Commentary on The New Zealand Curriculum Draft for **Consultation 2006**

By Sue Ferguson on behalf of the Australian Council for Educational Research

Introduction

This commentary on The New Zealand Curriculum, Draft for Consultation 2006, is provided by Sue Ferguson, Sue Ferguson Consulting, on behalf of the Australian Council for Educational Research.

The commentary compares the document with similar documents from Australia and the United Kingdom and addresses each section of the New Zealand draft for consultation. Finally commentary is presented against the recommendations of the Curriculum Stocktake 2006.

The document

A vision

The vision outlined in the document is clear and concise and outlines a view that is forward looking and appropriate for the world of today and the near future. The emphasis on pride in New Zealand and the importance of lifelong learners that are confident, connected to each other and actively involved in the country's civic life is to be commended.

There is no specific reference to the place of young New Zealander's in the global community except for the reference to economic prosperity.

The Scottish curriculum document states 'We need a curriculum which will enable all young people to understand the world they are living in, reach the highest possible levels of achievement, and equip them for work and learning throughout their lives.¹

Similarly the National Curriculum for England states 'The school curriculum should contribute to the development of pupils' sense of identity through knowledge and understanding of the spiritual, moral, social and cultural heritages of Britain's diverse society and of the local, national, European, Commonwealth and global dimensions of their lives. It should encourage pupils to appreciate human aspirations and achievements in aesthetic, scientific, technological and social fields, and prompt a personal response to a range of experiences and ideas.²

¹ http://www.scotland.gov.uk/Publications/2004/11/20178/45862#4 accessed 5 January 2007

² http://www.nc.uk.net/nc re<u>sources/html/valuesAimsPurposes.shtml</u> accessed 5 January 2007.

Perhaps a statement could be added to the document that recognises the increasing impact of global society on all people and the need for New Zealanders to consider themselves global citizens as well as New Zealanders.

Principles

The principles outlined in the document are comprehensive and designed to aid schools as they design and implement their own curriculum. However, if this is the purpose of the principles, it would be useful if there was a greater link between this section and the section on designing a school curriculum.

The Department of Education and Training, Victoria has published a set of principles, Principles of learning and teaching (POLT) which deal more with designing classroom programs. However, one of POLT elements is 'Assessment practices are an integral part of teaching and learning.'³ There is no mention of assessment in the New Zealand principles although there is a useful section on assessment later in the document. If the principles are to guide the development of school programs then the integral nature of assessment should be included.

Education Queensland too has recently released a document Principles of Effective Learning and Teaching⁴. This document, like the one from Victoria, focuses more on classroom planning. The principles include a focus on establishing worthwhile learning partnerships and the provision of supportive classroom environments, picked up in the equity principle from New Zealand.

Values

The National Framework for Values Education, published by the Commonwealth of Australia in 2005 and unanimously endorsed by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) states the following values.

1. Care and Compassion

Care for self and others

2. **Doing Your Best**

> Seek to accomplish something worthy and admirable, try hard, pursue excellence

3. Fair Go

> Pursue and protect the common good where all people are treated fairly for a just society

4. Freedom

³ http://www.sofweb.vic.edu.au/pedagogy/plt/principles.htm accessed 14 January 2007

⁴ http://education.gld.gov.au/curriculum/learning/teaching/technology/principl/principl.htm accessed 14 January 2007

Enjoy all the rights and privileges of Australian citizenship free from unnecessary interference or control, and stand up for the rights of others

5. Honesty and Trustworthiness

Be honest, sincere and seek the truth

6. Integrity

Act in accordance with principles of moral and ethical conduct, ensure consistency between words and deeds

7. Respect

Treat others with consideration and regard, respect another person's point of view

8. Responsibility

Be accountable for one's own actions, resolve differences in constructive, non-violent and peaceful ways, contribute to society and to civic life, take care of the environment

9. Understanding, Tolerance and Inclusion

Be aware of others and their cultures, accept diversity within a democratic society, being included and including others.

The values stated in the New Zealand document are consistent with these but written in a more succinct and user friendly manner.

Key Competencies

In 1992, a set of seven generic skills, the Mayer Key Competencies, were identified in Australia as the basic transferable competencies that underpin employability and the capacity to adapt to different types of whole work roles, as well as personal and community activities throughout an individual's life.

The Key Competencies are:

- collecting, analysing and organising information
- o communicating ideas and information
- o planning and organising activities
- working with others and in teams
- o using mathematical ideas and techniques
- o solving problems
- o using technology.⁵

⁵ <u>http://online.curriculum.edu.au/the_cms/tools/new-display.asp?seq=6481</u> accessed 16 January 2007

The Mayer competencies are consistent with those listed in the New Zealand document. The addition of thinking as a key competency is to be applauded as it is broader than problem solving. In this age of increasing impact of information and communication technologies (ICT) on the life, both at home and at school, of students, a further competency related to scepticism about the veracity of resources found on the Internet or something similar would be advantageous. Such a competency could be added to using language, symbols and texts.

