NCEA — Bane or boon? Daniel Goh

Introduction

The National Certificate of Educational Achievement (NCEA) is controversial. Anyone involved in education is likely to have an opinion on this relatively new form of assessment. Implemented as a New Zealand secondary school qualification in 2002, the NCEA is a culmination of New Zealand's search for a modern and effective secondary student qualification. The journey has been fraught with many obstacles.

This paper reviews literature concerning issues surrounding the NCEA qualification; how it came to be, the issues, critics and proponents. Bane or boon, at least in the short term, NCEA is here to stay. Understanding assessment history is imperative for the teaching fraternity to deliver fair and valid assessments. Some elucidation is provided for the introduction of what has been one of the most contentious and important changes in New Zealand's educational system in recent decades.

Education Reforms

The search for a more effective secondary school qualification emanated from the aftermath of some of the worst economic adversities faced by New Zealand for a long time; the oil crisis in 1973 and the loss of the British export market for New Zealand when Britain joined the European Economic Community.

The harsh new world of global competition led governments worldwide to look to education to produce cutting edge human capital and competitive advantage that was seen as essential for economic growth and prosperity.

The significance of globalisation to questions of national educational and economic development can be summarised in terms of a change in the rules of

eligibility, engagement, and wealth creation (Brown & Lauder, 1997, p.172).

Global competition, together with rapid advancement in technology and the need to move with the times, resulted in education reforms that included policies on social justice to reduce disparities in student achievement, increasing the proportion of students with formal school qualifications, and enhancing New Zealand's economic competitiveness by increasing the proportion of skilled workers.

The report of the Task Force to Review Educational Administration (1988)

Administering for Excellence (Picot Report) by the Labour government recommended the removal of regional Education Boards and their replacement by schools as self-managing units.

Notwithstanding structural reform, assessment and qualifications reforms are also necessary for meaningful change within secondary classrooms and schools. In the 1990s NCEA Qualifications became the standards for New Zealand Secondary School Qualifications. These were designed to better equip secondary school students with skill-based education to compete in the global economy of the modern twenty-first century.

New Zealand Qualification Authority (NZQA)

The New Zealand Qualifications Authority (NZQA), established under the Education Act of 1989, was given the mandate to develop a framework for national qualifications in secondary schools, post-school education and training.

... new forms of vocational curricula and new ways of measuring learning are required to ensure that skills students obtain at school meet the needs of employers and that the information about a school leavers' skills is maximized (Strathdee & Hughes, 2001, p.155)

To this end, four key structures were put in place: Skill New Zealand, the Industry Training Strategy, the New Zealand Curriculum Framework and the National

Qualifications Framework (NQF) — which later became the New Zealand Qualifications Authority (NZQA). The NZQA's mandate included overseeing the development and review of national standards for all qualifications in post-compulsory education and training, administering national qualifications and policies, producing criteria for the validation of courses and accreditation of provider institutions, and the endorsement of overseas qualifications.

Overseas experience

Strachan, (2001a) published information regarding countries that had reviewed or reformed secondary qualifications. Australia, UK, USA, Ireland, Germany, Italy, France, Spain, Israel and Canada's secondary qualifications and assessment practice were examined. There was no uniformity in the way each country assessed students.

Assessment usually involved a mix of school-based and external assessments.

Internationally, what was apparent was a move to assess against standards and criteria.

Curricula was increasingly being specified in outcomes, and assessed and reported against such outcomes. There was the realisation by many countries that the ranking (cohort-referenced) mark-based approach used in the past did not provide enough information about student strengths, and also hid evidence of achievement in areas of interest where standards-based assessment could supply relevant information.

The conclusion drawn from reviewing international practices is that no system is so compellingly successful that many others are persuaded to copy it – "there is no one best system of assessment" (Nisbet, 1993, p. 137 cited in Strachan, 2001b, p. 253). New Zealand chose to design its own standards-based qualifications and criteria to meet its own needs.

