OUT OF THE FRYING PAN AND INTO THE FIRE? NEW ZEALAND'S CURRICULUM AND ASSESSMENT REVOLUTION

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ABSTRACT

This article discusses the recent wide-scale curriculum and assessment reforms in New Zealand. It analyses the reforms of the early 1990s, drawing out parallels between the Curriculum and Qualifications Frameworks and those in England; and it examines the new initiative, 'Achievement 2001', which has been presented as an attempt to meld together the best of the old and the new. The authors argue that, while lessons have been learnt from the English experience, they have not been learnt in their entirety. They allege that not only is the New Zealand model administratively cumbersome, but that it exacerbates the difficulties inherent in outcomes-based curricula by attempting to superimpose the Qualifications Framework on the Curriculum Framework, and thus extend the influence of an essentially vocational training model to academic study in schools. The article concludes that the problems which have emerged in New Zealand derive not from the adoption of unit standards, but rather from the attempt to utilise this model as an over-arching qualifications framework for school-based assessment. The authors emphasise the attendant risk that reliance upon objectives entails academic subjects becoming overly assessment driven, with the potential consequence that learning becomes narrower in focus, and point to the likelihood that the recent reforms sign-posted by 'Achievement 2001' will perpetuate these problems.

Introduction

Since the mid 1980s, New Zealand has witnessed radical and far-reaching educational changes which are similar in their scope, scale and nature to those that have transformed the scene in England. Successive governments from both sides of the political spectrum attempted during the 1980s to introduce curricular reform to update the system established in the light of the post-war consensus of the 1942 Thomas Report, which had established a post-primary system predicated upon the notion of equality of opportunity, and based around a national framework of subjects and norm-referenced assessment. By the 1980s, this settlement was seen in many quarters as failing. Moreover the precept of equality of opportunity was increasingly being exposed as a myth. However, early attempts to reform the curriculum failed due to opposition from interest groups such as the business community, and the first reforms of any substance came in the sphere of administration rather than curriculum.

The Picot reforms of the late 1980s, introduced by a Labour government which was heavily influenced by free market ideology similar to that espoused by the Thatcher governments in Britain, instituted local management and a quasi-market philosophy analogous to the Local Management of Schools introduced by the 1988 Act in Britain. These reforms were a key feature of the general encroachment of this type of market ideology into the public sector. As in Britain, the type of curriculum and assessment arrangements introduced in the wake of the free market revolutions in New Zealand, although being centrally imposed and seemingly antithetical to the ideology of the right, have been alleged to reflect a desire to impose accountability on schools and teachers (e.g. the primary teaching union, the New Zealand Education Institute: NZEI, 1991), thus pursuing the goal of value for money: as such they naturally went hand in hand with the administrative reforms instigated by Picot.

The New Zealand Curriculum Framework, introduced in 1993 by the new right of centre National government, 'in the hope of being third time lucky' (McCulloch, $(1992)^1$, introduced a new form of curriculum which has much in common with the original National Curriculum in England. It was subsequently supplemented by the National Qualifications Framework, which envisages a 'seamless education system' in which barriers no longer exist between schools and post school education and training (Ministry of Education, 1994a). This framework, which exhibits many similarities with the NVQ model espoused by Gilbert Jessup (1991), was adopted in New Zealand following investigations into the SCOTVEC system of vocational qualifications (Irwin, 1994; Smithers, 1997)², and it has introduced unit standards as a mode of assessment into the school curriculum in the compulsory Year Eleven and the postcompulsory Years Twelve and Thirteen. These competence-based qualifications are based around unit accreditation (each unit being broken down into a series of competencies), the assessment of performance and the recognition of prior learning in similar fashion to Jessup's model. Like NVQs, the New Zealand qualifications require that competence be demonstrated against each and every performance criterion, and there is no scale for excellent achievement: the student in question has either demonstrated competence, or is still working towards the level necessary to demonstrate it.

The initial curriculum development was at first largely accepted by the teaching profession, due in part to the efforts of the government and the New Zealand

Qualifications Authority (NZQA) to involve teachers in the developmental processes of the new curriculum. In this respect, lessons had been learned from the failure of 'Kenneth Baker's essentially hierarchical or military vision of a chain of command from centre to periphery' (Beattie, 1991). However attitudes subsequently hardened with the introduction into schools of the more explicit unit standards assessment procedures, with their emphasis on mastery and competence, and with the concomitant increase in workload faced by teachers. Unit standards have faced stiff opposition from the teaching profession (e.g. Post Primary Teachers Association: PPTA, 1997), from the business community (e.g. Irwin, 1994; Smithers, 1997), and from academics (e.g. Irwin et al, 1995; Elley, 1996), prompting the government to issue the 1997 Green Paper (Ministry of Education, 1997), and subsequently a new curriculum initiative: 'Achievement 2001' (Ministry of Education/NZQA, 1998). This new development, which has sought to amalgamate the more acceptable features of the old and new systems following general consultation, has been seen by many as an attempt to reach a compromise, although it is clear that the New Zealand government remains firmly committed to the ideal of an objectives-based model of assessment for all qualifications. 'Achievement 2001' will be discussed in the final section of this paper. In contrast to the situation in England, where a degree of acceptance has been reached through a dialectic process, the situation with regard to the final implementation of the criterion-referenced assessment that drives the New Zealand model remains fluid and the outcomes are unpredictable, despite the very clear central commitment to it.

It is becoming clear that New Zealand has stepped where others fear to tread. The Curriculum Framework, as will be seen, has a clear precedent in the National Curriculum of England and Wales, and although New Zealand has plainly learnt from some of the lessons of that latter model (there are a number of important differences between the two models), this initiative does not represent a radical departure from what has been already tried elsewhere. The Qualifications Framework has, on the other hand, heralded a new experiment: in its adoption of standards-based assessment for the whole gamut of academic school subjects it is moving into uncharted territory. Indeed Peters, Marshall and Massey have described the Framework as being 'more ambitious than that suggested by any other western nation' (Peters et al., 1994). Time will be the ultimate judge of its effectiveness and suitability for such assessment. However, despite the scarcity of evidence about this, there are disquieting signs that all is not well and that New Zealand's curriculum and assessment revolution is replacing the problems of the old regime with a host of new ones. It is clear that the old norm-referenced model of assessment was in need of an overhaul: its predetermining of proportions in which different grades were to be awarded, and the concomitant predetermined cohort of passes (these quotas often determined by performance in examinations taken in previous years) led many students to adopt a culture of failure early in their school careers, resulting in as many as a third of school leavers entering the world of work with no formal qualifications (Smithers, 1997); and a lack of standardisation in grades used at different levels was plainly confusing. The notion of a standardised and more transparent system of assessment, and moreover one that could be brought into line with vocational and occupational training, was an attractive one bringing with it hopes of emancipatory potential for lifelong learning through modularisation and credit accumulation.