Learning Areas

The eight learning areas outlined in the document are consistent with those in Australia. The learning area approach adopted by New Zealand and Australia provides greater flexibility than the subjects specified in much of the English-speaking world.

The document does not make it clear, at this point, if all learning areas are mandatory across the years of schooling. This is somewhat clarified later in the document but it may be worth including a statement about the status of the learning areas at each stage of schooling at this point.

Comparison documents

The Australian Statements of Learning, Victorian Essential Learning Statements (VELS) and the Western Australian Curriculum Framework are used as the basis for international comparisons for the learning area sections of the document. It should be noted that all Australian documents cover only the compulsory areas of schooling and hence no comparison is offered for levels 7 and 8.

Statements of Learning describe essential skills, knowledge, understandings and capacities that all young Australians should have the opportunity to learn by the end of Years 3, 5, 7, 9 in the areas of English, Mathematics, Science and Civics and citizenship and Information and communication technology. Achievement objectives in the New Zealand Curriculum are equivalent to 'opportunities to learn'. All states and territories have agreed to implement the Statements by 2008.

In the VELS, learning areas are called disciplines and strands are called dimensions. Western Australia uses the more traditional terminology used in New Zealand.

Link to senior years

New Zealand is to be commended for tracking the development of learning areas to the end of formal schooling. The relationship between these achievement objectives and the standards in the National Certificate of Educational Achievement needs to be clarified, as it is certainly not clear in the document.

Cross learning area planning

The layout of the New Zealand charts that allow comparison between learning areas at each level is excellent. The Australian documents and the UK curriculum framework do

not facilitate this comparison, which is so essential for primary schools where multidisciplinary teaching takes place. But even in later years, where specialist teachers are working largely from single learning areas, being able to compare what is expected, for example, in Mathematics when planning Science programs, or even the data interpretation that can be expected in Social sciences with the statistics understandings expected in Mathematics, will be advantageous for teachers. Of course, the literacy aspects of English are relevant to all learning areas and the approach taken facilitates teachers of other disciplines to take heed of the likely literacy competencies of their students.

Arts

The description of the Arts learning area makes no mention of the use of ICT and the emergence of multi-media as a new discipline in the Arts area. This is also true of the description of the Arts discipline in the VELS. Western Australia includes a 'combination' discipline which mentions the use of media and audio-visual forms of the arts. While Australia's Statement of Learning in ICT makes no specific reference to the arts, some aspects are described at each of the four year levels as 'creating with ICT' and 'communicating with ICT'. Both of these aspects are relevant to the arts, and it is disappointing to see no specific mention of ICT in this learning area.

The strands described in the document are similar to those used in Western Australia of arts ideas, arts skills and process, arts responses and arts in society. Even the dimensions of the VELS arts statement: of creating and making and exploring and responding cover similar territory are simple combinations of those used in New Zealand. The disciplines are consistent with those used in other documents examined.

English

The structure of the English document uses an interesting matrix approach. The notion of input and output as major organisers is very neat.

The achievement objectives are well sequenced and easy to understand. The idea that students need to have the opportunity to practise fundamental skills in increasingly sophisticated and challenging ways at each level of the curriculum is to be applauded.

The lack of reference to the fundamental nature of English literacy to learning in all areas of the curriculum is of concern.

Health and physical education

The strands described are similar, but more detailed than, those of the Victorian Essential Learning Standards. It is pleasing to see an emphasis on both the physical and mental health of students and the importance of community resources and the building of relationships.

The relationship between the three subjects, particularly home economics is not well explained. For example are some strands to be a focus for some subjects or is it expected that all subjects should address all strands?

Learning Languages

This learning area is well structured with the achievement objectives showing a progression of cognitive development. It is not clear if this learning area is mandatory at all stages of schooling.

Mathematics and Statistics

The distinction between mathematics and statistics is interesting and not one that is a feature of other documents examined as part of the research for this commentary. Statistical analysis of data is surely also the exploration of patterns and relationships in quantities.

The three strands are consistent with most states and territories in Australia although Measurement is combined with data in the Victorian Essential Learning Standards and in the Australian Statements of Learning and Algebra is a separate strand (although called Structure in the VELS).

The achievement objectives are comprehensive and demonstrate a progression in cognitive complexity. The different arrangement of strands does not seem to have resulted in important concepts being omitted.

Most states and territories in Australia and the Statements of Learning include a strand of 'Working mathematically'. This is not included in the New Zealand Framework although the general statement on page 19 points towards students applying mathematics to problem solving and real life investigations. The achievement objectives also have a flavour of reasoning and applying, and this could encourage teachers to include working mathematically tasks and reasoning strategies in their programs more than having a separate strand.

