TE TIRO HOU

Report of the

Qualifications Framework Inquiry

INQUIRY MEMBERS

Peter Allen is Principal of Rangiora High School (since 1990). He is Chairperson of the Teaching Council of Aotearoa (since 1995). He has taught at Te Puke High School, Dargaville High School and Taupo nui-a-Tia College. He was President of NZPPTA in 1986 and 1987. His involvement with curriculum and assessment issues includes being a member of the Core Curriculum Review 1982-83, a member of the Curriculum Review Committee 1984-85 and a member of the PPTA's Curriculum Advisory Committee. He was a member of the Secondary Board of Studies in 1988 and 1989. He was a member of the organising committee for the 1991 PPTA Curriculum Conference.

Terry Crooks is Co-Director of the Educational Assessment Research Unit, University of Otago, and of the National Education Monitoring Project. In 1989 and 1990 he was a member of the Ministerial Working Party on Assessment for Better Learning. His research on the validity of educational assessment and the impact of assessment on students is respected internationally.

Shona Hearn (Convenor) is Head of English at Birkenhead College. She was National President of NZPPTA from 1990-91 and an Executive member from 1983-1992. Involvement in curriculum and assessment forums has included: PPTA's Curriculum Advisory Committee 1979-90; Form Six Action Committee 1963-84 and Assessment Task Force 1984-85. She was PPTA's nominee on the Committee of Inquiry into Curriculum, Assessment and Qualifications Forms 5 - 7 1984-86 and on the statutory Secondary School Board of Studies 1986-90. She has also been active in her own subject area of English at local and national level over many years. From 1995-96 she was a Commonwealth fellow at the Institute of Education, University of London, completing an investigation into standards-based assessment in the United Kingdom and New Zealand for the award of an Associateship of the Institute.

Kath Irwin is currently the chairperson of the Department of Education at Victoria University. A trained teacher, she has been an academic for some seventeen years, specialising in Mäori education, Mäori research and Mäori Women's Studies. In 1994 she was awarded the Hodge Fellowship to research and write the text "Mäori Education: Thinking Globally, Acting Locally". She is currently completing her doctoral studies entitled "Becoming a Mäori Teacher."

ACKNOWLEDGEMENTS

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KAUPAPA OF TE TIRO HOU — THE QUALIFICATIONS FRAMEWORK INQUIRY

This report outlines the findings of Te Tiro Hou - The Qualifications Framework Inquiry.

PPTA's Kaumatua gave Te Tiro Hou its name. The words "Te Tiro Hou" convey the essence of the task: 'taking a fresh look' in this case at the Qualifications Framework. The name is also a pun on the common phrase, 'Te Tira Hou', a special or selected group of people, or the 'panel of experts' first envisaged by PPTA's Curriculum Advisory Committee.

Increasing disquiet amongst secondary teachers about a variety of issues surrounding the development and implementation of the New Zealand Qualifications Framework during 1994 were of concern to PPTA. In early 1995, the Curriculum Advisory Committee proposed that the Association establish a panel of experts to undertake a review of the Qualifications Framework in consultation with PPTA members.

This was approved by the 1995 Annual Conference and the Executive subsequently approved the composition of the panel and terms of reference. Financial constraints caused by the 1995/6 collective contract campaign then put the matter on hold. At the end of the campaign, Executive allocated funding to the project.

Te Tiro Hou was *commissioned* by PPTA, but is *independent from* PPTA and its policies.

The Inquiry was required to consult widely with PPTA members as well as commissioning research. A questionnaire for members was prepared following meetings with focus groups in different parts of the country. This was circulated early in 1997 and responses were analysed by the Educational Assessment Research Unit of Otago University.

The Inquiry also commissioned a major review of New Zealand research and informed comment on the Qualifications Framework from Dr Alison Gilmore of Canterbury University. This was supplemented by material on relevant overseas experience from a variety of sources.

Te Tiro Hou is required to report formally to the PPTA Executive in June and the Convenor will present the Inquiry's findings to the PPTA Curriculum Conference in Auckland on 18 July 1997. At that point, the kaupapa returns to PPTA members.

The report is particularly timely given the recent release of the Government's Green Paper A Future Qualifications Policy for New Zealand and may be of assistance to members as they consider their response to its proposals. It is our hope that the report will help to clarify the issues surrounding the National Qualifications Framework and provide a constructive basis on which PPTA members can formulate a position on the future of secondary school qualifications in New Zealand.

TE TIRO HOU TERMS OF REFERENCE

1. To consult widely with PPTA membership.

2. To draw on or commission appropriate research.

3. To analyse whether the NZ Qualifications Framework model is educationally valid.

4. To analyse whether the NZ Qualifications Framework model of standards-based assessment can do justice to educational aims across the curriculum at all levels.

5. To investigate the manageability, resource and workload implications of transition to the Qualifications Framework.

6. To suggest solutions to problems identified in the course of the review.

7. To report findings to PPTA Executive.

EXECUTIVE SUMMARY

1.   The Qualifications Framework Inquiry Te Tiro Hou was commissioned by NZPPTA to acknowledge widespread membership discomfort with aspects of the National Qualifications Framework (NQF) and its implementation. Its brief included a requirement to consult widely with PPTA's membership, and to propose solutions to problems with the NQF identified by the Inquiry.

2.   New Zealand's education system has used and discarded a number of qualifications since its legislative inception in 1878. This process reflects society's changing needs and a gradually expanding education culture in this country. The value of qualifications tends to diminish as more students achieve them.

3.   PPTA took a leading role in the assessment debates of the 1980s and was instrumental in the removal of University Entrance in 1984. Policy developed during the period 1983-1991 supported the establishment of a flexible, integrated qualifications structure which recognised actual achievement and contributed towards a single, national, post-compulsory award. PPTA was represented on the statutory Board of Studies (which was abolished with the establishment of NZQA), and its predecessors.

4.   The apparent congruity of philosophies between NZQA's Qualifications Framework and PPTA policy resulted in initial support for the NQF. Concerns began to emerge as early as 1992 about work-load and resourcing issues raised by the Framework, as well as the educational validity of elements of it. These concerns led to the setting up of this Inquiry.

5.   No overseas system provides an exact parallel to the Qualifications Framework, though there are useful points of comparison in England, Scotland and Australia:

    - England has a three-track qualifications system, a disadvantage of which is that the different systems are accorded varying status. Lessons learnt about standards-based assessment are that professional training, exemplars and moderation systems are essential to assist in communicating the intent of standards. British assessment commentators agree that school qualifications must generally distinguish more than two levels of performance. New Zealand's advance moderation of tasks is an important improvement on the English approach to moderation.

    - In Scotland, strong community opposition to a twin-track system has resulted in a new move to bring together the vocational and academic. All subjects will be available in a single curriculum and assessment framework; a mix of internal and external assessment will apply, with criteria to determine grades.

    - South Australia uses criteria to assess, both internally and externally, against objectives. Moderation includes common assessment tasks, exemplars and visiting moderators.

    - New South Wales is considering a proposal for five-level standards-referenced, internal/external assessment. There would be the flexibility for some vocationally-oriented courses to be included in a new university entrance score. The proposal would also abandon the Year 10 examination.

- Victoria uses criteria-based assessment for school-based tasks, but the number of criteria and descriptors and the complexity of aggregation create questions about validity. Teachers involved in moderation are linked by technology to the state reviewer.

- Queensland uses standards-based assessment at Years 11 and 12 only. Standards are derived from syllabi. Comparability is achieved through exemplars and district and state moderation panels.

6. The Inquiry commissioned Dr Alison Gilmore of Canterbury University to review the existing research and literature on the Qualifications Framework. She reported that most commentators approved the fundamental principles of the Framework: participation, relevance, simplification of structure, coherence and fairness. However the debate has concentrated on their achieveability. Critics have commented particularly on issues of validity and in implementing the NQF, problems of recognising excellence and the costs, both physical and human, of implementation.

7. The Inquiry undertook a survey of PPTA members. Some 800 responses were received, from branches, groups and individuals. Frequently-mentioned advantages of the Framework were fairness to students and clarification of objectives. Disadvantages mentioned centred on manageability, resourcing, the inadequacy of moderation and the complexities of implementation. Modifications suggested matched these criticisms. There was strong support for recognition of merit and excellence and for the retention, within the Framework, of the Bursary examination. External examinations at Year 12 received little support. Responses about Year 11 were evenly split between support for School Certificate and alternative systems.

8. Many respondents had no comment, or declared themselves unable to comment, on the issues for Mäori education raised by the Framework. Those who did respond and those Mäori who attended QFI hui saw benefits in the Qualifications Framework for Mäori learners, especially in terms of transparency of objectives and the recognition of actual achievement. However, these benefits could only be placed in the context of a serious Mäori teacher recruitment and retention crisis, with associated workload, professional development and resourcing issues.

9. The Inquiry's terms of reference required an analysis of the educational validity of the Qualifications Framework. The panel developed criteria upon which to base such analysis. An educationally valid qualifications system is:

- fair

- inclusive

- cumulative

- clear

- motivating

- coherent

- constructive

- manageable

10. The Inquiry believes that standards-based assessment is more educationally desirable than norm-based. Defining standards validly is highly problematic, requiring consistent professional development and credible moderation.

11. The Inquiry also concludes that many - though not necessarily all - unit standards would be better suited to a range of passing grades than a pass/fail model. It is further concluded that the average size of unit standards should be at least four credits.

12. The Inquiry rejects the concept of Framework credit accruing from norm-referenced examinations, but accepts that credit may be gained from examinations where standards for credit were defined using a standards-based approach. The Inquiry is cautious about proposals for competing options leading to high and low status qualifications, and problems of manageability.

13. The Inquiry notes with deep concern that, since the disestablishment of the Board of Studies, much policy development of the Qualifications Framework has been done without teachers' or PPTA's direct involvement, satisfying political concerns about 'provider capture' but diminishing ownership by teachers of the new assessment procedures. Inadequate resourcing of implementation, and especially of teacher development is also a major concern.

14. It is the view of the Inquiry that educationally successful implementation of the Framework, requires the following modifications to unit standards' design:

   - provision for merit and excellence in unit standards;

   - avoiding large numbers of small unit standards;

   - a reduction in detail for content coverage;

   - changed expectations about re-assessment;

   - restricted use of multi-level assessment within a class;

   - improved approaches to moderation;

   - avoiding dual assessment;

   - a realistic time-frame for implementation;

   - improved support and resources.

It is acknowledged that work has begun on some of these developments.

15. The Inquiry considered seven scenarios for the future structure of assessment in the senior secondary school, against the criteria listed in point 9 of this summary:

   i   retire existing awards, fully implement the Framework at Years 11, 12 and 13;

   ii   abandon all internal assessment, implement wholly external examinations at two or three years of Years 11, 12 or 13;

   iii abandon the Framework, continue existing qualifications;

   iv   implement the Framework at Years 12 and 13, external examinations at Years 11 and 13 to encourage excellence, retire existing awards;

v   implement the Framework at Years 12 and 13, external examinations for credit on the Framework at Years 12 and 13, retire existing awards;

vi   implement the Framework at Years 12 and 13, retire SFC as Framework development permits, retain Bursary adapted to give credit, continue to offer School Certificate outside the Framework; and

vii   implement the Framework at Years 12 and 13. Retire Sixth Form Certificate as soon as the Framework is ready for full operation at Year 12. Retain the University Bursaries assessments with adaptations which allow them to be credited onto the Framework. Retire School Certificate**.**

16.   The Inquiry regards the last two as the only viable scenarios, but strongly favours the last. It fits best with the eight criteria articulated in Chapter 6. Notable strengths are:

- the avoidance of extra workload and other costs associated with parallel assessments for different awards;

- flexible provision for diverse needs and aspirations;

- ready transfer of credit earned from secondary to post-secondary education;

- strong provision for all students to work at appropriate levels and have more than one opportunity to demonstrate their competence;

- and encouragement for teachers and students to work towards excellence (but not at the expense of others).

PART ONE

NEW ZEALAND AND OVERSEAS

QUALIFICATIONS SYSTEMS

CHAPTER 1

HISTORY OF EXAMINATIONS AND AWARDS IN NEW ZEALAND

This chapter gives a brief outline of the history of examinations and awards in New Zealand schools, in order to provide a context for the Qualifications Framework Inquiry. It is structured in three parts:

- examinations and awards in New Zealand from 1878 to 1970;

- the PPTA Assessment Debate from 1970 to 1996;

- background to the New Zealand Qualifications Framework.

This chapter is indebted to A Short History of Examinations in New Zealand (Keynote address to PPTA Principals' Conference. C.McGeorge 1985).

Examinations and Awards in New Zealand from 1878 to 1970

New Zealand's public education system began in 1877, when the Education Act introduced a national system of elementary education for all under a new Department and Minister of Education.

From 1878 all primary school pupils from Standard 1 up were examined annually by school inspectors against prescribed levels of achievement on the national syllabus. Many students failed to move to the next level and most Nineteenth Century children did not reach Standard 6 before leaving school. Only those who passed Standard 4 could leave at age 12; otherwise they waited for the official leaving age of 13.

By 1886 passing Standard 4 exams was established as a prerequisite for acceptance into the police, army and prison service and for the employment of under-sixteen year olds in factories. Many private employers followed suit. The Railways and Post Office also demanded Standards 4 or 6 exam passes for various jobs.

Meanwhile the 1886 Civil Service Reform Act established a new competitive exam for entry into Public Service. This exam, set at a level just above Standard 6, led to the growth of Standard 7 classes which catered for intelligent working class children whose parents could not afford secondary school fees. This arose because primary schooling was free up to the age of 15, while there was no universal provision of secondary education.

In 1894 exams disappeared from Standards 1 and 2 and in 1899 the new Chief Inspector, George Hogben, abolished all inspectors' examinations below Standard 6, although teachers were still required to set exams and determine who passed at each level. The Standard 6 exam now became an even more important vocational credential.

From 1877 the competitive Education Board Scholarships had rationed access to secondary school for the majority who could not afford to pay. By the early Twentieth Century students could also compete for junior (access to forms 3 and 4) and senior (access to forms 5 and 6) national scholarships or pass the Department of Education's senior free place examination. This was a modified version of the Junior Civil Service examination which was now located in secondary schools as Standard 7 dwindled.

The secondary education system expanded rapidly with the introduction of the free place system in 1903. Social divisions were retained, however, with a hierarchy from the older state and private secondary schools to the newer state secondary schools and finally the district and technical high schools. The system of examinations and awards reflected this complexity with a series of qualifications designed to select for different social and vocational purposes.

In 1914 the Education Board Scholarships were abolished. Three secondary school leaving certificates had now been introduced to be awarded by examination or accreditation: the Intermediate Certificate (Form 4), the Lower Leaving Certificate (Form 5), the Higher Leaving Certificate (Form 6). Form 5 was also the Year in which pupils sat the Matriculation exam.

The debate about secondary school curriculum and qualifications was framed around the question of relevance. However, this was interpreted in two ways: firstly, as direct vocational relevance of subjects such as woodwork and agriculture offered in the technical high schools and secondly, as the less direct but ultimately more far-reaching relevance of academic qualifications which led to higher status options in the future.

By the 1920s there were 8 different school awards:

1.   Standard 6 — The Inspectors' Examination for Proficiency and Competency certificates

2.   Standard 6 — The Junior National Scholarship examination

3.   Form 4 — The Public Service Entrance Examination

4.   Form 4 — The Intermediate Examination, the same exam under different name, which entitled the student to a senior free place

5.   Form 4 — Senior National Scholarship examination (The intermediate exam under a different name)

6.   Form 5 — Matriculation Exam and Lower Leaving Certificate by accreditation

7.   Form 6 — The Higher Leaving Certificate by accreditation and (from 1929) a separate Training College Entrance Examination (abolished in 1938).

8.   Junior University Scholarship in Upper Form 6.

The 1930s began with cost-cutting measures to limit the numbers in senior secondary education - the abolition of junior and senior scholarships, the suspension of the Public Service Exam, an end to accrediting for proficiency, senior free places and higher leaving certificates. This led to an increase in entries for the Intermediate Exam.

In 1934 the Lower Leaving Certificate was abolished and the first version of School Certificate was instituted as an alternative to Matriculation. Although pupils could enter either or both, School Certificate remained the lower status award until further changes in the 1940s.

The 1937 Labour Government made major changes to the examination system, abolishing the Proficiency Exam so that all children completing primary education could claim a free secondary school place. The Intermediate Examination and Certificate disappeared in 1938 along with the free place system now that secondary education was free till age 19. The Public

Service Entrance Exam had been reinstated in the Fourth Form, and enjoyed a brief rise in entries from private school pupils desirous of attaining success in the only remaining Fourth Form award.

These reforms of junior secondary school awards allowed the focus to shift to Matriculation and School Certificate. The Training College Entrance exam had been abolished in 1935, removing an award from Form 6. In 1944 some schools were granted the power to accredit University Entrance, and this award was moved to Form 6 as a four year qualification.

The Thomas Committee reported in 1944, recommending "a broad, liberal secondary education suited to a democracy with universal secondary education." A broad core curriculum was established, which would not be specifically examined. "Those credited by their schools as completing it would go on to sit a general school-leaving examination, School Certificate Mark II, as an alternative to the more specialised University Entrance." The Public Service agreed to accept the new School Certificate as an entry qualification, and the Public Service Entrance Examination was abandoned in 1946. School Certificate rapidly became the sole award in Form Five as opposed to the Thomas Committee's intention that it would be a more general alternative to University Entrance in Form Six. In practice the UE award was required for many public service positions.

From this point on there was a long period of comparative stability in the overall structure of qualifications. A number of changes did occur, however. Many were attempts to cater for the wider range of students in the senior school, for instance the introduction of the Bursary examination in addition to the Junior Scholarships examination in Form 7 in 1966, the move from an aggregated pass mark to single subject passes in School Certificate in 1968 and the addition of Sixth Form Certificate in 1969, as well as a range of alternative local certificates.

The most noticeable trend in this history is the phenomenon of credentials inflation, whereby the value of each credential fell as more and more students achieved it. Between 1886 and 1945 the general school leaving age certificate sought by most New Zealand school pupils rose from a pass in the Standard Four Examination to a pass in the Form Five award of School Certificate. By the 1980s most students were aiming for an award in Form Six, the University Entrance examination, although it was not a realistic goal for many of them. By the late 1990s, many students expect to complete a Seventh Form year and attempt the Bursary examination.

It takes time for society to acknowledge these shifts, but it is worth noting that credentials which outgrow their purposes are eventually dispensed with - for instance the Certificates of Proficiency and Competency.

The PPTA Assessment Debate from 1970 to 1996

In the late 1960s and 1970s, PPTA was active in a number of assessment initiatives. New directions for education, including shifts in assessment thinking were signalled in PPTA's publication Education in Change. PPTA took a proactive role in the Education Development Conference and was represented on the group which produced Assessment in Education, a report which included a survey of teacher views about assessment.

Recognition of the impact of assessment on curriculum, and the inability of external assessment to focus on many important student attributes were two important elements which received attention at that time. PPTA members participated in a number of initiatives designed to ameliorate these problems, which remain at the forefront of issues today.

For instance, developments in English delivered the NESC curriculum, whose 8 modes could not be validly assessed by written, one-shot, short duration, end-point instruments. At the School Certificate level the response was an internally assessed English option which eventually grew to a steady state of round 25% of the subject's entries. Mathematics, science, art and workshop technology got off the ground in the mid-1970s before more traditional thinking rooted in a belief in the superiority of external assessment grounded other fledglings. This thinking constrained other subjects to partially internally assessed options, led by geography in the early 1980s, which spread in due course to the Bursary examinations.

Workload issues did arise within the internally assessed options. However, it became apparent that this was worst in the transitional period and over time dwindled to more acceptable proportions. A further lesson from this period might be that piloted, more gradual implementations which built expansion upon the experience of the pioneers found greater favour with teachers than the wider scope and faster pace of the implementation of the NQF.

By the late 1970s there had been significant changes to the clientele of the senior secondary school. Whereas the Sixth Form and the Upper Sixth Form had previously been the preserve of a small elite destined for university education, many more students were staying on at school. As participation rates grew, teachers became increasingly aware that the University Entrance examination was no longer a realistic goal for many Sixth Form students. Sixth Form Certificate (SFC) had been introduced in 1969 as an internally assessed alternative Sixth Form qualification, but students and their parents correctly perceived the higher status associated with the UE exam, and so the academic requirements of this award continued to dominate the Sixth Form curriculum.

By the early 1980s this led the PPTA Principals' Conference to call for a boycott of the UE examination.

1983   PPTA's Annual Conference in 1983 debated the issue and made the decision to instruct members to assess Sixth Form pupils in 1984 only by SFC, and not to participate in the administrative procedures of the 1984 UE exam. The ensuing campaign led by the Form Six Action Committee was bitterly opposed by the National Minister of Education, Merv Wellington, but harnessed a ground swell of support from parents, employers and the public.

1984   Before the final crunch came, the snap election of 1984 intervened, with the immediate decision of the new Labour Minister, Russell Marshall, to proceed with the abolition of the UE examination.

Another significant event in 1984 was PPTA's Waahi Hui attended by 1200 teachers, parents and students to discuss Mäori education.

One important outcome was the explanation of the processes of School Certificate inter-subject scaling, which came as a shocking revelation to many of the Maori and Tauiwi present. This led to changes in the scaling methodology to place the Mäori language on an equal footing with English, and discredited scaling sufficiently that a later Minister (Dr Lockwood Smith) abolished statistical scaling of School Certificate subjects outright.

Recommendations passed at PPTA Conference that year included a statement deploring the fact that SC in its present form gives a significant group of students a

sense of failure, and demanding that it be abolished and replaced with a broader-based system of assessment.

Conference decisions also reaffirmed that SFC should be the only award in Form Six and insisted on membership consultation as the changes were implemented. The PPTA Executive was also instructed to enter negotiations with the Minister to establish a statutory Board of Studies.

By this time the Minister had set up two committees: the Curriculum Review Committee and Committee of Inquiry into Curriculum, Assessment and Qualifications F5 - 7 (CICAQ).   PPTA was represented on both and set up an Assessment Task Force which planned and ran assessment seminars in every branch during Term 3. This was the beginning of a series of membership consultations, which fed into the CICAQ.

1985   The consultations continued in 1985, with a second round of seminars and membership surveys which ultimately resulted in policy decisions represented in the CICAQ. They were:

   1.   Support for provisional entrance to university from Form 6

   2.   Support for an interim position on Form 6 for 1986:

      •   SFC the only award at Form 6

      •   Internal assessment with external moderation

      •   Moderation on the basis of SC results

   Ironically this remains the status quo in 1997.

   3.   Support for a long-term position on Form 6:

      •   SFC the only award, internally assessed but not moderated by SC results, each subject to stand alone, administered by a Board of Studies

      •   Form 6 assessment to become achievement-based

      •   Moderation essential.

   4.   Support for a statutory Board of Studies to co-ordinate curriculum, assessment and awards in the secondary school.

   5.   Support for a long-term position on assessment Forms 5 - 7:

      •   a National Leaving Certificate in combination with other awards

      •   a school-based Fifth Form Certificate

      •   an achievement-based Sixth Form Certificate as outlined above

      •   a national award at Form 7 based on a mix of internal and external assessment, including a merit award

- first priority for change should be Form 6.

Members were evenly split on whether entry to university from Form 7 should be based on performance in the award or should be open.

1986   The final report of the CICAQ, Learning and Achieving was published, recommending changes along the lines indicated above.   By now the Board of Studies had been established as an advisory group to the Minister on secondary school curriculum, assessment and awards.   It had wide community and professional representation including three PPTA representatives.

The Board of Studies set about progressive implementation of the recommendations of Learning and Achieving, with an initial focus on developing alternative forms of moderation at Form Six, in order to free SFC from the tie with SC.   The trials in achievement-based assessment in a number of subjects at Form Six were initiated on the advice of the Board of Studies.   PPTA's first priority was the implementation of the Secondary Staffing Report, which was seen as the vehicle for delivering the necessary staffing to support these changes.

Annual Conference discussed a paper Curriculum Directions, which sought to make the connection between curriculum and qualifications by including a recommendation that school reporting and the national award system should report on the agreed areas of learning in the curriculum and be consistent with the principles of the curriculum.

1987   By now the Curriculum Review Committee had reported.   Until this point, PPTA assessment policy had focused exclusively on the secondary school, but by this time reference was being made to the need to come to terms with the 'jagged edge' between schools and tertiary providers.   The need to respond rapidly to the Hawke Working Group on Post-Compulsory Education and Training exposed PPTA's lack of policy in this area and led to the conference paper Towards a Co-ordinated Policy for Youth, which recommended:

- that New Zealand develop a youth policy which would include a commitment to high levels of participation and training for 15-19 year olds; and financial support from all those involved in post-compulsory education and training

- that post-compulsory education and training:

    — be planned in a co-ordinated way

    — be fully accessible

    — promote equity

    — promote excellence and success for all by measuring the degree to which individuals achieve realistic personal goals and

    — provide all participants with recognised certification which describes actual achievement.

1988-90   PPTA was preoccupied during these years with the major industrial and administrative restructuring of Tomorrow's Schools and took little part in the debate around Project

Able - the Ministerial Working Party on Assessment For Better Learning. This group was charged with recommending procedures to monitor the effectiveness of the New Zealand school system on student learning and to assess the effect of individual schools on students' learning achievements. In many respects it was very influential, but in the area of secondary school qualifications it largely endorsed or extended the directions suggested in Learning and Achieving which were guiding the work of the Board of Studies.

Curriculum Policy for the 1990s was a paper presented to Annual Conference in the first year of that decade. By this time the Board of Studies was about to be replaced by the New Zealand Qualifications Authority (NZQA), a single authority to cover all secondary and tertiary qualifications. Neither PPTA nor any other representative of secondary education was a member of the NZQA Board. This led to the conference paper affirming the principle that effective development in curriculum and assessment requires the involvement of teachers. In the new environment where teachers were 'providers' who had 'captured' the system, this assertion had become necessary.

The paper also noted the likelihood of rapid changes in assessment and charged the Curriculum Advisory Committee with using feedback from membership to advise the Executive on policy regarding changes to national awards and assessment.

1991 The first six months of the new National Government precipitated PPTA into a series of major campaigns, but despite these distractions, the first PPTA Curriculum Conference Te Ara Ki Te Rau Tau Hou (Pathway to the New Century), was held in Christchurch. It was intended to underline the central role of teachers in curriculum and assessment debates and to assert that the real agenda for change in these areas was at risk of being lost in the welter of structural and industrial adjustments.

In March NZQA released its discussion document Designing the Framework. At this stage it was supported by PPTA, since the design appeared to be broadly in line with existing policy.

The Annual Conference paper, Te Ara Ki Te Rau Tau Hou, contained a number of recommendations which affirmed in the direction of the Qualifications Framework. Some of the recommendations were:

- that a flexible modular approach to learning be endorsed within a co-ordinated framework, based on appropriate guidance to ensure that students have access to an integrated course of study provided that necessary training and resources to develop and teach units of learning are made available

- that priority be given to the development of standards-based assessment leading to a single national award available to students in Forms 6 and 7 or in other post-compulsory institutions, and that awards which do not contribute to this development be given no further priority.

The paper also proposed a widely representative New Zealand Education Council to build consensus on national education goals and priorities, supported links between education and industry, endorsed the concept of national monitoring with a number of provisos and asserted the responsibility of the state to fund and provide a framework for curriculum, qualifications training and quality assurance.

1992   In 1992, PPTA took the unprecedented step of balloting all members on their willingness to take part in a moratorium on both the Curriculum and the Qualifications Framework. The vote was overwhelmingly in favour and the moratorium remained in place until April 1993. The moratorium was used as an industrial strategy to underline teachers' opposition to salaries bulk funding and other aspects of Government policy rather than because of educational or workload concerns with the Frameworks themselves. However, it did mark a major loss of goodwill from teachers and suggested that the administrative and industrial restructuring were beginning to take their toll in a new cynicism about education 'reform'. In the words of the 1991-92 Annual Report: "The experience of teachers over the past decade is that spectacular, glossy books introducing exciting and radical new curriculum and assessment reforms emanate from central agencies with monotonous regularity but are rarely supported with realistic practical plans for their implementation in schools." (NZPPTA, 1992-92, p12).

Ironically, it appears that the decision to move from achievement-based to single standard (credit/no credit) assessment was taken during the period when teachers were unavailable for comment because of the moratorium. This was to fester for some years and was a significant factor in the calls for the Qualifications Framework Inquiry.

1993   With the moratorium lifted, PPTA again set out broad support for the Qualifications Framework in The Braided Stream - Youth Policy Revisited. In some respects it went beyond NZQA's intention to retain the Bursary examination by arguing that entrance to university should be through the appropriate level of the National Certificate and that not only School Certificate but also Bursary should be phased out as the National Certificate was introduced. The implications of 'seamless' education for secondary schools and their students were discussed and the paper argued for a recognition of the role of the secondary school as 'home institution' for teenagers.

1994   PPTA continued to act as a conduit for members' concerns over the two Frameworks, with a central focus on achieving more realistic and co-ordinated time-lines. This work was now subsumed into the Modernisation process - an attempt to establish an alternative approach to industrial and fiscal issues in education - one which began with the learning needs of students rather than cost reduction and concessionary bargaining. 'Curriculum and Assessment' was one of the five strands of a proposed Modernisation Agreement between the Association and the Government. In the event, this was not picked up by the Government and relationships took a more confrontational course.

1995   As the trials of unit standards in mathematics and geography got under way, membership concerns about both the educational validity and the resourcing of the Qualifications Framework began to surface. The Frameworks: Braided Stream or Tangled Web? made continued support of the Frameworks contingent on adequate resourcing, while a paper from the Southland Region argued for outright withdrawal of support for the Qualifications Framework. In the event, Conference called for a panel of experts to undertake an independent review of the Qualifications Framework. This was delayed by the rigours of the 1995-96 Collective Employment Contract (CEC) campaign until late 1996.

1996   Workload was a major component of the CEC campaign, and became a focus for concerns about the Framework, resulting in the imposition of a Framework Freeze for

much of the year. The conference paper <u>Re-Establishing PPTA's Professional Input: Taking Control of Frameworks Development</u> set up a PPTA Board of Studies to oversee curriculum and qualifications development in secondary schools, as well as adding a requirement that the 'review and audit panel' consult widely with PPTA membership.

The panel was established as Te Tiro Hou - the Qualifications Framework Inquiry, and its work was under way by the end of the year.

Background To The New Zealand Qualifications Framework

This section is indebted in part to material prepared by Rob Strathdee as an introduction to Alison Gilmore's literature review (see Chapter 3) commissioned by the Qualifications Framework Inquiry.

The New Zealand Qualifications Framework is designed to integrate the qualifications of a large number of educational institutions and occupational groups into a single Framework which does not distinguish in assessment methodology between so-called academic and vocational subjects. Most qualifications within the Framework are to be earned by assembling appropriate unit standards, although it has now been accepted that a different methodology will apply to university degrees, and there is ongoing debate about the place of the current external school examinations within (or outside) the Framework. Assessment is standards-based and internally assessed, with external moderation based on a national plan for the subject. At present performance is assessed on a single standard (credit/no credit) model, although this has been the subject of much debate and the Minister has announced an intention to add one or more steps to recognise merit.

The Qualifications Framework was first proposed by NZQA in 1991, after a series of reports and discussion papers beginning with the Report of the Hawke Working Group on Post-Compulsory Education and Training commissioned by the Government in 1986. While it reflects similar developments overseas, it is more ambitious in its scope.

Four major themes have been identified in the literature that led to the development of the Framework:

- **The need for an upskilled workforce**

  This is part of an international trend to link a nation's capacity to obtain international competitive advantage with the levels of knowledge, skills and understanding of its workforce. It argues that unemployment is in part due to a mis-match between the skills obtained by learners and those required by employers. The contention is that in a technologically advanced economy, practical and academic subjects are equally important.

  The solution is seen as a more flexible curriculum which is likely to raise the educational achievement of a whole population rather than a tiny elite. In this context traditional norm-referenced examination systems are seen as perpetuating a narrow base of academic knowledge and placing barriers in the way of continued education for many students.

