories, there is very little description and little detail concerning other types of moderation. This is not surprising if final marks are re-scaled and the external examination acts as the arbiter of standards. Also, fundamentally, these processes are dominated by tertiary selection and the calculation of a tertiary entrance rank. In contrast, Queensland has, more or less successfully, separated the process of reporting achievement against 'objective' standards from the process of calculating 'relative' tertiary entrance ranks (OPs).

South Australia uses more elaborate moderation processes than most. However, even there, detailed explanation and theoretical justification are sparse. Four kinds of moderation are mentioned:

Central moderation
Schools submit student materials and results sheets to a SSABSA central venue for validation of marks by a SSABSA moderation panel under the leadership of a Chief Moderator.

Group moderation
Teachers bring student materials to group meetings of subject teachers. A SSABSA moderator guides the teachers in validating the marking standards. Where necessary, cross-group validation of marks is conducted by a SSABSA moderation panel under the leadership of a Chief Moderator.

School-based moderation
SSABSA moderators visit the school to view the student materials, such as practicals or performance, and validate the marking standards of the teachers.

Statistical moderation
Statistical moderation only applies to those subjects that have an external assessment component. In subjects that are statistically moderated, external assessment results are taken as the standard for moderation of those school assessment results not included in central, group, or school-based moderation (i.e. non-statistical) processes.
<http://www.ssabsa.sa.edu.au/policy.htm> [See Mercurio for extended explanation (2006)]

The term used here is 'validation of marks' and the expectation is that marks may be changed as a result. This is quite different from the 'feedback and negotiation' approach coupled with the accountability for follow-through in Queensland. In most States and Territories (except ACT) the existence of external public examinations reduces the need to engage in elaborate processes of quality assurance for the school-based component.

Western Australia and Tasmania have 'consensus moderation'. Tasmania also has some external marking of folios. Victoria and New South Wales rely on statistical scaling.

In summary, no useful guidance for Queensland can be found in the practices of other States and Territories. Queensland already has more sophisticated practices and theories for moderation and needs to build on its long and successful history in this field.

Some quality assurance processes

What kids of quality assurance processes (especially moderation) could be considered and what are their attractions and detractions? The following discussion considers some possibilities. These possibilities are not necessarily recommended. Some possibilities are more desirable than others; some are undesirable but included to make that point. An appropriate quality assurance program needs to be constructed out of a balanced mix of various possibilities.

Participation agreement (school)

- Extension of current sign-up (see earlier discussion) to cover internal assessment policies and internal quality assurance processes (including internal moderation); involves self-audit.

- This has potential to strengthen each school's attention to principles and practices for quality assessment and implementation of QSA policies.

- Impact depends on whether it is supported by other processes.

Accreditation (school)

- Schools could be accredited for a defined period on the basis of their past excellence in assessment and comparability; they would not then make submissions for verification/confirmation.

- The perceived advantage is greater efficiency in moderation processes, with attention being given where it is most needed.

- There are substantial disadvantages: greater efficiency would be illusory as accreditation processes would be necessary; the full range of assessments is not available for comparison; the best models are not evident to weaker schools; accredited schools might withdraw their staff from participation in review panels.

Accreditation (subjects within a school)

- Rather than accredit the school as a whole, specific subjects could be accredited for a defined period on the basis of their past excellence in assessment and comparability; they would not make submissions for verification/confirmation.

- The perceived advantage is greater efficiency in moderation processes, with attention being given where it is most needed.

- There are substantial disadvantages (as for school accreditation); also, subject accreditation would presumably be limited to later years of the syllabus cycle.

Workshops on assessment and standards

- These are essential for all subjects; the new workshops for Authority-registered subjects provide some prototypes that would be desirable for all subjects.

- Strengthening professional capacity is fundamental for school-based assessment.

- Costs and logistics may place practical limits on what can be done.

Approval of work programs or study plans

- This is a key aspect of current procedures; its role varies with the latitude for choice allowed by syllabuses; approval processes could include more self-audit requirements than currently.

- Approval processes are essential where there are choices to be made in implementation of syllabuses; choice is a foundational aspect of school-based assessment, an important agency for innovation and renewal in teaching and assessment and for local adaptation to student needs and circumstances.