Science

New Zealand has long been renowned internationally for the quality of its Science curriculum. This document is no exception. The strands outlined in the Framework are consistent with the strands in the Statements of Learning and other state and territory documents. It is interesting to note that, in contrast with the Mathematics and Statistics learning area the process strand, Nature of Science, is included. It could be argued that this strand could be woven into the conceptual strands for the same reasons given above for mathematics.

Social Sciences

Again this learning area is well structured with strands that are consistent with similar documents in Australia. The only omission, or perhaps downplaying, is the area of

civics and citizenship education. This aspect of the curriculum could be strengthened in the Identity, Culture and Organisation strand in particular.

Technology

The strands outlined in the VELS statement on Technology are Investigating and designing; Producing; and Analysing and evaluating. The strands in the Western Australian Curriculum Framework, although more numerous and including Enterprise, are similar to the Victorian set. Those described in the New Zealand document are phrased in more theoretical terms. Without the achievement objectives, it is difficult to judge if this is the intention of the curriculum to be offered to students.

Effective pedagogy

The section on effective pedagogy is a welcome addition to the document. None of the other documents used as a basis of the commentary included any advice about teaching practice. Most states and territories in Australia include supplementary advice about pedagogy, but none included this aspect in the main document. If the documents are designed to assist teachers in planning curriculum programs then some mention of this vital aspect of teaching and learning is essential and New Zealand is to be commended for its inclusion.

The Victorian Department is presently trialling the Principles of Teaching and Learning (PoLT).⁶ These principles are:

- The learning environment is supportive and productive.
- The learning environment promotes independence, interdependence and self motivation.
- Students' needs, perspectives and interests are reflected in the learning program.
- Students are challenged and supported to develop deep levels of thinking and application.
- Assessment practices are an integral part of teaching and learning.
- Learning connects strongly with communities and practice beyond the classroom.

These pedagogical principles are very similar to those described in the New Zealand document. The major omission in the case of New Zealand is that of the role of assessment. Although there is a section in the document that describes the importance of assessment, the notion that effective pedagogical practices should be informed by assessment, both for planning effective programs that meet the needs of individual students and for evaluating the effectiveness of learning programs, should also be included here.

⁶ http://www.sofweb.vic.edu.au/pedagogy/plt/principles.htm accessed 26 January 2007

Another major project in Australia is Queensland's Productive Pedagogies'. This project describes 20 pedagogical practices under four major headings: 'Intellectual quality, Connectedness, Supportive classroom environment and recognition of difference.'

New Zealand is to be commended for including e-learning and it's impact on pedagogical practices, something that is implied but not explicitly stated in either PoLT or the Productive Pedagogies.

Designing a school curriculum

The notion of schools using different frameworks to design their curriculum is commendable. However the section includes many options but provides little advice about how to put it all together. Nor does the document make it clear if it is necessary for schools to plan for all aspects such as values, outcomes, key competencies, purposeful assessment and coherent pathways.

The idea of basing planning on the analysis of evidence is laudable but what evidence is recommended? Is it the results of assessments of students learning, student and community satisfaction surveys, or some other matter?

The theme of the introduction to this section seems to be cross-curriculum approaches and the layout of the achievement objectives facilitates this approach. However, particularly in schools where there are discipline-based teachers, the resources required to ensure cross-curriculum approaches could be onerous. Those schools will need to make a significant effort to plan across learning areas and perhaps work out different ways of planning.

The document would be strengthened with a statement that all of these aspects are important and explaining that schools need to adopt a driver but that all aspects: outcomes, competencies, pathways and assessment need to be accommodated.

Planning with a focus on outcomes

This section is excellent recognising the need for a long term view rather than the checklist approach sometimes implied in other documents. The notion that all children can learn but they will not all learn at the same rate is to be applauded.

Planning for the development of the Key Competencies

Again this section is well constructed. The relationship between the key competencies and the learning areas is alluded to but not explicated. The section, and the previous one on outcomes, would both be strengthened by a cross-reference. A diagram showing the relationship between the axes would be useful.

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⁷ http://education.gld.gov.au/corporate/newbasics/html/pedagogies/pedagog.html accessed 26 January 2007

Planning for Purposeful Assessment

The approach taken in many Australian education systems can be characterised by the Victorian Blueprint for Government Schools⁸ where it is stated

Assessment is the ongoing process of gathering, analysing and reflecting on evidence to make informed and consistent judgements to improve future student learning.

Teachers should use information from assessment to understand student learning and to support students' progress towards achieving expected goals by providing regular, constructive feedback to students. This assessment information should be used by teachers to develop appropriate curriculum and pedagogy to meet students' learning needs. This assessment practice is enriched when teachers work collaboratively to share their knowledge and understanding of assessment, and of student learning requirements.

