



## CHAPTER 11

# **Managing without public examinations: Successful and sustained curriculum and assessment reform in Queensland**

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### **Introduction**

It is now over forty years since William Radford delivered the report that took his name and transformed secondary education in Queensland. The Queensland government accepted the report's recommendation that secondary-school external examinations be replaced by externally moderated school-based assessments. This assessment system has been very successful and has become part of the culture of education in Queensland. The system has grown in strength and sophistication over the years—initial uncertainty and confusion have been replaced by public confidence and teacher proficiency due to changes instituted in the 1980s and continually refined up to the present day. The strength of the system results from clear principles, consistent leadership, teacher professionalism, workable procedures, demonstrated success and recognisable benefits. There is essentially no public or professional desire for a return to the old ways. It has put down strong roots. Given the depth to which school-based assessment now infuses educational thinking and practice in Queensland, any attempt to return to external examinations would be difficult, even traumatic, and widely considered as retrograde and destructive.

The last Junior examination (for year 10) was held in 1970 and the last Senior examination in 1972 (for year 12).<sup>1</sup> So the last cohort of Queensland students to experience an external examination regime was born about 1955. Anyone born later, that is, anyone

younger than about fifty-five years of age in 2010, has known only school-based assessment for their secondary school subjects and would have no experience of written external examinations. Albeit, because of progressive changes to the system, they would have had rather different experiences of school-based assessment depending on which period of the past four decades they attended secondary school.

It is curious that no other Australian state or territory except the ACT has taken a similar step. Further, Queensland's assessment concepts and practices, while firmly founded in educational and assessment theory and research, have not been adopted elsewhere in Australia. Where school-based assessment occurs in other states and territories, it is fundamentally different.<sup>2</sup> Consequently, it is important to ask how did the Queensland system of externally moderated school-based assessment emerge, evolve and thrive, what are its essential characteristics, benefits and shortcomings, and what lessons can be learned for the rest of Australia and the world.

The development of externally moderated school-based assessment in Queensland can be seen as consisting of four broad stages: 1. *Initial stage*, roughly covering the 1970s, during which the recommendations of the Radford Report<sup>3</sup> were implemented, with some initial confusion but with general acceptance that the overall direction was the right one and that any 'teething difficulties' could be resolved; 2. *Review and reorientation stage*, roughly covering the 1980s, during which the recommendations of the Scott Review<sup>4</sup> were implemented, with the development of new principles and new practices, both of which have stood the test of time; 3. *Consolidation and diversification stage*, roughly covering the 1990s, during which recommendations of the Viviani Review<sup>5</sup> and the Wiltshire Review<sup>6</sup> were implemented, involving modified procedures for tertiary selection and a broadened and reshaped curriculum that included Vocational Education and Training options; 4. *Redefinition and expansion stage*, roughly the past decade, during which the recommendations of the Pitman Review<sup>7</sup> and Gardner Review<sup>8</sup> were implemented, with a new Queensland Certificate of Education (QCE) replacing the previous Senior Certificate, provision of even broader options for crediting student learning, and articulation of alternative learning pathways for students.

### Initial stage

The immediate catalyst for change to the public examination system in Queensland came from the arbitrary setting of and massive failure rates in two successive years of Senior Physics examination papers, in the late 1960s. However, the public outcry over the exposure of poor examination practices merely catalysed existing public concern for change and especially for greater diversity in the secondary school curriculum to match the greater diversity and interests of students. Year 12 retention rates rose from 7 per cent in 1950 to 30 per cent in 1970 (modest by current retention rates, now around 80 per cent, but dramatic then), and senior secondary education was increasingly seen as serving a variety of needs and purposes, not just preparation for university and college education with a curriculum controlled and set by university professors and with assessment dominated by written examinations.

In 1969, the Queensland government appointed a committee to review the public examination system. This committee was chaired by Dr William Radford, the then Director of the Australian Council for Educational Research (ACER) located in Melbourne. The report of this committee, usually known as the Radford Report,<sup>9</sup> was accepted and implemented by the government with only minor modifications. The new system became known as the Radford Scheme (or System).

The Radford Report provided a rather discursive exploration of options for secondary school assessment, analysing the merits and demerits of school-based assessments versus public examinations. The arguments remain valid today. The report recommended a direction for system development and a justification for taking that direction, but not a strategic plan, taking the view that much depended on future discovery, experience and invention. In fact, responding to criticism on this point, Radford<sup>10</sup> claimed that the guiding orientation was a general progressive philosophy of education and that it was unreasonable to expect all the outcomes to be anticipated. This is consistent with Fullan's later-stated principles of educational change.<sup>11</sup>

It is, however, possible to recognise two main aims in the Radford Report:

- *increased flexibility and adaptability in curriculum*—in order to cater to the widening diversity of student abilities, interests, needs and destinations;
- *increased reliability and validity in assessment*—increased reliability by removing the inherent instability of single-occasion (and peak-pressure) testing and increased validity by assessing the full range of intended and desired learning outcomes.