However the question must be posed: is the new system of school assessment more satisfactory than the old one? In other words, has New Zealand jumped out of the frying pan and into the fire? In seeking to provide some answers to this question, we will examine the socio-political context of the curricular reforms that have taken place in New Zealand. Second, we will analyse the structures of both the Curriculum and the Qualifications frameworks as they apply to schools prior to the imminent implementation of 'Achievement 2001'. Although these are separate frameworks, administered by separate bodies³, and although it is the Qualifications Framework that is the controversial initiative which has prompted this paper, they are inextricably linked through overlap in Years Eleven to Thirteen. Third we will analyse some of the recent evidence and comment on the implementation of these two frameworks. Finally, we will undertake some analysis of 'Achievement 2001' and its potential implications for learning and assessment in New Zealand schools.

The socio-political contexts of reform

The potential problems facing New Zealand governments with a desire to initiate curricular reform were in many ways fewer and less complex than in the UK. New Zealand, for instance had a 'tradition of top down imposition of curriculum and assessment methods on teachers' (O'Neill, 1996). The Thomas Report (1942) had in effect laid down curriculum content in a manner that the 1944 Education Act in Britain had not, despite the fact that the New Zealand Department of Education went to great lengths to involve teachers in curriculum projects at the time. The 1959 Parry Report likewise reflected a desire to direct curriculum, for utilitarian and instrumental reasons. It ominously warned that estimates of future needs would be 'related to the economic, social and cultural needs of society' (Openshaw, 1995) in a manner that was far more explicit than the contemporary reports in Britain. In New Zealand, the first two attempts to reform the post-war settlement failed, but they did so for political reasons rather than through opposition from teachers or through the concept of a common curriculum being simply too radical. The debate over curriculum direction was to focus on the form that it was to take, rather than over whether it should happen in the first place. The 1987 Labour initiative, for example, failed because of parliamentary and Treasury opposition to its liberal nature, and because of concerns about the potential expense of such a framework at a time of economic exigency. The present National Curriculum Framework, on the other hand, was implemented with remarkably little opposition from teachers and in the face of clear precedents for state direction in curricular matters.

Although there has existed in New Zealand a much stronger tradition of state influence over curriculum than in Britain, the basic premises that have been a catalyst behind the desire for reform are similar in both countries. Ultimately the educational status quo was to come under attack for ideological reasons. For example, Openshaw has pointed to political factors being the cause of the failure of the Thomas settlement in New Zealand, stating that 'if the post-primary education settlement failed then it did so at a political level rather than at the level of schools' (Openshaw, 1995), being part of a wider breakdown of the post-war consensus. These reasons lie largely in the socio-political and economic climate that developed in the 1980s with the advent of governments which were influenced by free market policies⁴.

Technological change is claimed to be in the process of transforming society and thus school curricula are coming under pressure to respond. Education, like many other disciplines, has over the last three decades increasingly been influenced by a belief that it is possible to classify everything in precise taxonomic terms, as if it were a scientific discipline (the phenomenon that Habermas described as scientific-technical rationality: Habermas, 1976); the development of the unit standards is clearly influenced by this philosophy. Moreover, a sense of economic decline has laid the foundations for similar ideologies to those which influenced policy in Britain during the 1980s, although there have been subtle differences in emphasis behind these perceptions, as 'in New Zealand's case the economic uncertainty of a traditionally dependent economy took the place of national welfare and international prestige in fueling concern' (Openshaw *et al*, 1993). Policies which have sought to address such decline have had political appeal, as have those which sought to reaffirm traditional moral values: the cutting of expenditure and its concomitant emphasis on

accountability and value for money have been powerful messages; the need to produce a workforce that is trained in the appropriate skills has driven policy; and the alleged decline in moral and educational standards has led to demands that traditional values should be reinforced through the medium of education, and that academic excellence should be pursued at all costs. The corollary of these somewhat contradictory demands has been curriculum development that many have accused of being instrumental and utilitarian. For example it has been alleged that the Essential Skills identified in the Framework could correspond with pre-vocational training, and are thus designed with the above aims in mind (Lee and Hill, 1996). It is certainly true that the new curriculum in New Zealand has been framed in terms of pre-specified objectives. The process-oriented view of education as 'development from within', has been ignored in favour of a model that sees it as 'formation from without' (Dewey, 1938), driven by extrinsic goals such as the training of a workforce. Its exponents ascribe a wholly teleological slant to education, seeing curriculum, as did Hilda Taba, as a means of 'preparing young people to function as productive members of our society' (Taba, 1962). Moreover, as in Britain, their success in directing educational policy lies partly in rhetoric of equality of opportunity which litters the curriculum: 'the clothes of the educational left have been stolen by the political right' (Lawton, 1988), and this has helped to broaden the political appeal of policies that many would have found to be otherwise unpalatable.

The Curriculum and Qualifications Frameworks

The genesis of the New Zealand Curriculum Framework owes much to the English National Curriculum. It employs much of the same terminology, such as 'breadth' and 'balance', and utilises the same basic structure in many respects. However there are also substantial differences between the two models, and indeed it would be true to say that some of the structural faults and implementation errors that have afflicted the English model have been avoided in New Zealand. In particular the New Zealand model is widely seen as being more flexible in terms of curriculum content than its English counterpart, allowing 'sufficient flexibility for schools to interpret curricula to suit particular needs' (Barr and Gordon, 1995). However, the model is still open to charges that it is structurally unsound, and 'in spite of a number of differences between the UK and New Zealand models, there are several key problems that are common to each' (Elley, 1994). In particular, in curriculum construction terms rather than from a structural perspective, consultation seems usually only to have occurred 'after broad policy directions had been decided' (Taylor, 1994), and in similar fashion to the situation in England in 1988, it is clear that 'overall there has been a lack of analytical and research support for these very extensive and interrelated reforms' (ibid.). In short, the development and implementation lessons that have emerged from the English experience have not indeed been learnt in their entirety.