- Approval processes are potentially inflexible; constraints need to be pedagogically defensible; negotiation needs to remain a key principle.

Self audit

- This can be a component of the participation agreement (school level) and work programs or study plans (subject level); schools can be required to say how they will implement specified policies and principles course implementation and assessment and to rate the quality of their practices.

- Self-audit is highly desirable for all courses as a means of drawing attention to desirable practices and requiring schools to monitor their practices.

- By itself, this would not deliver comparability.

External audit

- External audit could focus on the whole school or specific subjects (or both); external audit could occur regularly and might be more frequent for new schools and new syllabuses.

- External audit would be a useful adjunct to self-audit; it allows deeper perusal of the school's practices and their validation through an external auditor.

- Costs and logistics require careful consideration.

Moderation forums

- Moderation forums might be integrated into workshops on assessment and standards or separate from them; various styles are possible—the most important feature is opportunity to place examples of assessments and student folios on the table and debate their merit; the emphasis is on teacher-to-teacher interchange in a collegial setting of learning and support.

- Teacher-to-teacher exchange is largely missing from the present system; moderation forums could be a replacement for monitoring; an advantage is direct generation of the 'guild knowledge' that is needed to drive comparability; moderation forums also develop professional confidence and expertise.

- Costs and logistics require careful consideration.

Moderation exchanges

- Moderation exchanges would mean that pairs or small groups of schools would share their practices, materials and standards for comment and feedback; exchanges could be created by the schools themselves or through central assignment and be school-to-school or subject-to-subject (or a mix of both).

- There is potential here to reduce the need for external audit; the emphasis is on teacher-to-teacher interchange in a collegial setting of learning and support; exchanges could be face-to-face or electronic (enabling cross-district exchange).

- Central management would involve costs and logistics; some exchanges would work better than others; would schools consider the effects worth the effort; would some form of reporting by necessary (a trade-off for external audit?).

Expert review panels

- These have proved their worth in the current system and are important for high-stakes assessments; the current monitoring role could be accomplished by other means but the verification and confirmation role is critical for comparability.

- Expert review is especially needed where there is considerable variability across schools in their implementation of syllabuses and assessment of student achievement; review panels are recognised as a powerful contributor to professional development and dissemination of ideas and practices; the extent of negotiation needed with schools at verification and confirmation indicates that they play an important role in creating comparability.

- Review panels sometimes stifle creativity—this may require better appreciation of the tension between innovation and control.

External moderators

- External moderators could be used instead of expert panels in some circumstances such as for verification/confirmation of special projects and alternative programs; standards and assessment officers already act in several respects as external moderators, especially in providing teacher workshops, advising schools, and assisting in the management of difficult cases; these roles could be extended.

- Special projects and alternative programs might be extremely variable and demand a range of capabilities unlikely to be found in review panels. External moderators can be more authoritative where problems are identified.

- External moderators could not realistically manage the present work of panels; at best they can supplement other processes; care is needed to balance accountability and responsibility, that is, to provide authoritative support not to take over.

Common assessment tasks

- Common assessment tasks could be used in a variety of ways ranging from optional prototypes through standard assessment of some common elements to a fully-fledged external examination. Much depends on whether such tasks are compulsory and whether the marking is internal or external and moderated or not.

- It is claimed that common assessment tasks would provide a common baseline comparison and/or a common reference point for discussing standards and/or a means of training teachers in good assessment practice, thus strengthening overall comparability.

- This claim is problematic and contentious. The current school-based assessment system is founded on the principles of curriculum flexibility and continuous assessment and much of that could be lost through standardisation. When the main focus of comparability is a common task, other assessments are diminished in importance. It would require considerable ingenuity to ensure that the common assessment task (single point-in-time performance) does not inappropriately override other items (from continuous assessment) in the student's folio. There will always be a problem when one type of evidence contradicts the other.

Typically, elsewhere, externally managed assessment has higher status and influence, irrespective of the relative validity of the evidence.

External reference tests

- External reference tests have some of the same features as common assessment tasks but are more restricted in format, typically consisting of objective items.