Curriculum diversity was to be achieved by creating opportunities for schools to create new courses of study as well as expanding the range of learning outcomes that could now be assessed. Schools would also be able to implement approved subjects in ways that suited local circumstances, available resources and student characteristics.

Concerning reliability, continuous assessment would lead to more stable judgments of student achievement (through collection of more extensive information over time and consultative judgments among teachers). The associated challenge of making school-based assessments comparable across the state (so that ‘performances awarded the same grade are genuinely equivalent’) was not seen as problematic and was to be met by a system of moderation led by subject moderators and involving peer review. Concerning validity, the possibility of broader and multiple modes of assessment would drive attention to broader learning outcomes appropriate to secondary education as a ‘stage of education with its own objectives’.<sup>12</sup>

The recommendations of the Radford Report dealt with general structures and procedures. These included a central statutory body (Board of Secondary School Studies) to control the nature and the award of the two certificates, Junior and Senior; development of syllabuses by representative Subject Advisory Committees, providing broad frameworks and not prescribing the detail; opportunity for schools to initiate subjects for approval; freedom for schools to offer non-approved subjects on their own behalf; and freedom for schools to choose the details, methods of presentation and methods of assessment for an approved syllabus within a system of moderation.

The first few years of the system were difficult. Teachers were unprepared for the change and found the new system challenging. They needed to learn new skills. Moreover, they had to learn them through experience. There was a good deal of confusion about how

to conduct good assessment. Models for assessment other than written examinations were scarce. New ideas for assessment (and moderation) had to be invented and trialled. Yet, there was determination to make the system succeed and there was widespread goodwill in coping with the difficulties. Despite some anxiety and concerns, very few participants wanted to turn the clock back. Rather, most wanted the system to succeed and saw initial difficulties as challenges to be met and overcome. This commitment to the long term allowed the system time to stabilise.

Two early studies of the system were conducted, both collecting data in 1974, after completion of year 12 under the new system by the first cohort of students.<sup>13</sup> These studies produced similar findings, signalling both positive and negative outcomes. Positive outcomes included: greater teacher involvement in decisions about curriculum and assessment and growth in their professional capabilities; increased adaptation of teaching approaches to student needs; and increased validity of assessments through attention to a broader range of learning objectives. Negative outcomes included: inadequate moderation processes; teacher uncertainty and insecurity; over-emphasis on tests and examinations; inadequate attention to formative feedback to students; student anxiety about and competition for grades;<sup>14</sup> student orientation towards instrumental learning ('does it count?'); and erosion of relationships between students and teachers (through the teacher's new gate-keeping role as assessor). The anticipated liberalising and humanising possibilities of the new scheme were not very evident in those early years of the scheme. But these were simply growing pains. The system later charted new directions and emancipated itself from these early concerns.

Radford himself, while expressing disappointment at the negative consequences of the scheme, denied that they were inevitable and saw the positive outcomes as being in line with good teaching and learning practices. To him the main issue was:

What are the ways to provide school assessment which will give schools desirable freedom in method, avoid too frequent internal assessment, encourage diversity in courses, maintain student interest in learning for its own value, and develop or restore that close relation between teacher and student in which they combine to cultivate the latter's capabilities to the full.<sup>15</sup>

### Review and reorientation stage

Following receipt of the two research studies in 1976, the Board of Secondary School Studies (BSSS) commissioned a review chaired by Professor Edward Scott. Weighing all the evidence, the review committee concluded that the scheme was working: external examinations were abolished; internal assessment was happening; there was public acceptance; and schools were beginning to exercise their freedom in syllabus design and teaching approaches.<sup>16</sup> However, the report recommended some refinements and improvements. Its recommendations were quite detailed: thirty-six *policy* and sixty *machinery* recommendations. Some of these were later dropped or amended, but the broad thrust of report was accepted as a basis for change. Key concepts concerning assessment were:

- moderation in years 11 and 12 to be conducted by expert review panels with a focus on accreditation of work programs and certification of student results
- changing assessment from peer-referencing to standards-referencing by
  - specifying achievement criteria or performance dimensions, initially under the categories of content, process and skill
  - specifying performance standards, initially called ‘levels of competence’ and later simply ‘levels’ or ‘standards’
- reporting a single exit result rather than separate semester results, thus allowing a more developmental approach to learning and assessment
- using five ‘exit levels of achievement’—Very High, High, Sound, Limited, Very Limited.