However, it should be noted that this rationale can be read in different ways depending on the agenda and educational philosophy of the beholder. This may explain why opposition to the Framework only began to surface as the theory was put into practice.

- **The need for increased participation in education**

  This suggests that most students do not stay in education long enough or return for retraining. A culture of life-long learning is seen as essential in a technologically advanced economy. New Zealand's participation rates in education for the 15-19 age group were not high in comparison with other OECD countries, despite a continued rise in retention rates. Again the existing qualifications system was seen as inhibiting continued participation and allowing students to leave school with little or no recognition of their learning.

  However, what little research there is on this subject (for instance, Snook, 1989) tends to throw cold water on the idea that increased education necessarily leads to a reduction in unemployment.

- **The need to motivate students**

  Commentators also stress that it is not so much increased participation that is important as the nature of that participation. It was argued that many students are turned off school and see themselves as failures because of the primarily academic focus of the school curriculum, even when they have strengths in other areas which may also be valued by the community. Solutions suggested included the addition of more practically-based or directly vocational subjects, and greater co-ordination between schools and technical institutes. This might encourage students to stay in education longer by the dual motivation of taking courses that they could see as interesting and relevant, and being able to study simultaneously in more than one institution. It is also suggested that students would make better progress in academic subjects such as English and mathematics, if they could see their relevance in a vocational context.

  This lay behind the proposals in the Ministry of Education Report <u>Learning for Life Two</u> (1994) to introduce greater flexibility of qualifications in the upper secondary school and the lower tertiary sector by re-organising the curriculum on a modular basis to facilitate multi-institutional study, and reduce the number of qualifications available in the secondary school.

- **The need to provide for students at risk**

  This is closely aligned with arguments in favour of a move towards a more vocationally-based curriculum. While it is couched in terms of ensuring that young people leave education with qualifications relevant both to their needs and those of our present-day society, it also has overtones of the need to use education as a means of solving social problems.

The Professional Debate

While these factors, separately or in combination, can be seen as the central political motivation behind the development of the Qualifications Framework, the other important element is the debate over the past decade amongst teachers and other education professionals. This debate centres on the nature of assessment, the relationship between curriculum and assessment, and the impact of both on the qualifications system.

Much of this is reflected in the PPTA assessment debate described above. It is also part of an international movement which has been described as a "paradigm shift" in assessment, where the emphasis has moved away from "a testing and examination culture to an assessment culture" (Gipps, 1994, p1) This involves a recognition that any system of assessment will inevitably influence teachers' curriculum priorities and the way they structure the learning environment.   It suggests that a high-stakes assessment regime of exclusively written examinations and testing focused on a narrow range of knowledge and skills and with emphasis on rote learning will be reflected in classroom activities. This is unlikely to result in learners with the broad range of skills, knowledge and understandings widely recognised as necessary for citizens in the new millennium.

The search for more integrated and authentic approaches to learning and assessment has taken different forms in different education systems, but many of them are striving with varying degrees of success for similar goals:

- the recognition that learning and assessment are complex and multi-faceted

- assessment against explicit standards shared with students

- the attempt to produce good quality, fair and interesting tasks to encourage thinking rather than regurgitation of facts

- the recognition that "assessment is an inexact matter and can never be an exact one" (Harlen, 1994, p139). Consequently teachers will always need to exercise professional judgement and draw inferences

- the parallel recognition that "Although we cannot aspire to exactness, there is every reason for not adding to inexactness which would make assessment in some circumstances, for example, where it is used for selection, unfair, and in other circumstances, where it is used for decisions about teaching, useless." (W. Harlen, p159). Consequently it is necessary to ensure that assessment is as consistent and comparable as possible

- the use of training, exemplars and moderation procedures to develop teachers' skills and consistency

- more informative ways of reporting achievement rather than aggregation of complex information to produce a single score.

Each system has also had to deal with the tension between the new styles of assessment and the political imperative for accountability and national monitoring, especially when the stakes are high. Many commentators argue that it should not be a matter of choosing between the two, but of selecting assessment instruments fit for a particular purpose.

New Zealand was not alone, therefore, in its move in the direction of standards-based assessment. It is true, however, that it is more ambitious in its scope than other systems.

The next chapter looks at recent assessment experience in the United Kingdom and Australia — countries whose education systems have much in common with our own.

CHAPTER 2

LESSONS FROM OVERSEAS EXPERIENCE

No other system presents an exact parallel with the New Zealand qualifications structure, either before or after the inception of the Qualifications Framework. However, New Zealand's education system was derived from the English model, as was that of Australia and despite some divergence in the ensuing years, the British and Australasian systems retain a number of common features. Commentators in all these systems are contributing to the international pool of understanding about standards-based assessment from the indigenous forms that are emerging, with each new discovery being evaluated and often assimilated into innovations elsewhere.

This chapter does not seek to give exhaustive coverage of these systems, but to draw out possible lessons or points of comparison for New Zealand from recent developments in assessment and particularly, forms of assessment against explicit standards in England, Scotland and a number of Australian states.

The English Qualifications System for 16-18 year olds.

In England 16-18 year olds attend a range of institutions, including comprehensives, grammar schools, sixth form colleges, and further education colleges. The qualifications system for these students has three distinct 'tracks' or pathways and most institutions offer at least the first two:

1. **The academic track**

    This predominates with the General Certificate of Secondary Education (GCSE), for Years 10 and 11 students (a mixture of course work and a terminal examination), and the General Certificate of Education (GCE) A level examination (a two-year terminally examined course for Years 12 and 13). The latter is seen as the 'gold standard' and is a major factor for entry into higher education.

2. **The 'applied' track**

    This is less popular than the academic pathway and has lower esteem. General National Vocational Certificates (GNVQs), soon to be called Applied A levels, are in fact a form of general education, despite the vocational connotations of the name.

    They operate at three levels - Foundation (pre-GCSE level, seldom offered), Intermediate (a one Year alternative to GCSE), and Advanced (a two-year course roughly equivalent to two A levels). Students choose a course in one of 15 broadly vocational subject areas, which also include core skills. Student work is internally assessed on a competence-based model with multiple-choice external tests for some units. Results can be a 'pass' or at one of two levels of grading. There is also a pilot Part One GNVQ for 14-16 year olds.

3. **The occupational or work-based track**

    This involves mainly employees in full-time work or students in further education colleges and is designed to develop and accredit competencies for particular occupations. National Vocational Qualifications (NVQs) are assessed on a 'pure' competence-based

model, with a single cut-off point for competence. Critiques of competence-based assessment from the United Kingdom are commonly derived from studies of the early years of NVQs. There is also a fledgling scheme for Modern Apprenticeships.

All three tracks exhibit the closely-guarded English tradition of specialisation in the latter years of schooling. A-level students study three subjects in depth from age 16, with no requirement to cover a broader base. GNVQ is even more specialised, with almost the entire student programme given to study within a single vocational area. There is, however, a requirement to cover the core skills of communication, applications of number and information technology within the context of the vocational subject. NVQs are of course focused on training for single occupational groups.

Given this degree of specialisation, students' choice of track at age 15 or 16 may be very far-reaching. There is little cross-over between the pathways, although in theory some is possible. Although some subjects such as business studies, art and science are offered in both qualifications, they differ in timetable structure, in assessment methodology and in public esteem. The Dearing Review of 16-19 Qualifications (1996) was in part a response to the perception of fragmentation in the English system, but its remit was essentially conservative, and it did not attempt to unify the three pathways into a single route, the more radical option favoured by many.

Another implication of the different tracks is the requirement for most teachers to become familiar with at least three separate assessment regimes, each with different jargon and methodology. It is common for one teacher to be teaching classes for GCSE, GNVQ and A levels. Since each qualification requires separate professional development, this leads to an inefficient use of human and financial resources, as well as additional workload for teachers.

One of the factors militating against coherence has been the fact that each track was overseen by a different authority.

The Schools Curriculum and Assessment Authority (SCAA) is the overall authority for GSCE and A levels, but the exams are set and administered by some 15 examination boards, which compete against one another. There has been some public debate about variation in standards between exam boards. The National Council for Vocational Qualifications (NCVQ) has been the overall authority for GNVQ and NVQ, but there are three competing awarding bodies. They are the Business and Technology Education Council (BTEC), the Royal Society of Arts (RSA) and City and Guilds. This has meant variable approaches to the verification of standards, a matter only recently being addressed.

A significant structural change now under way as a result of the Dearing Report is the merging of SCAA and NCVQ, which will bring the various qualifications under one administration. Its impact and that of the new Labour Government on the different assessment regimes has yet to emerge.

Relevance to New Zealand

Three general issues arise for New Zealand from the English experience.

- **The advantages of coherence**

Firstly, it is clear that New Zealand has an advantage in the relative smallness and coherence of the system with its single authority for the oversight and awarding of qualifications. The English acknowledge the fragmentation of their system and have been attempting to move in the direction of greater coherence, so far without notable success. Further, it is clear that the existence of competing authorities and awarding bodies undermines national comparability of standards.

- **The dangers of multi-track systems**

  Secondly, the social impact of the three-track system is relevant in current discussions about 'dual systems' in New Zealand. Use of the term 'pathways' has an appeal to those concerned about issues of equity, in that it appears to allow recognition of a variety of learning styles and other individual or ethnic differences. In reality however, students are expected to make life-changing decisions at a relatively early age between tracks with unequal esteem and confusion of purpose - hardly a guarantor of equity. New Zealand advocates of dual systems should consider carefully the likely outcomes in terms of equity.

- **The selective use of English experience**

  The third issue to be considered is the tendency for participants in the New Zealand debate to refer selectively to research material from the United Kingdom. Comparison may illuminate but may also prove misleading, if the contexts are not well understood. One example of this may be the tendency to quote Wolf's research findings (1995) about the problems of competence-based assessment in NVQs as incontrovertible proof of the failure of all variants of standards-based assessment. In fact, it is necessary to identify whether a particular study is based on NVQs or GNVQs, and at which stage of its evolution the study took place, since in some cases faults identified in particular case studies have now been addressed.

Two Standards-Based English Qualifications

The most directly relevant English qualifications for New Zealand are National Vocational Qualifications (NVQs) and General National Vocational Qualifications (GNVQs). The remainder of this section identifies lessons applicable to New Zealand from the English experience of NVQs and GNVQs.

Each of these qualifications uses a form of assessment that fits within the 'family' of standards-based assessment. However, they are not identical. NVQs are closer to a 'pure' form of competence-based assessment, as defined by Wolf, with:

1.   an emphasis on multiple outcomes, each distinctive and separately considered

2.   the belief that these can and should be specified to the point where they are clear and 'transparent'- that assessors, assessees and 'third parties' should be able to understand what is being assessed and what should be achieved

3.   the decoupling of assessment from particular institutions or learning programmes (Wolf, 1995, p2).

NVQs have limited application to this Inquiry with its focus on secondary school qualifications. However, the New Zealand Framework did begin from a concept very similar to NVQs, and it retained some key features such as the single can/can't cut-off without grading.

GNVQs, on the other hand, are delivered in conventional educational settings and in this respect have more relevance to the issue of secondary school qualifications in New Zealand. Many features of the assessment model remain similar to NVQs, but from the outset they were required to incorporate a form of grading, rather than the single standard cut-off.

- **'Socialisation of the Assessors'**

  One of the most significant problems with NVQ stemmed from an initial belief by its architects that it was possible for a set of standards to be conveyed by assessment specifications alone. There was no need for a curriculum statement, no need for training or resources, because the standards would be transparent and everyone would know what they meant! The problem was particularly acute in NVQs since most of the work-place assessors had no training in pedagogy or assessment. Inevitably, studies have revealed problems in interpretation of the standards, and in achieving comparability between work-places.

  This approach still prevailed at the outset of GNVQ. Hence teachers and students were thrown into the new system without a trial. From 1992, students who opted into GNVQ were not assessed for any other qualification. Although a variety of courses was offered, there was no overall guarantee of in-service training and no national model for training. Teachers are still expected to get themselves through an assessor qualification, but it is based on recognition of prior knowledge rather than assisting them to come to terms with a new pedagogical approach. Resources were non-existent at the beginning, and are now trickling through from publishers, charities and the agencies. No sooner were resources written than they were out of date with the latest revision of the specifications.

  By now, research has demonstrated that standards cannot stand alone, and that they will only exist when they have found their way into assessors' heads - the 'socialisation of the assessors'. The pre-requisites for this are training, the use of exemplars, and good moderation systems. Belatedly, the GNVQ system is moving towards a more coherent approach to training and the development of exemplars (led by New Zealander, Giles Brooker), although its moderation system is still open to question on several grounds.

  The New Zealand experience provides an interesting contrast. The trials have placed a huge load of dual assessment on teachers which would be unsustainable for any lengthy period, but they did allow mistakes to made and lessons to be learned before everyone was thrown into the maelstrom. The national training model for every subject teacher and the national assessment guides offer teachers far more coherent support than was given to the GNVQ teachers.

- **Avoiding 'atomisation'**

  The GNVQ curriculum is entirely assessment-led, with teachers devising programmes on the basis of assessment specifications. There is no equivalent to the national curriculum statements which underpin unit standards for most of the general education subjects in New Zealand. This has led to concern in England about a narrow or overly 'atomised' curriculum, as well as throwing doubt on national comparability. This may have relevance for those

NZQF subjects where the unit standards have been developed under the auspices of an Industry Training Organisation rather than on the basis of a national curriculum statement.

It has now been recognised that the provision of sample programmes and assessment tasks, which exemplify an integrated approach to the curriculum is also an important means of resisting the tendency to atomisation.

Atomisation is also a significant factor in workload, which tends to increase as assessment is broken down into very small 'atoms'. This was recognised in GNVQ in September 1994 with a move away from recording assessment at the level of performance criteria towards element level. The Capey report went further with a recommendation that assessment should ultimately be at unit level. This is currently being piloted, (Capey, 1995, p1).

In the New Zealand unit standards, subjects vary in their degree of atomisation. The earliest versions of mathematics, for instance, break the subjects into many very small units, each with a large number of performance criteria and elements. Like geography, however, these were rewritten during the trial. Some maths elements disappeared altogether, performance criteria were revised to reflect the elements and the number of separate process skills was reduced. Subjects developed later benefited from this experience, so that there are many fewer unit standards, elements and performance criteria. Most unit standards for English, for example, include no more than two or three elements and a similar number of performance criteria.

- **Avoiding the 'spiral to specificity'**

  The lack of GNVQ curriculum documents has led to the self-defeating 'spiral to specificity' identified by Wolf (p55), where more and more supporting detail is crammed into the specifications in an effort to clarify their meaning and offer guidance to teachers, only to create further confusion. In New Zealand the approach has been to remove detail from the unit standards and refer to the curriculum statements, where they exist. This lack of 'clutter' may help teachers here to focus more clearly on what they are assessing.

  The other key to avoiding the spiral is to accept that words alone cannot convey the standards - hence the need for training, exemplars and good moderation systems to socialise the assessors, "rather than technical and linguistic preoccupation with the unit standards" (Coogan, 1996, p2).

- **The need for a national system of pre and post hoc moderation.**

  The emphasis in GNVQ is on post hoc verification, with visits perhaps twice a year from verifiers, who check a sample of student folios. Their training has been uneven, and there are concerns that some awarding bodies use verifiers who are not subject specialists or even educators (a problem for some vocational subjects in New Zealand too, perhaps.)

  There is no equivalent of New Zealand's emphasis on moderating the tasks and assessment schedules before they are given to the students, despite the fact that a recent scrutiny of GNVQ tasks (GNVQ, 1996) revealed that flaws in assessment design are a major weakness. Our mix of pre and post moderation is distinctive, and, while it is professionally challenging, may also contribute to professional development on an ongoing basis.

- **Moderation - let the model suit the subject**

In GNVQ, one model of multiple-choice external testing is made to fit all subjects. The tests do not stand up well on the grounds of validity. The ultimate absurdity was a multiple-choice question to art students about which of four media would be best for expressing emotions! Their reliability is also under question because the vast number of items produced each year does not allow for adequate pre-testing. This problem is especially acute since students cannot attain the award unless they achieve a 70% pass in the test. There are also wide variations between subjects with some subjects so easy "that students are passing them before studying the units" while in others "the pass rates on tests have been so low that centres are having to spend a disproportionate amount of time preparing students for what is intended as a low hurdle" (Capey, p17).

Pilot schemes are now exploring the possibilities of nationally-set assignments as an alternative in some subjects. The term 'synoptic' assessment is used to signify an assessment which integrates important constructs within a particular course and provides an overview of students' knowledge, understanding and skills. However, a joint London and Bristol University study of set assignments indicates that there can be dangers in over-ambitious efforts at integration.

Unlike GNVQ, the New Zealand moderation model allows some variation in national moderation plans to suit the needs of a subject. This appears to be more promising for validity. New Zealand's use of the Nationally Prescribed Activity (NPA) has something in common with the set assignments being piloted in GNVQ, but they differ in their application, in that the set assignment is a mandatory component of the students' results, whereas the central purpose of the NPA is to enable a check to be made on the quality of assessor decision-making.

- **Grading**

GNVQ has a grading system, with two levels of merit above a pass. This is seen as essential if it is to compete for equal status with the academic track. The particular model of grading has been much-criticised for excessive complexity. There are a number of 'themes', each to be considered separately, with complicated numerical rules for deciding how much evidence was sufficient for each scheme. The system has undergone a number of changes, to the ongoing confusion and frustration of teachers, with further reforms recommended by the Capey Review. This would see only two themes, with decisions based on specified units with particular weightings and an externally set, internally marked and externally verified assignment. Although this is an attempt to simplify the model, reduce the workload and improve the comparability, the main lesson New Zealand can draw from the GNVQ grading model is to look elsewhere - perhaps to Scotland!

Nevertheless, the overwhelming evidence from English commentators on assessment is supportive of some system for differentiating student performance in school qualifications beyond a single can/can't distinction. Wolf argues that two levels may be too coarse a distinction for many subjects. The more complex the subject, the more unlikely it is that performance will fall neatly into two categories. She also points out the difficulty of convincing assessors to operate a can/can't system with an absolute 100% success requirement, since in practice they offset and compensate, allowing for some errors and interpreting performance in the light of context and their perceptions of the candidates. She noted in interviewing work-place assessors that "people find it hard to use a two-category model. They are definitely keen to have a third, middle category" (Professor A. Wolf, Personal communication to Shona Hearn, 1996).

Gipps also sees a problem with the can/can't model "because it was derived from a very theoretical model. The more I learn about competence-based assessment in practice, the more I'm convinced the single cut-off is not possible" (Professor C. Gipps, Interview with Shona Hearn and Phil Coogan, 1996). Broadfoot noted that two levels are seldom sufficient reflection of the complex reality of how students perform in many subjects: "what is really there is a continuum" and was also sceptical about whether the single standard system could survive in the New Zealand Framework because of the need for legitimisation: "Students, parents, politicians and the public are still rooted in an alternative discourse about selection." (Professor P. Broadfoot, Interview with Shona Hearn and Phil Coogan, 1995).

Hence, the recent announcement that the New Zealand unit standard approach will now incorporate one or two steps to recognise merit is in line with the thinking of English researchers. However, GNVQ provides a stark warning that careful consideration must go into the particular merit model which is adopted.

Higher Still — Changes in the Scottish System

It is well-known that the design of the New Zealand Qualifications Framework was significantly influenced by developments in the vocational strand of Scottish education - the modular, competence-based approach of Scotvec.   More recently, however, Scotland is moving in a direction which New Zealand has already taken - towards a unified qualifications system which will "improve continuity between the current Scotvec and Scottish Examinations Board course, encourage a parity of esteem between 'academic' and 'vocational'/qualifications."

Existing Scottish qualifications for 15-18 year olds at secondary schools in Scotland, as in New Zealand, are more uniformly comprehensive than in England. The Further Education (FE) sector has a recognised function in the vocational educational area, so that the climate between schools and FE colleges is less competitive than in England.

Post-compulsory qualifications taken in the final two years (S5 and S6) fall into three strands which appear similar to the English model:

1.   **The academic strand**

     The Higher Grade examination, ('Highers') usually taken at 17 or 18 is the main entry requirement for Higher Education and has dominated secondary education for over a century.

     This does allow greater breadth of study than the English A-levels - up to six subjects may be taken by able students. In practice most spread this work over two years and take fewer than six subjects.

2.   **The general vocational strand**

     In recent years, a wide range of vocational National Certificate Scotvec modules (at different levels) has been developed, capable of being studied on their own or of being combined to form tailored courses including the general Scottish Vocational Qualifications (GSVQs) somewhat akin to the English GNVQs. Scotvec modules were originally designed for FE colleges, but schools quickly recognised that they offered an alternative for the many students for whom Highers were inappropriate. By 1996, schools were Scotvec's major 'customer'. Despite the initial vocational focus, many courses have been

developed to meet the demands of schools for less academic programmes in traditional subjects. Hence there are also National Certificate modules in subjects such as Literature and Creative Writing.

Scotvec modules are internally assessed on a single standard (can/can't) basis but GSVQs are graded. There is a system of external verification.

3. **The occupational strand**

The Scottish Vocational Qualifications (SVQs) are very similar to the English NVQs, and provide work-based qualifications assessed on a single standard basis.

There is also a Certificate of Sixth Year Studies (CSYS) for students to continue school study after Highers. However, this carries little weight for tertiary entrance, so is not widely supported.

The academic strand and CSYS were administered by the Scottish Examinations Board (SEB) and the vocational qualifications by the Scottish Vocational Education Council (Scotvec).

Despite the similarity to the English model, these strands are not as distinct. Many post-compulsory students combine courses of study from more than one track.

The Howie Report

Nevertheless, growing dissatisfaction with the system led to the setting up in 1990 of the Howie Committee to review upper secondary education. Their 1992 report identified a number of weaknesses including:

- an insufficient and inappropriate range of qualifications for students in the middle and lower ability ranges

- a vocational/academic divide, with differing pedagogies and the inevitable problem of low status for the vocational awards

- an assessment overload for students in the academic strand, with a `two term dash' for students to take highers in the first year of the Sixth Form.

However, their proposals for a two-track Scotbac (academic) and Scotcert (vocational) system were almost universally rejected in the consultation that followed. Reasons given included:

— the two certificates would not be held in equal regard

— there would be parental pressure on students to enter the Scotbac course, leading to high drop-out or failure rates

— different forms of assessment and course structure would reinforce the divide

— few schools could offer both certificates, perhaps leading to a two-tier school system

— students should keep their options open as long as possible.

High Still — Further changes

Instead, the then Government set out in its High Still discussion document a proposal for a unified system of qualifications, initially to be implemented in 1998, now postponed until 1999. This will integrate aspects of the academic and general vocational strands, but SVQs will remain distinct.

A significant structural change has been the merging in April 1997 of Scotvec and the SEB to form the Scottish Qualifications Authority, which will subsume the functions of both its predecessors. Under the Higher Still programme, former courses from both Highers and National Certificate have been brought together in subject areas ranging from classics and physics to business education and managing environmental resources.

These are to be available in a single curriculum and assessment framework, with one form of certification.

Awards will be available at five different levels, with clear progression routes between them.

- Foundation

- General

- Credit

- Higher

- Advanced Higher

Multi-level study will operate in S5 and S6, with students entering the framework at an appropriate level, largely determined by their results in the Standard grades (S4 assessment).

Advanced Higher courses will replace the former Certificate of Sixth Year Studies to form a coherent progression route from study at Higher level. Students aiming at accreditation at Advanced Higher level in their final year will be able to bypass external assessment at Higher level. There will be a safety net allowing for accreditation at Higher level if these students fail to achieve at the Advanced level. Similar bypass arrangements will apply at other levels.

The system will be based on units, expressed in outcomes. A unit is of 40, 80 (or sometimes 20) hours recommended study time and is certificated on the basis of internal assessment.

Courses will be made up of specified combinations of units totalling 120 hours of study with a further 40 hours for activities such as induction, remediation and preparation for exams. To gain a course award, students must succeed in all the component unit assessments as well as a course assessment which is wholly or partly external. Assessment will be based on criteria to define a C award (pass) and an A award.

National Certificates will be group awards made up by combining courses and units from the Higher Still framework together with the core skills of communication, numeracy, information technology, personal and interpersonal skills and problem-solving. Accreditation of core skill competence will be by a variety of methods, some integrated into other learning units, and some stand-alone.

Relevance to New Zealand

Many of the findings about standards-based assessment in England were also part of the Scottish experience, although in general the Scottish system appears to be able to respond more quickly to problems and flaws once they have been identified. This is perhaps because it is smaller and less fragmented than the English system. As such it has provided a useful model for New Zealand.

At present, however, the latest Scottish innovation is embryonic. Since the assessment model has not yet been implemented it is too early to draw firm conclusions on its proposed methodology. The impact of the Labour Government's proposals for constitutional reform is another reason for uncertainty. However, aspects of the design are pertinent to the New Zealand situation.

- **A unified model**

  One of the most noteworthy aspects is the strong consensus of opposition on both practical and equity grounds to the Howie Report's twin-track proposals, which has relevance to current New Zealand proposals about 'dual qualifications' models. The Higher Still approach signals that systems other than our own see it as a worthwhile goal to develop a unified model for qualifications.

  A related issue is the question of whether outcomes based assessment is suitable for both academic and vocational subjects. Given that Scotland has considerable experience now with this approach, their confidence that assessment of outcomes against criteria can be made to work for all subjects carries some weight. On the other hand, it is significant that they have not adopted the single standard model of the Scotvec modules, but will include several levels of achievement.

- **Internal and External Assessment**

  The decision to retain Highers with a mix of internal and external assessment within the unified structure can also be seen to have a bearing on New Zealand's discussion about the place of the Bursary examination. The distinction between unit and course assessment indicates the possibility of students who did not wish to undertake a full examination course achieving credit for the units they have successfully completed.

- **Appeals system**

  There is also a proposal to continue the Scottish tradition of an appeals system, whereby a poor examination result can be partly compensated for by high achievement in the unit assessments, where the school's internal judgements are overall consistent with external assessments.

Secondary School Qualifications in Australia

There is no single national qualification in Australia, since each state has a separate education administration under the federal system. The following sections outline the state of play in four Australian states:

- South Australia

- New South Wales

- Victoria

- Queensland

and identify some points pertinent to qualifications in New Zealand.

Queensland is the only state to use a fully developed form of standards-based assessment at secondary school level, although the other three states outlined here all make some use of criteria in their assessment processes.

Objective-related assessment in South Australia

South Australia has both publicly examined subjects and school assessed subjects in its Year 12 certificate (SACE). Both use criteria, and are assessed against objectives. This form of assessment, termed 'objective-related' or 'criterion-related' has evolved since the mid-80s in reaction to the negative effects of norm-referenced external examinations.

They have several assessment criteria per subject, like Queensland, but although they assess in grades for school-based assessment, they avoid attempts to precisely define grades in words. Instead they use an exemplar/moderator visitation system to socialise assessors into the required standards.

The source of those standards is the professional judgements of the moderators, accumulated over a number of years, coupled to the experience of teachers. While moderators use student work to clarify, illustrate and convey standards, the work is not published because of the risk of it being seen as a model to copy. The notion of 'connoisseur' is attached to moderators, who are trained in their role and standards by a chief moderator.

Common tasks are set annually which students are required to complete, and are then marked by teachers. This determines the nature (method) of the assessment, a potential source of invalidity in more open systems. The degree of specificity (extent of teacher flexibility in interpreting the tasks) available to teachers varies from subject to subject, dependent to some extent on the subject and its syllabus (for example, a geography field task could not be overly specific, as it will vary according to the environment available locally).

The assessment criteria have a degree of 'wooziness' which means that precision is neither expected nor sought in criteria statements. Consistency is achieved through moderators working with teachers. Moderators come together annually to check state assessment standards on samples of students' work selected according to criteria specified by the South Australia Board of Secondary Assessment (SABSA).

Moderators are practising teachers released from their schools, or working part-time in each role - SABSA is flexible about modes of employment according to circumstances. The role is seen as strong professional development, but as these are the best teachers, there is a certain reluctance to release, and it may be done one year with the proviso - not next year.

This is a system which has developed progressively over a number of years. As in Queensland, it is now part of the culture. Moderator visits are highly valued - "teachers love them" - any proposal to withdraw them would meet "screams of protest". It is expensive in both moderators' loss to their schools, and direct expenditure. However, the Board is committed to

this as a quality enhancement process, and is prepared to wear the cost. Moderators' roles are multi-faceted: they are expected to provide advice on programmes as well as assessments and grading standards. (Note that like most Australian certification authorities, SABSA has responsibility for curriculum as well as assessment, so can see a broader perspective in the cost-benefit of its moderation activities).

Visits have two purposes: first a formative purpose, providing guidance ("shaping the standards") at the pre-assessment stage, and later a verification function. As a rule of thumb a class may get from one-half to a day of moderator time per year, more or less depending on need. A needs-based model is currently in operation. A school may request a moderator visit, or moderators may make their own decision that a visit is needed. If support/expertise already exists in a school, the moderator may signal that that avenue should be tried first. There is no inspection flavour to visits - thus no attempt to hide and avoid scrutiny. Assistance is supportive. This is at least in part because of the history which has developed, so the visit is an accepted part of the culture. A further dimension to visit-need is the syllabus itself - some are more open and flexible than others, some are more specific, needing less clarification.

Public examination subjects also use criteria for marking and grade setting. After marking using the usual panel process, panels revisit the mark distribution to set grade cut-offs. They have available historical statistics of grade distributions and student work. Their decisions are informed by both, but clearly involve consensus professional setting of standards against expectations of what A, B, C grade work ought to look like. Agreed standards decisions would override historical statistics where clear evidence supported the decision.

Relevance to New Zealand

This is a very 'high trust' system, which places a strong emphasis on the professionalism of teachers. It appears to be well supported by teachers and accepted within the community. However, there is a strong expectation within New Zealand that a qualifications system should provide national consistency. The South Australian model, with its 'needs-basis' moderation does not appear to have sufficient safeguards built in to answer concerns about comparability.

It is interesting to note that, although they assess against standards, they differentiate between more than two levels of performance, rather than the single standard (can/can't) approach of unit standards.

New proposals in New South Wales

Professor Barry McGaw's report on the New South Wales Higher School Certificate, Shaping Their Future, has just been released (1997). In it he recommends a package which includes standards-referenced assessment, reporting what skills and knowledge a student has mastered. He criticises the way in which the Tertiary Entrance Rank (TER) ranks all students, irrespective of their intention or not to attend university, and argues for a University Entrance Score which will supersede the high-status beguilingly simple (TER) index which "has become a label for students and a means for easy comparison, whether fair or not, among students and schools". The new score would be available only for those students wishing to proceed to university, and would be used more flexibly than the TER (McGaw suggests three categories -

successful, unsuccessful, indeterminate, with more information sought before decisions on the latter).

This report is the result of extensive consultation coming some time after its predecessor, Their Future, which spoke strongly of the need to narrow the esteem gap between academic and vocational education. McGaw aims to assist this by recommending that some vocationally-oriented courses be included by institutions as part of their overall entrance mark.

The standards-referenced approach will work as follows. Criteria will define five levels of achievement. Consideration was given to having students pass and fail exams and rejected because it was too difficult to define what failure meant to different students with different abilities and aspirations. An HSC examination will continue, marked against the criteria. School-based assessment will continue to contribute 50% of the mark, the rest coming from the exam. Statistical moderation of school-based assessment using the examination will continue.

Standards will be described, supported by exemplars and other resources. Determination of the levels will make use of practices such as analysis of current examinations, identifying the performances which distinguish students at various levels. A wider range of assessment types is strongly encouraged in school-based assessment - the notion of assessment tasks as opposed to traditional testing is promoted. No proposals are made for teacher inservice, clusters or networks, an absence which may make itself felt in the future.

New report cards will grade students against specific achievement, not against the performance of other students. There will be no pass/fail mark: the traditional inferences drawn on a 0 -100 scale have been knee-capped by adopting a 20 - 70 mark allocation. The top mark of 70 will be given to students attaining the predetermined standard.

Teacher reaction at this stage seems positive. The clues to this perhaps include two aspects:

- The new HSC would reward students who were highly academic and remove the stigma of failure from those who were not.

