
*What Teachers and Parents
Should Know About the*

**National Certificate of
Educational Achievement
(NCEA)**

EDUCATION

FORUM

The Education Forum is grateful to Dr Kevin Donnelly and Professor Alan Smithers for help in the preparation of this document.

First published in 2000 by the Education Forum,
PO Box 38-218, Auckland 1730, New Zealand

ISBN 0-9582133-2-1

© Edition: Education Forum

CONTENTS

	Page
Introduction	1
Why are school qualifications important?	1
What is an NCEA?	2
Will the NCEA lead to sound teaching and learning?	3
Will the information provided by NCEAs be reliable?	4
Will the NCEA add to the workload of teachers and schools?	4
Will the NCEA provide useful information about students and differentiate sufficiently between them?	5
Will NCEA assessments be valid?	5
Is the NCEA the sort of arrangement used by educationally successful countries overseas?	5
Has any other country introduced anything like the NCEA?	6
What should the government do?	6
What should teachers and parents do?	7
Annex: Current school qualifications	8
Bibliography	9

The National Certificate of Educational Achievement (NCEA)

Introduction

From 2002 it is intended that a new National Certificate of Educational Achievement (NCEA) should become the main secondary school qualification in New Zealand. Its introduction will profoundly affect the education of our children and through them the quality of life in New Zealand. The new certificate is being heavily promoted by the Ministry of Education and the New Zealand Qualifications Authority (NZQA), but their officials seem unable to see or admit that the certificate's design contains serious flaws. Teachers and parents should take a close look at what is proposed and make their views heard.

The NCEA will be based largely on so-called Achievement Standards. It is untried and a radically different form of senior school certification for which there is no successful precedent anywhere in the world. It will be introduced over three years, progressively replacing School Certificate, Sixth Form Certificate and Bursary. The present third form cohort will, in 2002, be the first to work towards level 1. Level 2 is to be introduced in 2003 and level 3 in 2004. So the present third formers will be an experimental group throughout their three years of senior secondary schooling.

Academic analyses have been highly critical of what is proposed. Professor Cedric Hall of Victoria University of Wellington has concluded that the Achievement Standards will lack reliability and public credibility. Dr Terry Locke of the University of Waikato has severely criticised the lack of content in Achievement Standards and the method of grading and reporting. Dr Lydia Austin of the University of Auckland has pointed out the damage to education that will be caused by the fragmentation of subjects into Achievement Standards and their likely lack of challenge to able students.

Two overseas experts commissioned by the Education Forum have supplemented local research. Dr Donnelly, an education consultant based in Melbourne, has compared, in his report *New Zealand's National Certificate of Educational Achievement (NCEA): An International Perspective*, the NCEA with the arrangements employed by educationally successful countries. In producing its own report, the Education Forum drew extensively on an analysis provided by Professor Alan Smithers of the University of Liverpool and an adviser on education to the United Kingdom's House of Commons. This paper summarises these two reports, copies of which are being sent to all secondary schools and, as well, draws on local academic analyses. The Annex outlines current school qualifications.

Why are school qualifications important?

School qualifications are very important because they assist tertiary institutions and employers in candidate selection. Thus, for students, qualifications open or close

doors to tertiary places and job opportunities. They mainly attest to intellectual abilities. Information on students' other important personal attributes is often sought by employers and tertiary institutions from records of participation in extra-curricular activities, from referees and by interview.

School qualifications should, among other things:

- set worthwhile educational goals for all students at or towards the end of schooling;
- differentiate between students in terms of their levels of attainment and abilities;
- measure the attributes they claim to measure, that is, provide valid information; and
- measure consistently between students, schools and over time so students' qualifications can be compared, that is, they provide reliable information.

These purposes have been well served by the School Certificate and Bursary examinations. The present arrangements certainly need to be improved because so many more students are now staying on to Forms 6 and 7, and arrangements at Form 6 (Year 12) need particular attention. But the new NCEA completely overturns what went before - throwing away what has been learned through experience for something untried and untested.

What is an NCEA?