At this time, the Queensland Parliament established a Select Committee of Enquiry into Education. In its first interim report,<sup>17</sup> the Select Committee strongly supported the recommendations of the Review Committee and made some further recommendations, though some of these also were not implemented. After a period of public discussion, the Queensland Cabinet in November 1979 endorsed the reports of the Review Committee and the Select Committee and accepted phasing in of changes over several years. Implementation began in 1980 with the first of three phases. There were some industrial issues concerning assessment as a result

of perceived additional workloads for teachers but these were successfully resolved by the provision of special government funding for teacher support services during the phase-in. By 1986 all schools were operating on the revised system.

The 1980s were a period for working through the various theoretical and practical issues raised by the introduced changes. Procedural matters were dealt with first and some of the enduring principles of the system began to be established. However, there remained many uncertainties about assessment policy and practice. In order to establish firmer underpinnings, the BSSS established an Assessment Unit led initially by Dr Royce Sadler. In its three-year life, this unit produced twenty-six discussion papers. These influential papers provided substantive theory and concepts to guide assessment within the Queensland system. In particular, they provided convincing justifications and strategies for adopting a decision-based approach to assessment, that is, where assessment involves judgments against defined standards.<sup>18</sup>

While pointing towards new assessment practices, these papers formalised arguments for practices that had already begun to emerge. They formed part of an international movement for reform of assessment theory and practice towards qualitative judgment against performance standards (specified through 'assessment rubrics' or 'criteria-and-standards statements') as well as using assessment formatively to assist learning (although distinctions between assessment 'of', 'for' and 'as' learning lay in the future). These ideas gradually took root and became the orthodoxy without being formally endorsed. Dissemination through suggestion and contagion were astutely considered more likely to be successful than mandating any particular approach.

Some other fundamental principles became firmly established at this stage, deriving from judging the depth and quality of student knowledge and performance against explicit criteria and standards.<sup>19</sup> These included adaptation, transparency, internalisation, feedback, portfolios, and selective updating.

*Adaptation:* In Queensland, centrally prescribed syllabi are framework documents, the enactment of which differs from school to school. Each school's interpretation (work program) of a syllabus has to be centrally approved as meeting the syllabus requirements. Because detailed course content varies in this way, each



school necessarily organises different assessment. The fixed point of reference is the exit standards for levels of achievement in the relevant subject. Achievement of specified standards on designated criteria can be demonstrated in a variety of ways. Tasks can be tailored to individual needs and circumstances. This is made explicit in the current special provisions policy.<sup>20</sup>

*Transparency:* Having explicit criteria and standards allows teachers to ‘objectify’ their judgments of student performance and students to ‘target’ their learning and performance. The expectation is that teachers will provide students with the relevant criteria and standards prior to any assessment and be able to defend and justify their judgments to their students. An important consequence is that there should be no surprises for students about their results at the end of year 12.

*Internalisation:* Teachers internalise the standards through participation in teacher workshops and moderation processes. Comparability across the state is built on the cumulative effects of these processes year-on-year. The aim is for students also to internalise the standards through information, explanation and exemplification provided by their teacher, thereby empowering them to monitor their own progress.

*Feedback:* Continuous assessment distributes assessment tasks throughout the program of study. Students are continuously appraised of their progress and the steps which can be taken towards further learning and improvement. The likely outcome of any remaining effort and performance is known well in advance of the completion of the course. The final assessment is one building block rather than the whole wall.

*Portfolios:* Judgment of student achievement is evidence-based—what the student has done. Evidence may consist of tests, assignments, project reports, oral presentations, dramatic performances, experiments, designs and so on. These can be collected into a portfolio and it is this portfolio that is judged as a whole against the exit criteria. It is expected that the portfolio provide the ‘fullest and latest information’, covering all the relevant criteria for the subject with an emphasis on the most recent evidence.

*Selective updating:* Selective updating allows earlier and weaker achievement levels on particular criteria to be superseded by the later and stronger achievement levels. Within this approach, anomalous

lous performances for which a reasonable explanation exists, including illness, can be discounted. Provided sufficient evidence otherwise exists, missing assessments can be ignored. The intention is that the student's final result should represent 'where they arrived at', not 'where they set out from' or 'interim mistakes or setbacks'. In this system, while all assessments may 'count', none is critical. The possibility of retrieval from a weak performance reduces the pressure on each assessment and 'humanises' the assessment process.

In the senior years, by 1988, a lasting set of processes for assessment moderation had been established. These processes were managed by a system of Review Panels (District and State) supported by Board Officers. The key components were accreditation of work programs and review (by the Review Panels) of samples of student portfolios (from each school and in each subject). Processes were established for providing advice and feedback to schools about their assessments, verifying the proposed levels of achievement and certifying the final results. School-based assessment and moderation were now firmly established and accepted as successful.