Like the English model, the structure of that developed in New Zealand is linear. The Framework describes the key principles which are stated to be 'fundamental to teaching and learning' (Ministry of Education, 1993a). These include 'flexibility', 'coherence' and 'multi-culturalism', including a requirement to recognise the significance of Maori issues and the Treaty of Waitangi⁵. It is divided into seven Essential Learning Areas, rather than traditional subject delineations: these are *Health* and Well-Being, The Arts, Social Sciences, Technology, Science, Mathematics and Language and Languages, and they have much in common with the common curriculum advocated by HMI in Britain in the early 1980s and indeed with the cultural invariants described by Dennis Lawton (1989). Here there is clearly a major structural difference to the English model, and thus one of the major sources of criticism has, on the surface, not been repeated in New Zealand. However, critics of the Framework have still alleged that these differences are only nominal and that there is still a reliance on academically accepted subject disciplines within the Essential Areas: the Framework document stresses that schools may 'organise their programmes around subjects, by using an integrated approach, or by using topic or thematic approaches' (Ministry of Education, 1993a), and it is clear that many schools are using the former approach. The Framework begins to exhibit more striking similarities to its English cousin when one looks at the structure of each of the Essential Learning Areas which are articulated through a variety of National Curriculum Statements. These Statements are based upon subjects (for example English rather than Language and Languages). Each is divided into learning strands which are essentially the same as the Attainment Targets in Baker's 1988 model. Each strand is sub-divided into eight sequential levels, expressed in the form of achievement objectives (often three or four per level), which are designed to be broad goals around which more specific performance criteria for assessment must be formulated by teachers. For instance level 5 of the strand Making sense of the living world in the Science Curriculum statement includes the achievement objective, 'Investigate and classify in broad terms the living world at a microscopic level' (Ministry of Education, 1993b).

Content is not rigidly stipulated in the New Zealand model in the same way as in the English Programmes of Study; topics and assessment activities remain as suggestions rather than prescriptions and the only prescription in the Framework is the requirement to base assessment around the Achievement Objectives. In addition to these objectives there is a range of Essential Skills. These skills are: *Communication*; Numeracy; Information; Problem Solving; Self-Management and Competitive Skills; Social and Co-operative Skills; Physical Skills; and Work and Study Skills. They are assessed across the curriculum in an integrated manner, in much the same way as the Key Skills may be assessed in GNVQ programmes. At this point it is possible to discern a degree of ambiguity in the Framework. It is ambivalent, to say the least, about the degree to which the assessment procedures for the achievement objectives are in fact mandatory (this is true of both the Essential Skills and the Achievement Objectives), and there are suspicions that many schools have simply ignored this aspect of the curriculum. There is no explicit requirement as to the manner of assessment and recording of these objectives: both the Framework and its accompanying publication Assessment: from policy to practice (Ministry of Education, 1994b) fall short of requiring teachers to tick boxes, and direction in this area is confined to imprecise statements about the importance of different types of assessment. These include school-based formative and diagnostic assessment, assessment at the Key Transition Points (school entry, Year Seven and Year Nine) via the medium of standardised national tests, and a national Monitoring of Standards project to provide national data. This latter mode of assessment, similar to that conducted by the former Assessment of Performance Unit in the UK, is conducted annually, taking a 'light sample (5%)' (Ministry of Education, 1993a) from students in Years Four and Eight in between two and three subject areas, which vary from year to year. Consequently national testing in New Zealand has a considerably lower profile in New Zealand than have the SATs in England.

One major difference between the models in England and New Zealand lies in the fact that, while the former does not cover post-16 work, nor even, as originally envisaged, Key Stage 4 certification, the latter framework extends to Year Thirteen to cover all pupils at school utilising summative assessment to provide certification in Years Eleven to Thirteen. Thus in New Zealand the Curriculum Framework has been accompanied by a clear vision at government level for replacing the existing School Certificate, Sixth Form Certificate and Bursary qualifications with a criterionreferenced system of assessment, linked to the Curriculum objectives and tied in with the new unitary National Qualifications Framework (figure I). This latter framework was set up to provide a system of accreditation for qualifications in all walks of life. The Qualifications Framework is, as previously mentioned, directly descended from Gilbert Jessup's NVQ model and is based around units, elements and performance criteria, though it is in its curricular conception it is closer to the original GNVQ specifications. If the directions for continuous, school-based assessment are ambivalent in the early curriculum publications, then they are most certainly not so in this rigid system of accreditation with assessment against pre-specified objectives. Of course there are a great many problems associated with this type of assessment, not least when applied to academic subjects and complex and abstract processes, and these will be examined in due course. The role of such an assessment model within the curriculum has been a matter of hot debate, with opposition from the teaching union having delayed its implementation, and there has meanwhile existed a system of dual accreditation in many schools, where the old qualifications have existed side by side with the new, but still optional unit standards.

(INSERT FIGURE I)

Responses to the reforms

We have previously alluded to the reactions to the frameworks elicited from various groups within New Zealand society and the education system. These reactions have been significant in forcing the government to modify its curriculum policy, and are thus worthy of further exploration.

The frameworks and Maori education

Before embarking on any analysis of Maori attitudes to the Curriculum and Qualifications Frameworks, it is important to establish the fact that this indigenous people represents a fairly heterogeneous grouping within New Zealand society. As Pere has indicated, 'people who are classified as Maori today are in fact made up of individuals who derive their identities and experiences from tribal and sub-tribal groups, urban groups, other cultures, etc.' (Pere, 1983). However, while acknowledging this reality, in the limited context provided within this paper, any exploration of Maori values regarding education must focus on the common threads that exist between such groups. Various key features may thus be considered to be common to Maori education. First, it has traditionally consisted of a mixture of experiential learning and tutelage. Second there is a community focus for such education, often within the *whanau* or extended family. As early as the 1940s, Hawthorn pointed to the 'mutually appreciative attitude' where learning took place within an atmosphere 'to a large extent free of anxieties about a child's performance' (Hawthorn, 1944). It is easy to see in this context why so many Maori fail to achieve in a system based on institutionalised instruction and competitive accreditation. Third, Maori education has been predicated upon the notion of group responsibility. Benton *et al* questioned whether 'a Qualifications Framework based upon individuals attaining specific combinations of skills at particular times (can) accommodate the sharing of knowledge and skills of a group' (Benton *et al*, 1995).