- An NCEA will record credits earned for many fragments of different conventional, non-conventional and occupational subjects and learning areas (that is, for Achievement and Unit Standards) and for other approved exams and qualifications.
- NCEAs will be awarded at three levels¹, equivalent to Years 11, 12 and 13.
- Each conventional school subject (history, science, English, maths, art, etc) will be divided into between five and eight Achievement Standards. These Standards purport to make clear what has to be achieved for the award of credits towards the NCEA. For each Achievement Standard at each of the three levels there will be criteria for three grades (credit, merit and excellence).²
- Each Achievement and Unit Standard (and other approved qualifications) will be worth a number of credits. Achievement Standards will typically be awarded three or four credits irrespective of the grade awarded. To gain an NCEA a student must earn 80 credits of which at least 60 must be at the requisite level.

¹ Originally a fourth, scholarship, level was intended but this appears to have been dropped. It is possible that a scholarship might be awarded on the basis of performance at level 3 or a separate exam introduced using level 3 content.

² It was originally intended that marks and percentiles (rankings) would be reported for externally assessed Achievement Standards. It is understood that these have since been dropped.

- At least half of the Achievement Standards will be assessed externally with the rest being assessed internally. Each school will be primarily responsible for its own internal assessments subject to some national checking (moderation) system which has yet to be announced. There are no national rules about how many and how often reassessments may be undertaken.

The aim has been to link all educational components within a unified, coherent and comprehensive qualification that employs a common assessment methodology and that uses credits and levels to form the 'common currency'. It is superficially attractive – a neat, tidy 'solution'. Unfortunately that is all it is. It is also educationally unsound and will cause a great deal of additional work for teachers - that will produce a huge amount of unreliable information and will reduce valuable teaching and learning time.

Will the NCEA lead to sound teaching and learning?

No, because:

- Decomposing subjects into between five and eight fragments at each of the three levels for separate assessment and reporting will undermine subject coherence and the importance of integrating understanding. The NCEA's assessment requirements and structure will result in a very restricted and narrow view of education and will constrict teaching and learning accordingly. Without the specification of content, teaching may well concentrate on only a few exemplars.
- The approach adopted by the NCEA starts from the false assumption that all senior school education can be broken up in the same way and the bits then linked through levels and credits without loss of educational integrity. Administrative coherence has been given priority over the coherence of subjects.
- It is simply not possible to express all senior school learning in unambiguous, clear 'standards' against which work can be assessed, and to differentiate clearly the levels and grades. Clear standards can be set for readily definable repetitive skills (e.g. typing, reading a thermometer), but this is not possible for measuring understanding where large bodies of knowledge are involved, or students' ability to use generic skills in areas requiring a large knowledge base. Because of these difficulties, sound assessment of much senior school learning inevitably involves comparing students' work, yet education officials persist in denying this.
- Because of the difficulty in setting standards in knowledge-based areas, much of what is valuable in education will be disregarded or trivialised under the particular form of standards-based assessment chosen. This too will encourage unimaginative teaching to a few exemplars and narrowly defined outcomes.
- While it is true that students will be able to choose from a vast range of subject fragments, the Achievement and Unit Standards, the combinations chosen may not be educationally sound. The notion of educationally coherent programmes is largely lost.

Will the information provided by NCEAs be reliable?

No because:

- Assessment of intellectual achievement is always difficult and best undertaken by sampling students' work, using different assessment methods as appropriate, and bringing the results together to form an overall judgment. However, Achievement Standards are to be assessed either externally or internally and reported separately. Moreover, assessment for each Achievement Standard will be based on one or a very few tasks. Thus the advantages of sampling are lost and the results will lack reliability and public credibility.
- Achieving consistency of internal assessment across a whole school system is very difficult. With each of several hundred schools being primarily responsible for internal assessment - students assessed on different tasks undertaken under different conditions, and with varying degrees of teacher assistance, assignments marked by teachers with different views about what constitutes credit, merit and excellence - inconsistency in marking and resulting controversy can be confidently expected. In the absence of national rules about reassessment, schools will have varying practices leading to inconsistent treatment of students.
- Assessment under the arrangements currently proposed lessens the importance of marker judgment and could lead to major inequities. For example a top-performing student making only trivial errors could fail while a much less able performer could be awarded credit or merit. This would not happen under conventional marking arrangements.

Will the NCEA add to the workload of teachers and schools?