Unit Standards

In the 1980s the New Zealand Department of Education unanimously opted for developing achievement-based (criterion-referenced) assessment (Lee & Lee, 2000). By 1990, the National government (1990-1999) had announced a "unit standards" approach to assessment. The then Minister of Education, Dr Lockwood Smith stated:

...this new policy initiative would maximise participation and achievement in education and training, from birth throughout life and [barriers] [will] no longer exist between schools and post school education and training; all courses will lead to national qualifications regardless of the place of study..." (cited in Lee & Lee, 2000, p. 6).

NZQA planned to design and issue educational and vocational awards, qualifications and credentials through assessment by Unit Standards. These blocks of assessed learning outcomes would become the mainstay of separate learning within a given qualification and would be transferable to other qualifications. With this approach, the traditional distinction between both academic and vocational training courses was to be abandoned in favour of integration.

Criticism of Unit Standards

The main criticism of Unit Standards lies in its pedagogical and educational concerns; there is no distinction between academic and vocational subjects in assessment methods, and Unit Standards do not motivate students to excel and extend themselves (Hall, 1997). Objections emanated from schools, teachers, parents, academics and employers. McKenzie (1992) cited in (Lee & Lee, 2000, p.10) suggested that unless stakeholders gave support to new assessment methods, they would not succeed.

In assessing Unit Standards, all learners need to attain a "pass" is to perform a set of prescribed tasks to the prescribed "standard". This method failed to recognise the reality that students might not know or understand what they "can do"; they may simply "do" tasks by rote learning the requirements.

Independent reports included Curriculum, assessment and qualifications: An evaluation of current reforms, written for the New Zealand Business Round Table (Irwin, 1994). This report urged the NZQA to review and redesign its Qualification Framework and abandon the "one-size-fits-all" approach to qualifications in favour of a "pathway" approach that encompassed academic, technical and vocational standards, and would take

into account the diverse student population.

Further criticism also came from the powerful secondary teacher's union, the PPTA, which highlighted concerns about the educational validity and the lack of existing resources and professional development for Unit Standards. PPTA started the Qualifications Framework Inquiry to investigate:

Whether standards-based assessment could do justice to educational aims across all levels of the curriculum; to explore the manageability, resource and workload implications surrounding the implementation of the framework; and to suggest solutions to any problems identified by the review team (Lee & Lee 2000, p. 14).

With mounting public opposition and resistance to NZQA's approach, the government was more conciliatory, and according to Hall (1996, p.72), responded with the appointment of the Honourable Wyatt Creech as Minister of Education, followed by the resignation in October of David Hood (the first CEO of NZQA). Both events signalled a less doctrinaire approach to the implementation of the National Qualifications Framework.

By April 1996, the Qualifications Framework was broadened to provide non-unit standards-based qualifications and degrees, which were to be registered voluntarily on the framework.

In October 1996 the government adopted a solution that embraced both unit standards and norm-referenced examinations. The National Certificate of Achievement (NCEA) was launched as a certificate that recognized significant achievement across a range of learning areas, including communication and numeracy skills.

By February 1997, the NZQA Board had resolved that existing national secondary school examinations should be credited towards the newly registered National Certificate and would be fully operational across the full range of subjects. This was to become the

central qualification for senior (16 to 19 years old) secondary school students.

NCEA

The much awaited National Qualifications Framework White Paper was released in October 1999. NCEA appeared to:

...stake out a middle ground between those advocating Unit Standards, or who were at least sympathetic to what Unit Standards were attempting to do, and those who either favoured national examinations or were down right critical of Unit Standards as a form of assessment suited to school curriculum subjects (Locke & Hall, 1998, p. 183),

There were three levels: Level 1 (Year 11), Level 2 (Year 12), Level 3 (Year 13). The new Achievement Standards at each level were to be assessed by a mix of external and internal assessment. These would be recognised by achievement grades: Not Achieved, Achievement, Achievement with Merit, and Achievement with Excellence.