- It would give employers real information, help universities better select their students and be simpler for everyone to understand.

A more cynical interpretation might be that they have not yet begun to implement the new system.

McGaw has not recommended the removal of examinations as this was not within his brief though he has proposed simplifying course structures among courses removed are general studies and distinction courses to reduce the tendency for students to choose whichever option gave likelihood of higher marks.

One of the report's 26 recommendations would abolish the Year 10 School Certificate (SC) which is seen as low stakes and irrelevant to most students: "those who might seek to use the School Certificate...are the minority who have been the least successful. As a consequence there is little respect for the certificate in the community..."

Interestingly, it cannot be much more than two years since a consultation to change the SC found that same community wanted to retain it! State-wide literacy and numeracy tests are proposed instead, showing what standards students have achieved.

Relevance to New Zealand

These proposals are still at the developmental stage so it is too early to draw conclusions.

It is interesting, however, to note the rejection of a simple pass/fail and the intention to differentiate against criteria at more than two levels. It is also significant that the report sees no further need for the Year 10 examination (the equivalent of New Zealand's School Certificate).

Criteria-based assessment in Victoria

Criteria-based assessment is used for the marking of school-based common assessment tasks (CATs) in the Victorian Certificate of Education (VCE). There are 10 criteria provided, with 5 or 6 grade descriptors on each. Marking against these descriptors yields a score out of 50 which is then collapsed into a 10 point scale A+, A, B+, B.

While generally accepted, some teachers still dislike the system, preferring instead to award global marks. (Some do award global marks, then work backwards to apply the system, thus ensuring the final mark they considered appropriate. Though very much a minority, this illustrates the influence of habit!)

Standards are defined as written grade descriptors, then conveyed and modelled by training and exemplars. Previously they were written as statements of work requirements, but more recently have focused on attributes of the work. There have been a dribble of changes to criteria each year - some teachers were not picking these up, others found persistent refinement frustrating. The lesson has been learnt to get them right, then leave them for the period of the designated study (3 - 5 years). Criteria have been reviewed using an Australian Council for Educational Research package, to analyse whether they are effective in differentiating performance.

The state reviewer has an important role in maintaining standards, training reviewers, producing detailed assessment advice for CATs, providing professional development and advice to teachers.

Previously the state reviewer in various subjects travelled the state holding professional development meetings. Aside from illustrating standards, this was seen as necessary to achieve the cultural change necessary to adopt criteria-based assessment. This proved a heavy use of the state reviewer's time, and became unsustainable.

In 1996 a TV approach, using satellite and video, was used. In Mathematics for instance, 2 student CATs were sent out, one assessed and annotated, one for teachers to assess. A broadcast showed the state reviewer going through the CAT, using criteria. The plan was for a second session to be interactive. Several more CATs, at different grade levels, were sent out for teachers to mark. Later, the state reviewer's assessment of the CATs was sent. The plan was for the state reviewer to go through these, then to deal with faxed or phoned questions. In the event, the teachers videoed the broadcast for future review. The 1996 experience reduced the reviewer's workload, and was evaluated as an improvement on 1995 in terms of judgement consistency.

The Minister of Education recently announced a review of the VCE, to include:

— workloads of pupils (and to a lesser extent teachers)

— the balance between CATs and end-of-year exams

— authenticity of students' work (given the commercial opportunity for publishers to market CAT solutions).

Relevance to New Zealand

Although criteria are used in assessing the common assessment tasks, the number of criteria and descriptors and the complexity of the statistical process by which the information is aggregated is questionable on the grounds of both validity and comparability.

Like the other states, Victoria also sees a need to distinguish between more than two levels of performance.

Given ongoing discussion in New Zealand about the trustworthiness and sustainability of various moderation options, the use of technology to reduce costs while retaining the role of the state reviewer is worth noting.

Standards-based assessment in Queensland

Queensland operates school-based assessment and a state-wide core skills test for its Year 12 certificates. School-based assessment makes use of graded standards at Years 11 and 12.

Syllabi set the dimensions of a subject. Within these there will be 3-4 (occasionally 5) criteria on which performance is reported. Each of these criteria is elaborated through five standards (i.e. levels).

Standards at each of the 5 levels are conveyed, not only through the descriptive statements in the syllabi, but also through graded student work made available to teachers. It is stressed that these are not hypothetical exemplars, but actual student work.

Moderation of marking standards occurs through district panels. The panels are broadly representative through a district. They are trained in evaluation of standards. Working under a district reviewer, they consider and judge student work from schools. This evaluation occurs at two points over the two years of assessment (Years 11 and 12). First, Year 11 work produced in the previous year is evaluated in February, with the results used to identify and remedy prospective problems in marking Year 12 work. This could be termed a formative stage, which is followed later in the year (October) by a verification stage at which marked Year 12 work is viewed and judged. Participation in the district panels is claimed to provide significant professional development. Consistency between district panels is checked by a state review panel chaired by the state reviewer.

In 1990 the system was reviewed by Viviane. Actions arising from her report included:

— the setting up of a widely representative Tertiary Entrance forum

— the provision of a range of trialled assessment activities and course models, to illustrate how instruction and assessment might be planned.

A recent syllabus development in mathematics used ability to solve problems involving complexity and unfamiliarity to distinguish performance standards. Teachers lacked confidence in interpreting these consistently and initiated a proposal for research to clarify the issue

Relevance to New Zealand

The absence of a final year examination other than a core skills test distinguishes Queensland from the other states, as well as from New Zealand.

However, their approach to standards-based assessment offers some useful parallels and contrasts to the New Zealand one. For instance, the relatively small number of broad criteria for each subject in Queensland and the fact that assessment is derived from the syllabus is likely to help in avoiding fragmentation of the curriculum. The moderation system is similar to the NZQF model, but focuses only on post hoc verification without New Zealand's additional step of moderating in advance the quality of the tasks.

There is clearly concern in Queensland amongst some teachers about higher order skills, although in their case the question is not so much whether standards-based assessment can elicit these skills as whether it is possible to assess them consistently.

Conclusion

It is apparent from these snapshots of other systems that standards-based assessment is not a static concept. It is still in evolution. The Inquiry concluded that NZQA appears to have been aware of international developments, so that in some cases problems emerging in other countries were forestalled at the design stage or early in the trials. However, the path of implementing assessment reforms in New Zealand has hardly run smooth. The next part of the report deals with the findings of New Zealand-based research commissioned by the Inquiry.

PART TWO

RESEARCH COMMISSIONED BY THE INQUIRY

CHAPTER 3

NEW ZEALAND LITERATURE REVIEW

The Inquiry's terms of reference allowed that research to be commissioned on relevant issues. This chapter presents the findings of the major piece of research undertaken by Dr Alison Gilmore of the Education Department at Canterbury University. She was asked to provide an outline of existing New Zealand-based research on the Qualifications Framework, which was likely to have a bearing on the questions of validity and manageability set out in the Inquiry's terms of reference.

Introduction

My purpose in this review is to outline research and informed comment on the New Zealand Qualifications Framework (QF). I focus on issues and themes related to the secondary school sector of education and consider the literature relating to issues that address the QF as it has evolved and *currently* exists. I do not, therefore, consider the issues which are more relevant to the tertiary and industry sectors, although I consult literature pertaining to this area when it has a bearing on the issues relevant to secondary schools.

Structure

This structure is supported by Croft (1993), who sees as a priority the need to establish **qualities of validity and reliability** for the QF, particularly as they relate to standards-based assessment. Another priority for Croft is that of researching the conditions that will enhance these qualities.

Validity, Reliability and Manageability

Validity refers to the **'fitness for purpose'** of the assessment system, that is, whether the system achieves its intended aims. I address this issue in Section 1, focusing particularly on issues related to the purposes of assessment in general and standards-based assessment in particular. Within that context I address questions concerning the likely impact of the QF for learners, its 'fairness for students' and its appropriateness for New Zealand society.

Reliability refers to the consistency with which judgements about student performance can be made. Reliability is vital for public confidence in and the credibility of the national qualifications that arise from the assessment and moderation systems. I discuss issues of reliability and questions relating to the effectiveness of the Framework's quality assurance (moderation) systems in Section 2.

Manageability relates to the practical feasibility of achieving validity and reliability in such a way that the assessment system does not impose undue stress, professional burden or workload on those implementing it. I consider literature relating to the practical feasibility of managing the assessment system within the realities of secondary schools in Section 3.

In the concluding section (Section 4), I draw some conclusions in answer to the overall question of the educational validity of the QF.

Sources of Literature

The literature comes from three basic sources:

- the informed comment of educationalists and assessment and curriculum experts

- the views and experiences of teachers and principals who have been involved with the writing, moderation and assessment of unit standards

- more systematic research into the implementation of unit standards.

Much of the literature available is of the first two types. Because of the relative recency of the QF, the amount of systematic research is somewhat limited, although its findings are illuminating. As such, I present these findings in some detail in the report, as empirical evidence allows refutation of or support for claims made by the former two groups.

Distilling the issues surrounding the QF in such a way that allows a ready and clear summation of them is not easy. The issues are numerous (Elley, 1991, identifies 20!) and the views diverse, expressed equally strongly and convincingly by opponents and supporters, theorists and practitioners. The synthesis of the literature represented in this review, therefore, is influenced by my position as a 'theorist' and the views that I personally bring to the debate.

Two additional notes should be made. As Peddie (1993a) points out, the New Zealand Qualifications Authority (NZQA) "has been greeted with a mixture of satisfaction, hostility and delight since it began serious development of the Framework" (p22) from a variety of educational sectors. However, much of the accessible literature that is related to secondary schools is oppositional or critical. But such criticism should not be seen as unexpected given that for many educators and educational theorists the Framework is "the single most important issue currently facing education, dwarfing all change that has gone before and striking at the very heart of the teacher/classroom/student relationship" (Martin, cited in Chamberlain, 1996, p114). This 'bias' will be reflected in the review.

The second point to note is that while there is a myriad of complex, interwoven issues relating to the QF, its evolutionary/developmental nature since it was first proposed in 1991 has meant that some issues have become less relevant. Some of the initial issues raised by Croft (1993, 1994), Elley (1991-93) and Irwin (1994), for example, are no longer relevant. This review therefore focuses on what I consider to be the major *current* issues relevant to secondary schools.

SECTION ONE

'Fitness for Purpose'

Any consideration of validity must consider the purposes for which that assessment is designed - its 'fitness for purpose'. Hood (1993) defines assessment as a process designed to gather information for a specified purpose. Therefore, any discussion of the assessment practices denoted by the Qualifications Framework needs to be preceded by a discussion of its assessment purposes.

In a recent report, Sir Neil Waters, Chairman of the New Zealand Qualifications Authority, expressed the Authority's aspirations regarding assessment for the Qualifications Framework as follows:

In my view, assessment should not dictate curriculum or be unmanageable. It must be for a purpose. It should be a process linked to learning, not a separate entity. Its impact should have positive, not negative consequences for learning. Local and national quality management strategies, such as accreditation and moderation must seek to ensure that assessment is fair, equitable, consistent and in keeping with established standards. The flexibility to provide a range of learning and assessment opportunities must be assured. (NZQA, 1996, pii*)*

What NZQA is aspiring to is an assessment system that is valid, reliable and manageable. This is reinforced by their definition of good assessment:

Assessment methods will be appropriate, fair, integrated with work or learning and manageable.(assessment) evidence will be valid, direct, authentic and sufficient...Assessment will be systematic, open and consistent. (1996, p7)

Certainly, few of those New Zealand commentators who have criticised the Framework (for example, Elley, 1991, 1996a, 1996b; Irwin, 1994; Irwin, Elley and Hall, 1995; Gilmore, 1996; Tuck, 1995) would find fault with many of the fundamental QF principles underlying the above quotations. As expressed by NZQA (1996), the principles emphasise:

- encouraging greater participation in education and training

- developing learning that is relevant and responsive to the needs of the individual, employer and society

- simplifying the structure of qualifications

- bringing coherence and allowing credit transfer between courses and learning establishments

- introducing a fairer system which measures achievement against clearly stated objectives.

It is *whether* these principles can be achieved and how they are to be achieved that is the source of the debate. Many of the above-mentioned commentators remain unconvinced regarding the first point and dubious about the second.

Secondary teachers also seem uncertain. Cooney (1995), then senior vice-president of the PPTA, reported that while the majority of teachers were in favour of the concept of the QF and that many of the problems are related to implementation, a considerable number also supported Business Round Table notions that the problems are insurmountable.

What is clear is that the issues surrounding the debate, as expressed in the literature, are numerous. However, they can be considered under two broad categories:

i)	*philosophical or conceptual issues* centring on some of the underlying principles of the Framework

ii)	*issues of implementation* centring on operational and structural matters that have arisen out of trials to implement the unit standards in a range of subject areas.

NZQA itself is not unaware of the issues, as illustrated by recent internal reviews (Methven et al, 1996) and an 'assessment stock taking' exercise (Strachan, personal communication, 1996). This part of my report therefore focuses on a discussion of what I consider (from the literature)

to be the key philosophical issues relating to the validity, reliability and management of the QF. These are:

- the nature of standards-based assessment (SBA)

- the purposes of assessment in secondary schools

- the appropriateness and quality of standards and SBA

- for all areas of learning

- the 'fidelity' of assessment to the curriculum

- recognition of merit and excellence

- dual qualifications within the QF

- fairness for students

- cultural appropriateness of the QF.

These correspond substantially with the issues identified by Methven et al (1996) of NZQA as they relate to secondary schools, namely that :

- the QF is being implemented with insufficient prior research and consultation

- excellence will not be pursued or encouraged under SBA

- workloads associated with the SBA will increase

- the costs of the QF are excessive

- academic and vocational learning are different.

The central mechanism through which it is hoped many of the aims of the QF will be realised is that of SBA. However, there is an implicit tension here in that the QF encompasses dual qualifications (through standards-based assessment for national certificates and through norm-referenced external examinations). The following discussion, therefore, must also focus on the validity of a framework that employs only the one type of assessment.

1.   What Is Standards-based Assessment?

In their publication *An Introduction to the Framework*, NZQA defines SBA as the measurement of a learner's performance against pre-determined, clearly stated and well-defined standards of achievement or competency (NZQA, 1991b, p6).

According to proponents of SBA, a primary advantage of this assessment tool is that, unlike norm-referenced forms of assessment, it does not promote the failure of a set proportion of learners. Rather, provided they meet the standards required, all students can be successful (Methven et al, 1996). Because SBA establishes clear learning outcomes, teachers and students have a clear understanding of what is required.

Teachers can focus their teaching with confidence, and students know exactly which targets to aim for. SBA therefore represents a 'holistic' view of assessment and has three major aspects:

- it is outcomes-focused

- it encompasses knowledge and general attributes

- it takes into account the context in which the knowledge, attributes and skills will be employed (Methven et al, 1996, p38).

Essentially, the form of SBA adopted by the NZQA is a form of competency-based assessment in which students are judged as either 'competent' (they have attained all relevant performance criteria or elements of the 'standard') or as 'not yet competent' (they have failed to reach the standard). Students who do not achieve the standard may be reassessed until they become competent.

Peddie (1992) and Croft (1993, 1994) discuss the interpretation of the term 'standards-based assessment' that has been adopted by NZQA. They contend that NZQA has consistently made very firm and, in some cases, quite erroneous comparisons of SBA with norm referenced assessment (NRA) in attempts to rationalise the former and discredit the latter.

In line with this analysis, Tuck (1995) refers to NZQA's characterisation of SBA as the 'white knight' and NRA as the 'poison pill', so that "judgements involving comparisons between learners are deemed less worthy than judgements of the extent to which the learner has mastered specific content" (p60). However, as Croft (1993, 1994) and Tuck (1995) point out, there is an integral interrelationship between standards (or criteria) and norms. Indeed, a "conceptual and actual link" exists between the two (Peddie, 1993a, p5). The performance criteria that are used for assessment purposes become the standards, which means that the statements of performance for those criteria must necessarily be based on the normal range of achievement expected of the student in the programme (Wagner and Sass, 1992). Lennox (1995a) notes, however, that the relationship between standards and norms establishes criteria in advance of assessment, rather than at the point at which learners are assessed.

As Tuck (1995) points out, the essential difference between SBA and NRA lies in the purposes for which the information is to be used. Similarly, Codd, McAlpine and Poskitt (1995) claim that the issue is not "which is better?" but rather, "when and how are they [the two forms of assessment] to be used?" (p43). They conclude that the two forms of assessment are not mutually exclusive and that any comprehensive system of assessment must include both.

The interrelationship of the two types of assessment has been reinforced by the experience of trialing unit standards in schools. The geography and mathematics unit standards, for example, have been rewritten to better reflect realistic expectations of what students can achieve at each level (Coutts and McAlpine, 1996).

Torrie (1996) reflects the views of some teachers who believe that standards-based assessment is more valid than norm-referenced assessment. He states:

Of the two systems, the standards approach is more valid, it's more appropriate because it's closer to the classroom and it's better for the students. To throw standards out because they are not perfect is nonsense. (p15)

2. Does SBA Achieve 'Fitness for Purpose'?

Codd, McAlpine and Poskitt (1995) believe that there are 'deep seated contradictions' within the assessment policies of which the QF is part, and that these concern the nature and purposes of assessment. They refer to a:

fundamental tension between assessment that aims to improve learning in relation to the needs and abilities of individual learners, and assessment that constitutes a mechanism for centralised control and accountability. It is a tension...between an educational form of assessment essential to effective classroom practice, and a political form of assessment concerned with achievement standards. (p33)

A similar tension exists between the purposes of assessment in secondary schools. Here, the arguments become intertwined with the issues relating to standards-based assessment and norm-referenced assessment. Hood (1993) argues that as long as selection of students for higher education and employment remains a major purpose for assessment, the information available from current assessment techniques will be unsuitable primarily because it tends to focus on *sorting* students (in a norm-referenced way) rather than on describing what they can *do*. He further argues that the purposes of assessment have widened, which means that the assessment approaches of the past can no longer satisfy students' needs (p29).

However, as Lennox (1995a) points out, while assessment against standards (criteria or objectives) as proposed in the QF has long been advocated, the assessment mechanisms of the QF have not been advocated nor has a single standard form of assessment. The results of an NZQA survey in 1991, cited in Gilmore (1996), found that assessment against graded criteria (achievement-based assessment) was supported by the majority of respondents from the education sector. Fewer than half considered achievement-based assessment as suitable for all areas of learning with many respondents commenting that a combination of methods is needed.

NZQA's conclusion that the issue centres on finding an effective way to combine achievement- based assessment and competency (standards) based assessment has not been pursued, and achievement-based assessment has since been abandoned, without mandate or explanation, as a form of standards-based assessment.

A number of writers see the answer to this issue as not being one of choosing between retention of the present 'imperfect' system or adoption of SBA (Childs, 1995). Rather, they see it as involving exploration of other possibilities that focus on combinations of assessment against unit standards for formative stages of assessment and an external moderating device (such as an examination) for summative/selection stages of assessment (Gernhoeffer, 1995).

3. Is SBA Appropriate For All Areas of Learning?

Given that the QF focuses on only one form of assessment, it is obvious that the whole curriculum will be placed under that one unit standards umbrella. As such, the QF makes

no distinction between what were previously considered 'vocational' and 'academic' subjects.

Elley (1996a) describes this situation as the "fundamental flaw" of the QF, while Irwin, Elley and Hall (1995) identify it as the QF's "basic fallacy". Irwin et al argue that one type of assessment (standards-based) is not suitable for assessing the "myriad combinations and levels of skills and knowledge to be found in education and training courses and programmes" (p*iv*). Irwin (1995a) adds that:

> *the vast and growing range of knowledge and skills cannot fit into the one monolithic, bureaucratic framework incorporating one set of levels and one building block - nor will the widely varying aspirations and abilities of students be met by it.* (p11)

Few of the commentators have difficulties with the suitability of unit standards for practical skills and areas of learning that follow a linear sequence of learning (Brace, 1996; Elley, 1991; Metcalfe, 1996; Neyland, 1994). Metcalfe (1996) summarises this position by pointing out that there is much to recommend the philosophy of unit standards. It aims to award students credit for reaching a set standard of achievement regardless of how they compare with other students. Re-assessment opportunities mean that students can try again if they fail the first time. And the practical assessments can assess a wider range of skills than can be covered by a written exam.

In fact, she concludes, unit standards make excellent tools for the assessment of practical skills. Where there is a procedure to be carried out, criteria can be clearly laid down, the subsequent assessment is open and reliable, and the standard is easily attainable by most students. Elley (1995) concurs with this, stating:

> *The current pendulum-swing towards standards-based assessment at all levels of the education system is motivated by laudable ideals about students' learning. There is little doubt that standards-based teaching and standards-based learning are pedagogically defensible and desirable...However, there is much less to be said in favour of standards-based assessment, especially when the results count for high stakes.* (p78)

Elley (1991, 1996a) and other writers (for example, Irwin, 1994; Metcalfe, 1996) also argue that the key differences between skills-based (or 'vocational') subjects and knowledge-based (or 'academic') subjects are critical to the validity of SBA. The former require mastery of a linear sequence of competencies that are discrete and related, but not *inter*related. The latter do not follow such a simple linear sequence of skills but are much more complex in nature. Barker (1995), from NZQA, acknowledges this complexity when he states, "..with something as complex as knowledge and its application to new horizons, there are webs of connections, interrelations and manifestations that remain mysterious" (p27).

In short, the crucial issues here are (i) the ability of SBA to assess the complexities and 'higher order thinking' of knowledge-based subjects, and (ii) the location of the standard for these subjects.

Assessment of higher order thinking

Subject area experts concur with the above-mentioned views of Elley, Irwin and Metcalfe. Campbell (1995), for example, states that because of the topic-based nature of history, the subject "fits the procrustean bed of unit standards very badly" (p124). Neyland (1994) argues that most areas of mathematical knowledge cannot be characterised as highly structured or linear. Mathematics "encompasses a number of domains each of which is a facet of maths knowledge and together forms an organic, interdependent framework of knowledge" (p1). Unit standards assessment, Neyland says, is inadequate for assessing such complexities.

Another view of the problem is offered by Childs (1995):

> *In many areas of the cognitive domain there is a wide range of possible views and 'answers' which preclude objective standards. Any standard laid down could do more than reflect a democratic scholarly consensus...[which] is constantly shifting, has no monopoly on truth and simply does not exist. Indeed the challenge of modern academic endeavour is to provide students with the opportunities to challenge traditional viewpoints.* (p146)

A number of authors (for example, Brace, 1996; Elley, 1991-93; Hall, 1994; Irwin, 1994; Millar, reported in *NZQA Framework: what are teachers prepared to do about it?* (1996) have commented on the problem of writing unit standards and performance competencies as they generally apply to higher learning. Their arguments can be summarised thus: the problem with unit standards as they apply to higher and academic learning is that much of what is learned in academic education cannot be specified in standards.

The NZQA disputes this view (Methven et al, 1996), However, the problem relates not just to the difficulty of applying SBA to academic learning, but also to the difficulty of applying SBA principles *and obtaining reliable results.*

Elley (1991-93) argues that it is impossible to write specific and clear standards for school subjects, such as English and history, whereas this is a straightforward task in subjects such as typing, a view also held by Brace (1996). From her experience as a writer of unit standards for law-related subjects in the senior secondary school, Brace concludes that standards-based assessment is most appropriate when learning is centred on a basic recall of simple knowledge and skills (as for Level 1) in which the learning outcomes are distinct, isolated from other learning and can be specified easily and reasonably precisely in terms of performance. She does express some concern, however, that a particular standard could be interpreted as a series of "atomised behavioural objectives" (p23). Others have similar misgivings. Milne (1996) describes standards as "reductionist" (p15) and Metcalfe (1996) describes them as "simplistic".

Coogan (1996) argues that while it may be difficult to specify learning outcomes for higher order thinking, it is not impossible. The challenge, he says, seems not to lie "in having the criteria but in ensuring a consistency of professional judgement in deciding when they have been met" (p76). Outcomes written for higher order learning may need to be more flexible and open-ended than for more applied or vocationally specific unit standards.

For higher levels in the QF, Brace found that standards have yet to reflect the best practice or understanding in the field. She attributes this failure to the narrowness and specificity required by the unit standard, which focuses learning on the more easily

assessed pieces of knowledge and skills. As such, it cannot adequately provide for the more complex processes, for higher order learning and for the critical process of integration.

Brace reiterates the position taken by many educationalists: SBA is suited to some forms of learning, but it is not universally appropriate for all forms of learning. She neatly summarises this position and the different learning characteristics and their suitability for SBA in the following table (1996, p24).

Most suited learning characteristics	**Least suited learning characteristics**
Clear, technical, endpoint outcomes	Open-ended learning
Easy to measure performance	Difficult to measure performance
Quantitative, objective assessment	Qualitative, subjective assessment
Stand alone learning episodes	integration with other learning critical
Competence driven	Expertise driven
Linear approach to learning	Multidimensional approach to learning
Reaching a standard important	Extending learners to their potential important

These characteristics make up learning in varying degrees. Brace hypothesises that as a learning programme increasingly reflects more right-side characteristics, SBA becomes increasingly unsuitable for effective learning. In addition, Brace argues that as one moves further to the right, formative assessment methods become increasingly expensive and time-consuming, especially if reliability and consistency are to be maintained.

It is significant, says Brace, that most Framework success stories, both within schools and in industry, are found in learning programmes featuring the left-side characteristics. NZQA's publication, *Learn*, abounds with accounts of these stories. The fact that senior school learning, particularly in academic subjects, is located towards the right side of the Table suggests that SBA is unsuitable for this form of learning.

Locating the standard

NZQA members themselves acknowledge the above situation to some extent when they define some standards as being 'transparent' and others as being 'agreed'. The agreed standards tend towards the right of Brace's model and require the more extensive and complex moderation plans that are based around socialising teachers to 'what the standard is'. However, Methven et al (1996) argue that "the difficulty of redefining general education outcomes in standards-based terms seems greatly exaggerated" (p40), a view shared by Coogan (1996).

Nevertheless, experience with the unit standards in chemistry (Metcalfe, 1996) and physics (Batchelor, 1996) is consistent with Brace's position as it relates to higher learning. Metcalfe concludes that unit standards are too simplistic, too fragmentary and too focused on specifics. They fail to assess understanding of concepts and interrelationships and are impossible to measure in 'black and white' or word-perfect answers. Rote learning becomes more important than real understanding, which leads to the fragmentation and 'death by detail' (Metcalfe, 1996, p3). Millar (NZQA Framework,

1996) states that while segments are assessable as components of the total field of chemistry, the whole has so much more meaning than the parts.

Coogan (1996) introduces the notion of 'synoptic' assessment to counter criticisms concerning the fragmentation of learning and assessment. Synoptic assessment is an assessment that requires learners to draw together the various threads of a learning programme (which incorporates a number of unit standards), to demonstrate they can make links. It assesses aspects that relate to the whole subject and not just to individual unit standards.

This type of 'meta unit standard' could be achieved through well-designed evidence indicators. Methven et al (1996) argue that, in time, good quality management practices provide alternative methods of assurance and that standards-setting bodies will endorse broader outcomes. Moreover, the Authority expects that 'over-specified' standards will, therefore, disappear through a process of review and consolidation. The flexibility of the Framework and its associated development and review processes allows this to happen.

However, critics such as Gernhoeffer (1995), Millar (NZQA Framework, 1996) and Tuck (1995) continue to stress that while subjects (especially those for which standards are easily defined, are 'clear and transparent', and allow a clear progression of achievement) may generally lend themselves to small discrete unit standards and clear assessment of whether the standard has been met, the same cannot be said for the *whole curriculum*. Breaking up the curriculum diminishes the opportunities for integrated learning and teaching. It trivialises aspects of the curriculum, particularly at the higher academic levels.
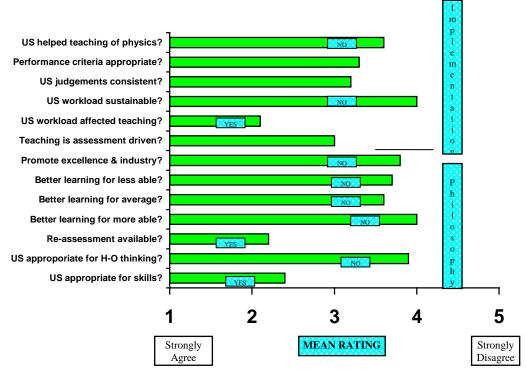
NZIP survey

The opinions of Physics teachers on this issue were surveyed by the New Zealand Institute of Physics (NZIP) Education Subcommittee (1996a). It is worth looking at this study in detail.

The survey identified three groups of respondents—those linked with NZQA (for example, employed by NZQA on unit standards); teachers who had trialed unit standards; and those who were NZIP members. The survey required teachers to indicate whether they agreed or disagreed with each of 13 questions centred on a controversial statement about the unit standards. A 5-point scale, ranging from 'strongly disagree' (1) to 'strongly agree' (5), was used.

An interesting observation from the findings is that, of the three groups, the first (linked with NZQA) generally held more favourable views on a range of questions relating to philosophical and implementation issues (mean = 2.8) than the other two groups (means = 3.3 and 3.5, respectively). I have 'extracted' the views of the group of 75 teachers trialing the unit standards because of their direct experience with them. The views are expressed in the form of weighted means in Table 1. (The views of the other two groups were relatively similar to the first.)

FIGURE 1   **Physics unit standard trials: response of teachers (information extracted from NZIP, 1996a)**

The teachers who had been trialing the unit standards tended to feel that:

- unit standards are appropriate for assessing practical skills but not for assessing higher order thinking

- re-assessment should ideally be part of any assessment scheme

- unit standards did not improve students' ability to learn physics, irrespective of ability group

- unit standards did not promote excellence and industry among physics students

- the workload associated with unit standards affected their (the teachers') classroom delivery

- the present workload will not be sustainable in future years

- the implementation of unit standards has not helped their teaching of Sixth Form Physics.

The teachers were divided/neutral about whether their teaching delivery was most influenced by assessment or the curriculum; whether unit standards-based judgements of competence could be acceptably consistent throughout New Zealand; and whether the performance criteria were set at an appropriate level.
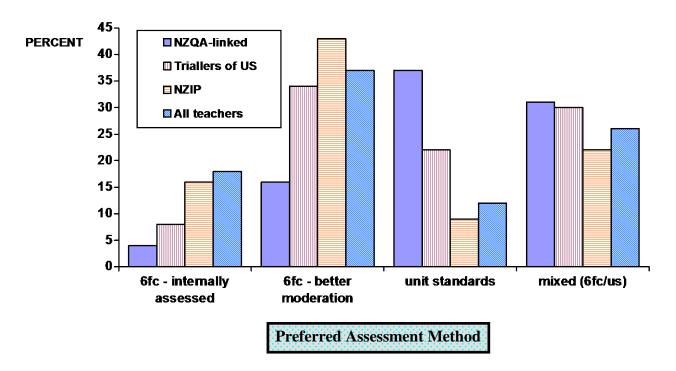
The teachers were also asked to indicate their preferred method of sixth form assessment. Again, some interesting differences between the groups of teachers emerged. Those teachers linked with NZQA were substantially more in favour of internally assessed unit standards (as is being proposed by the QF) than the other

groups. Conversely, considerably more teachers who trialed unit standards were in favour of a Sixth Form Certificate with improved external moderation (see Table 2).

Table 2 suggests a generally strong support across all groups for (i) a Sixth Form Certificate featuring improved external moderation, and (ii) a 'mix' of Sixth Form Certificate assessment (for knowledge and problem-solving) and unit standard assessment (for practical skills).

Table 2: Preferred sixth form assessment method for Physics (NZIP, 1996s, p11):

Preferred Assessment Method

4.   Does Standards-based Assessment Have Curriculum Fidelity?

Hearn (1996) considers validity in terms of 'curriculum fidelity', that is, the extent to which SBA remains true to and accurately reflects the skills, knowledge or understandings we wish students to learn (p36). She argues that the curriculum documents from which unit standards are derived "offer reasonable prospects that the domains and constructs assessed will be well specified with broad coverage of the curriculum, and will be embedded in a broadly based learning programme" (p58). The fidelity extends to the potential for the advance moderation processes to improve the quality of the assessment tasks themselves as well as teacher judgements about student performance. The issues that remain to be resolved, however, relate to the single model of standards-based assessment and curriculum fidelity, its capacity to be a realistic and motivating challenge to all students, and its ability to reflect the complex continuum of human performance (p98).

