What educational reform means: lessons from teachers, research and policy working together for student success

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Abstract   This paper describes education reform projects designed to bring about major improvements in school and tertiary student outcomes. Individually the projects illustrate characteristics of educational reform in local contexts for primary, secondary and tertiary education. In combination they signal key components essential to getting large scale high-quality school and tertiary education cultures geared to student success.

Keywords   Education reforms · School outcomes · Tertiary outcomes · Student achievement

1 Introduction

In many settings across the globe educational reform has been about compliance and top-down reform. This paper suggests that educational reform is not linear, but a continual process of constructing meaning — as learner, teacher, leader and within a range of organizations. The key to effective education reform is the improvement in relationships among all involved.

This paper describes projects designed to bring about major improvement in school and tertiary student outcomes. Individually the projects will illustrate characteristics of educational reform in local contacts. In combination they will signal critical components

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essential to getting large scale high-quality school and tertiary education cultures geared to student success.

For the past 4 years we have been working in projects across New Zealand aimed at improved literacy. We will report on aspects of this work aimed at long-term education reform through policy–research–practice collaboration. The collaboratively designed interventions have resulted in significant improvements in primary school student literacy achievement.

Educational reform in New Zealand secondary education has included understanding the future. This planning method means that greatest attention is paid to those issues that will assume importance in 5,10,15 or 20 years time, rather than those immediately present. We will discuss what we are learning in relation to the characteristics of educational reform when focusing on secondary school futures.

From 2001 to 2005 the reformation of outcomes for underrepresented and underachieving students in tertiary education has been targeted. We will describe a project undertaken in a university setting focused on improved student success rates for teacher education students of Pacific Nation heritage. The importance of personality and innovation in teaching, alongside research and organisational learning were evident in achieving improved student success.

Each section of the paper describes a number of components essential in getting large scale high-quality school and tertiary education cultures geared to student success. By describing characteristics of educational reform this paper sets the scene for future possibilities when research, policy and practice work together for student success.

2 What 'educational reform' means

There is much about 'educational reform' that is exciting, applied, knowledge-based, knowledge-bearing and transformational. 'Educational reform' in this sense means the removal of faults and the drive for education outcomes to be better. In all cases the intention is that educational reform should lead to the very best opportunities for learners, and advancement in local and global communities.

The evidence nationally and internationally, however, shows that educational reform is not achieving great outcomes for all. As discussed previously (Airini et al. 2006) in New Zealand for example, educational failure is still happening amongst the same population groups in schools and tertiary education. The partnership among universities, schools and government is not working well enough to affect national education reform for all (ibid).

International data indicates differences in what aspects of educational reform are needed within countries. The PISA (OECD 2001) results suggested that in New Zealand some but not all 15-year-old students are able to apply their learning well in science, reading and mathematics. Analyses show that New Zealand is producing world-class students while at the same time being one of the few Western countries in which the bottom twenty percent of students are systematically falling behind (Hattie 2003). Māori (indigenous peoples) learners and Pasifika (Pacific Nation heritage) learners dominated this group and were disproportionately represented in what has come to be known as 'the tail' of student achievement. As shown in Fig. 1, New Zealand's education system could be described through international measures in 2001 as 'high quality, low equity'. By 2005 Māori and Pasifika continued to be underachieving in national assessment measures. Boys in particular were poorly represented in success figures. In 2005 43% of Pasifika boy school leavers finished secondary school with no qualification; and 53% of Māori boy school leavers had the same outcome (Ministry of Education 2006). This contrasts with 80% of Pakeha (European heritage) boy school leaver population finishing secondary school *with* a qualification. Further educational reform
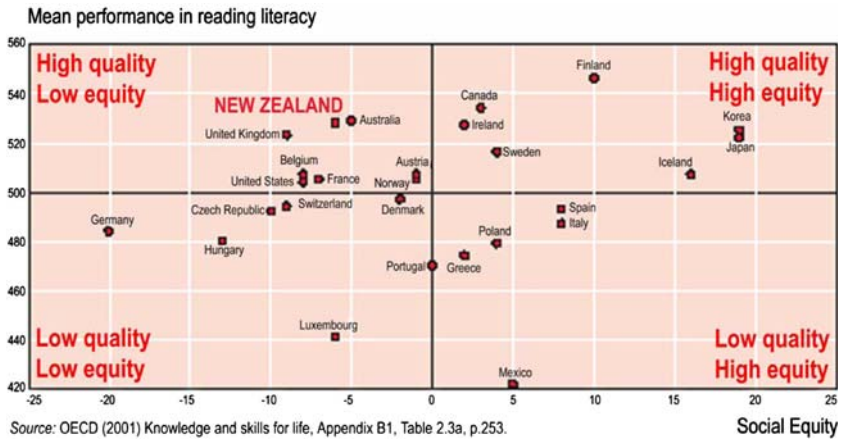
Mean performance in reading literacy

Fig. 1 Student performance, Quality and Equity

targeted at those "traditionally underserved by New Zealand schools" (Alton-Lee, 2005, p. 2) is needed to achieve a outcomes that are "high quality, high equity".

3 Improving literacy outcomes in primary education

Despite New Zealand's international reputation for high levels of literacy achievement there is a long tail in the distribution of achievement. Māori and Pasifika students from low decile schools are over represented in this tail. The diverse urban schools of South Auckland which have high proportions of Māori and Pasifika students have long been identified as sites for low achievement, particularly in literacy (e.g., Ramsay et al. 1981). Recent evidence suggests that the disparities between Māori and Pasifika students and other students in reading accuracy have been reduced, and that there has been a substantial reduction in the proportions of students in the lowest bands of achievement. Despite this, the evidence also suggests that at Year 4 and Year 9, the disparities in reading comprehension have continued, if not increased (Crooks and Flockton 2005).

A research and development programme, conducted as a collaborative partnership between researchers, schools and the Ministry of Education, was designed to test several questions about achievement in seven decile 1 schools in South Auckland (McNaughton et al. 2006). These questions were:

- Can a research-practice collaboration develop cluster-wide and school based professional learning communities that are able to critically analyse and problem solve issues of instructional effectiveness, thereby developing more effective instruction that has a powerful educationally significant impact on Māori and Pasifika children's comprehension at Years 4–9?
- Can a set of effective instructional activities be identified that can be used by teachers to enhance the teaching of comprehension for Māori and Pasifika children in Years 4–9?