Each student's results would show credits gained from Achievement Standards and Unit Standards, grades for Achievement Standards, exam marks, NCEA and any other certificates. The new qualifications system was to be phased in over three years (2001-2003) starting with Level 1 in 2001.

Summarising the new qualifications policy, the Minister claimed that it provided:

...credible, quality qualifications that recognizes their (students') strengths and allow them to succeed at different levels and in different subject areas;... encouragement to schools to offer innovative programmes that embrace both the New Zealand Curriculum and a range of other options beyond the school; flexibility to maintain national standards and encourage schools and students to strive for higher levels of achievement; links between school learning, tertiary education, and the workplace, a mix of internal and external assessment within a

unified set of qualifications; results that show how well students have done against each other and against national standards; and a system that makes teacher workload manageable (QA News, December 1998, p. 13).

To help with implementing these reforms, a Ministry of Education and Development Group was formed to develop qualifications policy; and resources and the training of teachers in assessment. It also appointed subject specialist panels who were to assume responsibility for determining the Achievement Standards for each subject. Once the Qualifications Development Group had completed its work and was fully operational in secondary schools, the NZQA would administer the new system.

The Labour Government and the NCEA

By 2000, Labour's Trevor Mallard was the new Minister of Education. He was a staunch supporter of the NCEA even while in opposition, and was keen to see it implemented. However, he acknowledged that there was much work to be done before implementation, and proposed a one-year delay. When critics of the NCEA saw that the new minister was not prepared to abandon the new certificate, tensions emerged.

The Ministry of Education embarked on an ambitious public information campaign. Videos, pamphlets and posters distributed with information packs were sent to students and families. "Roadshows" were launched in the schools to the Boards of Trustees, staff, parents and student representatives. Ministry of Education and NCEA websites were set up to provide NCEA details, updates, ministerial press releases and other resource materials. From the start, the Ministry of Education realised it would be hard to convince sceptics, and little expense was spared to win over converts.

The NCEA worked on the basis of students accumulating credits on the Qualifications Framework, with each credit awarded on the basis of students demonstrating that they had met (or exceeded) predefined outcome standards. Although Achievement Standards are similar to the Unit Standards in that both set clear objectives for achievement and provide language for reporting achievements, they are quite different. Firstly,

Achievement Standards are designed to test and recognise superior student performance — motivating students to achieve higher grades (Not Achieved, Achievement, Achievement with Merit and Achievement with Excellence). Unit Standards, in contrast, defines achievement simply as Achieved or Not Achieved. Secondly, expert panels were required to ensure that Achievement Standards described broad outcomes, unlike Unit Standards which many felt "atomised" learning. Thirdly, Unit Standards used in the school were assessed internally; in contrast, credits obtained from Achievement Standards in conventional subjects could be obtained by both internal and external assessments.

Criticism of NCEA and Problems

Critics of NCEA argued that NCEA would be a "soft" qualification. This was because the Ministry of Education, in 1999, had recommended a 70 percent pass rate for Level 1 NCEA, while the bench mark for School Certificate was approximately 60 percent (Cassie, 1999). The Concerned Teachers Association claimed that Achievement Standards were incapable of testing and reporting knowledge gained through the study of academic subjects and believed NCEA was forced upon students as "guinea pigs" for an untested qualification (Calvert, 2000, p. 8).

Some school principals distanced themselves from NCEA on the basis that it would increase, not decrease teachers' workloads, encourage plagiarism owing to the greater emphasis on internal assessment, remove comparability between secondary schools, reduce academic rigour, and create uncertainty over university entrance requirements. Many school principals subsequently announced they would be offering the Cambridge University A-Level examinations.

Doubts about the reliability, validity, and manageability of the NCEA were raised by Terry Locke and Cedric Hall (Locke, 1998; 2000; Hall, 2000). Their reports raised issues regarding the then current mixed system of assessment, i.e. unit standards and achievement standards employed together for the assessment of conventional and non-conventional subjects.