Metcalfe (1996) provides some indication of the extent to which there is curriculum fidelity for chemistry. She reported considerable loss of flexibility in the chemistry programme because of the need to train students to reach the required unit standards and the time taken for the assessments themselves. She argues that it is possible with the chemistry curriculum to bypass the thrust of the new curriculum, the reason being that the unit

standards have been closely derived from only the last of the curriculum's three aims. The aims relate to developing and understanding the ways materials and chemical processes interact with people in the environment; experimental work; and traditional concepts and patterns of chemical behaviour. The last 'aim' allows teachers to ignore the first two aims and to teach their old course unchanged.

5. Can SBA Recognise Merit and Excellence Learners?

Another major criticism of the pass/fail or 'competent/not yet competent' nature of SBA is that it neither promotes nor identifies excellence in learners (for example, Elley, 1991-93, 1994; Irwin, 1994; Irwin, Elley and Hall, 1995; New Zealand Vice-Chancellors' Committee, 1994). According to Peddie (1995), this situation leads to able students not being motivated to achieve to their full capacity, resulting in widespread mediocrity among learners.

For Methven et al (1996), however, to suggest that the Framework does not 'encourage' excellence in education is comparable with complaining that New Zealand Standards do not encourage excellence in manufacturing. Standards provide an assurance of quality, or fitness for purpose: that is all. The nurturing of excellence is the business of the education and training provider. The absence of standards for merit does not inhibit this professional obligation. (p42)

The Authority's policy is that there is nothing to prevent any school from providing information about meritorious performance additional to the unit standards (NZQA, 1996). In their view, the Framework caters for excellence and motivation by encouraging able students to attain unit standards more quickly through higher levels unit standards (Taylor, 1996) and by allowing students to work at the level of the Framework to which they are best suited (Lennox, reported in Controversial Student Assessment Scheme still has the Education Experts Polarised, *NZ Herald*, 14 December, 1995).

The assumption here is that such multi-level study can take place within one classroom. But is this possible in reality? Coogan (1996) suggests that, on the basis of the experience with unit standards in England, it is a "worthy but somewhat utopian ideal" and is difficult to conceptualise against the realities of large senior secondary school classes.

Peddie (1993a) notes that the strong interest in rewarding merit and excellence tends to be driven by people other than the learners themselves for example, parents, employers and those on university selection committees. The issue here revolves around whether the process is robust enough to (i) reward, encourage and give better information about a student's performance and (ii) enable selection. In Peddie's view, both aspects of the process are defensible.

Merit versus excellence

In support of this stance, Peddie (1993a) distinguishes between merit and excellence, arguing that they are fundamentally and conceptually different. He views merit as a significantly higher level of performance that goes well beyond the performance criteria for competence as judged for credit on a unit standard. It sets no limits on the number of students who might achieve it and is conceptually consistent with SBA. He believes that recognition of 'merit' is possible whenever the standards are themselves part of a continuum of learning. In situations where it is possible to identify and clearly define certain levels of performance, then the award of 'credit' or 'merit' are equally valid (p12).

Peddie also contends that there is a good case for introducing a merit level when there is a valid, defensible and practical way of setting an extra standard well above that required for competence or pass.

For Peddie, excellence is related to outstanding performance, which is deliberately set at a level which only a few—if any—might be expected to attain. On the surface, excellence incorporates notions of norm-referencing, which Peddie (1995) views as conceptually 'at odds' with SBA. However, as discussed earlier, standards are inextricably linked with notions of norms and reasonable expectations of student performance at different levels (Croft, 1993, 1994; Peddie, 1993a). Therefore, a standard of excellence may be set equally justifiably as a standard of merit (Peddie, 1995). Peddie also argues that the recognition of excellence would seem important for selection.

He also argues in his 1995 article against the rate of accumulation of credits as a basis for recognising merit. To do this:

> ...seems potentially at odds with [advice] to teachers to construct coherent curriculum packages involving a number of unit standards and learning outcomes. Such a move would probably make it more difficult to allow rapid progress through a number of levels by outstanding students. (p179)

He suggests that merit be awarded to a high level of achievement in unit standards and excellence be awarded at the completion of a qualification and to those students who are consistently outstanding.

On the basis of his comprehensive analysis (1995) of the issues surrounding the definition and recognition of merit and excellence, Peddie draws these conclusions:

- the identification of merit and excellence should be made on the basis of valid and reliable criteria

- a distinction must be made between cases where the learning outcomes of a unit require mastery for the competence standard, and those units where this is not the case

- distinctions must be made between the aim to identify learners who achieve at a higher standard than competency (merit) and the aim to identify the top-ranking group for a reason not specifically related to the learning tasks, such as a prize for scholarship (excellence)

- merit should not be interpreted as speed of completion, especially where learners do 'extra' within a normal time frame, but as students demonstrating a transfer of skills to new situations or achieving at a standard well beyond the credit standard

- the use of a separate norm-referenced assessment outside SBA is likely to have undesirable backwash effects on teaching and learning.

Coogan (1996) agrees with Peddie by recommending that should the pressure to recognise merit and excellence become 'irresistible', then that recognition should be introduced in those areas of the Framework that show a clear purpose. Examples would

be motivating students and facilitating selection for employment or higher education. In addition, Coogan calls for no more than one level of differentiation.

It may be that there are no simple, universal answers to the issue of identifying merit or excellence in SBA, and that no single approach will always be the best for every unit standard. Certainly, this is the stance that Peddie (1995) takes. However, he does see the use of merit standards as possible, but only where there are clear and acceptable approaches to recognising merit and excellence. This caution applies particularly to different cultural groups, notably Mäori for whom it is also extremely relevant to consider the circumstances under which merit standards are used.

As noted above, many principals and teachers have indicated a strong preference for merit and excellence to be recognised within the Framework. NZQA's argument that the Framework allows this recognition through the process of more able students acquiring more unit standards is generally not an acceptable definition. This is because recognition is not an integral part of the unit standards themselves.

Reports of the mathematics and geography unit standard trials (Meldrum, 1995a; Coutts and McAlpine, 1996) suggest that some schools are setting up internal systems for recognising merit. This practice in itself is consistent with NZQA policy but, according to Coogan (1996), it may be the 'thin edge of the wedge'. He cites the work of the New Zealand Association of Mathematics Teachers, which is currently planning to set up a series of national certificates for the top 15 per cent of students "to provide challenges that NZQA is unwilling to provide" (p89).

A final, but extremely important, point is that much of the discussion about merit and excellence assumes that students themselves need it to be suitably motivated to learn. However, it remains to be established empirically that students do in fact find 'merit' motivating.

Boereboom (in preparation) reports that the more able students in the physics trials were less positive than the students in the control schools because they lacked incentive to strive to improve beyond the standard. In addition, he found more teachers in trial schools (36 per cent) reporting that their students' motivation was unfavourably affected by assessment against unit standards than those who felt it was favourably affected (28 per cent).

Perhaps the best person to round up the debate at this point is Peddie (1995). He contends that the notions of merit and excellence should be seen in the light of the greater picture. "As a nation we should not only promote more extensive learning and set clear goals which the majority can achieve, but we should also be striving to raise standards by setting challenging targets and promoting excellence" (p23).

6.   Is the System of Dual Qualifications Consistent with QF Philosophy?

The terms 'dual qualifications' and 'dual pathways' as used in the literature refer to the philosophy of different types of assessment (internal assessment against unit standards on the one hand and normative external examinations on the other) existing within the same framework (the QF).

The QF encompasses a number of qualifications at the secondary school level—the National Certificate, School Certificate and University Bursary. The National Certificate is

based on internal assessment against unit standards, while the latter two are external examinations. NZQA has not yet made clear the 'official' relationship between these qualifications. A number of writers (for example, Peddie, 1993b, 1995; Croft, 1992, 1993) have pointed out that external examinations are inconsistent with the philosophy expressed for the QF because they are essentially norm-referenced rather than standards-based.

The level of support among teachers and principals for a dual Qualifications Framework is difficult to determine. Their views span a very wide range of opinion. For example, a survey of principals conducted by a group of Auckland principals suggests a relatively strong level of support for dual pathways of internal assessment against unit standards for 'vocational' subjects and external examinations for 'academic' subjects (Editorial, *The Press*, 20 May, 1996). At the other extreme, Torrie (1996) argues that "anytime you have dual assessment, one dominates the other. And exams will dominate because of the public perception of what is important and what counts - nothing to do with the validity and usefulness of the assessment" (p15). Furthermore, argues secondary school principal Verna Dowdle (1996), the supporters of the dual framework are forgetting the faults of the exam system; that it really only serves able students and tells us little of what students know or do not know.

Writers opposed to dual qualifications are so because there is a significant number of Year 13 students for whom University Bursary exams are inappropriate. Clear (1995) expresses the fears that many writers have about the QF:

> *The inevitable outcome of the [QF] will be an enormous diversity of standards nationwide, and each qualification will only be as good as the provider it was gained from. Which rather defeats the purpose of the exercise in creating a [QF] with transferable credits. Perhaps a national exam would be a simpler and cheaper approach. While it is singular and narrow as an assessment approach it is probably no less so than the strait-jacket imposed by the competency-based strictures.* (p5)

Comments by secondary school principal Rosalie Goldsworthy (quoted in *From Bouquet To Brickbat,* Learn, 1995) effectively summarise the middle position:

> *School Certificate and Bursary could still offer alternative pathways for some students under the new system. If this is the best alternative for 5 or 10% of students we should keep it. I don't believe we should disenfranchise those traditional schools for whom these pathways work well....Now, if we really believe that the point of these changes is to open up learning pathways I don't see why we should close down traditional pathways...The message should be that we are unlocking doors for all students.* (p21)

Arguments in favour of retaining the examinations have also been made in relation to them providing for student motivation and the recognition of excellence. Taylor (1996) represents the views of a number of principals and teachers, by being in favour of retaining a national examination at the end of Form 7, but in two forms - one without internal assessment and one based on the work covered by the standards. "Our best students should have the opportunity to compete in the same way as athletes do" (p13). Gernhoeffer (1995) agrees that the QF would then become an inclusive, flexible structure incorporating (i) unit standards for those subjects suited to standards-based assessment and (ii) external examinations for more academic, less task-based subjects.

Tuck (1994) maintains that a curriculum valid external examination at the end of secondary school (University Bursary) would serve as a benchmark for placing unit standards on the appropriate level of the Framework as well as an informal moderator for tertiary institutions. What needs to be avoided, in his view, is the situation which creates a set of demands which teachers regard as arbitrary and constraining rather than reasonable and liberating, and which have the unintended effects of deskilling the teacher (p75).

Irwin (1995a) argues that a system of qualifications which will endure must recognise the diversity of knowledge and aspirations, the differences between academic and vocational education, the educative and screening functions of schools. It must also reflect the need for flexibility and the range of qualifications required. He suggests that the system can be realised by determining what learning should be the subject of national qualifications, how it should be structured, which assessment methods should be adopted, and what linkages are possible.

Given that the Government has decided to retain School Certificate and University Bursary, the issue seems not so much one of whether there should be dual qualifications but how they can be reconciled with unit standard credits and the National Certificate qualification.

7. Is the System Fair for Students?

A number of writers have discussed the need for the assessment for the assessment structures within the QF to be fair (for example, Batchelor, 1996; Elley, 1995). Elley argues that the QF will fail to do justice to students because it promises far more than it can deliver. The reason why it does this is because of the quality of the unit standards and the difficulty with which students' knowledge can be validly assessed.

Metcalfe (1996) also comments on unfairness for students in the Chemistry trial, where the assessment schedules of the exemplars spelling out the standard were so rigid that one or two very small errors saw students missing the standard completely. A student with 98 per cent and one with 19 per cent were both failures. The students saw as particularly unfair the fact that the good students who had just missed out 'got lumped' with those who had 'missed by miles'. In some classes, fewer than 25 per cent of the students gained more than one unit standard, which has to be seen as an unfair showing for their year's work.

Perhaps the most important point to make here is that the system fails to recognise that while good students can be fairly successful in their understanding, they are rarely perfect, and that weaker students, though never perfect, still succeed to some extent.

8. When Has the Standard Been Reached? The Question of Sufficiency

The NZQA (1996a) provides advice on how information may be gathered to determine when a student has achieved a standard, referred to as 'gathering evidence', using a variety of assessment techniques, including the collection of naturally occurring evidence. Naturally occurring evidence emphasises informal and formative assessment procedures rather than formal and summative procedures.

Keown (1996) conducted an in-depth investigation of the ways a sample of teachers trialing geography and mathematics unit standards addressed the issues of determining

the question of sufficiency of evidence, that is, of determining when sufficient evidence had been collected for the teachers to confidently judge whether a student had achieved the standard or not. He concluded that resolving the sufficiency questions was not easy, although some teachers made considerable progress in finding satisfactory answers. There was considerable variation, however, between teachers, departments and schools in procedures for gathering evidence; in the range and style of assessment activities; and in the numbers and types of re-assessments.

While such variations may be a product of early experiences with unit standards, Keown feels sufficient concern in relation to equal opportunity and fairness to students that he suggests an urgent need for debate and shared understandings of acceptable practice.

He refers to some 'worrying' solutions to the pressure of gathering sufficient evidence by teachers using assessment activities which "perpetuate a summative formal assessment culture and prevent the development of a new broader assessment culture that uses both formative and summative assessment methodologies" (p106).

He considers the solutions to assessment workload (for students and teachers) and the variety of assessment techniques may best be found by addressing the issues associated with using more informal (naturally occurring) assessment opportunities. He contends that doing so will "in the long run, create more opportunities for success at a high standard for more students" (p107). It is also the way, he claims, to guarantee quality sufficiency decision-making; the way "to safely negotiate the sufficiency ridge" (p102).

9.   **How Appropriate Is QF for Mäori?**

The literature considers this question in relation to the *potential* validity of the QF for Mäori. It does not provide any indication of the extent to which that potential has been realised.

Monte Ohia (Learn, *1994*) of the NZQA claims that the changes heralded in the QF hold much promise for the Mäori educational community: "'The Mäori community sees change as necessary and essential.[The QF] has widespread support from marae, Mäori communities, te kohanga reo, university professors and lecturers to whakaruruhau" (p44).

According to Ohia (Nga Karere/News, 1995/96), these people recognise the potential of the QF to meet the learning needs of Maori by validating Maori skills and knowledge and Maori approaches to learning that previously have not been nationally recognised.

An article in the April 1995 issue of Learn contends that past education attempts at biculturalism have achieved cosmetic change only, an assertion with which Ka'ai (1995) agrees. She believes that the structure and function of the QF can be used as a tool by Mäori to increase proficiency in the Mäori language and to improve Mäori participation and retention rates. The development of Mäori-specific unit standards and qualifications based on Mäori knowledge is "responsive to and enabling for Mäori learners and Kaupapa Mäori education... [and] provides an emancipatory mechanism to advance Kaupapa Mäori education into the 21st Century" (p149).

In addition, Ka'ai claims that assessment against criteria (referred to as standards-based assessment but resembling the grade-related criteria that were the forerunner to unit standards) is appropriate because of its holistic approach, which, in turn, can "be easily aligned with the ideological and philosophical base of Kaupapa Mäori education" (pp 148-

49). She adds that the participation by Mäori in the development, management and protection of Mäori-specific unit standards and qualifications registered on the QF reflects the partnership in education under Te Tiriti o Waitangi.

It should be noted at this point that much of what has been written about the potential and impact of the QF for Mäori has been within the realm of Mäori private training establishments (Ohia notes that in 1995/96 there were 298 registered; Nga Karere/News, 1995/96) rather than within secondary schools.   The successes experienced and the support shown for the potential of the QF has to be seen within this context and its obvious implications for Mäori educators and learners, namely, ownership of their own learning and qualifications.

The ownership of intellectual and cultural property rights of Mäori learning is a major issue that is potentially threatened by the QF.   Hingangaroa Smith (1993) highlights two major concerns in this area: (i) the 'commodification' of traditional knowledge (whereby traditional knowledge becomes "packaged into saleable products that can then be bought and sold"), and (ii) the susceptibility of Mäori knowledge to being bought and sold or manipulated by other than Mäori interests once it has been packaged up into the commodified form.   Hingangaroa Smith claims that the 'official' recognition NZQA gives to Mäori knowledge through the QF provides Pakeha with a mechanism to exercise control over Mäori definitions of knowledge.

Benton, Benton, Swindells and Chrisp (1995) state that if the QF is to reflect Mäori cultural values and identity, it must ensure that Maori qualifications have a holistic nature. However, this assurance cannot be maintained unless iwi have a stake in protecting the quality of Mäori learning and teaching.   The authors ask several questions of the Framework in this regard - central questions which reflect important considerations regarding the validity of the Framework for Mäori.

How can a [QF] make room for their recognition of the social meaning of Mäori learning...? How can a [QF] that is based on measurable outputs incorporate a system of learning in which the process of acquiring that knowledge is considered as important?...How can a [QF] based on individuals' attaining specified combinations of skills at particular times accommodate the sharing of knowledge and skills of a group? (pp16, 18)

Benton et al conclude from their extensive survey of past and present Mäori educational ideas that:

a unity of process, content, and outcome is an essential characteristic of any educational approach which could legitimately be described as 'Mäori'. Mäori units, therefore, must have an internal coherence and a clear relationship to other Mäori units if they are to be of real value. These qualities cannot be assured by any set of levels descriptors, but...accreditation and course approval procedures can do much to help ensure that the thread linking the units to a greater whole...is not broken. (p36)

They also argue that there could be a place for the development of a completely autonomous iwi-based qualifications system that is not subject to the control of or regulation by the state.

At present, the potential of the QF as envisaged for Mäori can only partially be gauged through the increased participation of Mäori in learning for qualifications within that framework. As Jackson reported in the April 1995 issue of <u>Learn</u>, it will not be possible to fully evaluate that potential for several years.

SECTION TWO

Moderation and Quality Assurance

1.   Purpose and Process

According to NZQA (1996b), the aim of moderation as a quality assurance process "is to ensure fair, valid and consistent assessment in combination with other quality assurance processes such as the registration of the unit standards, accreditation and audit checks" (s.5 p1). Essentially, consistency and reliability by themselves do not guarantee validity. Assessment must be reliable to have a high degree of validity (Methven et al, 1996; NZQA, 1996b). Reliability and consistency of assessments and assessor judgements are essential also for the credibility of the national qualifications that derive from them. Torrie (*c.*1994a), a writer of the chemistry unit standards, states that "the success or otherwise of the NQF may well depend on the public acceptance of the reliability (rather than the validity) of the information produced by the assessment system" (p6).

Each unit standard has an accompanying Moderation Action Plan (MAP), which sets out the procedures for ensuring that assessments are nationally consistent. For 'transparent' standards, moderation requirements are relatively modest because 'the standard' is clear and unambiguous in the performance criteria specified for them. For 'agreed' standards, the standard resides in the consensus or collective judgement of the assessors, and moderation requirements are therefore more extensive. Most unit standards employed within the Framework are of this type.

MAPs attempt to "ensure...that all assessors who assess against the...unit standards use comparable assessment methods and make similar and consistent judgements about learner performances...In addition, all providers...must have their own internal moderation systems" (NZQA, 1996b, s5, p1). The process also seeks to achieve a balance between the requirements of accountability and the freedom of providers to design and implement learning programmes (Methven et al, 1996).

Professor Alison Wolf, cited by Barker (1995), expresses the essence of the role of moderation and quality assurance adopted for the QF when she says: "The important thing is to accept that perfect transparency is unattainable and that clear specification of outcomes is the building of case law; the socialisation of assessors and their constant re-socialisation; the monitoring of marking reliabilities - all these are equally important" (p27).

Hearn (1996) also sees the model of quality assurance adopted for the QF as being firmly based on enhancing the professionalism of teachers, and the combination of quality assurance measures as a useful beginning to achieving "consistency of approach to the assessment by teachers" and "a common understanding of assessment criteria" (p103). In addition, she contends that two distinct features of the Framework support comparability. These are the national curriculum documents and the advance moderation of assessment tasks. "The first provides an underlying basis for shared understanding of educational goals; the second feeds not only into the task moderated but into teachers' skills in assessment design" (p128-29).

Boereboom (in preparation) also considers that the aims of moderation are broader than that of simply ensuring consistency of assessment across different providers. Moderation also aims to "improve assessment practices, assist in the development of assessor expertise and establish public confidence in the new qualification" (p1, abstract).

These statements of aims, along with an examination of the role of moderators in unit standard trials, makes it clear that the brief pertaining to moderation is wider than that expressed initially.

Moderation methods

The repertoire of moderation methods available to the Framework include 12 alternatives:

1   exemplars and benchmark materials

2   recognition of 'expert' assessors

3   external written examinations

4   statistical moderation

5   common assessment tasks

6   item banks

7   distance moderators

8   external assessors

9   external moderators with site visits

10   external moderators with panel meetings

11   consensus panels (role of moderator assumed by assessors)

12   consensus panel networks (to ensure consistency between panels).

These alternatives were derived from the experience of a number of trials in moderation of Sixth Form Certificate in the late 1980s in French, geography, physical education, home economics, biology, English and practical art.

As a result of this work, Methven et al (1996, p55) identified the key elements of a successful moderation system as:

- opportunities for teachers to develop assessment expertise

- the use of exemplars of assessment techniques, assessment schedules and student work so as to enhance techniques and signal standards

- the provision of opportunities to align assessment standards (interpret the criteria) before assessment takes place

- verification of the award of credit through sampling.

Coogan (1996) adds to this list assessor moderation (networking) meetings which focus on exemplar material, especially borderline cases where the differences between assessors will be most pronounced and most important. He argues that if public credibility in high-stakes assessment is to be maintained, professional judgement needs to be guided and 'socialised', and that these processes must be kept as publicly transparent as possible.

The moderation process

The moderation or quality assurance process involves:

- accreditation of providers, which includes approval of the provider's plans for assessment and ensuring internal consistency of assessment within their organisation

- the submission of a sample of assessment activities/tasks and their associated marking schedules to moderators for approval before they are administered

- monitoring of the consistency of assessor judgements through cluster meetings of teachers from different providers

- verification of assessor judgements by moderators.

As part of this process, a hierarchy of moderators (national, regional and local moderators) seeks to ensure that national consistency is maintained.

2. How Effective Is the Moderation Process?

The effectiveness of the internal and external moderation processes is critical to the question of reliability and hence validity of the assessments and public credibility of the qualification. It is possible to gauge some indications of the effectiveness of the *external* moderation from research-based sources, particularly:

(i) the trials of unit standards in geography and mathematics, reported by Coutts and McAlpine (1996a) and Meldrum of NZQA (1996); and

(ii) the trials of physics reported by the New Zealand Institute of Physics Education Subcommittee (1996) and Boereboom (in preparation).

The Geography and Mathematics trials

In 1995, NZQA commissioned Coutts and McAlpine to undertake an independent evaluation of the external moderation systems operating in the maths and geography trials. In their report, Coutts and McAlpine (1996) described the experiences of the trials as being more 'developmental processes' than trials. As such, these experiences cannot be attributed to moderation alone.

The two researchers found that a complex interaction of various factors influenced the experiences of teachers. These included familiarisation with the respective unit standards, which were rewritten part way through the trial, and incomplete moderating components (teacher development and exemplars), particularly at the beginning of the trials. (According to Coutts and McAlpine, the greater number of problems reported at the beginning of rather than later in the Year suggests that these problems were due in part to setting up the trials. Nevertheless, it is possible to glean some indication of the effectiveness of the moderation system itself from the teachers' statements.)

The major conclusions about moderation that Coutts and McAlpine drew were that:

- The majority of teachers did not know or were unsure about the effectiveness of moderation between schools. Some moderators thought it had been "reasonably effective"; others expressed serious concerns. The authors stated that "there was apparently still a large gap between the quality of assessments between schools and in the quality of the judgements made" (p111).

- It was difficult to determine whether the moderation system was meeting stated aims of achieving valid and consistent assessment. Moreover, there was no clear evidence to support the assumption that an effective internal moderation system was operating within schools.

- Although effective communication with NZQA was seen as critical for effective moderation, it appeared to be lacking.

- The moderator had a greater role in providing support, advice and feedback during the trial than NZQA had anticipated. The future role of the moderator, which would necessarily be more restricted, may not be sufficient to ensure the level of support and advice required by teachers to ensure consistency.

- Moderation was critical to establishing the standard, defined by NZQA as "a band width concept which was developed over time" (p114).

- There was a tendency towards narrowness/lack of variety in the assessment tasks.

- Workloads for teachers had "massively increased" as had the types of resource implications for schools. These increases were also apparent in the 1996 trials of history and science.

- Teachers gained professionally from being involved in the trials.

- The quality of unmoderated assessment activities could not be assumed to be as high as those of moderated activities.

It is important to note here that Coutts and McAlpine did not give a clear answer to the question of whether the teachers and moderators considered moderation to be effective. As Meldrum (1995a) observes, if moderation is to be effective in terms of all teachers sharing in the moderation process, it needs to be professionally and personally more acceptable.

No statistical evidence is available from the trials to establish the level of consistency achieved through the moderation procedures. Rather, judgements about effectiveness were based on the professional opinion of moderators and teachers. Coutts and McAlpine's findings were not entirely consistent with those of the national moderators, the last of their conclusions as listed above being a particular case in point.

In general, the conclusions of the national moderator for geography (Pepper, 1995) and the national moderator for maths (McIntyre, 1995) were somewhat similar. They observed that (i) the quality of assessment activities submitted for moderation and the appropriate standard of assessment activity were somewhat variable initially but improved as the trials progressed; and (ii) teachers appeared to make consistent decisions about students' performance against the standards.

However, Pepper felt confident that the quality of unmoderated activities improved over the course of the trials and that "the level of consistency aimed for in moderation...[would] be achieved" (p5). Torrie (1994b), moderator for the chemistry trial, reached a similar conclusion. He found a noticeable improvement in the quality, originality and appropriateness of the tasks prepared during the second round of cluster meetings.

McIntyre (1995) reported that moderators for the mathematics trial were concerned about a lack of national consistency. She investigated this concern by having all moderators moderate two common activities and send in completed moderator comments. She reported only minor variations in moderators' practices and judgements, concluding that national consistency did exist in both methodology and standard.

The Physics trials

The two available reports on the physics unit standards trials are those prepared by the NZIP Education Subcommittee (1996) and Boereboom (in preparation).

Table 1 in this present report summarises the main findings of the NZIP study. The findings suggest that, like the mathematics and geography teachers, physics teachers were not confident regarding the consistency of unit standard judgements.

Boereboom's longitudinal research into the moderation of physics unit standards has the potential to answer the question of the effectiveness of a *number* of aspects of the moderation process. The unpublished results of the first year of his research (1997) provide some quantitative measure of effectiveness, in addition to qualitative measures.

Table 1 presents a summary of the opinions that Boereboom obtained from moderators and teachers regarding the effectiveness of moderation. As is evident from it, the trial respondents considered some components of the moderation process to be more effective than others. The teachers and moderators tended to be very positive that the channels of communication, the assessment guides, moderation meetings and training sessions would contribute significantly to achieving comparability between schools. They

were less convinced regarding the effectiveness of the moderation of assessment activities and assessor judgements.

Boereboom also found that about 52 per cent of assessment activities submitted by teachers to moderators for approval were approved for immediate use, that is, without revision. An estimate of the level of consistency gained between moderators on the moderation of a common activity over a number of criteria was 70 per cent.

3.   **What Does the Research Tell Us?**

The research conducted thus far suggests that some consistency between schools can be achieved through the range of moderation techniques available and that consistency may improve with more experience.   However, as yet there is no real answer to the question of the effectiveness of the moderation system.

Elley (1995) has argued that the level of consistency achievable through the present range of moderation procedures is insufficient and "will not ensure justice for our students" (p92). Citing research from trials with achievement-based assessment, he points out that even where there were five levels of achievement, the use of graded exemplars did not contribute to significantly higher levels of agreement between teachers' judgements.

Meldrum's (1995a) reference to a 'band width of tolerance' within which assessment (assessment activities and assessor judgements) must fall to be acceptable is also relevant here. This is because we need to ask ourselves how wide that band must be to ensure validity and credibility.

Table 1: Effectiveness of moderation for Physics unit standards: responses of moderators and teachers

Percentage of 'very positive' and 'positive' responses		
Comparability between schools is achieved by:	*Moderators*	*Teachers*
o Moderation of assessment activities	54	65
o Moderation of assessor judgements	63	72
o Communication with regional/local moderator	85	82
o Communication with national moderator	84	-
o Communication with the provider contact	84	-
o Usefulness of the assessment guides	-	82
o Usefulness of moderating meeting	-	96
o Usefulness of 3-day training session		96

Adapted from Boereboom's unpublished draft of PhD thesis: <u>Assessment and Moderation of the Physics Unit Standards on the National Qualifications Framework</u>, Department of Education, Canterbury University.

In this regard, the development of a set of appropriate performance indicators to monitor the levels of consistency achieved would, as Coutts and McAlpine (1996) and Meldrum (1995a) stress, seem to be essential, especially given the potential for 'agreed' standards to shift over time, as observed by Gilmore (1996). I argue that the potential arises because the 'agreed' standards are determined by the collective judgements of teachers (and moderators) formed through the moderation processes over time, and because the personnel involved in assessment and moderation also change over time.

On the positive side, there is little doubt that teachers make substantial professional gains in assessment as a result of their involvement in the moderation processes, particularly when there is opportunity for face-to-face interaction with the moderator and other teachers at moderation meetings (Coutts and McAlpine, 1996; Meldrum, 1995a; Metcalfe, 1996; Squire, 1996).

However, there is also little doubt that the workload implications of the moderation process have the potential to undermine quality assurance. A number of teachers and commentators (see section 3 of this report) view the systems of moderation as quite unmanageable, even when demonstrated to be effective. Irwin (1994), for example, describes them as "virtually impossible", while for Hall, they do not meet the criteria that would allow them to be helpful and worthwhile, that is, simple, practical and relatively inexpensive. Taylor (1996), a strong supporter of the QF, confesses that "the moderation system is exhaustive and exhausting...If it keeps expanding, it will be totally unmanageable" (p13).

In defence of these systems, Methven et al (1996) argue that, economically, the costs of relatively rigorous modes of moderation, estimated by NZQA to be under $20 per learner per annum in most school subjects, will not exceed those for the existing system of qualifications.

However, the costs of moderation must be considered according to the equally defensible criteria of effectiveness and practicality, and of teacher time and energy: in short, manageability. As Coutts and McAlpine (1996) note, the serious tone of their respondents' comments suggest that the Authority cannot lightly dismiss the workload concern: "...one [teacher] thought the problem was so bad that they seriously considered giving up teaching and others made comments which indicated that there was a serious effect on the home life too" (p119). The next section of this report looks at this issue in more detail.

SECTION THREE

Manageability

The issue of manageability is considered as the third major component of validity and revolves around the extent to which the QF system (as envisaged by NZQA) can be implemented within schools without undue workload, stress and professional burden.

As Gilmore (1996) states,

there are many features of the framework which have the potential to enhance the validity of assessment... However, ...a close examination of the many different features and

requirements of the framework brings into serious doubt the degree to which it is collectively a manageable system of assessment.   (p9)

The dominant lesson learned from the experience with unit standards in England is the need to keep assessment as manageable and straightforward as possible (Coogan, 1996).

Some of the published comment regarding the manageability of the Framework is expressed in very strong terms.   Haskell (1995), for example, sees it as a "gigantic, ambitious and unwieldy juggernaut", while Childs (1995) contends that is has "more moderation methods than there have been Bosnian peace plans" and that it demands a "blizzard of assessment". While these comments are emotive, they arise out of individual accounts of teachers' experiences with the QF.

A more objective means of looking at the issues is to examine them against the experiences of teachers trialing those unit standards that have been subject to systematic and independent investigation. The experiences of teachers in the geography and mathematics trials in 1995 are particularly useful in this regard, as they highlight issues which deal with implementation rather than philosophical concerns, namely, assessment workload, resourcing and professional development.