In the junior years, apart from accreditation of work programs, moderation processes were in decline as the importance of the Junior Certificate waned. This certificate was becoming less relevant as entry-level jobs increasingly required additional study—whether additional schooling or vocational education and training. Although there were attempts to delay the inevitable, it was eventually abolished in 1995, by which time any systematic moderation in the junior years seemed to serve no necessary purpose.<sup>21</sup>

The curriculum diversity aim of the Radford System also was being realised. By 1988, in both the junior and the senior years the number of centrally developed syllabuses (so-called 'Board subjects' at that time) had grown to about forty-two (up 50 per cent from the twenty-eight examined subjects before 1972). These syllabuses were developed by thirteen Subject Advisory Committees with forty-six subcommittees. However, the biggest growth area was 'Board-registered subjects', developed by individual schools to meet a felt need by the school. More than 1500 work programs for Board-registered subjects had been accredited. Of these, most covered Manual Arts, Health and Fitness, Religious Education, Office Practices and Hospitality and Catering.<sup>22</sup>

### **Consolidation and diversification stage**

From the beginning of 1989, the Board of Secondary School Studies (BSSS) was reconstituted as the Board of Senior Secondary School Studies (BSSSS) with a focus on the senior years (years 11–12). Assessment and moderation structures and principles established in the 1980s for the senior years were continued and strengthened.

In 1990, the newly elected Labor Government in Queensland instituted a review of tertiary entrance procedures (the Viviani Review). Almost all of the recommendations of this report were enacted. Most of these recommendations involved changes to the scaling procedures used to produce an overall ranking of students for selection into university programs. Equitable tertiary selection was always seen as important but as subsidiary to having appropriate curriculum and assessment.<sup>23</sup> In the Viviani Review, school-based assessment itself was not under challenge; in fact, school-based assessment received further support and endorsement, thereby strengthening even further its professional and public acceptance. However, a concern was raised about the lack of empirical evidence on the extent to which the moderation system delivered sufficient comparability across the state in each subject.

A direct consequence of this concern about comparability was that introduction in 1993 of post-hoc random sampling to provide evidence of the extent to which the moderation processes were being successful and to identify aspects where improvements might be needed. These Random Sampling Reports continue to indicate extraordinarily high levels of comparability.<sup>24</sup>

Also consequent to the Viviani Review, Masters and McBryde conducted a key study whose conclusions support the quality of teacher judgments within the Queensland moderation system.<sup>25</sup> They showed that Queensland teachers could make comparable fine-grained judgments (placing students on ten rungs within each of the five levels of achievement) at a level of reliability higher than is typical of public examination marking.

The high levels of comparability found by Masters and McBryde and in the annual Random Sampling can be explained by the fact that moderation is not a one-off event but develops cumulative effects over many years. These cumulative effects depend on having explicit standards against which student achievement is judged, keeping these standards constant from year to year, and having

consultative feedback processes that help teachers to align their interpretation and application of the standards.

The other defining event of the 1990s was the Wiltshire Review.<sup>26</sup> Again, school-based assessment was not at issue. The report, *Shaping the Future*, totalled 1340 pages over three volumes and offered 106 recommendations. Some of these recommendations were not implemented. For the senior years, three important recommendations were accepted: abolition of the Junior Certificate; rationalisation of Board-registered subjects through development of central syllabuses; and developing convergence of general and vocational education.

Subject Area Specifications for Board-registered subjects, allowing schools a variety of options for their implementation, were developed and phased in over several years; these subjects remained unmoderated. Convergence of general and vocational education was initially interpreted by the Queensland government as 'embedding' of vocational education units in Board and Board-registered subjects, that is, identifying and inserting selected VET competencies, perhaps from several VET certificates, into these subjects. This process was eventually reversed with an emphasis placed on completing full VET certificates and Queensland schools becoming registered AQTF providers. The presence of VET competencies, certificates and school-based traineeships and apprenticeships within the senior secondary curriculum grew substantially from that point on—more so than in other states.

While the competency-based assessment processes for VET were somewhat different from the standards-based assessment processes for senior Board subjects, there is sufficient similarity for them to be seen as sympathetic, even complementary. They both involve assessor judgment based on evidence concerning the match between performance and an explicit standard. In competency-based assessment, under the Australian Quality Training Framework (AQTF), there is one standard ('competent') for each of many separate competencies (performances) within a VET qualification; for school-based assessment in Queensland there are five possible standards for an aggregate performance within a subject. The two approaches therefore sit together as decision-based qualitative assessment approaches in which pre-set levels of achievement are judged directly (as distinct from the traditional quantitative

assessment approach using marking schemes and score aggregation).