Maori criticisms of education policy in New Zealand, and in particular the *Pakeha* (New Zealand European) hegemony within the system are long standing and consistent. Recent consultation with Maori groups by the Ministry of Education (Ministry of Education, 1995) has identified several strands of opinion. In particular there is a general feeling amongst Maori that there is insufficient consultation on both policy matters at a national level and in the day to day running schools at a local level. The report of the consultation highlighted this issue in stating 'the Maori education strategy must involve the government, communities and providers working in partnership' (Ministry of Education, 1998). The consultative process elicited many comments that echoed these sentiments. One submission argued for 'partnerships between home, school and community (that) involve the Maori community in the day to day affairs of the school, reflect a genuine partnership with regards (to) local

curriculum content, resources both people and physical, for the benefit of their pupils' (written submission 255/2, Ministry of Education, 1998b). Another called for the 'Government to acknowledge through ongoing consultation, the (various Maori) groups' contribution to Maori education' (Written submission 245/2, Ministry of Education, 1998b).

A second source of grievance concerns the promotion of Maori culture in schools. The consultation process revealed that many Maori feel that not enough is being done to improve sensitivity towards this in schools, both amongst teachers and students. A third issue highlighted by the report concerns the establishment of a separate and parallel framework for Maori education, and the setting up of a discrete authority to administer this. To a certain extent there have been moves in this direction; the new Art curriculum is to be published in Maori, and unlike the situation with other curriculum statements to date, this will not be a simple translation, but will reflect the very different nature of Maori art.

Thus the ongoing situation with regard to Maori education reflects dissatisfaction with current developments, despite the consultation process and despite the continued establishment of *Kura Kaupapa Maori* (schools with a Maori charter) which are intended to provide a holistic Maori spiritual, cultural, linguistic and educational environment. While these schools have largely succeeded in establishing a learning environment conducive to Maori achievement within the constraints of the Curriculum Framework, the view of many Maori is that the *Kura Kaupapa Maori* represent 'too little, too late'. Within the mainstream of education, the situation in respect of Maori education is seen as being yet less satisfactory. Attainment of unit

standard qualifications and school performance, as judged against the achievement objectives of the Curriculum Framework, are both perceived in terms of individual achievement. There exists an implicit emphasis on competition within the school curriculum, and within the role of both traditional and competency-based qualifications in the job market. In such an environment of individualism and competition, the traditional Maori concept of cooperative and group-based learning sits uneasily.

Teacher reactions to the frameworks

The Curriculum Framework has been on the whole less controversial than unit standards. Our recent research conducted in a series of New Zealand schools has supported this impression. Our survey, while highlighting some concerns about workload, elicited comments such as 'easy to follow and not constricting' (questionnaire response, 1998). Nevertheless there have been concerns expressed. The PPTA was initially broadly supportive of the government curriculum and assessment reforms. However by 1992 a degree of criticism was creeping into the policy of that organisation; a report of that year referred to 'spectacular, glossy books, introducing exciting and radical new curriculum and assessment reforms (that) emanate from central agencies with monotonous regularity but (which) are rarely supported with realistic practical plans for their implementation in schools' (PPTA 1992). While the PPTA has been largely preoccupied with issues such as workload, the primary teachers union, NZEI, has addressed its criticisms at more theoretical aspects of the Curriculum Framework. A response to the draft curriculum framework in 1991 focused critically on several areas, including the subject-based emphasis of the early proposals, and the fact that the levels structure ignored established theories about the

manner in which children learn. This report was also critical of what it saw as the inherently instrumental thrust of the framework (NZEI, 1991). Subsequent publications have continued this critical stance (e.g. NZEI, 1999).

The Oualifications Framework, as discussed, has elicited far more opposition. While NZQA initiated research has indicated that many teachers have welcomed the implementation of unit standards (particularly in helping them in improving their individual assessment practice; Education Directions, 1998), the overwhelming evidence from teachers indicates hostility to the model. Comments such as the following abound: 'The volume of paperwork and emphasis was tedious (...) This had the effect of reducing my enjoyment of teaching English' (Education Directions, 1998, p23). Teacher groups, such as the PPTA, which initially supported the concept underpinning unit standards, have withdrawn this support as 'concerns began to be 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.' (PPTA, 1997). These concerns have remained an issue for the PPTA, leading to the establishment of an inquiry and the publication of *The Report of the Oualifications Inquiry* in 1997. The PPTA has been consistent in its endorsement of a national framework, and has welcomed 'Achievement 2001', but continues to raise objections to unit standards; these are encapsulated in the following statement issued in 1997: 'Any future endorsement of unit standards by PPTA (should) be contingent upon negotiated modifications in the following areas:

- i provision for merit and excellence in unit standards;
- ii avoiding large numbers of small unit standards;
- iii a reduction in detail for content coverage;

- iv changed expectations about re-assessment;
- v restricted use of multi-level assessment within a class;
- vi improved approaches to moderation;
- vii avoiding dual assessment
- viii a realistic time-frame for implementation;
- ix improved support and resources.

The Green Paper A Future Qualifications Policy for New Zealand: A Plan for the National Qualifications Framework comes at a critical time.' (PPTA response to the Green Paper, Ministry of Education, 1997).

In particular it has been significant that the top-down method of dissemination has contributed to the alienation of teacher groups. The PPTA, for instance, in its official response to the Green Paper of 1997, complained of the fact that 'as the 90s have proceeded, PPTA has had little opportunity except from the sidelines and in often somewhat confrontational settings, to contribute to the decision-making related to the development and implementation of the Qualifications Framework. This has led to widespread concerns on teachers' parts related to the workload generated by dual-assessing. Teachers were moreover largely excluded from development of the new structures and funding for implementation has been inadequate' (*ibid.*).

These views, whether justified or not, have been sufficiently widespread to cause the government to backtrack on the issue of unit standards. However the resulting reforms represented by 'Achievement 2001' remain predicated on the notion that education and assessment are best served by adherence to an outcomes-based model. This

initiative will be described and analysed in the last section of the paper, but it is first necessary to discuss some of the theoretical arguments that have been leveled at objectives-based curriculum and assessment models such as those that have developed in New Zealand.

How appropriate are the reforms?