Yes, because:

- The Ministry of Education has advised that, overall, there will be a "significantly greater level of high-stakes internal assessment". More of teachers' time will be spent on assessing and reassessing their own students and in checking their assessments with those of other teachers in the same and other schools.
- Dividing up subjects into several Achievement Standards will cause very significant additional work in recording and reporting assessments and will further erode teaching time. Instead of 30 or so subjects on offer at any one level there will be some 200 Achievement Standards as well as Unit Standards. Instead of taking six or so subjects a student could take some 40 Achievement Standards each year or 120 over three years in the senior school.
- Teachers may be expected to teach and assess in the same class students taking different Achievement Standards at different levels within the same subject.

Will the NCEA provide useful information about students and differentiate sufficiently between them?

No because:

- There will be insufficient differentiation between students given only three grades at each level. This will be unfair on high achievers. Too many performance levels are to be crammed into too few grades with potential for egregious errors and unfairness at the margins between grades. The difference between credit and merit or between merit and distinction may be less than the measurement error.
- It will be impossible to discriminate between students who gained credits at the first attempt from those who had to make two or more attempts. As noted above, there are no national rules about how often an Achievement or Unit Standard may be attempted and reassessed and at what intervals.
- NCEAs will differ enormously as they will consist of credits from different combinations of Achievement and Unit Standards and levels, so comparing them will be difficult. Comparisons will require examination of often very long transcripts detailing information of doubtful reliability.
- Achievement Standards will not, as claimed, tell users “exactly” what the holders know and can do. Many of the Achievement Standards could apply to 11-year-olds just as well as to 16-year-olds.
- Users of qualifications want simple, clear information that differentiates between students. They won't get it.

Will NCEA assessments be valid?

This is doubtful because:

- If assessments lack reliability they won't be valid either.
- Dividing up subjects for separate assessment and reporting means that important aspects of education such as the ability to integrate knowledge from different areas will be virtually impossible to assess. As noted earlier, higher order learning cannot be readily specified unambiguously as standards and is likely to be disregarded or trivialised.

Is the NCEA the sort of arrangement used by educationally successful countries overseas?

Definitely not! Countries doing well in international surveys generally:

- have a limited number of clear, well-constructed pathways (e.g. academic, applied and occupational), often taught in different types of school, each made up of a core and a limited range of options using different curricula to recognise the diverse range of ability, attainment and aspiration in the senior school, and leading to different certification;
- rely on system-wide, externally set and marked examinations;

- use a 'syllabus' approach (not 'standards', outcomes etc), specifying content, to curriculum development and assessment; and
- back clear curricula with particular textbooks, employ explicit assessment methods that command confidence, and provide informative qualifications.

With the NCEA, New Zealand is moving further and more decisively in a different direction. Its NCEA adopts a 'cafeteria', rather than a 'pathways', approach to course selection, makes the adoption of educationally coherent programmes more difficult, and draws on a common, largely contentless, curriculum delivered within a common school. It seeks to assess all senior school learning directly against standards even where this method of assessment is totally unsuitable.

Has any other country introduced anything like the NCEA?

No, but:

- The NCEA incorporates features similar to some of those in the original Victorian Certificate of Education (VCE) in Australia that led to major problems (including unreliable assessments, cheating and high costs) and to significant changes including the reintroduction of statistical scaling and more assessment under examination conditions. The NCEA is likely to fare worse than the VCE because it divides up subjects into numerous bits for separate assessment and reporting which causes particular reliability, teaching and workload problems.
- Other countries that have sought to adopt a standards-based approach have restricted it to the compulsory years of schooling.
- The United Kingdom has introduced a standards-based approach in the vocational education and training areas but has maintained an academic, examination-based system for mainstream, post-compulsory education.

What should the government do?

- The NCEA has potential for great harm. Accumulating a great many small units or credits is not a sound way of obtaining qualifications. It is irresponsible to introduce an untried system that has no international precedent, and to throw out respected qualifications in the process. Certainly, existing arrangements should be improved, but the aim should be to build on what works already. A fresh approach to school qualifications is required.
- Given the uncritical commitment of the Ministry of Education and the NZQA to the NCEA, which they jointly designed, the proposed new system should be put on hold pending a review to be undertaken by independent assessment experts, including people from overseas.
- If a 'back-to-the-drawing-board' approach is not acceptable then we recommend that:
 - it be accepted that the NCEA is a certificate recording different qualifications that have their own individual status and purposes;

- School Certificate and Bursary be retained because they are well understood and respected qualifications though capable of improvement, and a similar qualification be introduced at Year 12 (Form 6); and
- Achievement Standards be redesigned in a way that provides overall subject scores using externally assessed Achievement Standards to adjust internally assessed Standards (cross-moderation).