Keown (1996) considers the question of manageability when he asks, "Can the secondary teaching profession be persuaded that there are manageable means and systems to put the theory [of sufficiency of evidence] into practice?" (p106). He concludes that standards-based assessment for the Framework should have a "viable future" if the techniques to make efficient, quality sufficiency decisions can be mastered by teachers. If teachers cannot master these techniques, SBA will always be at risk of over-assessment or under-assessment—"unpalatable outcomes" for teachers and the public.

1.   Assessment Workload and Resourcing

As mentioned earlier, Coutts and McAlpine (1996) refer to "massively increased" workloads and resources for teachers in their evaluation of the geography and mathematics trials in 1995. The same was said of the 1996 trials of history and science. According to Meldrum (1995a), the specific issues of workload arising out of the mathematics and geography trials relate to the requirements for:

- assessment, re-assessment and recording

- assessment against individual performance criteria

- dual assessment systems.

Meldrum observes that assessment against individual performance criteria in particular tended to be narrow and exclusive rather than holistic, resulting in a serious assessment workload for teachers and students. However, he also notes that changes to assessment against elements rather than performance criteria reduced these problems somewhat.

Metcalfe (1996) described workload as an "intractable problem" (p3) in the chemistry trial. The workload demands were due mainly to the paperwork required for administration and the need to make time available for students to resit the assessments.

Boereboom (in preparation) found that the assessment and administration workload associated with physics unit standards in 1996 was, on average, twice that associated with the assessment and administration for Sixth Form Certificate (321 versus 156 minutes per week). In addition, moderators found that meeting the needs of their workload on top of their teaching workloads was of an average to difficult nature. Squire (1996) also describes the workload as "massive...as [teachers] grapple with the task design, then the marking, record-keeping and finally the re-assessment opportunities" (p1).

Meldrum (1995a) acknowledges that the workload, particularly initially, is considerable, but tends to become more manageable as the trials progress and teachers become more familiar and more confident with the unit standards and the requirements for assessment and moderation.

Assessment workload has been attributed in part to a tendency for teachers to carry out assessments in a fragmented way, said to be particularly noticeable in the mathematics trial, where assessment was against numerous performance criteria. When assessment was made against the more broadly defined elements of the unit standards, the assessment workload reduced somewhat.

However, the question as to whether the workload under 'normal' conditions is reasonable cannot be answered from the literature. It is dependent on continuing experience with unit standards so that the actual workload associated with it can be determined. While it is clear that the current workload with unit standards will not be sustainable in future years (Keown, 1996; NZIP Education Subcommittee, 1996), the long-term situation may not be as severe as that experienced in the trial phase.

Coutts and McAlpine (1996) also argue that, without long-term adequate resourcing, it will not be possible to maintain the high level of quality assurance necessary to maintain the credibility of and public confidence in the Framework.

2. Professional Development

There has been widespread acknowledgement that teachers have made substantial gains professionally through their involvement in trialing unit standards (Meldrum, 1995a; Metcalfe, 1996; Squire, 1996).

Metcalfe (1996) describes this involvement as "an excellent professional development exercise for teachers—teachers who took part were unanimous in appreciating the assistance given and the opportunity to meet and discuss task preparation and assessment" (p3).

Meldrum (1995a) reports that the standards-based assessment approach has allowed teachers to learn more about the nature of their subject. He claims that tasks now go directly to the heart of the matter and so provide greater clarity for teaching: "as they [the teachers] get better at assessment they get better at teaching" (p18).

However, these gains have not come without the previously mentioned costs of heavy workloads and stress (Coutts and McAlpine, 1996).

Participants at the Otago-Southland Principals' Conference claimed that time, training, advice and consultation all had a cost value which needed to be met, and identified a key

resource for teachers to be the development of a large number of assessment activities based on the new curriculum from which they can choose each Year (Inching Towards Consensus, *Learn*, 1996, p17).

3. What Is The Role of Research?

Many writers have commented on the need for an ongoing programme of research to establish the validity of the standards-based assessment model for the QF and to verify the effectiveness of quality assurance procedures (for example, Coogan, 1996; Croft, 1993; Gilmore, 1996; Hearn, 1996; Keown, 1996; Peddie, 1993a). However, only a small number of systematic and independent pieces of research has been conducted to date. These have been reported in this review (for example, Boereboom, in preparation; Coutts and McAlpine, 1996; Keown, 1996; NZIP Education Subcommittee, 1996).

The level of teachers' experience with unit standards has been identified as a factor which may influence the findings of such research and the views held by teachers of the Framework (David Nicholson, personal communication, 1997). He argues that important differences in relative success and positive attitudes towards the QF are presently disguised in any teacher surveys which do not take teachers' experience with unit standards into account. Why some teachers/schools should find trialing unit standards 'challenging' yet still stimulating, successful and a positive experience, and other teachers/schools find it unmanageable, unsuccessful and a negative experience, is a central question to be researched and understood. However, a clear understanding of teachers' views can only be achieved by distinguishing the views of teachers who have trialed unit standards from those who have not yet experienced unit standards.

SECTION 4

Conclusions

The literature review suggests a number of conclusions in relation to the issues of validity surrounding assessment for the Qualifications Framework. Generally, the conclusions highlight a need for research to explore and monitor the implications of the QF for learners and teachers. In addition, a number of trials with unit standards are currently in progress, and the results are not yet known. While the conclusions may be somewhat negative with respect to standards-based assessment, the review has not attempted to consider current alternative assessment procedures for qualifications which may, in fact, fare no better under a similar scrutiny of validity.

The conclusions as suggested by the review are as follows:

1. The Range of Issues Outstanding

1.1 There are a number of philosophical as well as implementation issues which need continued debate if the Qualifications Framework is to have validity and be acceptable to the majority of teachers and other educators.

2. Standards-Based Assessment

2.1 A single model of standards-based assessment for all areas of learning may be inappropriate (see 2.4 below).

2.2 The appropriateness of standards-based assessment for skills-based courses and for lower order skills seems to be well established.

2.3 Concern about the appropriateness of standards-based assessment for knowledge-based courses and higher order thinking skills is widespread and serious enough for this form of assessment to be investigated further. The current trial with unit standards in English, as well as in other subject areas, will help to inform this issue. However, the investigations need to be systematic, independent and carried out over a wide range of subject areas.

2.4 Assessment against graded criteria may be an alternative to the 'competent' 'not yet competent' nature of standards-based assessment for knowledge-based subjects and higher order thinking that have concerned commentators.

2.5 Breaking up the curriculum into unit standards has the potential for fragmenting the curriculum into related but discrete competencies, but may not provide for assessment of the interrelationship between competencies.

2.6 The issues in using more informal (naturally occurring) assessment opportunities need to be explored and debated, and solutions shared, so as to allow for the facilitation of efficient, quality sufficiency decision-making.

3. Recognition of Merit and Excellence

3.1 A distinction is needed between 'merit' and 'excellence': the former being applicable to the recognition of outstanding performance in individual unit standards; the latter applicable to recognition of outstanding performance on the qualification overall.

3.2 There is strong support for recognition of merit and excellence within the QF. (Peddie, 1993a, outlines the types of criteria to consider when making judgements about how to achieve this recognition.)

3.3 The ways in which recognition of merit and/or excellence is found to be motivating to students needs to be established empirically.

3.4 The addition of merit or excellence will place further demands on moderation systems.

4. Dual Qualifications

4.1 Practices within the secondary school system should reflect the purposes for which assessment information is required, namely educative and selective purposes.

4.2 Assessment against unit standards for the National Certificate provides motivation and appropriate goals for Year 13 students for whom the University Bursary examination is inappropriate.

4.3 A system of dual qualifications or dual pathways appears to be supported in the literature.

4.4 Some clarification of the articulation of and the relationship between the qualifications on the Framework is required.

5. Fairness to Students

5.1 The literature suggests that students do not see some of the assessment practices of the QF as fair. Reasons for this need to be explored.

6. Appropriateness for Māori

6.1 The potential of standards-based assessment within the QF to be valid for Māori seems apparent, but has not yet been determined in reality.

6.2 Close monitoring of the implementation of Māori-specific unit standards and the experiences of Māori with the QF is required.

7. Appropriateness for Other Cultural Groups

7.1 The literature relating to the cultural appropriateness of the QF focuses on its implications for Māori. Validity of the QF for other groups (for example, Pacific Islands students and Asian students) also needs to be established.

8. Moderation

8.1 Effective levels of moderation are critical and fundamental for validity of the QF and for public confidence in the qualifications that derive from it.

8.1 The literature suggests that the level of consistency that can be achieved through the moderation plans is variable, largely unknown and almost certainly not substantial enough to satisfy the requirement for rigour in the national comparability of standards.

8.3 While there are arguments that the level of consistency (that is, reliability) that can be achieved through moderation plans will improve with experience, there needs to be some consideration of:

(i) the *absolute* level of consistency which is necessary for validity and public confidence (the appropriate 'band width of tolerance'); and

(ii) performance indicators that will *demonstrate* the actual level of consistency achieved.

8.4 A performance indicator is potentially available in nationally prescribed tasks (NPTs). The potential for NPTs for establishing the level of consistency among teacher judgements on a national basis should be explored.

8.5 The cost of moderation needs to take into account effectiveness, practicality, teacher time and energy, and economic costs.

9. Manageability

9.1 The workload and resource implications of the Framework have a clear and strong bearing on its manageability or practicality. The concerns are considerable. The present workload is proving severely stressful for many teachers, as shown during trials of unit standards.

9.2 The longer term and on-going workload associated with the QF needs to be separated out from other factors, such as setting up trials and familiarising practitioners with the unit standards and moderation systems. It should be possible to obtain a clearer picture of the workload as experience with the trials progress.

10. Teachers' Professional Development

10.1 The professional development of teachers in assessment has been considerable through their involvement in unit standard trials. This development has occurred despite the workload and administrative burdens imposed by dual assessment during the trials.

10.2 Teachers and schools can experience vastly different levels of success in implementing unit standards. Depending on their relative success, this may lead in turn to either strong support for the Framework or strong opposition to it. Careful investigations of the factors which contribute to teachers and schools experiencing success are required so that explanations can be found to assist with implementation in other schools and subjects.

11. Further Research

11.1 Many commentators in the literature highlight the need for research to establish the validity and reliability of the assessment procedures and their impact on the teaching and learning activities in the classroom. (Indeed, Hearn, 1996, sees this need as an integral part of the moderation system itself.)

11.2 Systematic and independent research needs to be encouraged and supported to inform the questions of validity, reliability and manageability of the assessment practices of the QF. This includes philosophical as well as implementation issues (some of which have been highlighted in this review).

Inquiry Comment

Dr Gilmore's literature review was very useful in the Inquiry's deliberations. Taken together with the findings of consultations with PPTA members, it offered very useful insights into the challenges facing the Qualifications Framework and the factors which would need to be addressed when proposing solutions to those challenges. It is important to note, as Dr Gilmore has emphasised, that research on the Framework is in its infancy. Only a small proportion of the references related to systematic research—instead, most were based on informal observations or professional debate. Readers should also note that existing awards such as School Certificate, Sixth Form Certificate and the University Bursaries Examinations were not evaluated in this literature review. If they had been, major concerns about their validity and effects on teachers and learners would have been reported.

CHAPTER 4

MEMBERSHIP CONSULTATION

In undertaking the inquiry into the National Qualifications Framework, the Inquiry panel decided to begin with a survey of teacher views about the Framework. This recognised that the inclusion of teachers in the development and implementation of a new system of assessment is vital to its successful introduction into classrooms. The Inquiry needed to determine how teachers viewed the Qualifications Framework and its future.

A survey of the views of PPTA members about the Qualifications Framework was conducted in March 1997. The questionnaire was constructed by the Inquiry panel from the material gained from several focus groups convened during December. These groups comprised teachers with a varying range of experiences of the Framework and with a varying range of perspectives about the Framework. The groups were drawn from teachers in the Auckland, Wellington-Hutt Valley, Christchurch and Dunedin areas.

Out of a total of 363 schools, including area schools and kura, responses were received from 202. 104 branch responses were received from 101 schools, 184 group responses from 62 schools and 484 individual responses from 136 schools. A further 50 responses were received from groups or individuals without their school being identified. The total number of branch, group and individual responses received was 832.

This summary of survey responses incorporates the responses of branches, groups and individuals. The term 'group' refers to a group of teachers responding, for example, as a subject department. Where branch or group responses were reported as though they were unanimous or consensus positions, they were recorded as though the number of individuals participating in the response had responded individually. Where branch or group responses recorded divided opinions, the divided mentions were tallied under the different options voted for.

Teacher responses to the questions asked in the survey are summarised under each of the questions. (Responses to Questions 6 and 7 from the survey, concerning Mäori education and the Qualifications Framework are presented in Chapter 5).

QUESTION 1

Identify any features of the Framework which you accept as desirable.

The features of the Framework identified as most desirable were:

- ***impact on learners*** (2089 mentions).

In declining order of frequency, respondents highlighted these aspects:

— allows credit for practical and non-conventional subjects

— allows credit for work done during the year

— less able students get a second chance

— learners able to achieve at their own rate

— instant feedback provided by standards-based assessment contributes to greater motivation for students.

- ***impact on systems*** (1270 mentions).

In declining order of frequency, these aspects were identified:

— the standardisation of qualifications into a nationally recognised format

— the transferability of qualifications between learning institutions

— a fairer system of assessment which addressed problems associated with the current system such as exams and grade allocation, Sixth Form Certificate and norm-referencing

— the availability of an unambiguous record of achievement.

- ***impact on teaching practice*** (1074 mentions)

In declining order of frequency, these aspects were highlighted:

— clarifies objectives for learning

— greater professional development benefits arising from training and the improvement to assessment design

— closer link is created between curriculum and assessment providing more effective and reliable feedback to teachers and focuses teaching

— allows teachers greater flexibility to cater to the learning needs of students.

QUESTION 2

Identify any design features (structure, underlying assumptions and educational/social impact) of the Qualifications Framework which you find unacceptable.

Design features found unacceptable included:

- ***time and workload problems*** (1398 mentions)

These responses really belonged under Question 4.

- ***fragmentation of teaching and learning*** (1330 mentions)

- ***no recognition for excellence*** (1330 mentions)

- *inefficient or inadequate moderation structures and processes* (1221 mentions)

More were concerned about difficulties in achieving adequate moderation than were concerned about the workload or loss of professional autonomy.

- ***Very difficult for weaker students to gain credit leading to a lack of motivation*** (818 mentions)

- ***Forcing diverse courses into a single assessment model*** (741 mentions)

Other unacceptable features mentioned included the 'dumbing down' of the curriculum; poor communication and consultation; inequity of credit allocation across subjects; lack of teacher support and training; the non-involvement of tertiary institutions; inadequate resourcing; inaccessible language for teachers, students and parents making it difficult to make sense of the Framework; and the credibility of the unit standards assessment system over time.

QUESTION 3

Identify any modifications to the Framework design which would make it more acceptable.

Modifications to the Framework which received most frequent mention included:

- ***providing a range of grades to recognise achievement*** (882 mentions)

- ***increase the time frame for trialling the Framework and for full implementation*** (842 mentions)

- ***provide an item bank of assessment tasks and exemplars*** (615 mentions)

- ***provide improved guidance, support, training and resources*** (580 mentions)

- ***improve moderation procedures*** (483 mentions)

- ***use framework for 'vocational' subjects only*** (328 mentions)

Other improvements suggested were to resize the units; greater publicity about the Framework; and the retention of external exams within the Framework.

- ***No acceptable modification possible*** (388).

QUESTION 4

Identify problems of manageability, workload and support associated with the Qualifications Framework

Respondents identified workload and attendant issues such as lack of training and support and inadequate provision of resources as key problems.

Problems identified included:

- ***general workload*** (2297 mentions)

This included workload for participants in moderation (962 mentions)

- ***lack of training and support*** (1439 mentions)

- ***lack of money, time and other resources*** (1278 mentions)

- ***inadequate time for trialling before implementation*** (745 mentions)

- ***pressures associated with re-assessment requirements/demands*** (662 mentions)

- ***reinventing the wheel at each school*** (606 mentions).

Other problems identified included poor communication between NZQA and teachers and the inadequacy of publicity explaining the Framework.

Concern was expressed over moderation systems. This concern related to the reliability of moderation systems; the time taken to carry out moderation; and the difficulty of establishing reliable moderation within schools and between schools.

Re-assessment issues were identified including having students within a class working at different levels; using new material or the same material for re-assessment, the practical issues of where re-assessment; should occur and when; the costs; and the number of times a student should be allowed to re-sit.

Other problems identified included the jargon used by NZQA; the inadequate planning for trialling and implementation; the domination of assessment over learning; the possibility that students will be turned off and become uninterested; the conflict between unit standards assessment and external examination approaches; continuing changes to criteria making it difficult for teachers to keep up; and the 'shelf life' of unit standards.

QUESTION 5

Identify modifications to address manageability, workload and support problems

Additional injections of time and staffing into schools coupled with extra funding to assist schools with workload difficulties was the most frequently identified modification (1908 mentions).

Other modifications included:

- *improved professional assistance including more professional development and the provision of item banks of exemplars (1490 mentions)*

- *modifications to the Framework including narrowing the number of performance criteria; including examinations within the Framework and limiting the application of unit standards assessment to vocational subjects (424 mentions).*

Respondents also identified the need for improved media coverage to heighten public awareness of the issues, the need for NZQA to be more receptive and responsive to criticism; the need for a new national body to administer the system and the need for greater co-operation between providers (schools).

A number of respondents suggested there was a need to commit to the system and implement completely (including the tertiary sector) before using it while others pointed to the need to change school structures such as the school day.

A number of respondents wanted to slow down implementation of the Framework (202 mentions) while others wanted to scrap the Framework (251 mentions).

Questions 6 and 7 addressed advantages and risks associated with the Qualifications Framework for Māori Education. The responses are in Chapter 5.

QUESTION 8

> **At present, achievement in unit standards is judged on a 'credit' or 'no credit' basis. Some people have expressed concern that this does not encourage and reward excellence, others that it leads to standards which are too demanding for hard-working students**

a)   **Do you think that the 'no credit/ credit' model is suitable for all unit standards?**

    Yes   170 **No**   2396

b)   **For those who chose 'no' for (a), do you think that the 'no credit/credit' model is suitable for some unit standards?**

    Yes   1735 **No**   448

c)   **If you answered 'no' for a) and 'yes' for b), please give an example of a topic/subject for which the 'no credit/credit' is suitable**

Most respondents nominated an example of an area for which the 'no credit/credit' model would be acceptable.

Examples given tended to focus on what were defined as subjects which were 'skilled-based', for example metalwork, technology, electronics, chemistry, physical education, accounting, horticulture, maths, computer studies. Other examples given were of topics which had a heavy emphasis on 'practical skills'; for example:

- changing a tyre

- making a cake

- crutching a sheep

- welding

- hairdressing.

d)   **For those unit standards for which you believe the 'no credit/credit' model is unsuitable, do you favour one of the following models?**

i.   no credit/credit/credit with merit (3 point credit scale)

Yes   664   **No**   736

[439 of these also chose 'no' to option (ii)]

ii.   no credit/credit/credit with merit/credit with excellence (4 point credit scale).

Yes   1075   **No**   656

[439 of these also chose 'no' to option (i)]

People who reached d) did so because they felt something more than 'no credit/credit' was required. Of those responding 1075 wanted two grades beyond credit (e.g. merit, excellence), 664 wanted one 'grade' beyond credit and 439 rejected both of these options (presumably wanting more than two grades beyond credit or some other way of recording results).

QUESTION 9

> **There has been some considerable debate about the place of examinations within, alongside or instead of the Qualifications Framework. What is your preference for qualifications or national examinations at each of the following levels?**

a)   **Year 10/ Form 4**

No external examinations — 2417

Examinations (100% external) —156

Teachers are clearly very strongly opposed to external examinations being introduced into Year 10.

b)   **Year 11/Form 5**

Framework only — 497

Examinations only (100% external) — 227

Current School Certificate only (mixed internal/external) — 873

Framework and 100% external examinations — 233

Framework and current School Certificate — 443

A total of 1173 respondents favour the Framework at Year 11 or the Framework in combination with some form of external examination. A total of 1316 respondents favoured the retention of the School Certificate examination only or in combination with the Framework. 1100 respondents made choices not involving the Framework. All respondents with the exception of the 227 opting for 100% exams only favoured some form of internal assessment.

c)   **Year 12/ Form 6**

Framework only — 824

> **Examinations only (100% external) — 195**

> **Current Sixth Form Certificate only — 600**

> **Framework and 100% external examinations — 173**

> **Framework and current Sixth Form Certificate — 419**

Choices made by respondents involving the Framework totalled 1416, while those involving Sixth Form Certificate totalled 1019. Choices not involving the Framework totalled 795. All respondents with the exception of the 195 opting for 100% exams only, favoured some form of internal assessment.

d)   **Year 13/Form 7**

Framework only — 163

> **Examinations only (100% external) — 288**

> **Current Bursary only (mixed internal/external) — 799**

> **Framework and 100% external examinations — 296**

> **Framework and current Bursary — 838**

There is a clear preference amongst teachers for the current Bursary examination to be retained at Year 13 either as the sole award or in conjunction with the Framework (1637 respondents).

Teachers appear divided at Year 13 between those who wish to see the Framework in Year 13 only or in combination with examinations (either 100% external examination or the current Bursary examination) - 1297 respondents - and those who prefer examinations only (either 100% external examination or the Bursary examination) - 1087 respondents.

There is a relative lack of support for the external examinations only option.

A number of issues or trends emerged from comments made in response to this question. These included:

- the need for one assessment system, either the Framework or the current system, not both. Resources available can only sustain one assessment system

- a combined system of the Framework and the current Years 11 and 13 level exams will only work if both the Framework and current examinations are modified, particularly Sixth Form Certificate, and is dependent on universal acceptance of the Framework

- more research, trialling, and resources are needed before the Framework can be assessed as a viable alternative to the existing system

- the current Sixth Form Certificate needs improvement

- some support for the idea that the Framework/standards-based assessment is good for 'vocational, non-academic'/Bursary subjects while external exams are suitable for academic subjects. It is not clear from responses whether this should be in addition to existing qualifications or as an alternative. The idea that a single qualification should be available gained either through a combination of Framework and standards-based assessment, or through the current exam system, with the choice to be determined by a) the nature of the subject and b) the preference of the student

- the fear of development of a two-tier system. The new system must be comparable in value to the old system, otherwise employers will look for familiar credentials

- a number of respondents chose to abstain from responding to this question on the grounds that the questionnaire did not allow a broad enough range of options and did not clarify the nature of given options.

QUESTION 10

Should the costs of assessment and moderation for qualifications earned by secondary school students be:

a) **publicly funded** — 1554

b) **funded by individual students and their families** — 103

c) **a combination of a) and b)** — 1059

There was a general feeling that because the school system is largely state-funded and compulsory the costs of assessment and moderation should also be funded by the state.

In response to option c) concern was expressed that a limit should be imposed on the amount individuals pay. Respondents feared that a two-tier system would develop based on the ability of the individual student to pay. There was a view that the combined payment should consist largely of public funding with a limited contribution paid by individuals. Respondents also raised the issue of how the amount payable by the individual student would be determined.

Many respondents left this question blank. Some explained that they found the question unanswerable because there were too many variables needing clarification before opinions could be formed, for example, who receives accumulated funds, the amount payable and the equity of services provided.

Concluding Remarks

Membership consultation provided the Inquiry with valuable insights into the views of teachers about the Qualifications Framework. Survey findings influenced the thinking of the Inquiry about possible scenarios for the overall structure of assessment in the senior secondary school.

Some scenarios were obviously not viable in terms of teachers views. Others were clearly viable and worthy of support.

CHAPTER 5

THE ADVANTAGES AND DISADVANTAGES OF THE QUALIFICATIONS FRAMEWORK FOR MÄORI

This chapter explores the implications of the Qualifications Framework for Mäori in education as articulated by the PPTA membership who took part in this Inquiry. The approach developed to enable teachers to have their say has included the following steps. First two focus groups with Mäori teachers and educators were convened late in 1996 to provide overviews of the issues in the debates over the Qualifications Framework. The first was held in Te Araroa with a group of Mäori teachers based in area schools, located in small, rural Mäori communities. The second was held in Wellington and included a larger group of Mäori teachers and policy analysts who were from diverse communities and schools throughout the country.

Focus Group One

This focus group interview was held at Te Araroa Te Waha O Rerekohu Area School on Thursday, December 5th, 1996. Mäori teachers from Tolaga Bay Area School, Te Waha o Rerekohu Area School and te Whanau a Apanui Area School were present.

Nga mihi ki a koutou katoa mo te korero pounamu o tena hui.

Ahakoa he iti, te roopu he pounamu, he marama, he whanui te korero.

The interview was framed with a very general opening question: "what do you see as the issues?" The teachers were encouraged to speak as freely as they wanted to, from the range of positions they occupied in relation to the issues. Here, cognisance was being taken of the multiple roles that Mäori teachers simultaneously occupy and bring to the teaching profession they are employed by. Roles not fully recognised in terms of remuneration but which, at the very least, in terms of this research, were given 'voice'. Accordingly, the teachers were encouraged to speak as teachers, as well as members of whanau, hapu and iwi or any other Mäori organisation they were part of such as marae committee, Mäori Women's Welfare League etc.

The issues can be grouped into a number of categories. Some categories are supportive of the Framework: the philosophical direction of the Framework; the opportunities possible for innovation and growth; and some aspects of the area of moderation. Other categories emerged which were critical of the Framework. Here the impact on staff and issues of implementation were the two main areas highlighted. A third set address a series of issues which explore dimensions of the debate which have specific relevance to Mäori: the educational needs of whanau members in the community beyond the school gates; issues related to gender; and the role and mana of the iwi in the new qualifications scenarios. Finally, a fourth category emerged which was an expression of general concern about the rate and pace of change still being felt in New Zealand schools in relation to what has been continual reform over an extended period of time.

The Philosophical Direction of the Framework

Given the educational scenarios which frame Mäori education, the teachers identified that they were comfortable with the **philosophical direction** of the Framework because it seemed designed to ensure better educational outcomes for Mäori students. The key characteristics they identified are outlined here. First, it is student-oriented and the sense of it being user-friendly was closely associated with this. Secondly, whilst still unsure about how the recognition of prior learning would actually be implemented, this feature of the Framework was identified as being beneficial to Mäori learners. Thirdly, the transparency of the organisation of learning from unit standards and performance indicators to the range of programmes available were all identified as features which broke down the mystique often associated with post-compulsory learning environments, and experienced as a disempowering feature of them, such that learners are empowered by knowing what is happening around them. Fourthly, the programmes are designed to start where the student is at and to work at their pace. If that actually happens, it has been identified as a positive feature. Finally, the Framework provides a means to recognise the experiential learning that is a significant feature of Mäori pedagogy. The ability for unit standards to be based in oral traditions, as well as their written counterpart, to cover the broadest range of knowledges available in the community, from what are termed vocational to academic, bodes well for Maori children. As well as enabling them to gain credit for particular forms of knowledge, it also creates innovatory possibilities for Mäori pedagogy.

The Opportunities Possible for Innovation and Growth

Exciting possibilities for innovation and growth were identified as being associated with the Framework. The teachers were keen for Mäori communities and educators to be able to explore these. They acknowledged that this was not without some difficulties, but still felt that the positive opportunities should be identified and outlined.

Unit standards were seen to provide a **market opportunity** for those in a position to take advantage of it. However, some schools and areas were better placed to respond to this than others. For example, not all schools stopped development work when the moratorium on the Framework was on. Those schools are now in an advantaged position vis-a-vis developments in this area. Further, the minimal inclusion of te reo me ona tikanga into the curriculum of mainstream New Zealand schools over the years has the effect of requiring major development work in these areas to be completed before a broad range of unit standards become available. Added to this are the issues surrounding the shortage of Mäori educators able to engage in such developmental work. One of the consequences of this is that some knowledges are positioned more advantageously than others.

Unit standards provided an opportunity for programmes to be tailored to areas of students' choice. There was a sense in which this enabled an **individualised programme** to be developed. This was a positive feature as it tapped student interest and made good motivation a high probability. It also had the potential to be an area of concern. The practicalities of making it work seemed like a nightmare. For example, if students took early examinations, like early Bursary in te reo Mäori, then what?

The potential for the **development of study skills** courses was seen as a positive opportunity. The new transparency of the system was encouraged and linked to a need to have equally transparent programmes which would teach the research, writing and study skills necessary to

achieve high quality outcomes in such a system. Courses on assignment writing, staff training in these areas, and the time to upskill in these areas so that teachers would know how to help their students, were all possibilities which were positively viewed.

Teachers identified **a public relations** role related to the Framework in terms of educating the parents and the wider community about the issues. At one level this was a good thing in that it enabled schools and their communities to explore an educational relationship wider than classroom based programmes; at another, it was a concern that where the parents are completely overwhelmed, and in survival mode, this was not likely to be perceived so positively. Rather the likely response was the teacher was expected to <u>know</u> and to get on with things.

Finally, opportunities for **curriculum development** in a number of areas were identified. The preparation, progression and development of curriculum from kura kaupapa Mäori to Bursary was not considered coherent at the moment. The Framework was identified as a means of rationalising this and providing for planned, coherent curriculum planning and development. Scaling, for example, remains a current issue. The community endorsement of fluency is seen as a solution to this and one which also contributes to the benefits that could accrue from developments in this area. A further concern to be addressed in the context of curriculum planning and development is the issue of the social development needs of children encouraged to take early exams. At issue seems to be the desire for language fluency as compared with the developmental concerns of being able to enjoy childhood unencumbered by such academic pressures.

Positive Aspects of Moderation

The teachers identified clear benefits that could accrue from the possibility for staff development associated with **moderation**. Possibilities generated included trained, <u>on site</u> moderators as well as a permanent or district moderator.

The Impact on Staff

One of the main areas of concern was the impact of these developments on staff. Faced with decreasing representation in the teaching workforce workload issues were critical. A general issues for all Mäori staff, it was considered that this would be exacerbated for part-time, short term staff on contract. Staff development was tabled as an urgent priority to upskill Mäori teachers so that they could take advantage of the professional opportunities on offer. Such **professional development** would have budget implications, would require adequate planning for release time and would raise issues about the **venue**s chosen for such training. "Would the trainers come to remote areas?", for example, was a question asked, soon followed by, "or will the Framework become another area of educational development where rural schools are not afforded the opportunities created for their urban counterparts?"

Issues of Implementation

A range of implementation issues was raised and considered. In no priority order these included: the time needed for the implementation; the practicalities associated with it; and, the need for good leadership at the school, so that staff were fully informed about what was going on and were able to have input into the process. Issues of implementation were identified as having major implications for workload and resource issues in schools. The issue of competition was also raised as providers jostled in an effort to 'grab funding'. This was identified as a particular issue for Mäori teachers who are accountable to a range of groups

besides the school, including their whanau, hapu and iwi, whom they may be 'bidding' against. Some sensitivity will be required around the issue of who is accredited in the community as providers. Schools have an edge here over other Mäori groups without the background and experience that schools can call on. A level playing field does not exist, in this regard, and Mäori teachers are positioned precariously to be amongst the group at the forefront of detecting the level changes!

Problematic Aspects of Moderation

The concerns raised about moderation included: the establishment and maintenance of standards; issues of confidentiality; and, accountability. Without appropriate resources for training and time for thorough application, the teachers were concerned that moderation could be short changed. Such an integral part of the whole system, this was an area where careful planning, training and adequate resourcing were seen as non-negotiables.

Confidentiality was identified as an issue based on experiences people had already had in the new environment. An example will illustrate this. An anecdote was shared about a moderator, selected by NZQA, who, in addition to moderation, had made judgements about teaching quality and made these known to others, including secondary advisers. The teachers felt that this was a breach of confidentiality and that it demonstrated that the moderator had not stayed within the boundaries prescribed in the moderator's job description. They highlighted that moderation processes should remain confidential, that moderators should be required to stick to the specific job description they were employed to fulfil. Following on from this the teachers saw recruitment of moderators as a major issue and identified that knowledge of te reo Mäori me ona tikanga was not enough for this job. Professional training, experience and behaviours were also requisite qualifications.