### **Redefinition and expansion stage**

In 2002, the Queensland government established the Queensland Studies Authority (QSA) as the new statutory authority for curriculum in Queensland years P–12, taking over the responsibilities of the Queensland School Curriculum Council (QSCC) for years P–10 and the Board of Senior Secondary School Studies (BSSSS) for years 11–12, both of which were abolished.

QSA has been able to tread where QSCC could not concerning assessment in years P–10. From 2005, QSA has carried responsibility for the Queensland Curriculum, Assessment and Reporting Framework (QCAR) and the accompanying Essential Learnings and Standards for the Key Learning Areas in years 1–9. Consequently, QSA has been able to promote school-based assessment across the whole P–12 spectrum based on the principles prevailing in years 11–12, especially, teacher judgment against performance standards representing five levels of achievement. The Queensland Comparable Assessment Tasks (QCATs) in years 3, 6 and 9, support authentic assessment tasks, standards-referencing and moderation among teachers. In addition, an Assessment Bank provides teachers with prototypes of good assessment tasks to support school-based assessment.<sup>27</sup>

It remains to be seen what changes may be needed to Queensland school-based assessment as a result of the development of an Australian national curriculum.<sup>28</sup> However, even the development of national tests for specific areas of the national curriculum—currently with full-cohort tests only in aspects of literacy and numeracy—cannot remove the need for teachers to be the assessors of most student learning and to use their own assessments formatively to guide further student learning as well as summatively to inform parents of each student's progress.<sup>29</sup>

Coincident with establishment of the QSA, two reports commissioned by the Queensland government were completed, one dealing with the future of the Senior Certificate<sup>30</sup> and the other with student pathways.<sup>31</sup> After a period of consultation, these led to Educational and Training Reforms for the Future (ETRF)<sup>32</sup> and implementation of most of their recommendations. Again, school-based assessment

was not an issue and the changes built on existing practices. Most notably, the Senior Certificate was replaced by the Queensland Certificate of Education (QCE), awarded for the first time in 2008. Whereas previously all students completing year 12 received the Senior Certificate (which certified their levels of achievement), to receive the QCE students must meet minimum standards of achievement including literacy and numeracy requirements. The learning accounts of those students who do not meet these requirements by the end of year 12 remain open for future possible completion.

The new arrangements extend even further the previous diversity that had been an aim of Radford, catering to an even broader range of student needs and interests. A new principle was established under ETRF that student learning in the senior years (now defined as years 10–12) should take students deliberately along a pathway to future success. It should not be happenstance. Student choice of studies must be planned and registered. Also, there is now an emphasis, for students choosing vocational pathways, on completion (or moving towards completion) of whole vocational education and training certificates rather than selections of competencies embedded within subjects. The biggest innovation is recognition of a substantial array of alternative and enrichment courses, including work-based, community and self-directed learning, recognised awards and certificates (covering aeronautics, art, business, drama, languages, music, lifeskills, speech, sport), school-devised courses (such as metacognition and astronomy) and advanced courses such as university studies or VET diplomas.

Authority subjects (formerly Board subjects), the subjects on which an overall achievement position is calculated for university selection purposes, now number over sixty. These subjects are quality assured through the moderation processes (which include school agreement to participate, work program approval, teacher workshops in new syllabuses, panel review of sample portfolios, feedback to schools of quality of their assessments and their judgment of standards, negotiation and certification of final results, and post-hoc random sampling).<sup>33</sup> Authority-registered subjects (formerly Board-registered subjects) are quality assured through processes that are less rigorous. VET courses are quality assured through the processes required for AQTF recognition of VET certificates. Tailored learning programs must follow specified processes to ensure that the learning

expectations and judgments of student achievement meet appropriate standards. In other words, all of the reported results are quality assured in one way or another. Moderation can be seen as a special type of quality assurance.<sup>34</sup>

## Conclusion

The Queensland system of externally moderated school-based assessment has stood the test of time and has delivered the aims set forty years ago. It is adaptable and robust. It demonstrates how a comprehensive approach to curriculum and assessment can be successfully designed and improved over time through imagination and persistence and can satisfy stringent quality assurance requirements, especially for high levels of validity and reliability.<sup>35</sup>

A key factor in the success of the system has been stability—constancy of direction and orientation over many years. Development occurred steadily and deliberately over time. There were no sudden changes of direction, processes or procedures. Any changes emerged as a natural progression of ideas within the basic philosophy. In fact, the bedrock processes set in place during the 1980s remain essentially unchanged today. This is quite remarkable for an educational system. It is not that the system has ossified. Rather, it has continually regenerated and reinvigorated itself with each new generation of leaders, teachers and students. Of considerable significance was the leadership of John Pitman who was director of the Board of Secondary School Studies (BSSS) and its successor the Board of Senior Secondary School Studies (BSSSS) throughout the 1980s and 1990s. His consistent leadership and political astuteness steered the system in a constant direction that realised and preserved the Radford vision.