The research questions were based on a set of hypotheses about the nature of effective instruction for reading comprehension, and the nature of effective school-based interventions. There were two main hypotheses: first, that more effective teaching could be developed through

a professional learning community that has a continuing process of critical discussion and problem solving, based on evidence (Robinson and Lai 2006); and secondly, that effective instruction would include a range of attributes, such as explicit teaching of strategies, and deliberate teaching of vocabulary (Pressley 2002), but that these would need to be contextualised to the specific needs created by past histories of schooling and contemporary profiles.

The research and development programme was conducted over 3 years with up to 70 teachers and, in different years, between 1200 and 1900 students, over 90% of whom were Pasifika or Māori students. A quasi-experimental design was employed to examine relationships between the programme and the outcomes over 3 years. Repeated measures of student achievement at the beginning and the end of each year, and a final measure at the beginning of the fourth year, form the basis of the design which, among other things, examines rates of gain against predicted patterns of growth generated from a baseline.

An initial step involved collecting baseline "profiles" of achievement, using the standardised assessments of reading comprehension. It also involved collecting baseline profiles of classroom instruction, using systematic observations in classrooms. Together these baselines provided detailed evidence about strengths and weaknesses in the students' reading comprehension, which were able to be mapped on to patterns of instruction in the classroom. For example, it showed that low decoding levels were generally not a problem; rather, it was patterns of checking and detecting threats to meaning in paragraph comprehension, and size and knowledge of vocabulary, that were posing difficulties. An unpredicted finding was that while high rates of explicit strategy instruction occurred, students were focused on the strategies as ends in themselves, and often resorted to guessing. Classroom observations showed a low incidence of teachers or students monitoring and checking strategies, and low rates of identifying and elaborating meanings of low frequency words, unusual uses of common words, or idiomatic uses.

The first phase over a year included systematic feedback and analysis and problem solving at cluster, school, and classroom levels, using the profiles as evidence. This process occurred each year thereafter. A second phase added targeted professional development, based on the evidence in the first phase, with all the Year 4–9 teachers. The third phase involved planned sustainability of the professional learning communities with teacher-designed projects and a cluster-led conference.

At baseline, students were on average at stanine 3.1, approximately 2 years below expected levels, and this was generally the case, with some variation across year levels and across schools. To test the impact of the programme, a number of different analyses were made using longitudinal cohorts, comparisons with baseline projections, and total school population changes.

Analysis of achievement for longitudinal cohorts showed that by the end of the project, the average student now scored in the average band of achievement (stanine 4.21). The overall effect size for gains in stanines was $d = 0.62$. Māori students' achievement accelerated at similar rates to those of the other ethnic groups participating in the project, so that by the end of the project, the average Māori student scored within the average band (mean = 4.73), with one cohort of Māori students (Year 4) scoring above the national expected average at stanine 5.29. Males and females made similar rates of progress over the 3 years in the intervention, but female students, on average, started with higher levels of achievement than male students. On average, students in each school made accelerated gains in achievement from the beginning to the end of the project.

Analyses using the design format showed that after both 2 years and then 3 years, students had statistically significantly higher achievement than baseline comparison groups (effect

sizes ranged between 0.31 and 0.59), and were achieving statistically significantly higher than a comparison cluster of schools (effect sizes ranged between 0.33 and 0.61.)

Observations of classroom instruction showed significant changes in types of teacher and student exchanges relating to the focus of the intervention that could be linked to the pattern of the gains over 2 years in the component tests. Further case studies of teachers showed that a high gain teacher more often directed students' awareness to the requirements of activities, clarified her high expectations, pushed her students with complex tasks, introduced more complex and less familiar language including idiomatic uses, created a classroom community that enjoyed the use and study of oral and written language, exposed students regularly to rich and varied texts, and was able to incorporate student cultural and linguistic resources, as well as clarifying areas of confusion.

The research showed that it is possible to develop more effective teaching that impacts directly on the reading comprehension achievement of Year 4–9 children. The level of gains overall was in the order of one year's gain in addition to nationally expected progress over 3 years. When these gains are considered in terms of the history of schooling in South Auckland, the educational significance of the gains, and the international literature of schooling improvement, they are seen to be substantial.

3.1 Critical components

There are a number of components associated with the success of the research and development programme. Together these create greater alignment between national policy, the schools' focus and research imperatives on the one hand and the nature and course of the collaborations on the other.

3.1.1 A developmental history

Recently Raphael et al. (2006) argued that the reform process in schools in the United States has a developmental nature. This history determines in part the effectiveness of interventions. They propose a developmental model which 'describes qualitative levels a school moves through as it progresses toward increasing literacy achievement for students, identifies the mechanisms that allow schools to make progress and provides evidence of the stability of the progress and process' (p. 4).

The point for the research summarised above is that the 3-year programme had a prehistory. The research and development evolved out of a broad project initiative established in 1999 called, Strengthening Education in Mangere and Otara (SEMO) which aimed to raise the achievement levels of children which was in part located within the Ministry of Education's Literacy and Numeracy strategy (see below). SEMO's general aim was to strengthen schools in the area and to enhance children's learning opportunities particularly to improve literacy by enhancing the work of early childhood and primary teachers who were providing literacy programmes. SEMO was succeeded by a further policy and practice development with the schools called the Analysis and Use of Student Achievement Data (AUSAD). This project was located within that government-funded school improvement initiative. The goal of AUSAD was to offer high quality learning environments to raise achievement by using student achievement information to inquire into the nature of the under-achievement, to test competing explanations of its cause, and to monitor the impact of teachers' decisions about how to intervene. The focus was on developing the inquiry skills of teacher leaders and teachers to improve school practices and student learning outcomes. The schools that were

part of the collaboration had leaders who were well versed in collecting and using evidence to examine patterns of achievement and progress.

3.1.2 A policy context

A second component is the presence of a policy context. A national policy shift occurred in New Zealand with the implementation of the National Literacy and Numeracy strategy. The strategy was a response to reports by a national Literacy Task Force (1999) and an associated Literacy Experts Group (1999) convened by the New Zealand Government. The recommendations from those reports influenced a coherent and concerted policy, which set national guidelines, developed professional resources and provided funding pools and other resourcing. These enabled concerted professional development and research-practice collaborations to occur.