- Reference tests are used for scaling other assessments by providing a common baseline against which the other assessments are scaled. This does not support a judgment-based standards-referenced approach to determining achievement levels. Subject-based reference tests would undermine school-based assessment.

- The QCS Test could be considered an external reference test. However, this test is not used as a moderating device and it would make no sense to do so. Results in Physics, for example, could not be made more similar across the state by scaling against a test that includes no Physics. Rather, the QCS test measures underlying general capability in the senior curriculum to provide appropriate comparison of results in *different* subjects when adding them together to produce a measure of overall achievement.

Random sampling (prior to award)

- Random sampling before results are finalised could be used with lower-stakes assessments as a way of providing direct feedback to the sample schools; other schools could be provided with general comment on the kinds of problems identified in the sample schools; sampling might be partially random, allowing for deliberate targeting and complete coverage over a cycle of several years.

- Randomly sampled schools could be held accountable (where relevant) for adjustment of their standards before results are confirmed and for longer-term adjustment in their assessment strategies; all schools could expect to be sampled sooner or later; this process would not be as rigorous as current verification and confirmation processes and would not be a substitute for them with high-stakes results, but could supplement other support processes for low-stakes results.

- Who would review the folios (external moderator or panel) and when would this occur? Is such a process feasible? Costs and logistics would be a consideration.

Random sampling (post hoc)

- Post hoc random sampling has been in place since 1994; it could play a more deliberate role in public accountability and long-term improvement. It would be highly desirable for post hoc random sampling to be contracted to external researchers in order to produce an independent evaluation of system quality.

- All subject/course categories should be sampled, not just Authority subjects; sampling might be partially random, allowing for deliberate targeting and complete coverage over a cycle of several years.

- Currently, resources devoted to post hoc random sampling are modest; there is currently some targeting of problem areas but more extensive and systematic

enquiry into the health of the system is desirable; the outcomes of recommended actions should be reported in subsequent years.

Challenge of proposed changes to senior syllabuses

Four types of courses are suggested by the current review of Senior syllabuses:

- Core courses (2 years but with options for exit after one, two or three semesters)

- Preparatory courses (offer fresh start and provide articulation to core courses)

- Enrichment courses (short courses, both statewide and local; independent study)

- Advanced courses (extension courses allow specialised enrichment for talented students)

Following release of the blueprint, the following modification has been proposed:

- Preparatory courses (offer fresh start and provide articulation to standard courses)

- Standard courses (one year but with an option for exit after one semester)

- Elective courses (one year following a standard course offering specialisation)

- Elective trans-disciplinary projects (one semester following a standard course).

The following discussion considers both options. This allows for various outcomes.

The challenge is how to quality assure these new types of learning programs. Since the format of a standard continuous four-semester course would be broken, some changes to current practice would be necessary. It would not be appropriate to start with the proposition that current procedures are sacrosanct and that change must be limited to fit those practices. Educational considerations should be primary and quality assurance procedures should be adapted or invented to fit the new circumstances.

Nevertheless, a cautionary note must be sounded. QSA is the certification agency for senior secondary school education in Queensland. As such, the quality and currency of the QCE depends on QSA's quality assurance of the course results. This must be achieved to an extent that is publicly acceptable. The most important consideration is that quality assurance be at least as good as is currently perceived to be the case. The proposed curriculum changes assume that school-based assessment will continue. There appears to be no argument about this in Queensland. School-based assessment is well accepted, highly valued and preferred for senior secondary school certification. But confidence in school-based assessment could easily be eroded unless quality assurance is maintained at a high level and there is public perception that it is so.

Given the length of history and success with current moderation processes, it would be preferable to build on those processes and make as few changes as necessary. There is no point in reinventing the wheel and there is every reason to maintain the confidence that comes from well-tried familiar processes.

Different types of quality assurance for different types of courses?