Both of the New Zealand frameworks have been subject to charges that they are structurally and theoretically unsound and that they are driven by ideological and political, rather than by educational considerations. Some of these criticisms are as follows: that the sequential level structure of the Curriculum Framework is inappropriate; that the pre-specified outcomes in which both initiatives are expressed are problematic for a number of reasons, particularly when the attempt is made to utilise the model as a holistic approach to assessment, and especially when attempting to define abstract knowledge; and that the lack of reward for excellence within unit standards can lead to students adopting a strategy of minimum achievement. In attempting to answer the question of whether the reforms represent an appropriate educational system for New Zealand, we will examine each of these factors in turn.

Sequential Levels

It is possible to identify a number of problems that are peculiar to the adoption of sequential levels, the so-called achievement-based assessment. The New Zealand government has admitted that these are problematic, stating that 'writing clear and

unambiguous descriptions of each grade level can be difficult' (Ministry of Education, 1994b), and has presumably based its adoption of the non-differentiated Unit Standards on this premise. However, the eight levels of the Curriculum Framework remain. This multi-level structure was adopted by New Zealand despite the difficulties that were being experienced in Britain, and despite the fact that there was no other precedent, let alone a successful one, for the adoption of the model. Even the frank admission of one of the English architects of the National Curriculum during a visit to New Zealand in 1991, that 'there is no research on children's learning to support the levels structure' (Elley, 1994) was insufficient as a deterrent.

Many of the problems of specifying levels are the same as those of specifying objectives, only magnified by the need to allow for a sequence of development. The problems, though significant, are fewer and easier to resolve in cumulative subjects like Mathematics. However, in subjects such as English and History the difficulties are compounded. Elley has documented some of the issues that arose during the formulation of the draft English curriculum statement in New Zealand, with reference to the following statements concerning listening to text:

- Level 1: Listen and respond to texts
- Level 2: Listen and respond to texts and recall main ideas
- Level 3: Listen and respond to texts and respond to the main ideas in a meaningful way

Level 4: Listen and respond to texts and identify processes and respond to the main ideas in a well-structured and imaginative way.

Those seeking unambiguous specification in these objectives will be frustrated by the ambiguity of the language and the degree to which the subjective interpretation of the teacher could affect assessment. The distinctions between levels 3 and 4 are particularly open to this charge. Elley has also pointed to the fact that the attainment of these levels is dependent upon the mastery of the language found in different texts: if the same text were utilised then it would provide a more reliable measure of attainment. However texts vary in their degree of difficulty, and therefore the results of such assessment are suspect to say the least (Elley, 1994).

The actual sequence of the levels often seems to have been pulled out of the collective hat of the working party that formulated them, rather than being based upon any hard and fast principles. Why else would 'outline the characteristics of major world religions, and present evidence to illustrate the impact they have on national identity and cohesion and on international relationships' be level 8, whereas 'describe and present the cultural expressions of different generations within their cultural group and compare these with those of other groups in their community or region, identifying factors that have influenced changes in these expressions and suggesting possible changes in future' is only level 6 (Ministry of Education, 1996)? This is one example of many, and one which serves to illustrate the arbitrary nature of the level descriptors

and the difficulty of applying meaningful definitions to complex subjects in this manner, particularly in the absence of subject-specific conceptual research.

Children's learning does not always follow a particular sequence, let alone that specified without any grounding in developmental studies. Learning is not standardised but individual in nature, and Kelly has pointed to the fact that these curricula evince a 'less sophisticated view of children's minds than certain shoe manufacturers do of their feet' (Kelly, 1986), while Elley has claimed that in many subjects growth is 'individual and idiosyncratic', consisting of 'irregular spurts, sidetracks, inconsistencies and misconceptions' (Elley, 1994). In such a context, the uniformity and linear nature of the curriculum models in question seems to be ill-advised to say the least. In the words of Irwin, 'education is easily subverted by attempts to reduce it to its component parts, to sequence its acquisition, or to assign it to various levels. The result is always arbitrary and the important aspects are easily trivialised or lost in the process' (Irwin, 1994).

The use of objectives

One of the major and enduring criticisms of both the Curriculum and Qualifications Frameworks concerns the use of pre-specified objectives. Initially these were not highly specific within the Curriculum Framework, but were more ambiguous: the Achievement Objectives for each subject were designed to 'define in detail the knowledge, understanding, skills, attitudes and values' (Ministry of Education, 1993a) as laid out in the Curriculum Framework, and yet they stopped short of actually specifying learning content, which teachers were expected to 'derive from the achievement objectives' (Ministry of Education, 1993b). This, as previously indicated, has led to a situation where the finer details of assessment have been ignored by schools, and of course now the use of unit standards is changing this situation by superimposing a far more prescriptive assessment regime on the curriculum.

The New Zealand government has been quick to defend the reliance on outcomes, which it variously describes as 'clear learning goals' (Ministry of Education, 1993b), and as 'clear statements of what students know and can do' (Ministry of Education, 1997). There are nevertheless a number of serious criticisms to be levelled at the use of such an objectives-based approach, and these are especially pertinent when one considers the explicit and prescriptive nature of the performance criteria of the new unit standards.

Many educationists have spoken of the folly of attempting to define the developmental process of education in the form of rigid and pre-specified objectives. Pre-specification of objectives is, it can be argued, rationalism of the same type as that

which seeks to specify content and is thus subject to many of the same criticisms. There are several potential problems here.

First, one can point to the well-documented phenomenon that curricula such as these are highly assessment driven in their specifics. Lazarus for example, has argued that 'students know that the test is what matters most. 'Are we responsible for this on the test?' is the student's way of asking 'is it worth my trouble to learn'? When the answer is no, attention is turned off like the flick of a switch' (Lazarus, 1981). This causes a number of problems, most notably that teachers are tempted to teach to the test or to the assessment of objectives. This means that activities and topics which have intrinsic value, which are interesting or which contribute to the development of individual pupils, might be ignored in favour of those which are to be assessed, particularly in the face of curricular overcrowding. Some commentators ascribe intention here and accuse these models of being instrumental and channelling students into narrow, predetermined conduits which ultimately provide the material to contribute to the economic well-being of the country in question.