3.1.3 Research capacity

A third component is external support for schools in the form of collaborative research-practice-policy partnerships (e.g., Annan and Robinson 2005; Lai et al. 2004). The Woolf Fisher Research Centre, at the University of Auckland developed research practice collaborations with the schools from 1998 within the policy and developmental history noted above.

Several features of the research capacity are critical. The researchers needed to be well versed in and able to learn from applied contexts. That meant having methods and designs and ways of working that both expressed the expertise but enabled that expertise to be tested and informed. Researchers needed to be well versed in theoretical and professional research relating the fields of improvement specifically in literacy (reading comprehension) teaching and learning in the context of cultural and linguistic diversity.

The ongoing results from this research and development partnership suggest we need to consider how to foster such partnerships both in terms of the kind of partnerships being developed and the infrastructure to support the development and sustainability of such partnerships. (Annan and Robinson 2005; Robinson and Lai 2006). Such infrastructure could be in the form of short-term projects through contestable funding by central government for short-term projects involving partnerships between schools and researchers, or longer-term collaborations such as those involving the Woolf Fisher Research Centre, which has ongoing external funding for specific projects as well as core funding from a philanthropic trust. Neither are mutually exclusive and policy makers need to consider how best to use different vehicles to achieve their goals.

3.1.4 A collaborative process

The nature of the collaboration itself is the fourth component. It has several critical features which contribute to the collaboration being an effective working professional learning community (also see Coburn 2003; Robinson and Lai 2006). One is the need for a research-practice community's shared ideas, beliefs and goals to be theoretically rich. This shared knowledge is about the target domain (in the present case of comprehension), but it also entails detailed understanding of the nature of teaching and learning related to that domain (Coburn 2003). Yet a further area of belief that has emerged as very significant for the achievement of linguistically and culturally diverse students in general, but for indigenous and monitory children in particular, is the expectations that teachers have about children and their learning (McNaughton et al. 2003).

Being theoretically rich requires not just consideration of researchers' theories but also practitioners' theories and adjudication between them. Robinson and Lai (2006) provide the framework by which different theories can be negotiated using four standards of theory evaluation. The standards are accuracy (empirical claims about practice are well founded in evidence), effectiveness (theories meet the goals and values of those who hold them), coherence (competing theories from outside perspectives are considered) and improvability (theories and solutions can be adapted to meet changing needs or incorporate new goals, values and contextual constraints).

This means that another feature of the community is that their goals and practices for intervention are based on evidence. That evidence draws on close descriptions of children's learning as well as descriptions of patterns of teaching, and systematic data on both learning and teaching would need to be collected and analysed together. That assessment data is broad based in order to know about the children's patterns of strengths and weaknesses, to provide a basis for informed decisions about teaching, and to clarify and test hypotheses about how to develop effective and sustainable practices (McNaughton et al. 2003).

However, what is also crucial is the validity of the inferences drawn, or claims made about the evidence (Robinson and Lai 2006). Inappropriate inferences drawn from the data can result in interventions that are mismatched to students' learning needs Buly and Valencia (2002). So this requires a further feature, which is an analytic stance to the collection and use of evidence. The research framework needs to be able to show whether and how planned interventions do impact on teaching and learning enabling the community to know how effective interventions are in meeting its goals. The design part of this is by no means simple especially when considered in the context of recent debates about what counts as appropriate research evidence (McCall and Green 2004; McNaughton et al. 2006).

The analytic stance needs to be a critical reflection on practice rather than a comfortable collaboration in which ideas are simply shared (Annan and Robinson 2005). Recent New Zealand research indicates that collaborations, which incorporate critical reflection, have been linked to improved student achievement (Timperley 2003) and changed teacher perceptions (Timperley and Robinson 2001).

A final feature is that the researchers' and teachers' ideas and practices need to be culturally located. We mean by this that the ideas and practices that are developed and tested need to entail an understanding of children's language and literacy practices as these reflect children's local and global cultural identities. Importantly this means knowing how these practices relate (or do not relate) to classroom practices.

4 Educational reform in secondary school settings

This part of the paper examines the impact of some 15 years of educational reform on secondary education in New Zealand and to describe a recent initiative that seeks to include an understanding of the future and what it holds for our secondary schools, teachers and students looking out 20 years and beyond. In many respects New Zealand led the way in such reforms. It describes the background to the radical reforms that began in New Zealand in 1989, the subsequent changes and the impact they have had on New Zealand's education system. Particular attention is given to an assessment of the effectiveness of the reforms, the weaknesses that have become apparent and proposes a model for future development.

Essentially, there have been three broad phases in the development of education policy in New Zealand during the last decade of the 20th century and first six years of the 21st century. The first phase was pre-1989 when education was administered by large, centralised bureau-

cratic structures. In this phase teachers were a part of a large public service organisation with their employment, assessment, promotion, and professional development controlled by central government or local authorities acting on behalf of the government. It was argued that the education system at all levels did not involve communities of interest to the extent necessary for effective delivery and, as a consequence, was slow to respond to the changing needs of a modern and dynamic society and economy.

The second phase was the reforms that occurred from 1989 onwards. These reforms were broadly known as "Tomorrow's Schools" and occurred within a context of radical social, political and economic reform that was taking place in New Zealand at that time. Part of that reform was a re-structuring of the public sector at all levels in order to bring about greater decentralisation and higher levels of social, professional and economic accountability. The secondary education system was no exception.

The third phase, which has begun over the last 6 years, has three parts. The first two have begun, the third has yet to commence. The first is the realisation that the achievement of children does not necessarily occur simply because administrative reforms occur. The second part is a move away from the relentless external accountability created by a doctrine of managerialism and towards professional accountability through the development of agreed professional standards, ethical standards and focusing on evidence-based best practice. The third part was to begin the process of looking at the future using a "blue skies" approach in order to attempt to identify and describe the societal changes that will occur over that period and how the secondary education will need to adapt in order to both lead and respond to those changes.