Finally, accountability in the moderation scenarios was highlighted. The teachers identified that Mäori teachers usually live in close proximity to their schools and that once moderation was complete they couldn't 'hide' from the outcome of the results. This was contrasted with the experiences of moderators from other sectors, for example, the polytechnics, who could run in, drop bombs, as it were, and disappear.

The Educational Needs of Whanau

Ever aware of the fact that they were wearing many hats simultaneously during this interview the teachers spoke about the educational needs of the community beyond the school walls. They argued that the needs of the children's parents, in terms of whanau-hapu-iwi development, should also be taken into account by the school. After all, research has established over a long period of time that Mäori communities have systematically been disadvantaged by schooling and that there is an obligation on schools, if only at a moral level, to be doing all that they can to play a role in redressing this situation. The development of adult and community education programmes, through the school, in association with other developments in this area, is a major possibility for exciting educational development and innovation. The provisions for the recognition and accreditation of prior learning, for example, is well suited to the diverse knowledges that parents will bring to these programmes. Once so accredited they will be able to staircase into other areas and programmes so accessing lifelong learning, modelling very positive attitudes to learning and education for their whanau, as well as enhancing new post-training employment opportunities for themselves. Such second chance learning opportunities have the chance of taking away some of the pain associated with

academic learning. The range of vocational skills in many communities is so diverse that the creation of a 'Handy person Diploma', a general Mr/Mrs/Ms 'Fix It' credential, was discussed with some purpose.

The Role and Mana of the Iwi

Considering the political implications of these developments from the view of the iwi, the question was asked "what power do iwi have to choose or not choose the Qualifications Framework?" Given the international developments in the area of indigenous education, and the specific moves towards an international indigenous Qualifications Framework, the teachers were concerned about what iwi might be bound by. The teachers explored what real freedom they had to make choices. They asked do they go for the Framework as individual teachers, or as an iwi do they make a different choice that is iwi specific, perhaps not even in line with PPTA policy? The Mäori teachers' 'choice' in this context may well be a source of tension and conflict.

Gender Issues

The group reflected on the contributions Mäori women were making in education and commented that they were working twice as hard as anyone else to prove themselves. They saw this both as an iwi / Mäori issue as well as a Tauiwi issue, particularly when appointments in education were made by Tauiwi. Concern was expressed that Mäori women had to lead by superb example, but that Maori men had rights accrued to them from their speaking roles in marae contexts. The new environment, and opportunities afforded by developments surrounding the Qualifications Framework, were identified as areas in which gender issues would need to be closely monitored so that opportunities could be equally enjoyed by Mäori men and Mäori women.

Reform and Change

Finally, the teachers addressed the continuing reform and change that the education system has been subjected to for so long now. They identified that changes in recent times had been traumatic, not just dramatic, with lots of extra stress. They felt that one of the consequences of this was that despite having to work twice as hard, Mäori teachers were being judged. This was identified as having the effect of unsettling the whatumanawa - literally the source of one's emotions - leading to stress, emotional disturbances and anxiety. That was identified as a recipe for disaster: put bluntly one teacher commented "that kills you!".

Competing demands were discussed in this environment of continuous change. Examples cited were dual assessment systems and workload issues where schools sought to find equitable workloads across subjects as well as across different staff groups. As well as attending to such developments teachers have the curriculum to deliver and this is also in the process of change. A messy, murky, transitional period was associated with the Qualifications Framework. It was characterised as taking place at rapid rates of change as well as having a major impact on teachers workload.

Focus Group Two

The second focus group interview was held in Wellington and included members of Te Huarahi, and policy analysts from the Ministry of Education, who were from diverse communities and schools throughout the country. The korero from this session was focussed at a different level

to that of the first interview. This discussion focussed on the macro level, big picture, systems-wide issues and analyses, and provided an important complement to the first focus group interview. The national context within which the Qualifications Framework Inquiry could be considered was explored in detail in this session.

A number of issues were identified as being significant and needing urgent consideration. By far the most immediate of these was the **recruitment and retention** of **Mäori teachers**. Discussion included considerations of models of pre-service teacher training and inservice professional development for Mäori teachers. At issue in the highlighting of this area were the current levels of representation of Mäori teachers in the secondary teaching workforce and the long-term retention of the Mäori teachers in this sector. Falling from some 6%, reported in the Ministry of Education Workforce Census, to around 3% at last count, the scenarios facing Mäori teachers are at the very least not 'best case' professional work situations. Burn-out, professional loneliness, disillusionment, and inequitable work environments are common-place for Mäori teachers. A major focus of the discussion was the development of positive strategies to address the issues of the recruitment and retention of Mäori teachers.

In such an environment of openly acknowledged, and readily accepted systemic inequalities for Mäori teachers, any new national development is likely to be ill-fated from the start. Trying to maintain and consolidate the position of Mäori in the education system are major priorities. Innovation and development, of the kind the Qualifications Framework invokes, call for energy which is already well and truly spoken for. What energy there is for innovatory thinking and developments is focused at the level of achieving Mäori community aspirations for Mäori in education, which Mäori teachers have demonstrated, in a range of different contexts, that they have dedicated energy and vision for. Here aspirations in terms of te reo Mäori me ona tikanga have taken highest priority. This, at a time when Mäori Education continues to be positioned by the state as one of the almost intractable areas of education in which widespread systemic solutions remain beyond the grasp of most. Of concern here is the degree to which the specific aspirations of Mäori people and the aspirations of the state, as articulated in educational policy, coalesce. To put it bluntly, Mäori teachers are currently caught between a rock and a hard place, and even the space they occupy in this precarious scenario is at risk. The Qualifications Framework is one example of many current developments which fits this description of being central to the State's agenda for change but peripheral to Mäori perceptions of urgent priorities in education.

Added to this area of major concern were issues of funding, resources, opportunity to develop unit standards, policy, workload and the role of information technology. The teachers were concerned about the **cost** of unit standards and what the long term scenarios would be in this area. Whilst funds might be available now, would this be a sustainable cost, long term, in areas where schools were already facing funding crises?. The notion of a 'free education system' takes another step backwards with the 'user-pays' approach to the purchasing of unit standards.

Workload was a major area of contention. With so few Mäori teachers in the system it was clear that the loads they carried would be herculean, quite out of proportion with other teachers. Added to the professional responsibilities, they also routinely carry a whole range of other responsibilities from community liaison to pastoral care for Mäori children generally to curriculum adviser in tikanga Mäori across the entire school programme.

The lack of **resources** available to provide support for Mäori learners continues to be a pressing educational issue, particularly as this applies to immersion education programmes.

This has implications for workload as teachers are often required to develop the resources their students need before units of work can be initiated.

Connected to workloads again is the degree to which Mäori teachers are able to take part in the **development of new units**. With so many other demands on their time this seems like a luxury which they cannot afford, yet it may also be an opportunity for professional development which they would benefit from. At issue here is the availability of a broad set of units relevant to kaupapa Mäori programmes.

Information technology was identified as a means by which quality could be enhanced in school-based programmes. For example, in schools facing difficulties staffing a broad curriculum offering a full range of the sampling of unit standards, IT was identified as providing a means to link online with other schools with the necessary staffing in place. A second example of the application of IT is that it has the potential to provide a critical resource base for the Mäori teacher on his or her own in a school or department, often the case, so that a full programme can be offered without burning out the sole Mäori teacher.

Finally, the area of **policy development** was identified as a major conduit through which the range of issues facing Mäori teachers could be addressed such that they enabled the aspirations of the State and the Mäori communities that teachers represent to integrate more fully so that Mäori teachers are not caught between the two.

Two general questions relating to Mäori in education were developed for inclusion in the questionnaire distributed to the PPTA membership (Questions 6 and 7). The Inquiry team wanted a broad, inclusive response from the secondary teaching workforce as a whole, articulating views from the diverse range of schools that comprise the secondary sector. Given that Mäori teachers comprise such a small percentage of this teaching workforce it was important that the numerous teachers who are not Mäori, but who have both the opportunity and the responsibility to deliver education to Mäori, also had the chance to have their say. The questions were:

QUESTION 6

Identify advantages associated with the Qualifications Framework for Mäori education

The bulk of respondents either did not answer this question (919) or replied that they did not feel qualified to comment (443 mentions). 279 mentions were associated with responses such as "advantages and risks no different for Maori students than for any others."

Of those who did respond, the majority (726 mentions) the recognition of additional skills as an advantage while 227 mentions identified multiple pathways as an advantage.

Other advantages identified included the view that pass rates would be higher leading to higher achievement rates for Mäori. The re-testing option was given as an example of how improved pass rates would be achieved. Other respondents identified the more immediate feedback provided by standards-based assessment and the clarification of goals and expectations provided by standards based assessment as positive for Mäori.

A number of respondents suggested that moderation procedures used in the Framework provided for fairer assessments and improved comparability between schools.

QUESTION 7

Identify risks associated with the Qualifications Framework for Mäori Education

As with the previous question many respondents did not reply to this question (919) or indicated that they felt unqualified to comment (443 mentions).

Of those who did respond the largest number (434 mentions) suggested that the Framework provided the potential for separatism in education while 305 identified the danger of high credit requirements leading to Mäori students ending their courses with no credit earned and consequently experiencing failure rather than success. The feeling was often expressed that the Framework offered an improved range of qualifications for Mäori but that these may be of little use in the long term if the Qualifications Framework is associated with low status qualifications in the future.

Other respondents suggested that the unit standards structure was not suited to Mäori learning styles, that the ease of gaining credits would unfairly raise expectations of success and lower standards, and that the unit standards approach discouraged students from striving for excellence.

Language problems arising from the use of jargon, increased demands on Mäori educators especially those working in one-teacher departments and concerns about moderation, for example the consistency of course structures between schools were also identified as risks.

A number of respondents suggested there were no risks for Mäori (139 mentions).

Discussion

The sections above provide overviews of the global response given to these questions, particularly those that provide the dominant patterns in the thinking of the PPTA membership in relation to the advantages and disadvantages of the Qualifications Framework for Mäori Education. However, it is readily apparent that a significant proportion of the responses that were received indicated that people didn't feel qualified to comment at all in these areas, a worrying indication given the high proportion of Mäori children in mainstream secondary education. The following section is added, therefore, with the aim of fulfilling an educative function. It will provide a composite outline of some of the advantages and disadvantages that were submitted in branch responses. Whilst not being indicative, in a broad theme or trend sense, of the membership thinking, it may well be instructive enough to generate some thinking where previously there has been little or none in the responses from many branches. If that outcome is achieved, it will have served its purpose and that is to educate. The composite picture indicates that the PPTA membership en masse 'knows' enough about the possible advantages and disadvantages to begin the process of educating itself in this area. Accordingly, the comments of the teachers are presented as written in the branch submission.

To those branches that made submissions to Questions 6 and 7, your honest, open articulations have provided useful grounds for further discussion and education. Tenei te mihi ki a koutou katoa mo enei whakaaro. In the face of so many non-responses these responses give a deeper sense of meaning to this Inquiry, one designed to enable PPTA 'to take another look'.

Under advantages the broad categories to emerge were, career development, educational success, unit standards, school community relations, tino rangatiratanga, kaupapa Mäori developments, assessment, student programmes and learning styles of Mäori students.

Under disadvantages, the broad categories to emerge were, workload, tino rangatiratanga, educational success, funding, implementation, learning styles and staffing.

Advantages

Educational Success

- all students, but Mäori students in particular, can pursue two or three subjects where they have a realistic chance of success and the remainder of their course can comprise meaningful units of learning from the Framework. This then becomes a custom designed individual education programme for each student.

- recognition of prior learning

- less able students can achieve in small bites

- achievement recognised in areas other than writing and speaking eg listening, practical skills

- harnessed relevance and diversity

- schools must study Mäori literature and values to gain credit in some subjects eg English

- provides greater incentive to succeed because it provides more immediate responses

- culturally specific knowledge and skills may be recognised

- retesting may be advantageous with a supportive whanau group

- encourage participation by Mäori students who are intimidated by external academic 'exams'

- more opportunities to gain credits for less academic students

- able to work at own level

- work at own pace

- good for accessing practical subjects

- generic units manageable and attainable for many Mäori students

- the current system a culture clash but the feeling of the group is that this clash remains, especially if external exams are to be retained as well as unit standards. There seems some potential for improvement in Mäori Education if proper resources are provided to allow schools to develop a range of meaningful courses and assessment activities (a big IF).

- Mäori students often leave during the year, this way they will take something with them

- capacity to enhance Mäori education because of the wider range of subjects being given credit

- recognition of short term success

- could improve the chances of some leaving with qualifications that they would otherwise not have gained

- raising the profile of Mäori education amongst the current generations must be positive

- may get more success at upper levels and credit if they leave during the year

- exams not set by NZQA

- achievement based

- smaller learning blocks

- less academic

- workload streamlined

- Mäori 'tall poppy syndrome' can dislike better than everyone else so pass/fail could be suitable

- enthusiasm for Mäori students with retesting — a greater chance of success

- record of what achieved

- short-term academic goals

- provides a system for acknowledging traditional skills and previous knowledge

- advantage for non-academic kids

- advantage of students knowing that they have learned

School Community Relations

- opportunity for marae-based modules

- school can work with marae for culturally appropriate topics for all students

- well suited to iwi and community

- diverse range of providers able to teach Mäori not just schools and tertiary

- choice of providers may suit Mäori students better

- whanau/iwi involvement, support of courses

- allows for dual system if provider is available.

Assessment

- the model of assessment which is flexible suits some Mäori students

- moderates assessment so Mäori teachers are working towards the same objectives

- assessment items could be selected so as not to disadvantage minority groups

- moderation causes the Qualification Framework to be evenly assessed. It will be fairer from school to school

- different learning styles can be successfully assessed, no 'exam pressure'

- opportunity to excel given skills-based assessment

- consistency in assessment procedures

- continuous assessment may help Mäori given their outlook may be 'different'

- variety of assessment methods can be used.

Unit Standards

- unit standards (core generic) in particular offer the opportunity for students learning to be based on or around their experiences of life

- unit standards specifically geared to the interests of Mäori students can be written

- smaller bits of unit standards may increase the numbers doing some Mäori

- nationally recognised Mäori units

- specific unit standards in office systems which are bilingual and allow for bicultural skills

- all unit standards can be in te reo Mäori

- need unit standards for parts of the curriculum, like traditional Mäori crafts from the new curriculum

- pass rates on unit standards will be higher

- unit standards can be given to students element by element, rather than full task. It is more manageable for students

- units can be designed for local situation

Kaupapa Mäori Developments

- plenty of different subjects related to tikanga Mäori

- Mäori culture aspects can be used for example

- should gel with the teaching of te reo

- will allow Mäori to use their oral skills in many subjects.

Tino Rangatiratanga

- self control: moderation, assessments, unit design

- it has been designed as inclusive of Treaty principles and recognises Tino Rangatiratanga

- elevation of the importance of Mäori as a major cultural force in Aotearoa New Zealand

- the examination system does not reflect the culture — their system might

- may give more control to Mäori in terms of Mäori education

- opportunity for Mäori to define own standards

Learning Styles of Mäori Students

- oral and production areas give more opportunity to gain credits than under present system

- can gain credit orally if limited in written skills

- Mäori students might appreciate a shorter time-frame for completion of a unit of work

- opportunity to work in groups may be more beneficial for these students than working individually

- allows teacher to use direct teaching strategies which may suit Mäori students more

- more practical content/group learning.

Student Programmes

- more short-term blocks of work which would be more accessible to more students

- more suitable courses can be put together

- mobility of credits

- possibility of multi-level work.

Career Development

- practically-based, career-related education can be built into courses which suit the learning styles and interests of many Mäori students

- very helpful in vocational areas

- not specific of Mäori: non-academic students can gain a qualification

- positive means to recognise and enhance qualifications

- vocational units open many new doors and pathways into the world of work

- gain qualifications not necessarily gained before but need good advice on correct units to give a qualification that counts.

Disadvantages

Workload

- the transition period as secondary schools modify their programmes and courses to include more Framework units represents a huge workload for teachers. Given the potential attractiveness and relevancy of unit standards (particularly in the non-conventional subjects) teachers will have to be thoroughly trained, appropriately resourced and allocated enough planning time to ensure that unit standards are not delivered in a sterile 'dry balls' way. This could actually put Mäori students off rather than motivate them

- meeting Qualification Framework demands

- learning new methods of delivery

- extra workload to implement new initiative

- implementation before staff adequately trained and prepared

- needs of special groups can be overlooked due to workload pressure

- teacher workload demands unrealistic

- difficulties of isolation for one person Mäori language departments or in isolated regions — how to balance tasks and moderation?

- the wordiness and paperwork associated with unit standards is seen as alienating for Mäori

- excessive workload of the presently stressed and overworked Mäori teachers.

Implementation

- the rigid timetable in some secondary schools doesn't allow enough flexibility for success orientated Framework delivery in the non-conventional subjects. This impacts (in my experience) negatively on Mäori students in particular. This may only be an organisational problem, however

- too much jargon

- continual re-assessment can be demoralising

- lack long/mid-term goals

- it may not be flexible enough to meet topical issues that arise from time to time

- the moderation process is time-consuming, disjointed, with different providers at different places and working on different units

- the changes in moving to the framework do not seem to address the current disadvantages acknowledged for Mäori students

- suffer and pass/fail

- assessment may not suit their learning style

- Mäori education uses a holistic approach. Unit standards cuts assessment up too much — negative for students

- differences in resourcing — may disadvantage Pakeha

- under-developed resources.

Tino Rangatiratanga

- non-Mäori education should be holistic not in unit delivery

- imposition of basically European structure on culture which has its own methodology

- may not allow for different cultural perspectives

- risking intellectual and cultural property rights ie possible loss of iwi information through unit standards, copyright of Mäori resources by other iwi

- splintered into unit delivery not consistent with Mäori thought patterns or educational outcomes

- backlash at a time when many Treaty obligations are already resulting in suspicion that Mäori are getting more than their share

- needs to be sensitive to Mäori students cultural background

- worse than the present system

- authentication statements are Pakeha — Mäori curriculum statements emphasise the co-operative nature of learning. Unit standards are too controlled by ITOs who do not respect Mäori traditions

- instead of seamlessness and opportunity being provided for Mäori students what they cover will be according to the majority and what teachers can teach and cope with. So much for Lockwood's apparent philosophy of a seamless education system. Te reo Mäori again being relegated to second class because it is worth less points than eg English.

Educational Success

- lead to mediocrity

- general issue: precise nit picking wording and exact answers required is likely to mean few students would gain unit standards. Since Mäori are not achieving well this exact nit picking approach would disadvantage them particularly

- raising expectations of students excessively due to ease of getting credits in some areas

- seen as 'dumbing down' to 'give' Mäori qualifications

- concern many will leave school with few/no qualifications due to cost

- many Mäori providers are untrained/unqualified. A potential minefield, fragmented teaching profession

- we may have too many soft units

- they won't achieve anything because they will get discouraged

- further loss of self-esteem

- dropping standards for both Mäori and Pakeha

- these unit standards may not be worth much in society and self esteem could be further damaged when students find they cannot do the jobs that they want

- Mäori language standards have yet to be finished and trialled. They may not be a success

- difficult because level of units more advanced than average Mäori students

- side tracked into vocational courses as opposed to academic

- more failures

- the changes to the Framework do not seem to address current disadvantages acknowledged for Mäori students

- high achievers prevented from 'shining' or being given recognition

- we will not solve the problem of Mäori under-achievement by lowering the standards

- pass/fail ie no qualification possibility rather than the current partial success

- if qualifications are in Mäori, for Mäori, will they be recognised equally

- may have standards in Mäori but not in the language of power

- profile of school will become important in a new system and this may count against the achievement of Mäori students — that is, if the profile of a particular school is not high student achievement within that school will not have public status like that accorded to success in national exams

- discourages student from striving for excellence

- doesn't recognise the competition that will be faced in the workplace

- stereotyping of certain schools as less worthy

- no allowance for excellence

- there needs to be a selection of units that appeal to them to work towards, will they see the long vision ie earning the credits?

- has 15 years at the lower age limit — what about kohanga kura kaupapa students

- getting students to hook on to the Framework

- risk that students may take easy option to have low expectations

- what happens if they never reach the standards?

- danger of two-tier system: academic, valued; non academic, under valued

- huge, too many risks to record

- the retention of SC and Bursary could well see the emergence of a two-tier qualifications stigma with unit standards avoided by some schools, embraced by others and a lesser worth stigma attached to them for Mäori

- technology orientated

- retesting - risk of erratic attendees

- attraction of outside agencies positing 'softer' options

- Polynesian students and parents in general prefer national exams as they feel on neutral ground. There is fear of internal assessment, unit standards as they might be considered a soft option eg Mäori students related to teachers, moderators of Mäori units

- pointless unit standards written for course, pointless courses designed around unit standards

- parents even more reluctant to come into schools, therefore even more unfamiliar with the system

- could end up 'dumbing down' their expectations of the system

- pupils acquiring a smorgasbord of certificated courses with little relevance to their career paths.

Funding

- economical — cost

- costs to hooking on and credits becomes prohibitive to all students from a low income background

- costs to parents, costs can be disqualify them from the start

- students hooking on to the framework for $15 then not being able to pay the $100 for year's credit

- it will cost students and family more, this will disadvantage lower socio-economic groups.

Learning Styles

- the individually-paced building block approach to assessment may not aid learners who like to progress as a group

- group work not assessed - individuals have to prove that they have gained the performance criteria

- style of learning conflicts with Mäori culture

- collective consciousness works against the unit standard pass/fail approach

- lacking personnel to implement Mäori content into courses

- insufficient teachers at secondary school levels

- no teachers with qualifications to teach te reo across the curriculum

- not enough Mäori teachers, given time for training, some inadequately trained, lack of staffing.

PART THREE

EVALUATION OF THE QUALIFICATIONS FRAMEWORK

CHAPTER 6

CRITERIA FOR EVALUATING QUALIFICATIONS SYSTEMS

One of the terms of reference for the Inquiry was *to analyse whether the New Zealand Qualifications Framework is educationally valid.* At their first meeting, members of the Inquiry started to examine what is meant by the educational validity of a qualifications system. They identified and discussed approximately thirty desirable features of an effective qualifications system. In subsequent meetings, this list of desirable features was distilled first to fourteen features and finally to eight features. These eight features are presented here, with supporting discussion to enrich their meaning and clarify their significance. The Inquiry team regard them as universal criteria which can be used to evaluate any existing or proposed qualifications system.

The eight criteria are used in the remainder of this report to help identify the strengths and weaknesses of particular options for the development or re-development of New Zealand's qualifications system.

The criteria are derived from international research on the validity of educational assessments, and from the research and comment about particular qualification systems reported in Chapter 2 and 3. A useful starting point was Threats to the Valid use of Assessments T.J. Crooks et al (1996).

An educationally valid qualifications system is:

- Fair

- Inclusive

- Cumulative

- Clear

- Motivating

- Coherent

- Constructive

- Manageable

1.   FAIR

Credits and qualifications accurately describe learner achievement, and are trusted.

If this statement is to be true, several related requirements must be met.

First, the assessment tasks which are used and the conditions under which they are administered should give all learners a fair chance of demonstrating their achievement. Learners should be given appropriate opportunities to prepare for each assessment task, the tasks should be communicated as clearly as possible to all participants (with particular

care for those facing language, cultural or disability barriers), and care should be taken to avoid slanting the assessment to favour particular individuals or groups.

Second, the standards used in marking and judging student achievement should be sufficiently consistent to ensure that all learners who have achieved similar levels of performance are awarded similar results. Perfect consistency is unobtainable; what is needed is a level of consistency high enough that students are not seriously advantaged or disadvantaged by the inconsistencies which remain.

Third, the descriptions of student achievement that are associated with particular qualifications, credits, grades or marks communicate clearly the standards achieved to people interpreting those descriptions and grades.

If these three requirements are well met, then learners, teachers, parents, employers and the community should have good reason to trust the qualifications system. Trust is, however, a fickle and fragile thing, influenced by personal opinions and political lobbying, in addition to rational thought. Poor procedures may survive because they are widely trusted, and good procedures may founder because they are not. In essence, then, establishing trust becomes a fourth requirement; it cannot be seen as following automatically from satisfying the other three requirements.

2. INCLUSIVE

The range of credits and qualifications available meets the needs and aspirations of learners and of all sections of the community.

Diversity is an inescapable feature of our world, our society, our communities and our economy. Education should offer opportunities which allow learners to prepare for many different economic roles, for many different recreational pursuits and for varied collective and personal contributions to the well-being of our cultures, our country and our world. Furthermore, learners differ very substantially in their abilities and disabilities, as well as in their attitudes and interests. For all these reasons, a good qualifications system should make generous provision for diversity.

Credible pathways are needed to worthwhile qualifications for as many learners as possible. During the 1950s and 1960s, when regular employment was readily available for almost all New Zealanders, this need was not so apparent. Now however, education must play a larger role in preparing learners to meet the requirements of a more demanding and unpredictable international economy, and also for a more diverse range of interests and lifestyles.

In 1965, only 27 percent of Third Form students who entered New Zealand secondary schools three years earlier had reached the Sixth Form, and only eight percent of those who entered four years earlier had reached the seventh form. By 1995, however, retention to the upper levels of secondary school had increased dramatically. Over 80 percent of students were completing a Sixth Form year and over 50 percent were completing a Seventh Form year. This growth has meant that schools have been unable to ignore the inappropriateness of mainstream qualifications (such as Bursary) in the senior secondary school for a substantial proportion of their senior students. Most schools have offered alternative courses, but many of these have not led to credit towards related qualifications, which students may later seek in polytechnics, private training establishments or industry. An acceptable qualifications system will allow senior

secondary school students who are not pursuing a Bursary programme (or equivalent) to earn worthwhile credits towards their training, employment and recreational goals.

There is also a need to accommodate more diverse goals associated with culture and ethnicity. Our society can be enriched through strong and varied contributions from different groups. Statistics on the school achievement of learners from different backgrounds suggest that more varied pathways need to be available to provide equitable opportunities to all.

3. CUMULATIVE

Learning achieved and demonstrated in one context is accepted and credited in other contexts where it is relevant.

There is a natural inclination for learning institutions to value credits and qualifications earned through their own programmes, but to be reluctant to recognise and credit learning achieved elsewhere. A more competitive environment among institutions, together with funding arrangements based on student enrolments, tends to strengthen this inclination. It is in the interests of students and society, however, that the inefficiencies and frustrations which are associated with this parochial approach are minimised. A good qualifications system will allow full credit for relevant achievement, regardless of where it was demonstrated and documented.

An extension of this point is to make appropriate provision for learning which has been achieved but which has not yet been assessed and documented. Learners should be able to have such learning assessed and credited without needing to participate in an extensive learning programme covering the already learned skill and knowledge. Some form of recognition for prior learning should be available, either through assessment alone or through a considerably abbreviated learning programme within which the required assessment is embedded.

4. CLEAR

Learners and teachers can readily obtain clear and helpful information and guidance about the content, criteria and expected standards for particular credits or qualifications.

Pursuit of a goal will generally be more efficient if the requirements associated with the goal are clear to the participants than if they are unspecified or vague. If teachers are to plan good programmes which will help their students earn credits or qualifications, they need clear information about the knowledge, skills and standards expected. Likewise, learners should better meet programme or teacher expectations if those expectations are made explicit and clear to them.

Caution is required, however, to avoid diluting or narrowing the goals in a misguided attempt to be more precise about what is required. In many educational programmes, some of the most important goals defy tight specification of outcomes. Those goals must be retained, despite the constraints they place on the precision of criteria and standards. In most such cases, the content and attributes to be assessed can be described quite well, but precise descriptions of the standards to be applied is more difficult or impossible.

5. MOTIVATING

Learners and teachers find the qualifications and assessment system empowering and motivating.

Success in human activities is closely linked to motivation. Learners who are committed to learning, and especially those whose commitment arises from a strong interest in the material they are learning, generally achieve much more than others who are less motivated to learn. Likewise, teachers who feel empowered and motivated usually provide more stimulating and effective educational programmes and better role models than those lacking these attributes. A qualifications system needs to meet several requirements if it is to be motivating and empowering for learners and teachers. Discussed below are four criteria which relate particularly to learners, then two more related to teachers.

A first requirement has already been discussed above, under Criterion 2. Learners are much more likely to put continued effort into their learning if they can see pathways ahead which make sense to them and seem worth following. They value a variety of options, not only between programmes and courses, but also within courses.

A second requirement is that learners can achieve sufficient success from their efforts to justify continued effort. Learners should be challenged by the targets they are aiming for, so that they need to concentrate well and work hard to achieve those targets, but they also need to have some confidence that the targets are attainable. If learners come to believe that all or some of the targets are beyond their capabilities, those targets are no longer useful and the learners stop trying to achieve them.

A third requirement is that excellence in any area is encouraged and celebrated. High achievement tends to be contagious, in two ways. Individuals who achieve excellence in one area are more likely to gain the confidence to pursue excellence in other areas, while other individuals are likely to catch the excellence (bug).

A fourth requirement relates to the nature and quality of the learning. Knowledge of basic factual material is clearly important, but few learners find learning and regurgitating factual material very stimulating. Learning which involves the understanding of principles and the development of skills is more motivating and more enduring. Good evidence is available to suggest that factual learning is enhanced rather than threatened if it is embedded within a context emphasising deep, meaningful learning.

If the four requirements listed above are met, the positive attitudes of learners will help make teachers' work satisfying. Nevertheless, a qualifications system must meet additional requirements if it is to be empowering and motivating for teachers. Teachers are crucial to the success of any education system. Their energy, creativity and professionalism should be nurtured and treasured. In designing a qualifications system, therefore, considerable emphasis should be given to ensuring that these attributes are supported rather than undermined by that system.

For teachers, an additional requirement is that the qualifications system offers them scope to exercise substantial professional choice. Assessment should not dominate, but support the curriculum. Teachers need to feel that they have some freedom to select topics and learning experience without being placed in a straitjacket by the assessment requirements for the qualification. This allows them room to teach material they care about and to exercise their creativity as teachers. Some constraints on teacher autonomy

are needed if nationally recognised qualifications are to be awarded, but these constraints should still allow local choice.

A second additional requirement for teachers is that their involvement in the qualifications system should support and promote their professional development. They need to feel that they have an important professional role to play, and that their interaction with education agencies and other teachers involved in the qualifications is helpful in enhancing their teaching and assessment skills.

6. COHERENT

Assessment arrangements promote coherence and integration of learning and teaching.

A good qualifications system involves assessment models and strategies which do not result in fragmentation of learning. Knowledge and skills are most useful when their linkages are understood, and they are not seen to exist in their own little 'boxes'. Teachers and students need every encouragement to see and understand 'the big picture', and not to see learning as a series of narrow tasks to be ticked off on a checklist.

There is a danger that easily measurable outcomes will predominate in assessments, at the expense of outcomes that are more difficult to assess. Assessing the latter usually requires substantial professional judgement from the assessors, with considerable scope for differences of emphasis and expectation. Insistence on right and precise moderation of assessments by different teachers or schools would encourage removal of tasks which emphasise professional judgement. Tasks which encourage integration of learning are likely to be particularly harshly affected, because marking them usually requires high levels of professional judgement. Such narrowing and fragmentation of the curriculum should be strongly resisted.

7. CONSTRUCTIVE

Learners and teachers receive clear and helpful feedback on progress, and have more than one opportunity to attain the required standards.

A central purpose of a good qualifications system is that it should promote learning. Mistakes play an important role for learners, because they help to identify areas where further educational growth or greater care is needed.

For learners to be able to make good educational use of their successes and mistakes, they need feedback on their work which indicates those strengths and weaknesses, and also suggests ways of overcoming the weaknesses. The feedback needs to be clear, prompt and constructive.

Good feedback is of little use, however, if the learners are not given further chances to demonstrate their achievement. A good qualifications system will allow learners more than one opportunity to demonstrate their attainment of the required standards, and will not penalise students for earlier deficiencies which have been overcome. As an analogy, think about toddlers learning to speak. They require repeated opportunities to practice words, and benefit considerably if their successive approximations to accuracy are greeted with encouragement and patience.