Whether the same level of quality assurance is needed for all types of courses depends partly on the consequences. That is, different consequences allow or demand different levels of quality assurance. The highest level of quality assurance is needed where the consequences are most serious. More serious consequences demand higher quality assurance; less serious consequences allow lower quality assurance. This is essentially the situation now. Authority subjects are submitted to a higher level of quality assurance than Authority-registered subjects. The crucial difference, though this is usually implied rather than stated, is that Authority subjects count towards an OP whereas Authority-registered subjects do not. The use of Authority-registered results is therefore more diffuse and less subject to direct critical comparison. The consequences of lower comparability are less serious.[6]

The level of quality assurance required depends on the degree of exposure to public comparison and how much lack of comparability can be tolerated. For example, subject results on state certificates (versus a school or institutional certificate) are assumed to be comparable; the common subject names and nomenclature as well as the state imprimatur on the certificate mean that results are expected to have a high level of comparability. Even so, all results do not demand the same level of comparability; results that contribute to highly competitive selection decisions, that is, where the stakes are high, require a higher level of comparability than results where there are less competitive uses of the results and lower stakes.

The answer to this question (different types of quality assurance for different types of courses?) therefore depends on whether the results contribute to high stakes selection decisions or not. That, in turn depends on how tertiary selection procedures are recast in the light of any changes resulting from this current review of Senior syllabuses. However, for purposes of this analysis, some assumptions can be made. In any case, these considerations are not one-way. The types and levels of quality assurance implemented can influence tertiary selection processes as much as vice versa.

In the first model, it is reasonable to assume that *core courses of four semesters* as well as *advanced courses* would contribute to tertiary selection. Similarly, it is reasonable to assume that *preparatory courses* would not, since they offer a stepping-stone to core courses and would provide insufficient preparation for tertiary studies in themselves. The ambiguous cases are *core courses with early exit (after one, two or three semesters)* and *enrichment courses*.

In the second model, again preparatory courses would not count for tertiary selection, but presumably the others would (although the status of the standard courses for this purpose is unclear, especially since they would mainly be taken in Year 11 which is currently treated as formative and might be thought too early to be relevant for tertiary selection).[7] The high-stakes courses in this model are of either one semester (trans-disciplinary

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[6] The calculation of a tertiary selection rank from Authority and Authority-registered subjects for students ineligible for an OP undermines this claim to some extent but not much since such ranks are unlikely to be high enough to challenge for entry into the most highly competitive university programs.
[7] Perhaps only the elective courses (disciplinary and trans-disciplinary) might count for tertiary selection since these are at Year 12 level.

projects) or two semesters (standard and elective). Some students may take standard courses in Year 12 (though they are at 'Year 11 level'). Additional complications could be: students exiting both standard and elective courses after one semester); and whether both standard and elective courses could be offered by some schools at 'double pace' over one semester.

First model: Early exit from core courses

Core courses of four semesters duration could be handled in the same way as current Authority courses. However, difficulties would arise if exit after one, two or three semesters became more common.

It is already the case that students can be given a result for exit from an Authority or Authority-registered subject after one, two or three semesters. This option allows flexibility for students who wish to change or drop subjects over the two years of senior studies (and also for students who wish to choose some different subjects in a repeat of Year 12). This option is not without its problems since it is not clear what achievement standards apply for assessment earlier than completion of four semesters in a subject.[8] Currently, the system absorbs the risks because the numbers of students are small and the consequences of inconsistent assessment for these early exits are diffuse.

The numbers of students are low because such students are exceptions, typically where the student has chosen subjects that turn out to be uncongenial for them. Typically, too, most changes to another subject occur at the end of one semester. Essentially none occur after three semesters.

The consequences are limited because major decisions are not connected to performance on early exit assessments. Changing of subjects typically occurs because of poor performance in the initial subject. Achievement in the replacement subject is likely to be taken more seriously in any perusal of the student's results because it is later in time.

This last point might be challenged by pointing to the role of early exit results in calculation of OPs. In fact, the rule concerning 20 semesters (3 full subjects plus 8 other semesters) for calculation of OPs drives most concerns about equity in single semester results. Without this inclusion, these results would be of little consequence. For purposes of OP calculation, most of the cases of early exit could be dealt with more effectively by allowing students who complete the final three semesters of a subject after one semester in another subject to be credited with an extra semester in the replacement subject, on the grounds that they needed to 'catch up' for the missed semester in that subject and that what really matters is their final performance in that subject, that is, the result for their folio on exit from Year 12. In other words, a beneficial change would be to credit anyone who completes the final three semesters of a subject with the extra (initial) semester in that subject, the result in which has become essentially irrelevant and redundant. This simplification would reduce considerably any pressure on quality assurance of single semester results.[9]

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[8] This would also require some change in the way that current standards statements are framed to allow recognition of four distinct stages of development.