Three issues that might detract from the externally moderated school-based assessment system for years 11–12 are often raised: overall costs; broad grading; and the use of a standardised test for scaling. None of these are serious concerns.

Costs are difficult to estimate because some are hidden. Apart from the direct costs of the central authority, schools contribute to the system through staff time—in conducting assessment and through participation in moderation processes. Even considering these hidden costs, any reintroduction of public examinations would cost more in government expenditure. Also, against the costs of the

system must be placed its benefits in teacher professional development, stemming both from the constant challenge to teachers to rethink and improve their professional practice and from teacher participation in the moderation processes. Review panels are powerful agents of professional development for teachers through direct acquaintance with practices in other schools, the opportunity to discuss assessment issues, practices and standards, and a continual focus on quality and improvement. Schools value their teachers' membership of review panels for this reason—the benefits outweigh the costs.

Achievement in a subject is reported using five standards-referenced levels of achievement. Some would consider this too broad. However, this is consistent with general reporting practice and recognises that comparability (across schools) becomes increasingly more difficult to sustain as the number of categories increases. For purposes of scaling between subjects in the calculation of an overall achievement position, teachers *are* asked to provide a finer-grained rank ordering of students in each subject within their school, and research shows that they are well able to do this. A balance has been struck between judgments of standards for levels of achievement and rank ordering of students for purposes of aggregating subject results into a measure of overall achievement.<sup>36</sup>

The use of a standardised test (Queensland Core Skills test) as part of the senior school assessment system could be considered a weakness for a system that espouses school-based assessment. This is a pragmatic issue. Unless selection for university is to be based on a grade-point-average, such a test is unavoidable to provide the baseline for scaling between subjects. However, a virtue has been made of this necessity. The test has been grounded in the generalisable elements of the senior curriculum so that it is seen as assessing general achievement in the curriculum (as it is intended to do as a scaling measure).<sup>37</sup> Also, this has led to beneficial backwash effects in the classroom as teachers seek to ensure that the generic skills expressed in the aims of their subject are in fact acquired by their students.

Some of the positive features and benefits of Queensland's school-based assessment system have been mentioned. Two more should be mentioned.

Teacher professionalism is the bedrock of the system—without trust in teacher integrity it would not succeed. First, good teaching



has become inseparable from good assessment. Learning objectives, pedagogy and assessment are intertwined and support each other. This is just what assessment research has been stressing. Learning outcomes are better when assessment covers the full range of learning, pedagogy supports that learning, and assessment is used formatively as well as summatively.

Second, there is constant regeneration. Syllabuses are reviewed on a six-year cycle, encouraging fresh approaches and practices. Teacher practice is always under review as teachers absorb the lessons of moderation and seek to improve their practice. Assessment is never the same from one year to the next, it responds immediately to new ideas for improvement in practice, and it never has a chance to ossify.

Queensland has shown that the sky does not fall in without public examinations and that there are many benefits from externally moderated school-based assessment. For teachers, it allows professional expertise to be recognised and advanced. For students, it provides more worthwhile learning and learning support as well as transparency in their learning goals and how well they are meeting them. For the public, it provides confidence that the quality of teacher practice is at the centre of discussions about curriculum and assessment and is continually being redeveloped and improved. More generally, Queensland points the way to appropriate practice for the future, realising many of the possibilities for assessment in the twenty-first century as a multipurpose and multifaceted activity<sup>38</sup> that supports wide-ranging and important learning outcomes, is adaptable to local and personal circumstances and needs, and provides quality assurance of educational processes and outcomes.

## Notes

- 1 External examinations in a few subjects continue to be offered for mature-age students but are available to students in secondary schools only under exceptional circumstances.
- 2 This is so, even though all Australian states and territories have underlying similarities in curriculum and assessment and all make substantial use of school-based assessment. See Cumming, J. J. and Maxwell, G. S., 'Assessment in Australian schools: Current practice and trends', *Assessment in Education: Principles, Policy and Practice*, vol. 11, no. 1, 2004, pp. 89–108.
- 3 Queensland, Committee Appointed to Review the System of Public Examinations for Queensland Secondary School Students and to Make