Where assessment components are organised and marked by people other than class teachers, there is also a need for good feedback to the teachers, so they can get a useful picture of the strengths and weaknesses of the students' work and adjust their teaching accordingly.

8. MANAGEABLE

Assessment arrangements involve acceptable levels of workload and stress for learners and teachers, and justifiable expenditure for the community.

This criterion requires little comment. Undue workload or stress will undermine teaching and learning, preventing proper concentration on current learning activities and discouraging commitment to continued pursuit of excellence. An appropriate balance needs to be found between the thoroughness of an assessment process, its educational value, and its costs to participants and the wider community.

CHAPTER 7

REVIEWING THE FRAMEWORK: SOME IMPORTANT ISSUES

A number of important issues about the Qualifications Framework have been identified through our consultation with PPTA members, scrutiny of local research and comment, and investigations of international research and thinking on qualifications systems. This chapter describes these issues and gives reasons for the Inquiry's viewpoints on each.

1.   Standards-Based Assessment

We have a strong tradition in New Zealand of normative assessment: assessment in which the meaning of the marks or grades awarded is derived from the comparative performance of different students attempting the examination, test, or assignment.

For many years primary school reports used a 1 to 5 grading scale for each subject, in which '1' was supposed to be awarded to the top 5 percent of children in the country, '2' to the next 20 percent, '3' to the middle 50 percent, '4' to the next 20 percent, and '5' to the bottom 5 percent. Similarly, for many years School Certificate marks were scaled so that pre-determined proportions of students gained each grade. Sixth Form Certificate still follows that pattern, and Bursary marks are scaled so that pre-determined proportions of candidates obtain A Bursaries and B Bursaries. All of these approaches report achievement based on the comparative performance of different students.

Examples of approaches to assessment which compare student achievement to pre-determined standards of performance have also been present for a long time. For instance, the graded examinations for music and speech offered by Trinity College London and other similar bodies have clear descriptions of the requirements for each grade, with steadily increasing expectations as grade level increases. These examinations have no pre-determined quota of passes, and could be described as standards-based.

Over the past 30 years there has been steadily greater emphasis internationally on standards-based assessment in schools. It has been seen as fairer to students, because their success or failure is based entirely on their own performance, rather than on how they have done relative to others. It has also promoted clearer specification about what students need to be able to do, since such specification is needed in judging students' performance. Supporters have argued that the clearer specification helps students learn better because they are able to focus more accurately on what is required for success.

In New Zealand, standards-based assessment has gained ground steadily. The promotion of 'achievement-based assessment' models from the mid 1980s was a key influence, and by the time the New Zealand Qualifications Authority was established in 1990 there was strong acceptance that a standards-based approach was desirable for the Qualifications Framework. Routine scaling of School Certificate examinations was abandoned in 1992. Nevertheless, responsible critics such as Warwick Elley have argued that a standards-based approach is difficult to implement in some curriculum areas, and may impose more costs than is justified by the associated benefits.

While well aware that standards-based assessment is not a panacea, and cannot be applied with great precision in some cases, **the Inquiry has accepted that standards-**

based assessment is more desirable on educational grounds than norm-based assessment. The Inquiry, therefore believes that New Zealand's qualifications system should place prime emphasis on assessment against standards: standards which are defined as clearly as possible. We accept, however, that norm-based assessment may be well suited for special situations in which the prime purpose of the assessment is to identify the most capable applicants in competition for a fixed number of places.

2. Defining Standards

Several countries have attempted to establish standards-based qualifications systems in which the standards were to be defined purely through written statements which describe different levels of student performance. There is now convincing evidence that this approach will be suitable for only a few curriculum areas. Attempts to capture standards in descriptive statements tend to lead to steadily greater specification of requirements, with more detailed assessment criteria and range statements placing narrower limits on learning activities and assessment tasks. This approach can lead to loss of validity, because important but less easily assessed knowledge and skills are dropped from the standards in favour of knowledge and skills that can be more precisely specified and measured. The approach can also undermine curriculum flexibility to such an extent that teachers and learners feel disenfranchised and alienated.

If written criteria are not sufficient, what else is needed? An important next step is to provide examples of student work meeting or not meeting each standard. Several examples will generally be better than one, demonstrating more adequately the range of work which meets the standard. A commentary accompanying the examples can provide further help, drawing attention to particular features in the work which need to be taken into account and to inevitable trade-offs among strengths and weaknesses in each students' work. Sadler (1987) has provided good illustrations of the value of examples in clarifying standards.

A further important contribution in establishing standards is the provision of professional development for teachers who will be designing and marking assessments to judge whether or not student work meets the standards. A combination of expert input, practice, and discussion with colleagues can lead to much greater consistency of interpretation of standards than would be achieved without such activities.

All of the above elements will be needed whether assessment tasks are to be designed and administered nationally or locally. Even with a national examination such as School Certificate, considerable care will be needed if closely similar standards are to be applied year after year.

The final element to be considered in achieving acceptable standards-based assessment applies particularly where individual teachers are setting and marking assessment tasks and judging student achievement against national standards. Some form of moderation will often be required, going beyond the elements already identified. Possible approaches could range from statistical moderation based on use of a national common task (as in some internally assessed School Certificate subjects), to task and marking review meetings among small clusters of teachers. Many of the moderation approaches are likely to result in professional development benefits for teaching as well as assessment.

3. Grading Models

One of the most controversial features of the current version of the Qualifications Framework is the restricted range of options available to assessors when recording and reporting student achievement. For each unit standard, the assessor has the choice of awarding credit or not awarding credit. The system provides no way of recording achievement which substantially exceeds the requirements for credit. Critics see this omission as reducing recognition for excellence, and therefore undermining the pursuit of excellence. That view was prominent in our consultation with PPTA members.

The Inquiry has identified a "Catch 22" situation associated with the current grading model. Unless standards for credit are set very high, there will be good reason to agree with the view that excellence is not being encouraged. If, however, the standards are set very high, there is a serious risk that occasional errors or misunderstandings of task requirements will prevent students from attaining the standards even after repeated attempts. Many PPTA members raised this issue in their responses to our survey, stating that experiences to date with unit standard trials have suggested that the unit standards might become impenetrable barriers for some of the less capable students (whom it had been hoped the Framework would help). Some argued that students are better off with a non-passing mark of 45 in School Certificate than with zero credit on the corresponding unit standards.

The Inquiry reached the conclusion that many unit standards would be better suited to a model offering a range of passing grades than to the binary pass/fail model. We favour making available up to two levels beyond pass and suggest that those levels be labelled 'pass with merit' and 'pass with excellence'. Thus a unit standard could be awarded as a pass, a pass with merit, or a pass with excellence. The use of these additional steps should be limited, however, to unit standards for which they are agreed to be appropriate. For instance, a unit standard on food hygiene requirements might appropriately have a very high standard for awarding a pass, leaving little or no scope for further distinction. On the other hand, some of the same students might also be attempting a unit standard on food presentation, in which performance well beyond pass level could be recognised and rewarded.

Descriptions and exemplars of performance would be needed for the higher grades, as well as for the pass/fail decision. Teachers have become familiar with such requirements, however, though their use of achievement-based assessment approaches, so the additional decision making should be manageable.

4. Appropriateness of Unit Standards for Different Subjects

Many critics of the Framework have suggested that its standards-based model is appropriate for some subjects but not for others. Typically, 'vocational' subjects such as typing have been judged to suit a standards-based approach, while other subjects such as Sixth Form history have been deemed more suitable for norm-referenced assessment models. The choice of a pass/fail grading model for the Framework has strengthened the case critics can make, with arguments for a range of passing grades in some subjects seen as further damaging the case for the Framework. In the preceding section, we have argued that the sole use of a pass/fail grading model is a serious impediment to appropriate assessment in many courses.

Assuming that a range of passing grades was available, the Inquiry believes that assessment based on unit standards could be applied profitably to all subjects. The first

section of this chapter presented the case for awarding credits or qualifications through standards-based assessment. With two grade levels available to distinguish excellent or meritorious performances from adequate but undistinguished performances, unit standards could be adapted to the requirements of different subjects, different skills, and different providers.

In making this judgement, the Inquiry is taking into account the availability of a range of delivery and moderation models for unit standard assessment. We are not ruling out the possibility that some unit standards may be assessed, partially or fully, through national examinations or nationally prescribed tasks administered locally. Rather, we are concluding that a standards-based approach with three passing grades could be applied profitably to all subjects in the senior secondary school.

5. The Size and Structure of Unit Standards

One of the main concerns which has been raised about unit standards is the danger that assessing achievement using unit standards will fragment the curriculum, and make it difficult for teachers and learners to pursue learning in a holistic and integrated way. This concern is not restricted to people who have had little experience with assessment using unit standards; very strong concern has been expressed also by teachers who have been extensively involved in year-long trials with unit standards.

Some of this concern has arisen because teachers and others have interpreted unit standards as designed for a modular approach to learning, with assessment to be administered during and at the end of each teaching/learning module. This is not an expectation held by Qualifications Authority personnel. Assessment for several unit standards could be administered together, later in the course, to allow and encourage learning approaches which emphasise integration of the various aspects involved in the different unit standards.

There is a risk that the desire for precision in standards-based assessment will encourage subdivision of the curriculum for a subject into quite small unit standards. The smaller the unit standard, the more precisely the requirements involved can be specified. Nevertheless, this approach has two important dangers. The first is fragmentation of learning. The second is the added workload involved for learners, teachers and moderators when greater numbers of unit standards have to be assessed during a course.

For most secondary school subjects, such a reductionist approach seems highly undesirable. Through the adoption of achievement-based assessment models, many secondary school teachers have become familiar and comfortable with assessing and reporting on several different aspects of a subject — typically five to seven aspects. The Inquiry suggests that the number of unit standards in a year-long subject should be restricted to about this number. This would suggest that the average 'size' of unit standards should be at least four credits. Unit standards of this size offer sufficient scope to allow students to demonstrate some breadth of knowledge and skills, yet are not so broad that they combine very diverse knowledge and skills into a single aggregate grade.

Inquiry members were given access to lists of unit standards currently available in subjects offered by secondary schools. We found that different approaches had been used to subdivide subjects into unit standards. At one extreme were subjects which

based most unit standards on very specific topics or tasks, allowing teachers and students little choice within the unit standard. At the other extreme were subjects which based most unit standards on broad skills, potentially allowing a very wide choice of learning experiences. For instance, 'generic computing' at level 2 appeared closer to the first extreme, with unit standard titles such as:

- Produce and use computer spreadsheets using base functions

- Integrate data from wordprocessor, spreadsheet and database files

- Exchange messages using electronic mail

- Produce simple schematic diagrams using a computer application.

History was towards the other extreme, with unit standard titles such as:

- Define and plan a historical investigation under supervision

- Communicate historical information in an essay and another mode

- Explain the influence of an historical force

- Explain industrialisation and political change in an historical setting.

The Inquiry believes that different approaches will be useful for different subjects, and for different aspects within subjects. For instance, a topic-based model may be useful for major parts of the curriculum in science subjects, but a skills-based approach which spans topics may be more appropriate for unit standards relating to investigation skills and practical skills.

6.   Crediting Assessment which is not Standards-based onto the Framework

Some proposals for changes to the Framework have included suggestions that existing external examinations (such as School Certificate or University Bursaries examinations) should be able to be credited onto the Framework. In many cases this would mean that performance on norm-referenced assessments would be credited to a standards-based Framework.

One specific proposal which has received consideration at NZQA Board level involves a sliding scale of credits for performance in Bursaries examinations. In the proposal, higher Bursaries examination marks would lead to a larger number of credits on the Framework, but even quite low Bursaries examination marks would give some credits.

It is important to note that the Bursaries examinations are conducted using a norm-referenced approach. The percentage of students sitting five or more subject who will receive A Bursaries is predetermined before any students sit an examination paper. Indeed, if every Bursaries candidate in a particular year decided to abandon study for most of the year leading up to the examinations, the percentage of candidates receiving A Bursaries would be unchanged. Over the past ten years the percentage of entering third formers who remain in school to sit the Bursaries examinations has more than doubled, but the proportion of candidates receiving A Bursaries has been kept constant. It is more than likely, therefore, that the real minimum standard for an A Bursary has declined over that ten year period.

The position taken by Inquiry members is that Framework credits should be awarded only for performances which meet suitable standards-based criteria.

Performance in University Bursaries examinations could qualify, but only if standards for credit in the exams were defined using a standards-based approach. This would require the development of descriptions and examples of student work which defined the minimum performance level for credit (pass). These descriptions and examples would be used each year to establish the minimum mark in the examination which justified Framework credit. This new approach would bring the Bursaries examinations more closely into line with School Certificate examinations, which moved towards a standards-based model when scaling was abandoned in 1992.

The Inquiry is also convinced that the use of a sliding scale of Framework credit for different levels of performance in an examination would be highly inappropriate. The Framework is a standards-based model, and credits awarded should reflect the achievement of standards which can be defined independently of the performance of other students. In our proposals, students who perform particularly well would receive the same number of credits as students who barely exceeded the minimum standard for credit, but would receive their credits 'with merit' or 'with excellence'.

There are more radical possibilities for crediting tests and examinations onto the Framework. Many students sit tests such as 'Australian Maths', 'Australian Science', and 'Australian English'. These are norm-referenced tests and not closely linked to the current New Zealand curriculum. It would be difficult to justify awarding credit on the Framework for performance on these tests, and certainly inappropriate unless a standard-based system was used for deciding who should receive Framework credit.

A stronger case could be made for awarding Framework credits based on performance in the music practical and theory examinations run by organisations such as Trinity College London and the Associated Boards of the Royal Schools of Music. These examinations use a standards-based model, and could probably be linked satisfactorily to the Framework. They overlap substantially with the new music curricula in the senior secondary school, and therefore awarding credit for these externally-run examinations would almost certainly reduce enrolments in school music courses.

7. Equity

The criteria of fairness and inclusiveness are important in achieving an equitable qualifications system, that is, one which "meets the needs and aspirations of all learners and all sections of the community."

This is consistent with the requirements of the New Zealand Curriculum Framework for the school curriculum to "recognise, respect and respond to the educational needs, experiences, interest and values of all students; both male and female students, students of all ethnic groups, students with different abilities and disabilities; and students of different social and religious backgrounds" and to recognise and address inequalities. It must "recognise and value the unique position of Māori in New Zealand society", and "encourage students to understand and respect the different cultures which make up New Zealand society."

The question to be answered in relation to secondary school qualifications is whether a particular scenario would enable these goals to be met.

Equity issues in assessment are complex: a test is not necessarily unfair because students achieve different results, but where the language or administration of the assessment make the task less meaningful to one group than another, this can undermine their chance of displaying what they are capable of. No system can hope to eliminate completely the hidden bias underlying the unstated assumptions of teachers, curriculum and test developers and text book writers. However, its impact is likely to be lessened in an open system, where "an explicit account of the constructs being assessed and of the criteria for assessment will at least make the perspective and values of the test developer open to teachers and pupils." (Gipps, 1994, p151) This suggests that the aim of developing 'transparent' assessment information within the unit standard style of assessment is a desirable one in terms of equity, although in practice it is not entirely achievable.

One way of deciding whether a qualifications regime is equitable is to identify whether it uses a range of different types of assessment evidence, from formal pen-and-paper testing to oral and visual activities, some under strict time constraints, others spread over longer time periods and so on. If all assessment is by a single model, whether it be the traditional one-shot written examination or some other form such as an oral exam, then some students will be disadvantaged: a variety of assessment models is more equitable. Hence a qualifications system based exclusively on external examinations would not be fair or inclusive.

One response to the debate around the Qualifications Framework has been to suggest the possibility of a range of 'tracks' or 'pathways', where schools and students make choices about which qualification to offer or enter. For example, it has been suggested that unit standards could be available alongside a separate set of external examinations. This has been described as a 'dual framework', which would allow schools and students to choose either an exam-based or a unit-standard-based route to credit on the framework. In some cases the exams in question are the current Bursary and School Certificate exams. A more recent addition has been the suggestion of opening up the Framework to multiple, competing qualifications such as the New Zealand Education and Scholarship Trust examination or Australian Mathematics, Science and English.

On first impression such proposals may appear to meet the requirements for equity by offering students the possibility of choosing the pathway most likely to suit their individual learning styles and meet their individual needs. However, this assumption warrants closer examination.

Proposals for two or more unrelated qualifications at a single level of the school system are likely to be inequitable for a number of reasons.

The first is related to choice. Will the choice of qualification be made by individual students or by a school? Either option poses problems for equity.

For practical reasons the school is more likely to make the choice when it decides which qualifications it will offer. Every school has students with a diverse range of needs, abilities and learning styles. If one qualification is offered when others are available, some students will be denied access to a qualification which may have been a better option for them. This will be particularly the case if a school chooses an exam only option, since this tends to rely on one-hit assessment rather than offering a variety of assessment modes.

If, on the other hand, the school decides to make a number of different qualifications available, a different set of problems arises. The evidence from the United Kingdom is not encouraging about the capacity of a multi-track system to achieve equality of opportunity or outcomes, because it is extremely difficult to achieve parity of esteem for all qualifications. Students from advantaged backgrounds are more likely to have the information to understand which qualification has the higher currency in the world beyond school. Even where the alternative qualification offers considerable advantages in the nature of the curriculum and the approach to assessment, it will not be valued as highly as a more traditional, exams-based approach. Hence students who might benefit from the alternative qualification choose the more highly esteemed award, perhaps with failure or loss of motivation and interest in education as a result. If, on the other hand, they do choose the alternative, they risk losing future educational or occupational opportunities because their credential is not respected.

New Zealand already has experience of running two awards at one level, during the period where both University Entrance and Sixth Form Certificate were offered in Form Six. One of the major reasons for the ground-swell of opposition that led to the abolition of the UE examination was the recognition of the problems outlined above. Massive increases in retention rates changed the nature of the senior school. University Entrance was unsuitable for an increasing number of sixth formers, yet it was not possible for teachers or students to take Sixth Form Certificate seriously while the curriculum was dominated by the requirements of the external examination. Students felt obliged to enter the UE exam; for many the result was failure and an end to their education. If new proposals for the Framework result in several different qualifications being offered at one level it is likely that some will have higher status than others, with similar results.

Concern about the development of an inequitable two-tier system was evident in the membership consultation. Many teachers considered that it would not be desirable to end up with two separate awards at one level, and that any alternatives had to be part of a coherent model.

There are also issues of manageability associated with a dual or multiple qualifications model. These have a bearing on equity in that larger or more wealthy schools are more likely to have the resources to staff separate classes for the different qualifications. The reality for most schools, however, would be that they would either be forced to choose one qualification and deny students the possibility of the alternative, or to attempt to run two or more qualifications, generally within the same class. This would place a greater burden on teachers and the school in planning a programme to cover the different qualifications and in running two philosophically and practically different assessment regimes at the same level. Under these circumstances, the distinctive features and perceived advantages of either system might disappear. Teachers have already had some experience in operating a dual system during the trials of unit standards; while most accept the necessity of a transitional period, it is clear from the consultation that the additional workload and philosophic confusion of two separate qualifications at one level is unsustainable in the long-term.

8.   Implementation of Issues for Mäori

There are particular issues of workload, training and ongoing support for Mäori teachers who represent a very small fraction of the total secondary work force.

These issues relate to the expectations schools have of Mäori teachers and of the roles they should play in schools. Attention will need to be paid to how more Mäori can be recruited into teaching and how they can be retained in teaching

It is clear from teacher responses to the Inquiry Questionnaire that a very large majority of teachers had no understanding of the needs of Mäori children. There is a need to address the issue of how the teacher work force may be trained to take a more bicultural perspective to education. To achieve this, what is required is:

- greater professional development opportunities for teachers

- the provision of resource materials

- the provision of ongoing advice and guidance.

In recent years the education sector has been subject to a major programme of structural change. Significant features of the change include the new focus of education policy and the identification of the Treaty of Waitangi as one of the critical structural features of this new policy environment. That said, it is far from certain what this means in practice. The inclusion of the Treaty of Waitangi in educational discourses makes transparent the need for the further development of education in this country to be approached from a model which has at its core the validation of dual heritages, derived from both Mäori and western traditions. The development of the Qualifications Framework, for example, is one such change which will need to operationalise this notion. At present there is an urgent need for the articulation of the implications of the Qualifications Framework for Mäori education in the secondary sector.

9. **The Involvement of Teachers in Decision-making**

Successful implementation of any educational change requires the understanding and support of those who have to make it work. Without this, they will inevitably subvert it, either knowingly or simply through lack of understanding or commitment.

Prior to the establishment of NZQA, it was accepted that the representatives of secondary school teachers should be present in key forums where decisions and policy recommendations were made about secondary school curriculum, assessment and qualifications. Given that PPTA is a voluntary organisation representing some 95 percent of secondary school teachers, it was acknowledged as the appropriate vehicle to convey their views on professional as well as industrial matters. PPTA had three representatives on the former School Certificate Examination Board, two on the Universities Entrance Board, and three, including a principal, on the Secondary Schools Board of Studies, which succeeded the other authorities. PPTA had (and still has) its own Curriculum Advisory Committee and the facility to set up *ad hoc* committees on relevant professional issues. It was accepted that PPTA would consult members in every secondary school about important issues related to curriculum and assessment and that this consultation would be fed into the decision-making process. PPTA representatives were generally respected in those forums because their views were grounded in current classroom experience and developed on the basis of wide consultation.

PPTA did not always get its own way, and inevitably compromises were made, but in general teachers were supportive of curriculum and assessment changes because they

had had the opportunity to have a significant input into the decisions. It is perhaps no coincidence that teacher hostility and unease about assessment change has come about since PPTA was excluded from representation at the highest level of the new Qualifications Authority — presumably to avoid what was seen as the 'capture' of the system by the providers.

Clearly, the establishment of NZQA required new structures, since it was now to cover the full range of qualifications in New Zealand, rather than secondary schools alone. However, from its inception, there was no facility for PPTA, or in fact any representatives of secondary teachers, to be present at Board level of NZQA.

The consequences of this took some time to emerge. Since the initial design of the Framework was consistent with established and well-supported PPTA policy, PPTA remained supportive in the early years of the Framework's development. Furthermore, teachers' attention was focused elsewhere in coming to terms with the administrative and industrial restructuring of Tomorrow's Schools.

The absence of teacher representatives at the highest level meant that when the decision was taken in 1992 to abandon achievement-based assessment and move to a single standard (credit/no credit) model, there was no consultation with secondary teachers. To be fair, this decision was taken at a time when teachers had imposed a moratorium on both the Curriculum and Qualifications Frameworks for separate, industrial reasons. However, it meant that a fundamental change had occurred in the design of the Qualifications Framework without the involvement or even the knowledge of the people who would have to make it work in schools.

Teacher input is important not only at the highest level of decision-making on qualifications. At development level it is indispensable.

It is true that NZQA has involved many individual teachers at the level of developing and trialling unit standards and moderation processes for general education subjects. Despite the inevitable problems that come with any innovation, teachers in many of these subjects (for instance, geography and English) do see a congruence between the unit standards and the national curriculum statements. Further refinement is needed to ensure that they truly reflect the intentions of the curriculum and that the standard is set at a level that is neither unreasonably demanding nor unacceptably low. Where teachers have had a major role in the development there appears to be a greater sense that something worthwhile can be achieved in the long run.

However, teachers appear to have had far less involvement in the development process of subjects under the control of an Industry Training Organisation (ITO). It needs to be recognised that if an ITO-run subject is to be taken in a substantial number of schools, it is essential that teachers are part of the development process.

It is essential, too, for teachers to have confidence in the moderation process, which must be both trusted and trustworthy. This is more likely to occur where they have been involved in its development.

10. Workload and Stress

No qualifications system can succeed if the assessment arrangements involve unacceptable levels of workload and stress for learners and teachers. It is abundantly

clear from the membership consultation that there is a high level of concern amongst teachers about this issue in relation to the Framework-style of assessment (2297 mentions).

It is more difficult, however, to quantify the increase in workload or to propose solutions, for a number of reasons. Firstly, many of the responses expressed a high level of anxiety but gave no specific detail to indicate which features of the Framework were the major factors in increasing workload. The likely reason for this is the fact that many of the respondents have no direct experience of Framework-style assessment. Nevertheless, there were also enough responses from those involved in unit standards trials or informal trialling to suggest a number of aspects of the Framework which influence teacher and student workload. It is necessary to distinguish between those which are transitional and those which would be inherent features of the new system.

A further complicating factor is the general increase in teacher workload for a host of other reasons including the requirements of other agencies such as the Education Review Office, the introduction of more formal appraisal systems and the introduction of the New Zealand Curriculum Framework. The latter is often inter-related with the Qualifications Framework, for instance in mathematics and science subjects, where teachers in the unit standards trials were grappling with curriculum innovation as well as a new method of assessment. Many of the other factors are not attributable to the Qualifications Framework but have an inevitable bearing on teachers' overall responses on workload issues. The Inquiry noted that PPTA is attempting to deal with these matters in other forums, so the focus of this report is to attempt to identify and propose solutions on workload matters related to the Qualifications Framework.

Finally, there is the unquantifiable factor of the stress associated with implementing a change which many teachers feel has been increasingly imposed from above without adequate consultation with the people who will have to make it work. The loss of control, and the feeling that legitimate questions about educational validity and manageability have not been addressed, have certainly affected teachers' motivation and desire to find solutions - hence this Inquiry.

More specific issues identified by in the survey were:

- inadequate time for trialing before implementation (745 mentions)

- pressures associated with re-assessment demands (662 mentions)

- reinventing the wheel in each school (606 mentions) and

- poor communication and publicity (472 mentions)

A further source of information on this issue was NZQA's 'Report on the 1996 School Trials Surveys', which covered 337 respondents in trials of biology, physics, history, science and chemistry. Four major factors which could affect workload were ranked as follows:

- Re-assessment (most significant)

- Assessment for dual qualifications

- Record-keeping

- Moderation (least significant)

Writing assessment tasks and the actual process of assessing student work were also identified by the respondents as imposing significant workload demands. Gilmore (see Chapter 3) concluded that the current workload associated with the trials would not be sustainable on a long-term basis, but that "the long-term situation may not be as severe as that experienced in the trial phase".

Our conclusion is that *operating the Framework style assessment model as it currently exists and at all three levels (Years 11, 12 and 13) will probably produce an unmanageable workload in the transitional period and at least in the medium term.*

11. Funding

There are two issues of funding in the Qualification Framework which contribute to the difficulties faced by teachers and learners. The first is the added cost of running two parallel assessment structures in the final three years of secondary education. The second is the extent to which fees for qualifications earned in secondary school should be paid by the recipients of the qualifications (or their parents).

There are currently two parallel assessment structures operating in the senior years of secondary school. Assessment for the new National Certificates (through accumulation of unit standards) is occurring in parallel with School Certificate examinations, Sixth Form Certificate assessments, and University Bursaries examinations. All require learners to pay fees, and all create assessment workloads for learners and assessment and administrative workloads for teachers.

The fees requirement in 1996 for students who were engaged in unit standards plus either School Certificate or University Bursaries examinations were messy, reflecting the complexity of the systems. All students were expected to pay the standard fees for the national examinations, unless Financial Assistance was claimed and granted. Additional fees associated with assessment for unit standards were charged in some circumstances, as outlined below:

- learners who were only assessed against trial unit standards did not pay the hook-on fee ($25) in 1996. Payment was deferred until the learners were assessed against unit standards in subsequent years. Unit standard results reported as part of the trials scheme did not attract credit fees ($1.00 per credit)

- learners who received unit standard results for any other subjects apart from trials subjects were required to pay both the hook-on fee and any credit fees for these subjects

- where students were receiving Financial Assistance for the existing examinations, credit fees were waived for learners who had Financial Assistance granted for current qualifications in 1996. The waiving of this fee only applied to unit standards assessed within the school. These learners were required to pay the hook-on fee of $25 unless they were only being assessed against trial unit standards

A special system of fees also applied in 1996 for students taking part in assessments for unit standards and one or more Sixth Form Certificate subjects. SFC learners were required to pay an all-inclusive fee of $25. All SFC learners who were assessed against any unit standards in 1996 were required to pay the fee. This fee also applied to 1996

trials unit standards. Those learners who had paid the fee did not have to pay any credit fees for unit standards assessed within the school in 1996. Any unit standard assessed by a provider outside the school incurred the $1 per credit fee.

These arrangements have changed in 1997. In addition to fees for the national examinations and Sixth Form Certificate, there are fixed charges for students assessed for unit standards. For students who have not hooked on previously the fee is $30 which includes the one time payment of their hook-on fee and all unit standards reported in 1997. Students who have hooked-on previously will only pay $15, irrespective of the number of credits they have reported during 1997.

The Qualifications Authority has advised that these low fees for unit standards are not sustainable for more than one further year. In essence, the Authority is running two systems of assessment on the income of one. The likely casualties, if this is not, resolved, will again be teachers and learners.

One of the clear ways to reduce the costs to students of the NQF would be to transfer the current Government subsidy of $5.1m for School Certificate, making it available for Framework related assessment.

The other funding issue which needs to discussed is the extent to which the assessment and administrative costs for qualifications earned by learners who are still at secondary school should be paid for through Vote Education. Currently, learners or their parents pay all costs except for the Government subsidy of $5.1 million for School Certificate.

The consultation with PPTA members showed very little support for total reliance on fees paid by individual students (103 responses), and strong support for total reliance on Government funding (1554 responses). A middle course was favoured by 1059 respondents.

With the proposed rise in the school leaving age to 17 years from next year, a substantial proportion of learners' secondary school qualifications will be earned while they are compulsorily attending secondary school. The Government is withdrawing income support currently available for 16- and 17-year olds who are not at school and not employed, arguing that these young people should be attending school. There seems to be a sound argument that Government should therefore start paying a higher proportion of the costs of running assessments for qualifications in the senior secondary school.

12. The Need for a Long-term Change Strategy

Implementation of substantial changes in education places extra demands on schools, teachers and learners. In recent years, secondary school learners and teachers have been facing new curricula in most subject areas, as well as major changes in assessment practices arising from implementation of the Qualifications Framework. For these changes to be handled well by teachers and learners requires a strategy of systematic and resourced management of change, which to date has been lacking.

In particular, the extra expenses and workload associated with the period of transition from old systems to new systems need to be recognised and special additional resources provided during this period. In the senior secondary school, there will be dual

assessment systems operating for some time to come. Unless additional support is made available during this period, it is unrealistic to expect secondary schools to be able to devote the time and energy to get new systems up and running properly. The inevitable result will be that the transitional period will drag on, because trust in the new systems is a prerequisite to retiring older systems. This result is the 'worst of both worlds'—added costs and added workload without the satisfaction of operating the systems properly.

A properly planned and funded transition would allow measured and thorough establishment of the new systems over the course of three or four years, while the existing systems are maintained properly until either they could be retired gracefully, or their continuing value had been established.

In the period of transition the Inquiry believes it is imperative that Government recognise that change of this nature requires both physical and financial support. The set-up costs need to be clearly identified in order that they not be confused with the ongoing operational costs, which may be considerably less.

REDESIGNING UNIT STANDARDS

Taking into account the criteria presented in Chapter 6 and the issues discussed in Chapter 7, the Inquiry decided that, if Framework assessment was to be both effective and manageable, some significant changes were needed in the design and use of unit standards. Because most of these changes have been discussed at some length earlier in this report, the educational arguments for them are summarised quite concisely here.

Additional attention will be devoted to consideration of the workload implications of the proposed changes. Workload is a vital issue to teachers, and the Framework will only be able to be implemented, if its assessment and administrative procedures are manageable.

1. **Provision for merit and excellence to be recorded in unit standard assessments**

   The case for including one or two merit steps, for performances that substantially exceed the requirements for awarding credit, was extensively covered in Chapter 7. Most of the supporting arguments relate to motivational issues, which link to section 5 of Chapter 6. The Inquiry believes the addition of merit steps is essential if unit standards are to be widely accepted as a model for assessment in the senior secondary school, and to contribute effectively to enhancing student learning.