Underpinning the policy of non-aggregation of standards is the belief that the NCEA will open the door to much greater flexibility in the design of teaching, learning and assessment to meet the needs of all students. Manageability, however is a real problem considering the amount of resources required to individually tailor a "pick and mix" course.

With NCEA now implemented in schools, there has been a mixed reception. There are schools which have embraced the new system with some success; and there are others who have struggled. Chamberlain (October, 2003), in an article entitled The NCEA Maze (North & South magazine), wrote that schools who have embraced NCEA have reported enthusiastically that it has been beneficial. At Kelston Girls' High School, a decile-three school, the Head of Languages remarked that NCEA was forcing teachers to teach accuracy in English where previously it was neglected. Constant assessments also helped improve attendance at her school, and motivated students to achieve success. At Otahuhu College, a decile—one school, the principal said the school assessed a mix of unit standards and achievement standards. Students who were failures were achieving and the system was going "surprisingly smoothly". St Cuthbert's College, a private school, reported a similar type of success story.

Chamberlain (2003) noted that other schools like Macleans College, a decile-10 school, have expressed dismay about the system, calling it a "nightmare". There, some teachers believed NCEA was a:

...class system preventing ambitious young people breaking out of their sociological slot

and claimed that unfairness in the grading system was an inherent part of the structure.

2002 and NCEA

The year 2002 was significant for the government as this was the first time that NCEA was finally put to the test. The New Zealand Herald, (February 5, 2003), reported under

its forum page headline, "New exam teaches a lesson" that NCEA passed its first test well and "achieved with merit". It reported that,

...now that the results have been published, the tables have been turned. Traditionalists ought to concede that the results look rigorous indeed, as did the exam papers presented to pupils at the end of last year. It is those who want a gentler system who are becoming critics of the NCEA now" (p. A14).

The results revealed an alarming percentage of non-achievement in some required standards, and showed where improvements needed to be made in the future. It was noted that the new system would need further fine-tuning. Arguments persisted about standards that could reasonably be expected at each level, and ensuring consistency from school to school.

Another difficulty with the internal assessment component was that NCEA assessment could consume teachers' preparation and classroom time. The right to have two attempts at each internally assessed test could bias pupils towards subjects with high internal assessed components of the final grade. The most telling comment was that the NCEA was able to produce honest results. The overall editorial was promising and positive towards the NCEA—this coming from the same column that had in the past voiced suspicions.

In the same week that the NCEA results were out, Professor Warwick Elley, an Emeritus Professor of Education and long-time opponent of standards-based qualifications, wrote a critical piece in the NZ Education Review (February 19-23, 2003), headlined, "New assessment system does not pass test". Clearly not impressed with the results or the NCEA, Elley surmised that a standards-based system is unsuitable for a "high-stakes" academic qualification. He maintained that the problems within Geography, History, English, French, Mathematics, Biology, Technology, Visual Arts and Chemistry stemmed from inconsistency in standards description and weightings assigned, high

variation in grade allocation, and inappropriate or arbitrary standards of achievement judging (the procedures were not empirically-based).

Elley believes that the NCEA assessment system is fundamentally flawed. He describes problems such as unclear standards in each subject, dissimilar tasks set by different teachers in different schools, arbitrary cut-off points in judging achievement levels, and dissimilar "quality of" grades in different subjects. He also stated that consistent moderation was not possible between different schools and this gave rise to different marking of standards, and different treatment by schools of students who failed their first sitting and re-assessment. According to Elley the use of different levels of achievement will not be sufficient for the needs of tertiary institutions, the grades for each standard will not be as reliable as the marks from the traditional examination, the aggregation of weighted credits will be unfair to students as the weighting of credits depended on the spread rather than the students' grades, and employers will be unable to make employment selections based on a mass of reported standards but rather will be more reliant on an overall assessment of a student's ability.