More detailed recommendations are provided in the Education Forum's report (see Education Forum, 2000, in the bibliography below).

What should teachers and parents do?

- Teachers and parents should think carefully and urgently about what is proposed. A new qualifications system is not something to introduce first and tune into a practical system later.
- Those people who have concerns should make their views known now rather than await the damage to education and students' life chances and the disquiet and turmoil that will follow from the introduction of a flawed scheme.
- Parents should discuss their concerns with their Boards of Trustees and school principals.
- Teachers should debate the issue within their schools and professional associations.
- All concerned people, as individuals or in groups, should let the Minister of Education and local Member of Parliament know their views and seek constructive changes.

The Education Forum
August 2000

CURRENT SCHOOL QUALIFICATIONS

In brief, the main current school qualifications in New Zealand are as follows.

- At Form 5 (Year 11) the School Certificate is offered in some 30 subjects, assessed partly internally and partly externally. Reports are for each subject in grades linked to percentages. Although formal scaling is not employed, a similar distribution of marks is maintained from year to year.
- At Form 6 (Year 12) the Sixth Form Certificate is offered in 32 national subjects and some approved local courses, entirely internally assessed. Reports are for each subject in grades 1 to 9 with the distribution of grades determined by each school's School Certificate results the previous year.
- At Form 7 (Year 13) Bursary examinations are available in about 30 subjects, mostly externally assessed but with some internal assessments. Reports are for each subject in grades linked to percentages. Results are scaled between subjects and to maintain a similar distribution of marks from year to year. The percentage marks of students taking three or more subjects are aggregated and 'A' and 'B' Bursaries are awarded to students gaining 300 marks or over and between 250-299 marks respectively.
- Unit Standards are offered in some schools leading to the award of credits at levels 1, 2 and 3 (equivalent to Years 11, 12 and 13) and level 4 of the National Qualifications Framework. Assessment is internal and against 'standards' set for part subjects and for vocational learning areas with results reported on a pass/fail basis (that is, credit is awarded if the 'standard' has been achieved and not otherwise. So there are no grades or marks). Compared with learning through subjects, quantitatively, Unit Standards make a relatively small contribution to school-based education and training.

BIBLIOGRAPHY

On standards-based assessment:

Warwick B Elley (1995), "What is Wrong with Standards-based Assessment", in Roger Peddie and Bryan Tuck (editors), *Setting the Standards*, The Dunmore Press, Palmerston North.

Roger Peddie (1992), *Beyond the Norm? An Introduction to Standards-based Assessment*, New Zealand Qualifications Authority, Wellington.

Alison Wolf (1995), *Competence-Based Assessment*, Open University Press, Buckingham.

On the National Qualifications Framework:

Michael Irwin, Warwick Elley and Cedric Hall (1995), *Unit Standards in the National Qualifications Framework*, Education Forum, Auckland, May.

Alan Smithers (1997), *The New Zealand Qualifications Framework*, Education Forum, Auckland, November.

On the NCEA:

Lydia Austin (2000), "Shades of 19th Century in Using Overseas Exams", *New Zealand Herald*, 29 June.

Cedric Hall (2000), "National Certificate in Educational Achievement: Issues Related to Reliability, Validity and Manageability", Victoria University of Wellington, publication pending. Copies available from author at <cedric.hall@vuw.ac.nz>.

Kevin Donnelly (2000), *New Zealand's National Certificate of Educational Achievement (NCEA): An International Perspective*, Education Forum, Auckland, August.

Education Forum (2000), *Policy Directions for School Qualifications: A Report on the National Certificate of Educational Achievement*, prepared with the assistance of Professor Alan Smithers, Education Forum, Auckland, August.

Michael Irwin (1999), "Achievement 2001", paper for the New Zealand Council for Educational Research Examining Assessment Conference, Wellington, October.

Ministry of Education material can be found on its website: <<http://www.minedu.govt.nz/goto/ncea>>.

Terry Locke (1999), "Lacks of Achievement 2001", *English in Aotearoa*, 39, 62-67. This is accessible at <<http://www.tmc.waikato.ac.nz/ESD/>>.