[9] Allowance is already made for cognate subjects to be combined to make up a complete four-semesters for purposes of OP calculation, but the separate results are preserved. This is not the same as ignoring the first semester results and crediting that semester when three semesters in the replacement subject are completed.

Even so, the implication of the review is that there might be many more students exiting after one semester of a core course. Much will depend on how many students exercise this option (and whether schools encourage it) and what replacement is taken up in subsequent semesters. Much also depends on the provisions schools make for flexibility, for example, whether the first semester of a course can be taken in the second semester—which seems unlikely—or done in the first semester of Year 12 as a 'filler'—which may be more likely.

At the very least, if this option were encouraged—rather than simply tolerated, as at present—more deliberate specification would be needed of the relevant standards against which one-semester exit performance is to be judged. Some form of modularising of subjects may be necessary so that the first semester has more than the current 'finding your feet in the subject' orientation and has its own definite set of exit outcomes. What might be needed for quality assurance of these results would depend on the popularity of the option and the use of the results (as already discussed). Current moderation practices for Authority subjects do not attend to this issue. New processes would need to be considered.

The situation for exiting after two semesters in a subject is somewhat different. This typically arises from either dropping a subject entirely (without replacement, often to lighten the load) or from beginning a subject in Year 12 (and taking it for only two semesters). It is the case that some guidance is currently available to schools—through monitoring—concerning the standards applicable at the end of two semesters of a subject. This may build tacit understandings of these standards. However, this has never been studied systematically and the level of comparability is unknown. Again, current numbers exiting after two semesters are small, but the numbers are likely to increase substantially if two-semester courses are encouraged. Quality assurance of these results could become a major issue.

If monitoring at the end of Year 11 were maintained, this would continue to provide guidance to schools on standards applicable at the end of two semesters. However, monitoring advice arrives far too late (late first term of the following year) to be applicable to the award of results to Year 12 students taking a two-semester sequence in Year 12. Also, monitoring does not have the same force as verification and confirmation for four-semester results. Some additional process would be necessary for moderation of the results of these exiting students.

Procedures do currently exist for verification and confirmation of results for students taking a two-semester sequence (at Year 11 standard) during Year 12. This works satisfactorily because it is known that these students will be completing Year 12 that year. They are simply inserted into the normal verification and confirmation process (and judged against 'implicit' Year 11 standards). If there were a mix of Year 11 and Year 12 students in the same course, they may need to complete the year at the same time (early for Year 11 students) but that is something that the school could handle internally.

Three-semester courses (that is, covering semesters 1–3 of a subject) could be more problematic than one-semester courses, though that again depends to some extent on the

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The argument for ignoring first semester results in calculation of OPs is the same for abandoned subjects as for complete subjects—first semester assessment should be treated as formative and not summative.

uptake. Current cases are treated as exceptions and do not appear to cause any concern. There is likely to be little uptake apart from a few students lightening their load in the final semester of Year 12. Small numbers can always be absorbed as exceptions. On the other hand, more systematic take-up would require systematic attention. Whether these cases complete the three semesters mid-year or end-of-year, they could be dealt with similarly to the year 12 students taking two-semester of Year 11 studies, that is, through special procedures at the time of verification and confirmation.

The general conclusion therefore is that different approaches to quality assurance may be needed for each of the course-lengths (one semester, two semester, three semester and four semester). The variables affecting what kinds of processes might be adopted are: whether the results affect tertiary selection; how many students are involved; and the timing of the award of results, especially, whether the results are awarded in the final semester of Year 12 though procedures already exist for that situation.