This is echoed by the New South Wales Department of Education and Training⁹

Assessment is the process of identifying, gathering and interpreting information about students' learning. The central purpose of assessment is to provide information on student achievement and progress and set the direction for ongoing teaching and learning.

The draft New Zealand Curriculum Framework is in accord with the policy expressed in the two Australian documents, but goes further by including references to reporting and to the nature of national qualifications. The assessment section of the document is to be commended.

Planning for Coherent Pathways

The notion of using the key competencies to link the stages of schooling is very neat. A supporting document showing how this might be implemented, or a series of case studies could prove useful for schools. This could include transition documentation showing what accompanies students as they progress from school to school or even from class to class.

Achievement objectives by level

The notion that curriculum levels span year levels as for the previous version of the Framework is excellent. It demonstrates to teachers, and school community members and indeed to students, that it is acceptable and normal that students are working at different cognitive levels in each class. It has the added advantage of demonstrating

⁸ http://www.sofweb.vic.edu.au/blueprint/fs1/assessment/assess.htm accessed 29 January 2007

⁹ http://www.schools.nsw.edu.au/learning/k-6assessments/principles.php accessed 29 January 2007

when concern ought to be expressed and reasons sought if students are not progressing as expected.

The terms of reference

A Similar structure

The document is similar in structure to the previous version with the named sections retained.

B Additions

The nominated additions have been made to the document. These are comprehensive, easy to understand and will be helpful to schools and teachers in designing their school and classroom programs.

C Revision to principles

As stated above the principles section are comprehensive. There could be a more direct relationship between this section and the section on designing a curriculum so that schools could have some advice about how these principles could be implemented at different stages of schooling and in different types of schools.

There is nothing in this section on making the most of resources, particularly the use of Information and Communication Technologies (ICT) in the curriculum. With the impact of ICT becoming ever-more pervasive, the principle of optimising their use, helping students to become sceptical about the information available on the Internet and the learning areas, capitalising on the strength of ICT to enhance learning is surely a principle that needs to be included in the Framework more broadly than in the Effective Pedagogy section.

D Revision to Skills

The section on key competencies achieves this term of reference. It is coherent and consistent with the recommendations outlined in the terms of reference document.

As stated in the analysis above, it is difficult to work out how schools will keep check of the development of these skills and report students' development of those to parents and the next teacher. It may be useful to add to the learning areas some examples of ways learning area teachers can contribute to the development of these skills through curriculum programs. Alternatively if skills are to be the major driver of curriculum planning then the relationship between the skills and the development of curriculum understanding will need to be made clear.

E Revision to values

Similar comments apply to this section as to the skills/competencies section. The relationship between the three axes of achievement objectives, skills and values needs

to be made more clear. Values, of course are less concrete than the other two axes but if these are an important component of schooling, as the Framework states, then a way of ensuring the curriculum takes a strategic approach to exposing students to them needs to be stated in more detail than at present.

F and H Essential Learning Areas

The recommendation of splitting English and Language learning areas has been adopted.

The question of how much some learning areas, such as languages, should play a part in the curriculum is not clear and should be added to the document. It is assumed that it will not be compulsory for all students to undertake language education at all levels of the curriculum since it is assumed to apply to all learning areas in the senior levels. However languages is a new learning area and schools may have question about the need to incorporate this type of learning in say the early years or indeed in the middle primary years.

The achievement objects in all learning areas (apart from Technology which were not available for this commentary) are clear, comprehensive and provide advice to teachers and schools planning programs that develop programs that allow children to move from naïve understanding to complex operation within a learning area.

The question of future focused is more moot. The omission of mention of ICT in the learning area statements should be addressed.

G Curriculum manageability

The number of achievement objectives has been reduced without losing clarity of advice to schools and teachers. Together these outline the critical understandings required for the development of New Zealanders for the Twenty-first Century.

The section on designing a curriculum is perhaps too open and some more detailed advice or examples would help schools think about which axis to focus on as the main driver of their curriculum, while still keeping track of the other axes.

Summary

The document is generally well constructed and written in clear, non-jargon language. The provision of achievement objectives so they can be read across levels is great feature that will assist schools and teachers to move away from the 'silo' approach to curriculum planning, so common particularly where specialist teachers are in charge of facilitating learning.

Review of similar documents in Australia show a comparable level of competence at equivalent levels leading to the conclusion that this Framework will result in international levels of achievement and skills.

Some recommendations

- 1. More detailed reference to the relevance of ICT in all aspects of the curriculum.
- 2. Some examples of ways in which schools can keep check on the development of all three axes of conceptual development, the key competencies and values.
- 3. More emphasis on the development of literacy and numeracy skills and their relevance in all learning areas.