4.1 Part One: education policy pre "Tomorrow's Schools"

4.1.1 Organisational structure and policy

Prior to the 1980s New Zealand had a long and established tradition of social initiatives that sought to enhance the social well-being of its citizens (Middleton 2002). An essential part of those initiatives was an emphasis on the importance of education that had been established in legislation in the late 19th century and which received new life with the vision of the first Labour Government. The then Minister of Education's most famous statement, and one that has endured to this day, was:

> *"Every person, whatever his level of academic ability, whether he be rich or poor, whether he lives in town or country, has a right, as a citizen, to a free education of the kind to which he is best fitted and to the fullest extent of his powers."* (Peter Fraser, House of Representatives AJHR, E1, 1932, p. 2)

The educational structures built up from the 1930s, and largely consistent with Fraser's philosophy, consisted of district governance with central regulation and funding in order to ensure, as far as was possible, that the system was dominated by fairness and equal opportunity (Perris 1998). Within this dominant, central bureaucratic structure, teachers were part of a large public service organisation, with their human resource policies and procedures controlled by central government or its local agencies.

Primary schools were governed and administered by one of 10 regional education boards, each of which had responsibility for about 200 schools in its region. The education board was the employer of all the teachers in its region and made all the employment decisions for those schools. Although each school could make minor decisions about some aspects of day-to-day administration, the education board made all of the important decisions.

Most secondary schools had their own board of governors who controlled the school and reported directly to the Department of Education. Each school employed its own staff and made its own employment decisions. However, human resources policies and practices of the Department of Education tightly controlled all contractual obligations, from appointment criteria through to teachers' salaries, which were paid directly by that department.

Assessment in the secondary system was externally-examination focussed and based on a normative system that essentially "sorted" students during the last 3 years of secondary education. Examinations were taken; students were ranked on a normal distribution curve for each subject area and a certain percentage (about 50% in each subject) passed. In the penultimate year of secondary education students could earn matriculation. Some of this was assessed internally and some externally but still largely along normative lines.

The fact that the education system in New Zealand at that time was overly bureaucratic, top-heavy, bound by regulation and in sore need of reform was clear to most who worked within it and those who dealt with it. Many also argued that the education system did not involve communities of interest to the extent necessary for effective delivery and hence was slow to respond to the changing needs of a modern and dynamic society and economy. Yet others argued that the examination system that scaled marks and ranked student normatively was neither fair nor an effective means of taking education into the future.

4.1.2 Forces for change

Towards the middle of the 1980s three key forces began to emerge with regard to the education system.

- Frustration at the local level that the system was too centralised, too slow to respond to the needs of children and communities, and too constraining. Freedom from these constraints was sought (Nash 1989).
- A number of influential stakeholders supported government's view that teachers and schools were not accountable for what they did and that the level of performance of many in the sector needed to be lifted (Codd 1993). Parents' and communities' limited and indirect involvement was often confined to fundraising-type activities through parent-teacher associations.
- New Zealand was undergoing a period of radical economic reforms in the private and public sectors. Senior cabinet ministers and officials saw the education system and its teachers as a necessary component of that reform.

4.2 Part two: key aspects of the reforms

4.2.1 Reforms in education

The Labour Government, elected in 1984, set about reforming the economic and political landscape in a way that had not occurred since their first counterparts in 1935. Paradoxically some of the second set of reforms essentially dismantled the first set, due to the extensive amount of deregulation that occurred and control ceded to the "market" (Easton 1997).

The seminal educational reform document entitled *The Picot Report* (Department of Education 1988a), which was the outcome of a taskforce headed by businessman, Brian Picot, identified five areas of weakness in the existing system. These were identified in the opening paragraph of the report, which set the scene for its tone and emphasis:

*"Our investigations convinced us that the present administrative structure is over cen-
tralised and made overly complex by having too many decision-making points. Effective
management practices are lacking and the information needed by people in all parts
of the system to make choices is seldom available. The result is that almost everyone
feels powerless to change the things they see need changing. To make progress, radical
change is now required"* (Picot 1988).

Rather than propose the reform of existing institutions and systems, the report recommended
their abolition and replacement by others.

4.2.2 Changes to the secondary education system

A crucial part of the proposed changes was the need to give parents and communities far
greater involvement, not just in the education of their children, but in the governance of
schools. Five key changes that occurred for schools included:

- Each institution would be governed by a board of trustees elected from the parents of
  children attending the school. The day-to-day management of the school would be in the
  hands of the principal and teachers. Boards of trustees would be able to hire their own
  staff, develop their own charter and policies, and manage their own finances, property,
  and resources.
- In essence the board of trustees would become the employer of all of the teachers on the
  staff.
- The role of the principal would change from that of being an academic and profes-
  sional leader to that of an overall manager with oversight of finance, property and human
  resources in addition to the previous roles.
- Each secondary school would be bulk-funded for all of its operations apart from teacher
  salaries based primarily on the number of students in the school.
- Each school became, effectively, a stand-alone entity, separately governed and managed
  and in competition with each other school for funding.

These changes created a plethora of organisational reforms (Tomorrow's Schools, Department
of Education 1988b). At a local level each school became a 'self-managing' institution with
its own board of trustees, charter, set of policies and procedures and operational funding.
At the national level, a number of agencies were created to focus on specific areas. Those
of most significance to the compulsory education sector are summarised in Table 1. For the
most part, these were all operational by 1990.

The reforms at all levels had six key drivers: greater simplicity, more accountability,
greater transparency, more responsiveness to national and local needs, more flexibility and
less bureaucracy.

The National Party government, elected in 1990, affirmed the reforms, but in their view,
national agencies still had too much power and greater accountability from teachers was
needed for what was taught, and how well. Three new initiatives were introduced, which
were to have a profound influence on teachers.

- Decision-making was further devolved to individual schools, through the introduction of
  total bulk funding, so schools paid teacher salaries directly, rather than through a central
  source. The move to 'bulk-fund' teacher salaries angered the teachers' unions, as they
  believed central funding was important for protecting contractual conditions, and they
  saw it as a means of placing more power in the hands of boards of trustees at the expense
  of teachers themselves (McCann Personal communication 1999).