To summarise:

- if only completed (four semester) courses counted for tertiary entrance, then quality assurance of one, two and three semester results could involve a lower level of quality assurance; alternatively, if at least one-semester results did not count for tertiary selection, then there would be reduced pressure on comparability of these results (though clearly still less so on the others)

- if the numbers of students involved are small, then either comparability pressures are less since they are special cases or it is easier to deal with these cases using special processes; otherwise, additional processes will be necessary though these do not have to be the same as for completed (four semester) courses nor even the same as each other (for one, two and three semesters)

- if the results for two semesters are awarded in the second semester of Year 12, they can be managed as at present through verification and confirmation (though there might be many more to manage than the current exceptional cases); results awarded in earlier semesters could be handled similarly but allow a more extended timeframe.

First model: other courses

Preparatory courses are not high stakes. Quality assurance could be modelled on the new processes for Authority-registered subjects.

Enrichment courses would require new approaches because of their one-semester length and their likely dispersion across the state. External moderation might be at state level and processes could include a mix of workshops, self audit, moderation forums and exchanges, expert review panel and/or external moderator. It might be necessary to consider quality assurance for these courses as a year-to-year process of refinement rather than a process for verifying the results within a particular year. Some form of verification would be possible for courses completed earlier than the second semester of Year 12. However, verification would be problematic for courses taken in the second semester of Year 12. The end of term 3 would appear too early for comprehensive evidence to be available (even though this is effectively two-thirds of the semester). There could be time

pressures if evidence was not available until November—although maybe these pressures could be managed through smart electronic processing.

Advanced courses would presumably be more common and for two-semester courses moderation could be based on expert panel review. One-semester courses would have similar problems to one-semester enrichment courses with the added problem of being more prevalent and therefore requiring more complex management. External moderators may be the answer.

Second model: preparatory courses

As for the first model, *preparatory courses* are not high stakes. Quality assurance could be modelled on the new processes for Authority-registered subjects.

Standard courses represent a substantial change of structure and quality assurance processes would need to change to match the new situation. Because these courses would be self-contained, they would need exit criteria and standards for completion at the end of two semesters. Monitoring would no longer be relevant, at least in its current form, since the end of two semesters would mark an endpoint not a midpoint. Any midpoint process would need to be transferred to the middle of the year, which would not be feasible as an expert review panel process but could conceivably involve moderation forums and/or exchanges of material between schools.

However, current end-of-year monitoring processes possibly could be transformed into full-fledged verification-confirmation processes, at least for those courses completed in Year 11 by continuing students. This would mean submission of a sample of *completed* folios at the end of Year 11 for panel review in February. Verification and confirmation would be a combined process. Negotiations of final recorded results would be complete by the end of term 1 of Year 12.

Students might be discouraged from exiting a standard course at the end of the first semester. There should be less reason to do so because there would be fewer options. It would be very difficult to take up another standard subject at that point (half-way through the course). There would be some exceptions and these could continue to be treated as they are currently.

Under this model it could be expected that many students would be taking standard courses in Year 12 as well as in Year 11 (or instead of Year 11 if they are taking preparatory courses in Year 11). In those cases, results would have to be verified and confirmed before the end of the year and could not be held over for review in the following year. These results would have to be treated in the same way as the results for Year 12 students taking Year 11 studies are treated now. That is, verification and confirmation would need to occur parallel to the verification and confirmation processes for elective (Year 12) courses (see below). This assumes that the number of such cases remains reasonably contained. Parallel processing of completing students October/November and continuing students in February/March could become unmanageable (and would there be comparability across the two occasions?). However, processing continuing students in October/November would truncate the school year for Year 11 students. This might, of course, be an inevitable consequence of these proposals, that is, Year 11 and Year 12 students completing the school year at the same time.

Elective courses typically offer specialisation in Year 12 following a standard course in Year 11. These would be the courses with the highest stakes. Because they are two semester courses, as with standard courses there could be some form of participatory moderation process in mid-year. Verification and confirmation could occur as now in October/November. It would be preferable to discourage exit after one semester but such cases could be treated as now as exceptions. If schools were to teach these courses at 'double rate', that is, within a single semester, verification and confirmation could remain for all cases at the end of the year. Properly, for strong comparability, all cases should be considered at the same time.

Elective trans-disciplinary projects offer similar but larger challenges to those identified earlier for enrichment courses in the first model. Generic criteria and standards would be needed as well as appropriate training in their application. The specialised nature of these projects might make it difficult for external moderation of the standards. However, some external comparison would be needed. This might be best managed through an external moderator in conjunction with other processes to support comparability, such as moderation forums and exchanges.