- Recommendations for the Assessment of Student's Achievements, *Public Examinations for Queensland Secondary School Students: Report*, (W.C. Radford, chairperson), Department of Education, Queensland, Brisbane, 1970.
- 4 Queensland, Board of Secondary School Studies, *A Review of School-based Assessment in Queensland Secondary Schools: A Report to the Queensland Board of Secondary School Studies Arising out of a Consideration of the Implications of the Reports Schools Under Radford and Some Consequences of the Radford scheme for schools, Teachers and students in Queensland, and of the Second Report of the Board of Secondary School Studies Standing Committee for the Junior Certificate*, (E. Scott, chairperson), Board of Secondary School Studies, Queensland, Brisbane, 1978.
  - 5 Viviani, N., *The Review of Tertiary Entrance in Queensland 1990: Report Submitted to the Minister for Education*, Department of Education, Queensland, Brisbane, 1990.
  - 6 Queensland, Review of the Queensland School Curriculum, *Shaping the Future: Review of the Queensland School Curriculum*, (Kenneth Wiltshire, chairperson), Government Printer, North Quay, Brisbane, 1994.
  - 7 Pitman, J., *The Senior Certificate: A New Deal*, Education Queensland and the Board of Senior Secondary School Studies, Brisbane, 2002.
  - 8 Gardner, M., *The Review of Pathways Articulation: Through the Post-compulsory Years of School to Further Education, Training and Labour Market Participation*, Queensland Government, Brisbane, 2002.
  - 9 Queensland, Committee Appointed to Review the System of Public Examinations for Queensland Secondary School Students and to Make Recommendations for the Assessment of Student's Achievements, *Public Examinations for Queensland Secondary School Students*.
  - 10 Radford, W. C., 'Public examinations for Queensland secondary school students', in W. J. Campbell and E. M. Campbell (eds), *School-based Assessments: Aspirations and Achievements of the Radford Scheme in Queensland*, ERDC Report No. 7A, AGPS, Canberra, 1978, pp. 57–80.
  - 11 Michael Fullan identified eight factors for successful educational change. All of them, by foresight or fortune, were in operation in the Queensland reforms: (1) recognition that change is a process in which the outcomes cannot be fully legislated; (2) recognition that change is a journey not a blueprint; (3) learning through addressing problems; (4) mobilisation and positive contagion rather than splendid visions and strategic plans; (5) honouring both individualism and collectivism; (6) balancing central and local initiative; (7) sensitivity to the wider environment; (8) encouragement of all teachers to be active change agents. See Fullan, M., *The New Meaning of Educational Change*, Teachers College Press, New York, 1991; and Fullan, M., *Change Forces: Probing the Depths of Educational Reform*, Falmer Press, London, 1993.
  - 12 Queensland, Committee Appointed to Review the System of Public Examinations for Queensland Secondary School Students and to Make Recommendations for the Assessment of Student's Achievements, *Public Examinations for Queensland Secondary School Students*. An excellent

- analysis of the issues surrounding validity and reliability for the Queensland system is found in Matters, G., Pitman, J. and O'Brien, J., 'Validity and reliability in educational assessment and testing: A matter of judgment', *Queensland Journal of Educational Research*, vol. 14, no. 2, 1998, pp. 57–88.
- 13 Campbell, W. J., Bassett, G. W., Campbell, E. M., Cotterell, J. L., Evans, G. T. and Grassie, M. C., *Some Consequences of the Radford Scheme for Schools, Teachers and Students in Queensland*, AACRDE Report No. 7, AGPS, Canberra, 1976; and Fairbairn, K., McBryde, B. and Rigby, D., *Schools Under Radford: A Report on Aspects of Education in Secondary Schools in Queensland Since the Introduction in 1971 of School-based Assessment*, Department of Education and Board of Secondary School Studies, Queensland, Brisbane, 1976.
  - 14 In these initial years, grading remained peer-referenced with more-or-less fixed distributions.
  - 15 Radford, 'Public examinations for Queensland secondary school students', p. 80.
  - 16 Queensland, Board of Secondary School Studies, *A Review of School-based Assessment in Queensland Secondary Schools*.
  - 17 Queensland, Legislative Assembly, Select Committee on Education in Queensland, *Report of the Select Committee on Education in Queensland*, (M. J. Ahern, chairperson), Government Printer, Brisbane, 1980.
  - 18 Queensland, Board of Secondary School Studies, *Review of School Based Assessment (ROSBA): Discussion Papers*, Board of Secondary Studies, Queensland, Brisbane, 1986–88.
  - 19 Pitman, J. A. and Dudley, R. P., 'Criteria-based assessment: The Queensland experience', paper presented at the 11th International Conference of the International Association for Educational Assessment, Oxford, England, and at the Australasian Conference of Assessment and Certification Authorities, Brisbane, 1985.
  - 20 Queensland Studies Authority (QSA), *Policy on Special Provisions for School-based Assessments in Authority and Authority-registered Subjects*, QSA, Brisbane, 2009.
  - 21 In retrospect this was unfortunate because it left the junior secondary years without any quality assurance processes for assessment—a deficiency that provided no sustainable alternative to the introduction of national testing for public accountability purposes in recent years. The development of Queensland Comparable Assessment Tasks (QCATs) in years 1–10 has been an attempt to rebalance and strengthen school-based assessment. See the QSA website, at [www.qsa.qld.edu.au](http://www.qsa.qld.edu.au).
  - 22 Board of Secondary School Studies, *Annual Report*, Board of Secondary School Studies, Queensland, Brisbane, 1998; and *Statistics Bulletin*, Board of Secondary School Studies, Queensland, Brisbane, 1998. A more extended discussion of curriculum and assessment change in the senior years in Queensland up to 1996 is available in Maxwell, G. S., 'Secondary school assessment structures, principles and practices in Queensland: Reform and evolution', in G. S. Maxwell, *A systems analysis of selection for tertiary education: Queensland as a case study*, PhD, The University of Queensland, 1996.