Table 1 Agencies involved in education reforms

Agency	Specific Role/ Responsibility
Ministry of Education (MoE)	Policy advice to Minister of Education
	Allocation of funding
New Zealand Qualifications Authority (NZQA)	Quality assurance and qualifications
Education Review Office (ERO)	External audit and review of schools
School Trustees Association (STA)	Represent the interests of elected parents on boards of trustees
Teacher Registration Board (TRB)	Determining standards by which teachers can become registered to practice, how to maintain practicing certificates, how teachers can be de-registered

- The introduction of a national curriculum framework that tied teaching strategies and assessment to learning outcomes. Compared with the discretion enjoyed before the reforms, the national curriculum gave little latitude and teachers were made accountable for its delivery through regular reviews carried out by the Education Review Office (Ministry of Education 1993).
- The discussion and debate began about the secondary assessment system and its fairness and relevance for the future achievement of young people and the place they would take in New Zealand Society. As one commentator stated, "the system currently in existence seems to act more like a sieve than a fountain" (Secondary Futures Project 2005).

A major force that would impact on the reforms was the changing demography of New Zealand society. By the year 2000 New Zealand was very much a multi-cultural society. In Auckland there are some 160 different ethnic groups that comprise the population. Apart from New Zealand European and Māori (some 18% of the population), there are substantial numbers of people from east and south Asia to various parts of Africa and, of course Pacific Nations. Auckland, in fact, is the largest Polynesian city in the world. In addition, many immigrants have come from parts of Europe, particularly eastern and southern Europe. This flow of immigration has added greatly to the texture and strength of New Zealand life and culture. But, it has also added many challenges and difficulties that teachers in New Zealand classrooms face as they try to grapple with those who do not speak the language of instruction, those who do not speak it well, the many and varied different cultural attitudes that such groups bring and the increasing demand that accountability for success and achievement have placed on them. It was clear that many and varied tensions would be inevitable.

4.2.3 Changes to the assessment system

During the 1990s discussions were initiated about the future of the assessment system that would be used in New Zealand secondary schools. Throughout the 1990s the National government had initiated forums for discussion about how secondary students should be assessed, and why. The result was the development of the National Certificate of Educational Achievement (NCEA). NCEA was a structure that covered the final three years of secondary education and moved from a norm-referenced to a criterion-referenced (or standards based) form of assessment. It was argued that such a system was more accurate, fairer and gave more students an opportunity to succeed.

It was clear from the outset that the introduction of such a new and different system would put great strains on teachers and the agencies that were charged with implementing it. The strains on teachers were derived from the development of a detailed and elaborate set of standards against which secondary students would need to be assessed. The strains on government agencies, particularly the New Zealand Qualifications Authority, were how to communicate and administer a system that was fundamentally different for both teachers and the public compared to what had been in place before. The consequences of the change were difficult.

4.3 Part three: analysis of the effects of the reforms

4.3.1 Effect of reforms on young people

An assumption was made that if the administration system in education was reformed in the ways described then this, ipso facto, would lead to more effective teaching and learning (Langley 2005). There is no evidence that this has happened.

According to Hattie (2003) some 80% of children and young people in New Zealand schools are performing well and at world-class standards. For example, studies show New Zealand 15-year-olds performing among the top three countries in reading, mathematics and scientific literacy (Hattie 2003).

However, the lowest performing 20% are achieving poorly by world standards. According to Hattie, the effects of the lowest performing 20% of students are becoming evident already. For example, a third of New Zealand students leave school at or before the minimum leaving age with no qualifications; a third of those unemployed have no formal qualifications and of those one-third are Māori and 10% Pacific Islanders; a 1996 study found 42 percent of a sample of working New Zealanders scored below the minimum literacy rate, meaning they could not cope with the level of reading they encountered in the work place.

There is no knowledge of whether these percentages are greater or lesser prior to the reforms. When considering the performance of the lowest 20% of learners and the ethnic and socio-economic breakdown of that group, it would be possible to argue that many children and young people, far from benefiting from the reforms, may have actually been disadvantaged.

4.3.2 The effects on teachers

The effect on teachers and the teaching profession has been mixed (Adin 2003). Four problem areas have emerged. First, the education system has become more fragmented than it had been before. There are some 3,800 schools in New Zealand, each with its own board of trustees, its own charter, its own set of policies and practices and very varied sets of expectations.

Secondly, industrial relationships have become even more dominant over professional relationships. Performance is now tied to professional standards that were introduced as part of an industrial negotiation, rather than as a result of professional consultation and commitment. In a case study that sought to analyse the influence of the standards and Performance Management System (PMS) in a large New Zealand school, McKay (1999) found that no more than half of the teaching staff perceived the system as improving their performance.

Thirdly, many of the new reforms have tended to be 'top down', driven by external agencies and which have, for the most part, excluded the direct involvement of teachers. Consequently, a number of the developments have been viewed as an added imposition involving more work for little benefit, rather than change that will improve the capability of teachers to deliver quality programmes to learners (Langley 2002). Problems also stemmed from the more pre-

scriptive national curriculum. It is arguable that the role of teachers was no longer seen to be to assess and teach to the needs of children and young people, but rather, to be purveyors of the new curriculum (Langley 2002) and, in an increasing number of cases, to keep the parents happy and satisfied.

Finally and most importantly, none of the reforms had specifically focused on what happens in classrooms in terms of what it is that teachers must do to cause learning. The 'micro' aspects of the teaching–learning relationship have largely been ignored, with the apparent assumption that a clear curriculum, sound and flexible administration, community involvement and greater teacher accountability would lead to better learning.

4.3.3 Effects on schools

The *Tomorrow's Schools* model has produced mixed results for schools; some have prospered and are experiencing extensive growth; others are languishing. In Auckland, five secondary schools with over 3,000 students are constantly requiring more buildings and material resources, while other schools nearby, capable of holding similar numbers, are two-thirds full. The same pattern exists with both primary and intermediate schools.

Some would argue that such a consequence is fair and the natural result of a competitive system. It could equally be claimed that the system fosters wasteful resources and social injustices, and doesn't include a strategy for seriously addressing the 'long tail' of the lowest performing students. Overall, it is simply about fairness. All children and young people are entitled, as of right, to the very best quality education possible (Fraser 1932) and that will never occur as long as 'winner' and 'loser' schools are tolerated. Furthermore, the pattern of winner and loser schools will continue as long as the current governance, management and funding systems that define each school as a stand-alone entity competing with all others, is retained.

4.3.4 Community partnership

For the outcomes from the reforms to be successful, the concept of community partnership also had to be successful, as tensions between schools are communities are not constructive. Over time the teacher–community partnership, so much a part of the ethos of the Picot Report, has becoming increasingly confused and, in many cases, causing difficulty. The result from parents being involved in the governance of schools has been mixed.