The practical difficulties of specifying objectives are another problem, though it is clear that there are occasions when such a practice is accepted. The use of objectives to assess competence in occupational skills and specific performance techniques is well-established, but the curriculum models discussed, and in particular the unit standards model within the Curriculum Framework, make the assumption that all types of capability, at all levels (*cf.* Jessup, 1991), can be neatly classified in this way. Irwin, Elley and Hall (1995) have been quick to point to the folly of assuming that

'one form of assessment is suitable for assessing the myriad of combinations and levels of skills and knowledge to be found in education and training courses and programmes' (Irwin et al, 1995). As previously mentioned, the desire to classify all knowledge into neat taxonomies is an example of the technical rationality that may well prove too problematic for the assessment of abstract concepts and complex ideas. This, according to Smithers, will mean that 'if it is not possible to provide clear and unambiguous standards, assessment will differ in different settings, across schools for example, and any qualifications based upon them will be fundamentally unreliable and therefore invalid' (Smithers, 1997). Elley, for example states that 'in academic school subjects there are few knowledge sets that are finite and well ordered. Most are fuzzy, multi-dimensional and complex' (Elley, 1996), and it would appear that the New Zealand Qualifications Authority would concur to some extent: it has recognised the futility of trying to specify school subjects in absolute terms and instead has distinguished between the transparent standards utilised for occupational units and the agreed unit standards used in schools which depend to a far greater extent upon complex and expensive moderation and verification to pursue reliability. That said, there must remain doubt about the assumption behind this approach that such a model of assessment is even adequate for vocational training, the most apparently straightforward aspects of which can take on a different complexity in a working environment.

Plateau Learning

Further problems are in evidence with regard to the attitude of students towards standards-based assessment. We have already noted that students can tend to concentrate on that which is being tested, to the exclusion of other intrinsically worthwhile learning activities. There are moreover other attendant risks. In particular, it can be seen that when the objectives are combined with the simple pass/fail formula⁶ adopted for unit standards, 'the results are potentially more serious. Not only will there be a tendency to channel learning down pre-set channels, but there is a risk that students will adopt a strategy of minimum competence, resulting in plateau learning' (Priestley, 1999). Recent research in several New Zealand schools has shown that many students do not feel that it is worthwhile doing more than the bare minimum required to pass, in the absence of a system of rewards for excellent work. The survey elicited many comments from students on this subject, including, 'a poor job will get you up to the standard', 'if there was something achieved at the end I would work a lot harder' and 'excellent achievement is rewarded equally with those who just pass, so why spend time achieving excellence, when energy and motivation can be spent elsewhere' (ibid.). It is possible to infer from this that the structure of the unit standards model leads to poor work habits. It is to be hoped that the new achievement standards introduced by 'Achievement 2001' will address these issues, although the manner in which this will be done is far from clear at the time of writing. It is clear, in the light of the experience gained through implementing such a scale within GNVQ assessment in England and Wales, that this is not an easy option.

In summary, Tennant has identified four basic objections to the adoption of objectives, namely: 'that these objectives can rarely be determined in advance; that the emphasis on outcomes undervalues the importance of the learning process; that not all learning outcomes are specifiable in behavioural terms; and that learning may be occurring that is not being measured' (Tennant, 1988). The risks inherent in the wide-scale adoption of such an approach are clear, and it would seem that the over-reliance on pre-specified objectives 'can lead to learning that is limited in scope and scale, myopic and simplistic' (Priestley, 1997).

Achievement 2001

The recent government Green Paper (Ministry of Education, 1997) has sought to broaden the use of criterion-referenced assessment by stating, in a bid to mollify opposition, that any type of outcome-based assessment would be considered for accreditation by the New Zealand Qualifications Authority. As previously mentioned, this Green Paper has resulted in a new development, 'Achievement 2001', which is said to 'take into account views and proposals expressed by a wide range of individuals, agencies and groups over the last few years' (Ministry of Education/NZQA, 1998). 'Achievement 2001' remains in the formative stage. In particular the form that the new achievement standards will take is not yet clear. However it is apparent that the modified framework will contain the following features: it will incorporate a mixture of internal and external assessment, thus finally putting to rest the long standing and polarised arguments on this issue, and especially the tendency for internal assessment to be associated with unit standards and external assessment with the old system; the new system will retain unit standards for industrybased qualifications but will replace these for school curriculum subjects with achievement standards, which will allow for grading; the new framework will be credit-based, and students will accumulate credits to gain the national Certificate of Educational Achievement; this qualification will correspond with the existing unit standards levels: and significantly 'Achievement 2001' will herald the end of the dual accreditation that has been so unpopular with teachers.

The reception that this initiative will receive from education professionals remains to be seen. However it is clear that at least some of the criticisms levelled at the old framework have been addressed. The Minister of Education, Wyatt Creech, in launching the scheme, pointed to some of these, stating in a press release on 5th November 1998 that, 'there were some real problems - the teacher workload implications from moderation and assessment is one example' (Ministry of Education, 1998). The responses from professional bodies such as PPTA have been cautious, but largely positive. Nevertheless, there are several points to be wary of: as already stressed, the use of outcomes remains as an unquestioned orthodoxy, thereby muting the true impact of this important reform; and ominously the Minister has hinted that further discussion will not be welcomed, stating that, 'much of the theoretical differences of the debate have become very arid and rather pointless. We in the education sector have to remember that what counts is the very practical consideration, the qualification a young person is armed with as they go on to further education, training or employment. We need to bury those arid arguments and get on with the job of putting in place a modern, comprehensive system of qualifications that really illustrates what a student's skills are. It is time to move on - together. It would be a shame if this well constructed middle path became the subject of further division and debate, political or otherwise. Some extremists will still argue but I am confident the great bulk of the sector will back this new initiative' (Ministry of Education 1998a).

These points seem to suggest that the underlying philosophy of current education policy remains immutable, and that 'Achievement 2001' is little more than the old model dressed up in 'new clothes'

Conclusion

The two frameworks, Qualifications and Curriculum, are subject to criticism in many ways. On an educational level it is possible to criticise them on a number of grounds. They are both based upon a structure which is flawed. The outcomes-based nature of the two models is problematic in a number of areas, most notably: the difficulties involved in specifying objectives for academic subjects; reliance upon objectives means that the curricula run the risk of becoming overly assessment driven, with the consequence that learning could become narrower in focus; and the emphasis in the Curriculum Framework on sequential levels ignores the fact that much research about the nature of learning indicates that children simply do not learn in such an ordered fashion. This of course is greatly complicated by the attempt to superimpose the assessment requirements of the Qualifications Framework onto the syllabus content determined by the Curriculum Framework, making, for example, Level 6 of the latter, equivalent to Level 1 of the former. The administrative complexities created by such a duality are alone sufficient to call the model into question and one must ask whether a single curriculum and assessment framework for schools would be more desirable and appropriate. It is possible that 'Achievement 2001' will further 'muddy the waters' by seeking to utilise two separate types of objectives for the assessment of school qualifications: achievement standards and unit standards.