In response to Elley's arguments, the Education Minister, Trevor Mallard wrote an article in the NZ Education Review (February 19-23, 2003), headlined, "Education Minister responds to Elley's concerns". Mallard highlighted the rich source of data found in the results of the NCEA Level 1 performance by students around the country and how:

... they also gave us the opportunity it provides in evaluation and review of teaching approaches, and resources, curriculum and the assessment system itself (Mallard, 2003, p. 6).

Mallard detailed the nature of the achievement standards and the flexibility of the system in allowing schools to tailor courses to suit their students' needs. More importantly, he was able to explain the reasons for the distribution of various achievement standards within a subject that were a result not of the new system, but inherent even in the old system.

Interestingly, Mallard was quick to point out the similarities between achievement standards and old School Certificate grades. Mallard concluded by commenting that contrary to predictions Excellence grades were not "easy to achieve" and that able students were challenged by achievement standards. He remarked that the analysis of school and national statistics, resulting in sector-wide discussions and debates would lead to rapid improvement in teaching and learning.

Four months earlier, in the same NZ Education Review (2003, October 2-8), John Hellner, a teacher educator at the University of Waikato, wrote an essay in support of the new system titled, "NCEA: A Terrible Beauty is Born". The main thrust of his essay was that NCEA needs to be looked at in totality, i.e. the big picture—the catalyst for an historic change to our educational system. He started off by noting a painfully obvious point that the general impression in most educational circles is that NCEA has created problems in terms of money, time, effort, confusion, inconsistencies, workload and philosophic issues.

Hellner highlighted that NCEA allows what visionaries in education have been saying all along: the need to focus on interpersonal relations, critical thinking skills, self-evaluation, risk-taking, individual leadership, teamwork, innovation and creativity. Hellner further argued that NCEA has given teachers the licence to develop and use professional judgement. As teachers' skills develop, they will become more confident and trusting of their professional judgment in assessing work.

In addressing one of the greatest concerns about NCEA assessment—ensuring standards between schools are the same, Hellner maintained that it is impossible to rigidly enforce NCEA mandates and guidelines. He believed a solution to this was to rely on the professional judgement of teachers; standards-based assessment does not have to mean standardisation of implementation.

As professionals, Hellner determined, teachers will exercise their professional judgments and moderate themselves as they develop, deliver, assess, moderate and report on

curriculum and standards-based achievement. A possible solution would be getting an accrediting body to attest to the schools' ability to do so, thereby devolving control to schools.

He proposed that as long as certain skills, processes and attitudes are taught, the exact content of study could be flexible and that NCEA has the potential to allow for curriculum innovation and foster a culture of lifelong learning.

In Hellner's opinion, NCEA should be allowed to evolve through a trial and error process, rather than a drastic change overnight. In this process a new school model can evolve to meet the needs of the future and allow innovative, experimental thinkers in education.

Conclusion

The New Zealand education system has been recognised in the past as achieving excellence; by taking this unprecedented NCEA path, it is hoped that New Zealand will once again feature as a world-class model in education delivery. As outlined in Education for the 21st Century (New Zealand Government 1996) cited in Jerome (1998, p. 1), the New Zealand school system must provide a broad and balanced education for all students. Schooling must equip students with the attitudes, knowledge and understandings as well as skills to continue learning through life and active participation in society.

In a competitive global economy, education's role must ultimately enable learning to take place for the purpose of students' meaningful economic contribution to society. In this respect, the government's political agenda in using education as a strategic tool to produce a skilled workforce to compete in the global stage is a legitimate one.

The crucial question is whether the government can sell the NCEA vision to the majority. If the stakeholders do not support this bold new initiative, it is doomed to fail. On the other hand, the government must demonstrate political will; this will involve persevering

and persuading people to accept NCEA as being in the best interest of all concerned. Politics is about the art of the possible.

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