Where boards of trustees worked well they were most effective. However, situations developed in which there was a lack of clarity about the boundaries between governance and management issues. Some trustees saw their role as going beyond the governance of the school and into the day-to-day management, which created tensions for principals. In other cases, some boards became embroiled in professional matters that were never intended to be a part of their brief. In 2004 some 59 schools required interventions of various kinds and, according to data from ERO for the 2004–2005 period, of the 750 schools reviewed, 138 required supplementary reviews and 23 required special reviews.

It has been increasingly unclear what the real goal of community partnership was, especially give the complex relationships. There are several purposes for parental and community involvement in education. These include improving the knowledge of parents and the community about what teaching and learning is developing appropriate forums for discussion and the exchange of ideas (Picot 1988) and finding ways to get greater collaboration. However, Baker (2002) suggests that beyond all of this is the need to encourage parents and parental

education so that they can support the learning of their children. She contends that fundamentally the interest of most parents is in the education of their own children and that the biggest contribution that they can make in terms of partnership is to know how to work with teachers to improve learning. In some schools this is done well, in others not so well.

There is increasing evidence that principals and teachers are involved in a delicate balancing act between carrying out what they see as their professional responsibility and meeting the ever-increasing demands of parents, the latter often in conflict with the former. For example a recent study commissioned by the New Zealand Principals' Association suggests that 43% of principals in schools serving higher socio-economic areas are stressed to the point of leaving their jobs because of the incessant demands of parents. This trend is consistent with a range of findings from the United States, Australia and New Zealand which concluded that the pressure being placed on schools from parents in higher socio-economic areas was a major factor in teachers leaving the profession within the first 3 or 4 years.

Few would disagree with the proposition that positive relationships between schools and communities are desirable (Langley 2005), and effective schools had developed such relationships even before the reforms. The Tomorrow's Schools document seemed to imply that, by involving parents in the governance of schools this, almost by itself, would deal with the issue. Such an assumption misunderstood the complex layers of relationships that exist within schools and between schools and families.

4.3.5 Effects on the secondary system

Following the reforms three clear impacts emerged. The first was a series of lengthy and acrimonious industrial disputes between the PPTA and governments of the day about teacher salaries, conditions and workloads. These disputes resulted in strikes, disruptions to examinations and an atmosphere of antagonism among secondary teachers, the Ministry of Education and various governments throughout the 1990s and into the first two years of the new century. The second was the impact of the new assessment structure, NCEA, on the way in which secondary teachers operated and the impact that those changes had on their workload and professional life. Finally, it was clear that too much time was being spent looking back in anger and not enough looking in hope.

After one of the longest and most protracted disputes over pay and conditions between the PPTA and government the then Minister of Education, Trevor Mallard, agreed to establish a project to move forward in 2002. It was called the Secondary Futures Project.

4.4 Part four: learning from past lessons: The Secondary Futures Project

4.4.1 Background

The Secondary Futures Project *Hoenga Auaha Taiohi* was launched by the Minister of Education, Trevor Mallard, in 2003. It was clear that a completely new look at secondary education was needed in terms of both the way in which the system would operate in the future and the relationships that would be needed to make it work.

Both the Ministry of Education and the Minister, Trevor Mallard, were interested in developing a wide-ranging discussion about what secondary education would be like in 20 years. After a number of years of administrative and structural reform in the New Zealand Education system, there was a clear desire to begin to focus more on the professional debate about matters such as quality teaching and learning, student outcomes and diversity issues (Durie 2006).

Secondary Futures was launched with the announcement of the five Guardians in September 2003. The Guardians' role was to develop the process design for the Project, identify some of the key questions to be addressed and, after work with various groups around the country, identify the major themes that would need to be addressed as the country looked 20 years into the future.

Secondary Futures' goal is to help people think about the future of education, with a particular brief to stimulate the conversation (rather than write reports) about the future of education and "bring in voices not traditionally heard in the debate shaping education." This process would itself be the main outcome for the project and the Guardians' role therefore, was to oversee the integrity of the process within this broad brief.

The first phase of work involved setting up the process to think about New Zealand's future and help people think about the options for schooling that might best meet the needs of that future. This meant testing and developing a set of tools to help people think about New Zealand's future, and the future of schooling. Secondary Futures has spent the last 18 months or so using these tools in workshops with many people interested in education: students, parents, teachers, school boards, business people, local government and the rural sector so that they can identify their preferences for learning.

The Project has three phases. The first was to identify the key questions and themes that need to be addressed. The second is the production of papers around each of those themes, based on dialogue with a wide range of groups in New Zealand and reference to relevant research in each area. The third phase will focus on systems matters—work with schools, government agencies and community groups in order to bring a "futures" dimension to policy and planning in secondary education.

In the first phase the Project sought to answer three questions:

1. What is the purpose of secondary education?
2. How can secondary education best enable young people to meet their futures?
3. How will learning best happen?

As a result of analysing hundreds of responses to those questions five key themes emerged (Durie 2006) that have been identified as critical components to educational reform in secondary education. They were:

1. Students first
2. Inspiring teachers
3. Social effects
4. Community connectedness
5. The place of technology

4.5 Critical components to educational reform in secondary education

4.5.1 Students first

This theme explores what student centred learning will look like as secondary education attempts to move away from a "one size fits all" model and places the student at the centre of their own learning in terms of their goals and aspirations.

4.5.2 Inspiring teachers

This theme explores the role of the teacher in the secondary system and is attempting to re-define that role away from the traditional notion of transferring knowledge to a model

where the teacher becomes not only an expert in their area, but works alongside students as a mentor and guide.

4.5.3 Social effects

This theme explores the many and complex layers of the life of the young person and how those interface with the communities in which they live as citizens, contributors to an economy, members of families and parts of various communities.

4.5.4 Community connectedness

This theme explores the important relationship between education and the community. Although one of the major themes in the Tomorrow's Schools reforms this relationship has never been fully defined apart from structural developments such as boards of trustees. An important part of this theme is the assumption that all parts of society are sources of knowledge—families, businesses, community groups and leaders and those involved in education to name but some.

4.5.5 The place of technology

This theme explores the role of technology in future learning—not only about the ability to access information but also the implications that exist for time and place around learning. For example, will it be necessary for secondary students in the next two decades to "attend" school in the way they do now?