Moreover, one cannot escape the conclusion that both frameworks are inherently instrumental in nature: both, through their emphasis on pre-specified objectives, seek to attain accountability and market choice through the production of data to inform such choice. Both are thus ideological creations, rather than frameworks within which genuine individual growth and development is encouraged. Assessment provides the data to ensure that control and accountability over teachers and schools are achievable aims; it supplies the information which is required to facilitate market choice; and it allows learning to be channelled into the conduits which are deemed necessary to provide the sort of workforce to ensure future economic success.

However one must concur that the Curriculum Framework, although subject to criticism on many grounds, has been relatively uncontroversial, and indeed is welcomed by many teachers. Despite the limitations of its outcomes-based approach, it is a curriculum designed for use in schools, and furthermore is designed to take into account the conditions found in a school learning environment. However the implementation of the Qualifications Framework has been considerably more problematic. It has its origins in vocational training rather than in school-based assessment, and is based upon the premise that all qualifications can be assessed in the same manner, regardless of the type of activity being assessed. It has been seen by the government as a panacea, or in the words of Smithers as 'a magical formula' analogous to 'the philosophers stone', which would 'transform the entire educational system at a

stroke' (Smithers, 1997). It is becoming clear that these expectations are impossible and that such a rigid assessment regime for all qualifications is an unrealistic pipe dream. 'In undertaking a necessary reform of qualifications, New Zealand has been looking for a simple tidy structure which in practice has become a straightjacket' (*ibid*.). It is apparent that New Zealand needs to be far more flexible in its search for a national qualifications model. It is likely that 'Achievement 2001' will not provide the answer, despite the fact that the types of objectives to be utilised for school subjects will be more flexible than those provided by the unit standards model. The simple fact remains that the new initiative remains tied closely to the use of objectives. The objectives model has been shown to be a suitable form of assessment for some activities where performance is being judged. 'If you want to teach someone to type, it may make sense to have very specific and measurable targets (objectives). But if we try to apply that kind of formula to appreciating poetry, or understanding historical events, the model breaks down: the situation is much more complex and we have to plan learning quite differently' (Lawton, 1996). It would seem that New Zealand's problems stem not from the adoption of a rigid objectives-driven model, but rather from the attempt to utilise this model as an over-arching qualifications framework. 'Achievement 2001', in perpetuating the reliance on outcomes for all qualifications, threatens to perpetuate the problems. Despite the fact that 'Achievement 2001' is claimed to allow for flexibility through the adoption of a different types of outcome for the assessment different modes of learning, initial indications appear to maintain a continued emphasis on a 'one size fits all' philosophy, which ignores established theories about the manner in which children learn in favour of an assessment driven model which is still too narrow to meet the needs of a modern education system.

Footnotes

- 1. The 1993 curriculum was the third attempt in a decade to introduce curricular reform on this scale. Two previous attempts had failed due to a variety of political factors.
- 2. Both Irwin and Smithers document the adoption of the Scottish SCOTVEC curricular model for the New Zealand Qualifications Framework, following fact-finding visits to Scotland by officials from New Zealand.
- 3. This separate development of curriculum and assessment has created a duality that many teachers find confusing. The Curriculum Framework is the responsibility of the Ministry of Education, and teaching and learning is supposed to reflect the prescriptions laid down in relevant documents. The unit standards administered by the quasi-independent New Zealand Qualifications Authority are solely concerned with assessment. However, as is explained elsewhere in this paper, the demands of assessment can exert a disproportionate influence on teaching and learning. There is a parallel here in the former National Curriculum Council in England and the Schools Examinations and Assessment Council which subsequently merged to become the School Curriculum and Assessment Authority (now further merged with the National Council for Vocational Qualifications as the Qualifications and Curriculum Authority).
- 4. New Zealand's free market revolution has its origins in the Treasury, which continues today to push policy in this direction. The first reforms of this ilk were instigated by a Labour government that held power for the second half of the 1980s: this policy shift was named Rogernomics, as a parody of Reaganomics, after the Minister of Finance, Roger Douglas. The National administrations of the 1990s have continued in the same mould.
- 5. The Treaty of Waitangi was signed in 1840 by representatives of the British Crown and the Maori tribes. The tribes ceded sovereignty to the British Crown in return for protection and recognition of certain traditional rights, for example in the areas of forestry, land ownership and fisheries. There existed an ambiguity between the English and Maori language versions over the precise definitions of the word sovereignty in the context of the treaty, which continues to be a matter for debate today. Those interested should refer to Orange (1987) for further details.
- 6. The pass/fail formula remains a feature of unit standards, despite the criticism that it has attracted. It was originally intended that a multi-level 'achievement-based' assessment regime be instituted, but this was abandoned in 1994 in favour of the standards-based NVQ type formula, due the complexities involved in administering a multi-level criterion-referenced system. More recently, in response to the criticisms, work has been done by NZQA in developing a scale for recognising excellence; the achievement standards of the new initiative will utilise this approach.

REFERENCES

- BARR, H. and GORDON, P. (Eds..) (1995) *The Curriculum in the Classroom* (Palmerston North, Dunmore Press).
- BEATTIE, N. (1991) 'The wider context: are curricula manageable?', in: BRIGHOUSE, T. and MOON, B. (Eds.) *Managing the National Curriculum: some critical perspectives* (London, Longman).
- BENTON, R., BENTON, N., SWINDELLS, J. and CHRISP, T. (1995) *The Unbroken Thread: Maori Learning and the National Qualifications Framework* (Wellington, NZCER).
- DEWEY, J. (1938) Experience and Education (New York, Collier-Macmillan).
- EDUCATION DIRECTIONS (1998) Findings from the survey of teachers involved in the 1997 trials of English unit standards (commissioned by NZQA) (Wellington, Education Directions).
- ELLEY, W. (1994) 'Curriculum Reform: Forwards or Backwards', in: MANSON, H. (Ed.) New Zealand Annual Review of Education (Wellington, Victoria University of Wellington).
- ELLEY, W. (1996) 'Unresolved Issues in Fitting Academic Courses into the Qualifications Framework', in: O'NEILL, A. M. (Ed.) *Delta: Policy and Practice in Education 48* (Palmerston North, Delta).
- HABERMAS, J. (1976) Legitimation Crisis (London, Heinemann).
- HAWTHORN, H.B. (1944) *The Maori: A study in acculturation* (New York, American Anthropological Society).
- IRWIN, M. (1994) Curriculum, assessment and qualifications: an evaluation of current reforms (Auckland, Education Forum).
- IRWIN, M., ELLEY, W., and HALL, C. (1995) Unit Standards in the National Qualifications Framework (Auckland, Education Forum).
- JESSUP, G. (1991) *Outcomes: NVQs and the Emerging Model of Education and Training* (London, Falmer Press).
- KELLY, A. V. (1986) *Knowledge and Curriculum Planning* (London, Harper and Row).
- KELLY, A. V. (1989) *The Curriculum: Theory and Practice* (London, Paul Chapman Publishing).
- KELLY, A. V., (1990) *The National Curriculum: a critical review* (London, Paul Chapman Publishing).
- LAWTON, D. (1989) *Education, Culture and the National Curriculum* (London, Hodder and Stoughton).