- 23 An extended discussion of scaling issues can be found in Maxwell, G. S., 'Technical issues in comparing and aggregating achievement measures for tertiary selection in Queensland', in Maxwell G. S., 'A systems analysis of selection for tertiary education: Queensland as a case study', PhD, The University of Queensland, 1996.
- 24 Queensland Studies Authority (QSA), Random Sampling Reports, QSA, Brisbane, 2000+, available on the QSA website, at: [www.qsa.qld.edu.au](http://www.qsa.qld.edu.au). Also informative of the inner workings of the moderation processes are the annual State Review Panel Reports: QSA, State Review Panel Reports, QSA, Brisbane, 1998+, available on QSA website, at: [www.qsa.qld.edu.au](http://www.qsa.qld.edu.au).
- 25 Masters G. N. and McBryde, B., *An Investigation of the Comparability of Teachers' Assessments of Student Folios*, Tertiary Entrance Procedures Authority, Queensland, Brisbane, 1994.
- 26 Queensland, Review of the Queensland School Curriculum, *Shaping the Future*.
- 27 Queensland Studies Authority (QSA), *School-based Assessment: The Queensland System*, QSA, Brisbane, 2010.
- 28 Currently under development by the Australian Curriculum, Assessment and Reporting Authority (ACARA): [www.acara.edu.au](http://www.acara.edu.au).
- 29 Cumming, J., Wyatt-Smith, C., Elkins, J. and Neville, M., *Teacher Judgment: Building an Evidentiary Base for Quality Literacy and Numeracy Education*, Centre for Applied Language, Literacy and Communication Studies and Centre for Learning Research, Griffith University, Brisbane, 2006.
- 30 Pitman, *The Senior Certificate*.
- 31 Gardner, *The Review of Pathways Articulation*.
- 32 Queensland Government, *Education and Training Reforms for the Future (ETRF): A White Paper*, State of Queensland, Brisbane, 2002.
- 33 Maxwell, G. S., 'School-based assessment in Queensland', in C. Collins (ed.) *Curriculum Stocktake: Evaluating School Curriculum Change*, Australian College of Education, Canberra, 1995, pp. 88–102; Maxwell, G. S., *Implications for Moderation of Proposed Changes to Senior Secondary School Syllabuses*, Queensland Studies Authority, Brisbane, 2007.
- 34 Maxwell, G. S., 'Moderation of student assessment by teachers', in E. Baker, B. McGaw and P. Peterson (eds), *International Encyclopaedia of Education* (3rd ed.) Elsevier, in publication. Details of all quality assurance and moderation processes for Queensland years 11–12 are available on the QSA website, at: [www.qsa.qld.edu.au](http://www.qsa.qld.edu.au).
- 35 Pitman, J. A., O'Brien, J. E., McCollow, J. E., 'High-quality assessment: We are what we believe and do', paper presented at the International Association for Educational Assessment Conference, Bled, Slovenia, 1999; Queensland Studies Authority (QSA), *Externally-moderated School-based Assessment: Myths and Facts*, QSA, Brisbane, 2010.
- 36 Whether some degree of finer scaling in the levels of achievement and/or in the overall achievement positions might be possible is beyond the scope of this chapter.
- 37 See Maxwell, G. S., 'A theoretical model for a single general measure of school achievements and its consequences for the design of a common scaling test', in Queensland, Working Party on Tertiary Entrance, *Tertiary*

- Entrance in Queensland: A Review*, (Gabrielle Matters, editor; John Pitman, chairperson), Department of Education, Queensland, Brisbane, 1987, pp. 201–211.
- 38 Wyatt-Smith, C. M. and Cumming, J. J., (eds), *Educational Assessment in the 21st Century: Connecting Theory and Practice*, Springer, Dordrecht, The Netherlands, 2009.