The next phases of the Secondary Futures project seek to explore each of these themes in depth and to develop ways in which they can be built into the future planning of secondary education in New Zealand. Equally important, the process of the Project has enabled not only educators but also students, community leaders, business leaders, politicians and government officials to think more carefully about the shape of our country in the future and what that means in terms of its place in the world.

The real question is, who drives what? This is an age where change, technology, access to information and the blurring of boundaries internationally is moving at a rate never seen before. The matter for all of our communities to address is whether or not we make decisions about how this change will happen or simply be towed along on the back of other forces that will drive it.

The challenge for New Zealand is that which Peter Fraser raised in 1932. It is about enabling "every child" to have the opportunity to succeed. This is not only an educational imperative but also a moral one if a vibrant democracy is to flourish and prosper.

5 Educational reforms in tertiary education

New Zealand's economic and social prosperity has been identified as directly linked to Pasifika peoples' success in tertiary education. A recent economic research report undertaken by the New Zealand Institute of Economic Research states:

> Projections to 2021 suggest that if the education and training levels of the current generation of Pacific children can be accelerated to that of current levels attained by non-Pacific, then Pacific wage incomes could be close to 96% of non-Pacific rates by

2021. Economic convergence by 2021 would bring significant benefits to the New Zealand economy in the order of $4–$5 billion (*Pacific Peoples Economic Participation Report: Implications for the New Zealand Economy*, 2005: iii).

Successful tertiary achievement has been identified as a key enabler of economic prosperity. As suggested by the Pacific Islands Tertiary Education Providers of New Zealand (2006), linking tertiary education achievement with economic prosperity is not new, however, it has taken on urgency for the "health and well-being of the nation because of the fast growing Pacific population and the growing achievement disparities in education and income" (ibid, p. 5).

A specific commitment to Pasifika advancement had been put in place at The University of Auckland, Faculty of Education. The Faculty is the largest provider of teacher education and social work programmes to Pasifika peoples in New Zealand. In 2001 a Pasifika Student Support unit (PaSS) was established, comprising a minimum of two full-time staff. In addition further student services (such as counselling, and health services) were available for Pasifika students.

From 2001 to 2005 a series of planned interventions conducted as a collaborative partnership between Pasifika peoples and this tertiary organisation was designed to test several questions about success in tertiary education by Pasifika students (Airini and Sauni 2004):

- What factors help or hinder Pasifika student success in tertiary education?
- Can a set of effective academic support activities be identified that are able to be used by tertiary educators and organisations to enhance Pasifika student outcomes?
- What are the characteristics of a policy (government)—practice (university) relationship that has a significant impact on Pasifika success in tertiary education?

The questions arose from hypotheses about what 'success' means, ways in which tertiary educators and systems can both help or hinder Pasifika success, and the nature of effective policy-practice relations. There were three core hypotheses: firstly, that the perspectives of Pasifika students on what helps or hinders their success could usefully inform reforms in tertiary education; secondly, that for Pasifika peoples reforms in tertiary education mean greater levels of success (in the sense of tertiary education contributing to/ providing opportunities for strengthened identity, understanding and use of Pasifika knowledge and language bases, capability to be a local and global citizen, growth as an independent learner in the tertiary context, and achievement by way of passing courses), rather than achievement only (in the sense passing courses); and thirdly, that effective educational reform is characterised by partnership between policy makers and practitioners (Alton-Lee 2006).

The interventions were developed and implemented over 5 years with, depending on the programme of study, between 120 and 780 students, all of whom were Pasifika students. In the former case this was a cohort of students undertaking studies in specialised Pasifika pre-service teacher education. The cohort was in large part mature students, with an age range of 18–63 years, and an average age of 41 years. Most were speakers of more than one language, with a Pacific nation language being their strongest language. With 100% of this cohort being of Pasifika heritage, from at least one of seven Pacific nations: Cook Islands, Fiji, Niue, Samoa, Tokelau, Tonga and Tuvalu. In most cases these students were the first in their families to attempt tertiary studies at degree-level; and while most were full-time students, about 25% were part-time so that they could remain working fulltime in ECE Centres. Students in this cohort were completing Diploma studies that would be awarded at the same level as a degree.

The larger and second cohort was the remaining Pasifika students in the institution. During the period of this study this cohort grew from 666 to 803 students. Their courses of study were part-time or full-time, in a range of programmes at under-graduate and postgraduate levels including foundation education, human services, social work, teaching professional qualifications, and education. In this cohort Pasifika students were approximately 17% of the cohort. The average age was approximately 34 years.

A qualitative experimental design was used to explore what students perceived to help/hinder their learning, devise and implement interventions where necessary, and to evaluate outcomes over 5 years. Annual measures were taken of student participation, retention and achievement at the beginning (participation only) and the end of each year, and a final measure at the end of the fifth year. In addition students 'stories' of what helped or hindered their success in their studies were collected. In combination the data sets provided evidence about students' perceptions, which were able to be linked to patterns of instruction and learning outcomes.

In 2001, 247 of the 666 (37%) Pasifika enrolled in non-Pasifika specialised programmes were identified to be at-risk due to high levels of absenteeism from lectures. This was disproportionately larger than any other population groups.

A range of initiatives was put in place to address the at-risk data, including:

- Tracking and following up on student achievement (including Pasifika) in their first assignment of their first course, and throughout their studies;
- Making contact with all Pasifika students to inform them about support services available, and social events offering the chance to mix with peers also undertaking studies ('Operation Shadow').
- Establishing ongoing contact with private providers running foundation programmes geared towards preparing Pasifika students for entry into Faculty programmes. During this contact advice would be provided on course content and levels for first year Faculty programmes, the interview and entry experience, successful student habits, and support services available for all students and Pasifika students.
- In-community meetings with Pasifika applicants, their church ministers and families to ensure strong understanding of the realities of what it takes to be successful in tertiary studies. These meetings would be in English and in Pacific Nation languages.
- Meetings with Pasifika families during orientation period for Year 1 students. These meetings would be a time for encouragement and story-telling by Pasifika graduates and students well placed to describe the student experience and ways in which families can support their family-member undertaking studies.
- PaSS-based student support tutorials and one-to-one interviews.
- Professional advice, development and in-class support for lecturers.
- Establishment of a Pasifika stakeholder group comprising community members, to provide advice on programme development and student support.
- Participation in government-led initiatives aimed at increasing the flow of information between practitioners and policy makers.