Conclusion

Moderation processes should be seen as part of an over approach to quality assurance. While moderation to secure comparability of results is essential for high-stakes assessments (those that count for tertiary selection), for lower-stakes assessments other quality assurance processes may be sufficient. For high stakes assessment, the critical moderation processes are verification and confirmation of results. However, other quality assurance processes, such as workshops, program approval and audits, are also needed. Processes should not be considered in isolation but as part of an overall system.

This paper has considered some ways in which quality assurance, and particularly moderation, could be approached in the context of proposed changes to the senior curriculum. It is concluded that quality assurance processes, including moderation processes, could be devised for the proposed curriculum without abandoning important principles and practices that have been successful with the current curriculum. The best overall mix of quality assurance processes can be decided when the final structure of the senior curriculum is determined.

References

Australasian Curriculum, Assessment and Certification Authorities (ACACA) 1999, *Principles for the integrity, quality and long-term credibility of certificates of achievement*, Queensland Board of Senior Secondary School Studies, Brisbane. <http://www.qsa.qld.edu.au/publications/research/yrs11-12/assessment/lt-cred99.pdf>

Frederiksen, J. R. & Collins, A. 1989, 'A Systems Approach to Educational Testing', *Educational Researcher*, vol. 18, no. 9, pp. 27–32.

Masters, G.N. & McBryde, B. 1994, *An investigation of the comparability of teachers' assessments of student folios*, Tertiary Entrance Procedures Authority, Brisbane.

Maxwell, G.S. 2006, *Quality management of school-based assessments: Moderation of teacher judgments*, Paper presented at the 32nd IAEA Conference, Singapore. <http://www.iaea2006.seab.gov.sg/conference/programme.html>

Mercurio, A. 2006, *Teacher-based assessment at the upper secondary level of education: An exploration of the interaction between 'teachers as assessors' and 'teachers as moderators'*, Paper presented at the 32nd IAEA Conference, Singapore. <http://www.iaea2006.seab.gov.sg/conference/programme.html>

Pitman, JA, O'Brien, JE & McCollow, JE 1999, *High-Quality Assessment: We are what we believe and do*, Paper presented at the IAEA Conference, Bled, Slovenia. <http://www.qsa.qld.edu.au/publications/research/yrs11-12/assessment/hq-ass-99.pdf>

Queensland Board of Senior Secondary School Studies (QBSSSS) 1991, *Ideologies, principles and philosophies underpinning moderation in Australia*: *Report of the Inaugural Conference of Australian Moderators*. <http://www.qsa.qld.edu.au/publications/research/yrs11-12/assessment/ipp-mod91.pdf>

Queensland Studies Authority (QSA) 2005, *Queensland Certificate of Education: Expect Success*. <http://www.qsa.qld.edu.au/learning_priorities/qce/docs/qce_technical_paper.pdf>

Queensland Studies Authority (QSA) 2006, *Moderation processes for senior certification.* http://www.qsa.qld.edu.au/publications/yrs11_12/moderation/moderation_processes.pdf

Queensland Studies Authority (QSA) no date, *Moderation of achievements in school-based assessment*. <http://www.qsa.qld.edu.au/yrs11_12/mod/docs/mod-sba.pdf>

Radford, W.C. (Chair) 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,* Queensland Department of Education, Brisbane.

Sadler, D.R. 1986a, *School-based assessment and school autonomy* (Assessment Unit Discussion Paper 11), Queensland Board of Secondary School Studies, Brisbane. <http://www.qsa.qld.edu.au/publications/yrs11_12/assessment/rosba011.pdf>

Sadler, D.R. 1986b, *Subjectivity, Objectivity and Teachers' Qualitative Judgments* (Assessment Unit Discussion Paper 5), Queensland Board of Secondary School Studies, Brisbane. <http://www.qsa.qld.edu.au/publications/yrs11_12/assessment/rosba005.pdf>

Pitman, J.A. 2002, *The Senior Certificate: A New Deal*, Education Queensland, Brisbane. <http://education.qld.gov.au/curriculum/plan/senior-certificate/report.html>