- LAWTON, D. (1996) *Beyond the National Curriculum* (London, Hodder and Stoughton).
- LAWTON, D. (1988) 'Ideologies of Education', in: LAWTON, D. and CHITTY, C. (Eds.) *The National Curriculum* (London, The Institute of Education).
- LAZARUS, M. (1981) Goodbye to Excellence: A critical look at minimum competency testing (Washington, NAESP).
- LEE, G. and HILL, D. (1996) *Curriculum Reform in New Zealand: outlining the new, or restating the familiar*, in: O'NEILL, A. M. (Ed.) *Delta: Policy and Practice in Education 48* (Palmerston North, Delta).
- McCULLOCH, G. (1992) Introduction to McCULLOCH, G. (Ed.) *The School Curriculum in New Zealand: History, Theory, Policy and Practice* (Palmerston North, Dunmore Press).
- MINISTRY OF EDUCATION (1993a) *The New Zealand Curriculum Framework* (Wellington, Learning Media).
- MINISTRY OF EDUCATION (1993b) Science in the New Zealand Curriculum (Wellington, Learning Media).
- MINISTRY OF EDUCATION (1994a) *Education for the 21st Century* (Wellington, Learning Media).
- MINISTRY OF EDUCATION (1994b) Assessment: from policy to practice (Wellington, Learning Media).
- MINISTRY OF EDUCATION (1996) Social Studies in the New Zealand Curriculum (Draft) (Wellington, Learning Media).
- MINISTRY OF EDUCATION (1997) A Future Qualifications Policy for New Zealand: A Plan for the National Qualifications Framework. Green Paper (Wellington, Ministry of Education).
- MINISTRY OF EDUCATION (1998a) Notes from speech given at Rangiora High School, 5th November 1998 (Wellington, Ministry of Education).
- MINISTRY OF EDUCATION (1998b) Making Education Work for Maori: a report on consultation (Wellington, Ministry of Education).
- MINISTRY OF EDUCATION/NZQA (1998) Achievement 2001: Qualifications for 16 to 19 year olds (Wellington, Ministry of Education/NZQA).
- NZEI, (1991) Response to the National Curriculum Discussion Document, (Wellington, NZEI).
- NZEI, (1999) *The role of the Teacher in New Zealand Primary Schools: interim report*, (Wellington, NZEI).

- O'NEILL, A. M. (1996) Curriculum Development in Aotearoa/New Zealand: an editorial introduction, in: O'NEILL, A. M. (Ed.) Delta: Policy and Practice in Education 48 (Palmerston North, Delta).
- OPENSHAW, R. (1995) Unresolved Struggle: consensus and conflict in New Zealand State Post-Primary Education (Palmerston North, Dunmore Press).
- OPENSHAW, R., Lee, G. and Lee, H. (1993) *Challenging the myths: rethinking New Zealand's educational history* (Palmerston North, Dunmore Press).
- ORANGE, C. (1987) *The Treaty of Waitangi* (Wellington, Bridget Williams Books Ltd).
- PERE, R.R. (1983) *Ako: Concepts of Learning and Teaching in the Maori Tradition*, (Hamilton, University of Waikato).
- PETERS, M., MARSHALL, J., AND MASSEY, L. (1994) 'Recent Educational reforms in Aotearoa', in: COXON, E., JENKINS, K., MARSHALL, J., AND MASSEY, L. (Eds.). *The Politics of Learning and Teaching in Aotearoa-New Zealand* (Palmerston North, Dunmore Press).
- PPTA, (1992), Annual Report 1991-92 (Wellington, PPTA).
- PPTA, (1997), *Te Tiro Hou: report of the Qualifications Framework Inquiry* (Wellington, PPTA).
- PRIESTLEY, M., (1996) 'Unit Standards Assessment in the United Kingdom: A Critical Analysis of Competency Based Education and Training', in: O'NEILL, A. M. (Ed.) *Delta: Policy and Practice in Education 48(2), 49(1)* (Palmerston North, Delta).
- PRIESTLEY, M., (1997), 'Forcing square pegs into round holes: Unit Standards and the assessment of academic school subjects', in CLARK, J (Ed.) (1999) *Delta: Policy and Practice in Education 49*(2) (Palmerston North, Delta).
- SMITHERS, A. (1997) *The New Zealand Qualifications Framework* (Auckland, Education Forum).
- STENHOUSE, L. (1975) An Introduction to Curriculum Research and development (London, Heinemann).
- TABA, H. (1962) *Curriculum Development: Theory and Practice* (New York, Harcourt, Brace and World).
- TAYLOR, J. (1994) Foreword to IRWIN, M. Curriculum, assessment and qualifications: an evaluation of current reforms (Auckland, Education Forum).
- TENNANT, M. (1988) Psychology and Adult Learning (London, Routledge).

The Qualifications Framework levels equate to the following traditional accreditations: Level 1 = School Certificate (Year Eleven) Level 2 = 6th Form Certificate (Year Twelve) Level 3 = Bursary/University Entrance examination (Year Thirteen) Level 4 = Trade Certificate (undergraduate) Level 5/6 = New Zealand Certificate(undergraduate) Level 7 = Initial Degree(undergraduate) Level 8 = Postgraduate Degrees and Diplomas

Figure 1: The juxtaposition of the New Zealand Curriculum and Qualifications Framework levels