2. **Avoiding large numbers of small unit standards**

   In Chapter 7, we presented a case for restricting the number of unit standards typically assessed in a year-long general education course. We suggested a maximum of about 6 unit standards, and a corresponding average size of at least 4 credits per unit standard. These suggestions were intended to reduce fragmentation of the curriculum, while providing a rich enough picture of student achievement to allow awarding of merit and excellence grades in most unit standards. With fewer unit standards to cover, teachers are likely to offer students more than one opportunity to demonstrate their skills and knowledge for each unit standard. Students are also less likely to fail a unit standard because of one mistake or an 'off-day'.

   The demands for task design, assessment and re-assessment, recording and moderation are clearly greater for a large number of small unit standards than for the reverse. It is of course possible for teachers to group several smaller unit standards into a single assessment task, but assessment and recording requirements will still be complex because it is necessary to record achievement separately for each unit standard. Including fewer and larger unit standards in a course should have clear benefits for teacher and student workload.

3. **Less detailed requirements for content coverage**

   One significant source of additional workload, both assessment and re-assessment, is the inclusion in unit standards of very specific assessment coverage requirements. These requirements are spelled out in the form of range statements for each aspect to be assessed. If these range statements require detailed and specific coverage of particular contexts, teachers may need to design several different tasks to ensure that all components of the aspect have been covered. This could happen even if they are

confident that adequate knowledge and skill in the aspect being assessed has been demonstrated in the first task, and should transfer to other similar contexts.

It has also been recognised that first editions of unit standards often spelt out unnecessarily low level elements and performance criteria which could have been subsumed into other, more holistic statements. This too, created unnecessary workload as well as leading to criticisms of a 'dumbed down' curriculum. The removal of redundant elements and performance criteria is another change needed in order to address the problem of excessive workload.

The Qualifications Authority has already begun to address these issues. As unit standards are rewritten, range statements are being modified to remove unnecessary items or to move them to special notes to be used as guidance rather than as absolute requirements. The number of performance criteria per aspect is also being restricted to more manageable levels.

These changes will allow teachers greater flexibility to choose learning experiences and assessment tasks for their students, and to exercise greater professional judgement in determining if students have provided enough evidence that they meet requirements for standards. The more holistic criteria will slightly complicate moderation of the assessments, but in the Inquiry's judgement the gains substantially exceed the losses.

4. Changed expectations about re-assessment

Re-assessment is a distinctive feature of the Framework. In Chapter 6 we argued that students should be given more than one chance to demonstrate their attainment of required standards. This might occur through the use of more than one assessment activity in each unit standard, but it also could occur through opportunities to be re-assessed after falling below the standard on the first attempt.

Re-assessment has created major workload stresses for teachers because schools have not traditionally been organised to allow this to occur. If it is seen as desirable to give students more than one opportunity to achieve the standard, then school timetables and planning by subject departments need to take this into account. This means planning time for re-assessment within the programme, rather than attempting to deal with it outside class time. At present this may clash with the need to cover the prescription for an external examination. This suggests the need for a co-ordinated qualifications system with a single model operating at each level.

Some lessons have been learned from the trials — these need to be disseminated to avoid the situation where each school and teacher reinvents the wheel.

Fewer, larger unit standards are part of the answer. A realistic policy on the number of re-assessment opportunities (for instance, one per task) is also essential. It may also be useful to provide a standard collection of re-assessment tasks, while still leaving teachers free to develop the initial tasks which are subject to moderation. With experience, teachers are likely to develop other strategies, such as the use of tasks from previous years, either as re-assessment tasks or as formative assessment tasks so that fewer students require re-assessment.

Another part of the solution involves setting the standard for credit at a level which is a realistic challenge for most students. This inevitably requires some rewriting of standards

and adjustment of practice in all subjects. Once a suitable level has been set, fewer students are likely to need re-assessment. This is also related to the issue of providing a challenge for excellent performance by adding one or two steps above the credit level. When a workable merit and excellence system is developed, the level for credit need not be set so high, reducing the number of re-assessments likely to be needed.

5. Restricted use of multi-level assessment within a class

A further consequence of the development of 'merit steps' would be the removal of the largely unrealistic expectation that teachers could provide challenges for able students by offering unit standards at two different levels within the same class. This approach was NZQA's response to widespread criticisms that the can/can't (pass/fail) method of assessment did not recognise excellence or motivate students to achieve higher levels of performance.

The multi-level approach may be possible for some subjects, particularly where the focus is on skills and the higher level unit standard is simply a more sophisticated version of the lower level (as, for example, with transactional writing in English). However, it is almost impossible where the emphasis at the higher level is on entirely different content which requires a significant amount of input from the teacher (as, for example, in most mathematics or science unit standards). Even where it is theoretically possible, the workload for most teachers would be unsustainable. To develop two entirely different sets of assessment and re-assessment tasks and schedules, and to manage the preparation and teaching of two different sets of content within the same class is an unreasonable demand, particularly given the size of many New Zealand senior secondary school classes.

Merit and excellence steps acknowledging superior performance within the same programme of work are potentially a more realistic alternative, provided that the required assessment model is developed and, if necessary, modified in consultation with teachers to ensure that it is manageable.

6. Improved approaches to moderation

Interestingly, neither the QFI membership consultation nor the NZQA survey of 1996 trial schools revealed moderation requirements as the major factor in teacher workload. Comments in the QFI consultation tended to focus more on the difficulty in achieving adequate moderation than on workload issues. In the NZQA survey moderation was the lowest ranked of the four factors suggested as possible sources of additional workload.

Nevertheless, it is clear that the requirement to prepare a sample of assessment tasks and schedules at least a month before they are given to students does place teachers in charge of subjects under additional pressure. If the task is returned promptly by the moderator, there is a pay-off in that the work is ready well ahead of when it is needed in the classroom, with the likelihood of better quality tasks, greater efficiency in doing the assessment, and a reduction of stress at the other end of the process.

However, it must be acknowledged that the system breaks down, with additional stress to teachers, when moderators fail to meet the deadlines for returning work, particularly if they require changes to the assessment task. A number of comments focused on the workload of teachers who are moderators and suggested that the 'secondment' of a smaller number of teachers as full-time adviser-cum-moderators might be a more

workable solution. In theory this model could be developed to kill several birds with one stone — to reduce stress on teachers by ensuring the prompt return of moderated items, to enhance consistency by reducing the number of moderators, and to provide advice.

A further possibility that might be explored is a greater role for Nationally Prescribed Tasks, which have the advantage that teachers do not have to design the task or assessment schedule. A related approach, without the compulsion, would be to provide a 'bank' of tasks and assessment schedules which had been pre-moderated, so that teachers could choose tasks to suit their teaching programme from within the bank. It is even possible that in some subjects a standards-based reference test model might be a feasible option, with the potential to reduce teacher workload and provide consistency, providing it was a valid way of assessing the knowledge, skill or understanding in question.

In all discussions of the demands of moderation, the potential benefits also deserve attention. Most forms of moderation involve communication between or among teachers who are teaching the same subject in different environments. The professional development offered by this arrangement has frequently been remarked on by participants in moderation. These ways of achieving greater consistency of standards lead to very fruitful interchanges which enhance teaching and learning, as well as assessment.

7.   Avoiding dual assessment

Assessment for two qualifications within a single year has been a source of confusion and stress for students. It clearly has also been a source of additional workload for teachers trialling or implementing unit standards, with different and sometimes conflicting requirements for coverage, assessment, record-keeping and moderation. To avoid these stresses, it is necessary to ensure either that a single qualification is offered at each year level, or that any alternatives (for instance to cater for the desire for both a Bursary award and alternative programmes in Year 13) are co-ordinated and linked.

8.   A more realistic time-frame for implementation

It is abundantly clear that not all schools or subjects would be ready for the disappearance of Sixth Form Certificate at the beginning of 1998. To proceed with this time-frame would result in an unsustainable workload for many and in the process discredit even those aspects of the Framework which are actually or potentially desirable.

On the other hand, the present state of limbo and uncertainty is undermining many teachers' and schools' motivation to prepare themselves for change. Unless this alters they will still find themselves unready even at a future implementation date. The same problems of unsustainable workload will occur and the innovation will fail.

For this to change, teachers need to believe that the system will be worthwhile and manageable for themselves and their students. The criteria outlined in Chapter 6 are designed to provide a basis for making this judgement, and the changes to unit standards proposed in the present chapter bring them more into line with these criteria.

It is also essential that the time-frame for any changes be clearly published to give schools and teachers certainty in their planning. The time allowed for preparation must also be realistic.

9. Support and resources for effective implementation

The consultation made it clear that members see themselves reinventing the wheel in many aspects of the Framework — a further addition to workload pressures. While many teachers prefer to write their own assessment material, it is essential that they have access to exemplars of assessment and re-assessment tasks and schedules as well as samples of assessed and moderated student work and templates for record-keeping and reporting. This is particularly important for one-teacher departments, and for teachers in small and isolated schools where all the burden for assessment in a particular subject falls on a single person.

The provision of Assessment Guides for all but the first two trial subjects is a positive step, but it is vital that these are made available to all schools and updated with material that has been rewritten in the light of the trials. It was inevitable that the first editions contained untested 'bright ideas' which in some cases proved unworkable in practice. It is also essential that the experience of the trials be made accessible to all schools rather than leaving those not in the trials to stumble along and repeat earlier mistakes.

Adequate and ongoing professional development is also essential for all teachers who will be implementing the changes. Eighty-eight percent of respondents to the NZQA survey of 1996 trial schools indicated that involvement in the trials had provided useful professional development. The factor cited most often was having the chance to meet other teachers and exchange ideas. Similar opportunities for all teachers involved in the changes would be likely to provide teachers with both official and word-of-mouth strategies to reduce stress and workload.

It is particularly important that the extra costs and workload during the period of transition to a new system of assessments be adequately provided for. Failure to make appropriate provision will drastically slow down the transition and cause much greater stress for teachers and learners. The end result could be partial implementation extending over many years—perhaps the worst possible outcome.

CHAPTER 9

FUTURE SCENARIOS FOR SECONDARY SCHOOL QUALIFICATIONS IN NEW ZEALAND

In this chapter, the Inquiry draws together threads from all previous chapters and evaluates possible scenarios for the overall structure of assessment in the senior secondary school. The criteria presented in Chapter 6 are used to reject some scenarios and support others.

Throughout this chapter where 'unit standards' or 'the Framework' are referred to, what is meant are unit standards which have been re-developed in line with the Inquiry's recommendations in Chapter 8.

The Inquiry has no desire to see unit standards or the Framework used extensively in the senior secondary school unless these modifications are made.

School Years rather than form levels are used: Year 11 rather than Form 5, Year 12 rather than Form 6, and Year 13 rather than Form 7.

Scenario 1: — **Retire the existing School Certificate, Sixth Form Certificate, and University Bursaries assessments, and fully implement the Framework in Years 11, 12 and 13.**

The Inquiry rejects this scenario for at least four reasons.

First, it is apparent from the PPTA membership consultation and from soundings of public and political opinion that this scenario could not be implemented. In terms of our criteria, the scenario cannot pass muster under the first or second criteria: it would not be trusted and it would not meet the needs and aspirations of all.

Second, we are convinced that retention of the University Bursaries examinations in some form very similar to their current form is essential for the foreseeable future.

Third, a very high proportion of students now complete four years at secondary school. We see no need for most students to devote effort to earning credits towards qualifications in Year 11. Rather, we contend that Year 11 should be regarded as a further year of core education, albeit with some freedom to narrow subject choices a little more than in earlier years.

Fourth, we see distinct advantages for student and teacher stress and workload if assessment towards qualifications is delayed until Year 12 for most students. In our consultation with PPTA members, a number of comments from teachers were sceptical about the manageability of framework style assessment across three entire years of secondary school, for instance:

- "The system is not sustainable at levels 1, 2 and 3. The workload and complexity would be impossible."

- "I seriously wonder about the workload with unit standards when we are running them at levels 1, 2 and 3."

Students of average and above capabilities could be expected to earn level two unit standards in Year 12, and could then be credited (without formal assessment) with the level 1 unit standards which underpin the level 2 standards they have passed. For instance, a student passing level 2 trigonometry could be credited also with level 1 trigonometry. This would reduce the assessment load per unit standard awarded.

Students who were less capable might be expected in Year 12 to attempt level 1 unit standards, or a mix of level 1 and level 2 unit standards. Most of these students should be much more successful in obtaining credits in Year 12 than they would have been in Year 11.

Scenario 2: — Written external national examinations at two or three of Years 11, 12 and 13. No Framework assessment and abandoning of internal assessment components of School Certificate and University Bursaries assessments. Retirement of Sixth Form Certificate.

The Inquiry rejects this scenario for at least three reasons.

First, it is apparent from the PPTA membership consultation that this scenario could not be implemented. In terms of our criteria, the scenario cannot pass muster under the first or second criteria: it would not be fair or trusted and it would not provide sufficient choice to meet the needs and aspirations of all.

It would be unfair in that it would distort the content of many subjects which currently use internal assessment components to assess important skills which cannot be assessed on written examinations. What would be even more unfair is that it would remove any opportunity for students to earn national recognition for their efforts in subjects which are not assessed at all through written national examinations (such as practical art and physical education).

Second, it would not meet our seventh criterion: it would be a one-shot assessment with very limited possibilities for feedback on progress.

Third, for many students and teachers it would not meet our fifth criterion: it would not be motivationally sound.

Scenario 3: — Abandon the Framework. Continue with School Certificate, Sixth Form Certificate and University Bursaries assessments, as currently operated.

The Inquiry rejects this scenario, for the very reasons the Qualifications Authority and the Framework were established. A point had been reached where the high retention of students to the upper secondary school meant that alternative courses and qualifications were needed for a substantial proportion of Year 11, 12 and 13 students. There were worthwhile areas of learning for these students, but no way of crediting that learning towards qualifications available through tertiary institutions and private providers. This model fails seriously under criteria 2, 3 and 5: it does not provide for the needs and aspirations of all learners, it does not allow the cumulating of achievement across institutions, and it fails to meet the motivational needs of all learners.

Scenario 4: — Implement the Framework at Years 12 and 13. Offer written external examinations at Years 11 and 13 to promote excellence, but do not credit achievement on them towards Framework qualifications. Retire the School Certificate, Sixth Form Certificate and University Bursaries assessments.

The Inquiry does not favour this scenario. We believe that it represents too sharp a change from current practice, with the abolition of the University Bursaries examinations in particular likely to cause difficulties. It is unlikely to be trusted (criterion 1 in Chapter 6) or seen to be inclusive (criterion 2). There is substantial support from PPTA members for the Framework to play a prominent part is assessment at Year 12, but there is also strong support for the retention of University Bursaries assessments at Year 13.

The Inquiry does see merit in encouraging the most capable students to test their skills and understanding in external competitions, such as the New Zealand Education and Scholarship Trust examinations, or the National Bank Mathematics tests, or the Westpac Chamber Music contest. We would be less happy to see written tests or examinations aimed at most or all pupils in a given year, because such tests would be restricted to only some curriculum areas, would be inappropriate for many of the students, and yet could have a major impact on the focus of school programmes.

Scenario 5: — **Implement the Framework at Years 12 and 13. Offer written external examinations bearing Framework credit at Years 12 and 13. Retire the current School Certificate, Sixth Form Certificate and University Bursaries Assessments**.

The Inquiry does not favour this scenario. It sees no need for external examinations at Year 12. Responses to the consultation with PPTA members revealed only 368 'votes' in support of external examinations in Year 12, alone or in combination with Framework assessments. In contrast, 1843 votes favoured options which involved only internal assessment.

Scenario 6: — **Implement the Framework at Years 12 and 13. Retire Sixth Form Certificate as soon as the Framework is ready for full operation at Year 12. Retain the University Bursaries assessments with adaptations which allow them to be credited onto the Framework. Continue to offer School Certificate assessments, but not for credit on the Framework**.

Scenario 7: — **Implement the Framework at Years 12 and 13. Retire Sixth Form Certificate as soon as the Framework is ready for full operation at Year 12. Retain the University Bursaries assessments with adaptations which allow them to be credited onto the Framework. Retire School Certificate.**

The Inquiry regards these last two scenarios as the only viable scenarios it has considered. The only difference between them is the retention or retirement of School Certificate. The Inquiry would prefer Scenario 7, because it believes that School Certificate no longer serves a particularly useful purpose now that almost all students will be remaining at school for at least one year and often two years after they sit School Certificate. Retiring School Certificate would free $5.1 million of Government support and even larger sums in student fees which could then be used to enhance implementation of assessments for qualifications in Years 12 and 13. Nevertheless, the Inquiry recognises that School Certificate is perceived by a significant number of politicians, teachers and members of the community as serving a purpose, and therefore its retention in the meantime may be insisted upon.

We now present a detailed account of how our preferred option (Scenario 7) would operate, followed by a description of the steps and support required to properly implement it. Some of the supporting arguments have been presented earlier in this chapter or in previous chapters, and will not be repeated in detail here.

SCENARIO SEVEN — OPERATIONAL DETAILS

YEAR 11

The Inquiry decided that there is no need for most secondary school students to be earning credits towards qualifications in year 11. With expectations of what students need to learn constantly growing, there would be considerable advantages in allowing an extra year of core education before qualifications became a focus. The school leaving age has already risen by one year during the 1990s, and may increase by a further year, so there is ample scope to defer until Year 12 a focus on earning qualifications. Current plans would see the Framework widely used at Year 11; our proposal, however, will allow teachers to focus their efforts at Years 12 and 13, causing less stress and allowing more effective implementation at two levels than would have been possible at three levels. This aspect of our proposal was justified more fully at the beginning of this chapter, in the discussion of Scenario 1.

The retirement of School Certificate would permit continuation of a broader core curriculum in Year 11, with reduced specialisation. In the less desirable event that School Certificate continues, the Inquiry concluded that it should be seen as an option for a smaller proportion of Year 11 students, should not be credited onto the Framework, and should not be subsidised by the Government. It would serve a similar role to other challenges made available through schools, such as the National Bank Mathematics test and the Australian Science, English and Mathematics tests.

YEAR 12

In Year 12, students will be able to exercise considerably greater choice of learning areas than in Year 11, and will make a substantial start on earning credits towards qualifications on the Framework.

Students of average and better capability will pass a substantial number of level 2 unit standards in Year 12. Some will pass unit standards at higher levels. They can also be credited, through recognition of prior learning (RPL) provisions, with level 1 standards which are subsumed beneath the level 2 standards they pass. This approach will significantly reduce the assessment workload in relation to the number of credits awarded. It will also be appropriate for some of these students to be formally assessed for some level 1 unit standards, where these reflect their current level of development in a subject or aspect of a subject.

For students who are a little slower in their educational development, Year 12 will be a good year to work on level 1 credits. Most of these students would probably have experienced little success if they had attempted level 1 credits in Year 11, and might have lost confidence in their ability to earn credits. Delaying assessment for level 1 credits until Year 12 is advantageous for most of these students.

The removal of Sixth Form Certificate will be welcomed by many teachers, once the revised Framework is properly implemented. Of the three existing secondary school awards, it has the

lowest support. Teachers dislike the complex and unsatisfactory procedures for moderation based on School Certificate marks students were awarded the previous year. These arrangements do not reward excellent teaching or particularly committed learning in a subject. They also do not suit specialist subjects such as music and art, which may enrol students with particular expertise not reflected in their average mark across several School Certificate subjects.

The retirement of Sixth Form Certificate will also remove the extra workload for teachers and students now associated with the operation of dual assessment systems in Year 12.

YEAR 13

Central to our proposals for Year 13 is the conversion of the University Bursaries assessments to a standards-based model, so that they can be credited onto the Framework. This will require very little change in examination prescriptions or procedures, but it will require annual moderation of standards in each subject when deciding the scaling of marks or the minimum marks for awarding credit (pass), credit with merit, and credit with excellence. The existing arrangements for inter-subject moderation through a statistical scaling process will need to be dropped, and replaced by careful specification of standards to ensure reasonable parity of demands among the different subjects.

Unless such changes are made, the Inquiry does not believe there is any satisfactory way for performance on Bursary to be credited onto the Framework. Bursary at present uses norm-referenced procedures which cannot be directly linked with a standards-based system. An intermediate step of defining and applying standards is needed. Bursary results could still be reported to students on a norm-referenced, percentage mark basis if this was desired, but credit onto the Framework would require comparisons between students' performances and the required standards.

The externally examined component of each Bursary subject would be expressed as a few unit standards. Schools could offer those unit standards through the national external examinations only, or through internal assessment of individual unit standards. Students who were dissatisfied with their internally assessed results could have the option of sitting the external examination, in the hope of improving their results. In effect, this situation would be a little like the situation when University Entrance was available through both internal assessment (accrediting) and external examination. Some schools did not offer accrediting, while students who were not successful through the accrediting route had the option of sitting the external examination. The external examination also acted as a check on the consistency of standards for accrediting in different schools.

Internally assessed components of a Bursary subject would also be expressed as one or more unit standards, and would be assessed and awarded in each school, with whatever moderation was agreed to be required.

Standards for credit, credit with merit, and credit with excellence will need to be established for each Bursary examination, with corresponding standards used for each of the constituent unit standards. We suggest that the pass (credit) level be set at a level approximately equivalent to a mark of 50 percent in the current awards, with 'merit' awarded for the equivalent of an A pass (66 percent and above), and 'excellence' for the equivalent of scholarship level performance in the current awards.

Students who met the required standards in the external examination would be credited with all of the examination's constituent unit standards, at the level achieved overall (pass, merit, or excellence). Students who took the internal assessment route would be credited with each unit standard separately, at the level achieved in each. A comparison of the two routes indicates a 'swings and roundabouts' situation. Some students could be credited with all units through their overall examination performance, even though they did not meet the standards in one or more constituent unit standards. They could achieve this by substantially exceeding the requirements in other unit standards. On the other hand, some students could miss all unit standards because their overall performance in the external examination did not meet the pass requirements, but yet have produced work in constituent unit standards which would have earned credit if assessed separately.

Students' achievements would be recorded on the Framework as unit standards credited (in some cases with merit or excellence). The Framework record would make no distinction between unit standards gained through external examinations and the same unit standards gained through internal assessment. A similar situation applies at present in School Certificate, where few users of School Certificate results distinguish between results obtained via the externally examined or internally assessed pathways which are available in mathematics, English and science.

With the externally examined component of each Bursary subject also available as several unit standards, students who were not suited or motivated to tackle a whole Bursary subject could work on a subset of the unit standards which suited their talents or interests. This would make additional pathways available to students, and reduce the gulf between being a 'Bursary student' and a 'non-Bursary student'.

With these changes, several strands or pathways will be available to students. Many students with good academic credentials and who are aiming for full-time tertiary education are likely to take the equivalent of a current Bursary course in several subjects. Other Year 13 students could be attempting diverse combinations of credits drawn from:

- full Bursary subjects (in exam or unit standard form)

- selected level 3 unit standards drawn from Bursary subjects

- level 3 unit standards not included in Bursary subjects

- level 2 unit standards

- level 1 unit standards.

Some of the most capable Year 13 students, as at present, are likely to do some of their school work at level 4, or to combine tertiary study with level 3 study at school.

IMPLEMENTATION REQUIREMENTS

Timetable

A specific timetable for implementation is proposed. It allows the next 30 months for redevelopment and trialling of unit standards for the senior secondary school, and for the associated teacher development. Some of these unit standards would be available through

national examinations or through moderated internal assessment, with others only available through moderated internal assessment. Full implementation of the revised framework at Year 12 level would occur in the year 2000, with Sixth Form Certificate retired to start the new millennium. School Certificate would not be needed after this for its role in moderating Sixth Form Certificate, although the Inquiry recommends retiring it in 2003 by which time the new system should be bedded in. The revised approach to Bursary and the Framework at Year 13 would begin in 2110.

Provision of Resources

Improved professional support in the form of enhanced assessment guides, item banks and exemplars of performances meeting or not meeting the required standards is needed. These resources would assist with reducing the work pressure which teachers are facing, particularly in the early stages of implementing the new standards-based approach. Such assistance would also reduce teachers' concerns about having to 'reinvent the wheel'. While there is a need to reward those who invest their time and skill in developing exemplar materials, there is something to be said for returning to the culture that existed amongst schools and teachers until the early 1990s, which accepted that teachers would readily exchange ideas and resources to assist each other.

Workload is inextricably linked to staffing and time to undertake the various tasks required of teachers. Teacher responses to the Inquiry questionnaire frequently identified the need for more time to undertake training, to complete assessment and re-assessment requirements, and to handle increased administrative requirements which are a feature of quality management systems developed by schools.

There is a clear need for more time for the classroom teacher to undertake the extra tasks required of them. These tasks include being familiar with assessment policies and procedures which are relevant to their subject areas, designing assessment plans, carrying out assessments, and participating in moderation procedures.

The experience of schools and teachers since 1990 is that the number and range of tasks asked of teachers has increased, as has their complexity. Record-keeping requirements, in particular, have increased very substantially. Increased administrative support, in the form of teacher aide and clerical support, would ease workload difficulties and release teachers to concentrate on their prime task – teaching.

Long-term, adequate resourcing is necessary to ensure that a high level of quality assurance is maintained. This is needed to ensure the credibility of and ongoing teacher and public confidence in the Framework. Just as important is proper provision, at a higher level, to support the transition from the current system to the new one. Costs are highest during the transitional period, because that is when the majority of teacher development must take place, when tasks will take teachers longer because the tasks are unfamiliar, when new systems must be established, and when there is a temporary double load because the old assessments are still taking place alongside the new ones.

To assist schools with the substantial initial costs, then (at a lower level) with ongoing costs, operations funding should be increased so schools can provide sufficient time release for teachers, employ and train additional clerical staff, and cover added costs for the development and duplication of assessment materials.

Professional Development

Long-term, adequate resourcing is necessary to ensure that a high level of quality assurance is maintained. This is needed to ensure the credibility of ongoing teacher and public confidence in the Framework.

Teachers need far more support in the form of professional advice and guidance and training than is currently available to them. A number of teachers reported positive experiences in their subject areas of resources provided in the form of exemplars, assessment item banks, assessment guides and examples of good practice from other schools. Other teachers reported quite the opposite experience. All teachers need comprehensive and ongoing professional advice, guidance and training.

The importance of training for teachers in reducing workload concerns and increasing their effectiveness as practitioners has been highlighted both by teacher responses to the Inquiry Questionnaire and in Gilmore's review. The experience of many teachers involved in early trials has been positive.

Implementation of future assessment systems should be accompanied, if it is to be successful, by a comprehensive approach to training for all teachers which provides for a component of initial training, and for a component of ongoing or refresher training. The Education Advisory Service should be enlarged and its resources extended to allow for more in-school work with teachers.

Participation in inter-school moderation provides its own form of professional development. Many teachers reported positively on their involvement in moderation activities surrounding the introduction of standards-based assessment. Involvement in such activities has its own costs in the form of funding teacher relief. This is a growing burden for schools. Often it has resulted in teachers being asked to take extra relief duties, and which again impacts on workload. Schools should have their relief budgets increased to assist in meeting the extra demands being placed upon them.

Pre-Service Teacher Training

The number of beginning teachers with a poor understanding of current assessment developments is cause for concern. Every provider of teacher training for secondary school teaching should ensure that trainees are adequately prepared to meet the requirements of the assessment system in whatever form it finally emerges.

With the proliferation of providers of teacher training, a requirement of accreditation as a provider should be that the training course gives instruction in assessment, which is sufficient to prepare the trainee for the classroom.

Public Education

To assist schools with the costs of implementation as well as ongoing costs, attention should be given to:

- increasing school operations funds to enable schools to employ further administrative clerical assistance and to assist with such increased costs as those associated with printing, photocopying, telecommunications and internal moderation

- training for administrative, clerical and support staff in record-keeping and other administrative requirements of the Framework.

Once agreement has been reached on the exact form of the qualifications and awards structure and the timetable for implementing the structure finalised, an intensive public campaign needs to be undertaken to explain to students, parents and the wider community how the new structure will work, and what the various qualifications mean.

Schools have experienced increasing dissatisfaction from parents and students over the uncertainty surrounding the Framework. Parents and students have a right to accurate and consistent information about the qualifications available to students as they progress through school. Not to provide such information heightens uncertainty amongst parents and students about the credibility of the qualifications for which they are studying.

Boards of trustees change in composition every three years with the next trustees election occurring in 1998. Given the considerable responsibility the boards bear in being accountable to their communities for the policies and programmes operating in their schools, Government should accept responsibility for an intensive education campaign for trustees over changes to be made to the qualifications system, once decisions have been made.

The Inquiry noted the strong efforts made by the NZQA to publicise the Framework and unit standards. It is apparent, however, that effective public education will require the wholehearted participation of schools and teachers. Parents of current students rely heavily on schools for their knowledge and understanding of new educational developments. If teachers and schools become committed to the new assessment developments, so that they are willing to explain and promote them, parents and the general public will be much more likely to come on board also.

CONCLUSION

The design which the Inquiry has chosen to support matches well the eight criteria described in Chapter 6.

- The design is standards-based, so that credits and qualifications are awarded if, and only if, learners meet the required standards

- A range of pathways and options are available to suit different schools, teachers, and learners

- Examinations and internal assessments are both recognised as approaches which may be valid for recognising achievement and awarding credits and qualifications

- University Bursaries external examinations, which are highly regarded by many stakeholders, are retained, with limited changes in moderation procedures to fit them into a standards-based qualifications system

- Undue workload for teachers is avoided by almost eliminating dual assessment   in Years 12 and 13, and by removing assessment for qualifications from year 11

- All learners can gain credits towards useful qualifications while still at   secondary   school, using them and building on them in tertiary education or workplace education

- The design should foster a motivating, constructive and manageable learning environment for teachers and learners in Years 11, 12 and 13.

CHAPTER 10

RECOMMENDATIONS

1. The Inquiry recommends that the following be adopted as criteria for determining whether a qualifications system is valid.

    *   Fair — Credits and qualifications accurately describe learner achievement, and are trusted.

    *   Inclusive — The range of credits and qualifications available meets the needs and aspirations of learners and of all sections of the community.

    *   Cumulative — Learning achieved and demonstrated in one context is accepted and credited in other contexts where it is relevant.

    *   Clear — Learners and teachers can readily obtain clear and helpful information and guidance about the content, criteria and expected standards for particular credits or qualifications.

    *   Motivating — Learners and teachers find the qualifications and assessment system empowering and motivating.

    *   Coherent — Assessment arrangements promote coherence and integration of learning and teaching.

    *   Constructive — Learners and teachers receive clear and helpful feedback on progress, and have more than one opportunity to attain the required standards.

    *   Manageable — Assessment arrangements involve acceptable levels of workload and stress for learners and teachers, and justifiable expenditure for the community.

2. The Inquiry recommends that the following modifications be made to the design and implementation of unit standards:

    *   provision for merit and excellence in unit standards

    *   avoiding large numbers of small unit standards

    *   a reduction in detail for content coverage

    *   changed expectations about re-assessment

    *   restricted use of multi-level assessment within a class

    *   improved approaches to moderation

    *   avoiding dual assessment

    *   a realistic time-frame for implementation

    *   improved support and resources.

3.   The Inquiry recommends that long-term planning take place for the following scenario:

Implement the Framework at Years 12 and 13. Retire Sixth Form Certificate as soon as the Framework is ready for all operation at Year 12. Retain the University Bursaries assessments with adaptations which allow them to be credited onto the Framework. Retire the current School Certificate.

The foregoing designed and implemented as described in Chapter 9.

Note: This scenario best fits with the eight criteria above. Its notable strengths are:

- the avoidance of extra workload and other costs associated with parallel assessments for different awards

- flexible provision for diverse needs and aspirations

- ready transfer of credit earned from secondary to post-secondary education

- strong provision for all students to work at appropriate levels and have more than one opportunity to demonstrate their competence

- and encouragement for teachers and students to work towards excellence (but not at the expense of others).

4.   The Inquiry recommends that the following be adopted as an implementation timeline for the foregoing scenario:

- 2000 — implement the revised Framework at Year 12; retire Sixth Form Certificate

- 2001 — implement the revised approach to Bursary and the Framework Year 13

- 2003 — retire School Certificate.

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