By 2003, participation had increased to 803. Of that number of students, only 5 (0.6%) were at-risk. By 2004 participation had increased to 853, with 15 (0.9%) identified as being at-risk. While still significantly better than 2001 results, the slight increase in at-risk students was unexpected. Pasifika support service levels had remained constant, however a new variable had arisen—that of the adult educator leading classes. On individual questioning, even when the Pasifika students attended their classes (with no social issues) their success went down. This suggested a need to look closer at teaching practices with adult learners (Sauni Personal

communication 2006). Research is currently in progress looking at factors that help or hinder Maori and Pasifika success in degree-level studies (see *Success for All: What helps Maori and Pasifika students succeed in degree-level studies*. http://.www.tlri.co.nz).

This study showed that it is possible to develop responsive tertiary education environments that impact directly on the success of diverse students. Data analysis showed that failure patterns are generally not a problem to do with intellectual ability; rather, it was matters to do with student motivation and inclusive/exclusive teaching practices, that create major challenges to student success. The gains in this case were transformational. In terms of the ECE teacher education cohort, their retention and achievement rates as mature, ESOL students from non-tertiary education home environments, matched those of any teacher education programme in the country. With the larger cohort, the reduction in Pasifika students at-risk was substantial and sustained over a further two years. When these gains are viewed in terms of the trends of Pasifika underachievement in tertiary education, the policy focus on reforming these trends, and the international literature on improving minority student outcomes in tertiary education, the shift in outcomes achieved through responsive academic support is dramatic. Further understanding is needed of the characteristics of quality teaching in tertiary education.

5.1 Critical components

A number of critical components can be linked with the success of the interventions. They are described below under two themes: Micro components: Teaching and learning; Macro components: Collaborative knowledge building. In combination these signal components of building a platform for educational reform for tertiary education and what is needed to develop a genuinely collaborative relationship between policy and practice.

5.1.1 I Micro components

Clarity of assignment, Beaver and Tuck's study (1998) includes a number of Pasifika students in the sample (13 of the 104 total). The Pasifika students' top three ratings of strategies to achieve personal learning goals were 'simplify assignment instructions', 'extra study assistance', and 'facilitate social interaction' and they rated 'classes with similar work experience', 'classes with similar language skill' and 'classes with similar ability' as the least useful strategies. Similar findings along these lines have been reported in Ashdown's study of international students at the University of Waikato (Ashdown 1994).

In terms of the interventions described above, 'clarity of assignments' remained a constant and pivotal factor for Pasifika student success. For those engaged in Pasifika academic support, when asked to identify critical success factors, it is clarity that is identified most often, and most strongly as a key step in transforming Pasifika tertiary education outcomes:

It is the very top reason. Even after 5 years of support to hundreds of Pasifika students, here in PaSS we still have to work with the student to unpack that first academic understanding of the question. That is the most inexpensive way to use any tertiary education budget, but the most effective for the outcome in that journey to success (Sauni Personal communication 2006).

Intensive support As Clifford (1999) points out, adult education teaching can require new kinds of relationships between educator and learner, and new attitudes to teaching. Teaching can be provided by a lecturer who represents a knowledge expert, along with the tertiary educator who is a facilitator and academic support staff (Airini and Sauni 2004). Beaver

and Tuck's study (1998) identified access to intensive academic support as a critical success factor for Pasifika students.

The need for academic support remained during the 5-year period. This might take the form of 5 min with one student, or 3 hours with another. Such a dynamic was identified as an important issue for Pasifika students. What that does with the right skill base on the Pasifika academic tutor's side is to unpack the issues and to then devise the appropriate course of action. Most interactions are focused on results to do with professional development. Yet, none of that is possible without attention to planning and data, plus personal, cultural and professional needs (Airini and Sauni 2004).

Social interaction geared towards supporting Pasifika success With Pasifika peoples Sauni (Personal communication 2006) suggests social interaction with peers for support is "natural". What has become apparent in the study period's 5 years is that 'social interaction' also includes relationship development between Pasifika student support staff and general programme lecturers, coordinators, and Contact Centre. Initially this would be quite intense and direct. Overtime this changes to lecturing staff approaching PaSS because they see that when students have a relationship with PaSS it benefits the students and their success.

5.1.2 Macro- component

Collaborative knowledge building and use in education research, policy and practice In an environment in which return on investment in tertiary education is increasingly under public and political scrutiny, a precise answer to the questions, "What will enable student success in tertiary education?" and "What is quality teaching in tertiary education?" become urgent yet remain largely unanswered.

Research in teacher education, for example, has tended to focus on evaluating the student teacher's competency to teach (see, e.g. Fitzsimons and Fenwick 1997). In effect this has resulted in research on the behaviour of preservice teachers in school settings and the outcomes of teacher education, rather than the conditions and processes influencing the education of future teachers (Yarger and Smith 1990). Careful attention in teacher education to teacher education itself, through an examination of the conditions and processes within preservice teacher education, could ensure policy and practice decisions are more likely to be positive in educating individuals to become effective teachers (Airini and Brooker 1999; Yarger and Smith 1990).

Understanding teacher education in this way seeks to describe factors within teacher education that affect the student's ability to learn how to be an effective teacher, and thereby to graduate successfully. Such research then goes some way towards redressing trends in teacher education research to focus on the most readily measured aspects of quality (Doyle 1990; Hitchiner 1997), i.e. learning outcomes and competencies.

Alton-Lee (2006) argues that knowledge creation as a synergistic process in which policy makers, researchers and practitioners combine:

> To achieve the sustainable improvement demanded by old and new challenges of knowledge societies, more is needed of evidence work than the generation and explanation of new knowledge. To achieve its potential, knowledge building needs to be cumulative, iterative and synergistic (ibid, p. 1).

The point for the interventions described above is that greater good in terms of educational reform can be expected from greater collaboration between practitioners, researchers and policy makers. In their analysis of limitations and possibilities of dialogue among researchers, policy makers and practitioners, Ginsburg and Gorostiaga (2003) argue that the outcomes

are both qualitative and economic: "...the long run dialogue and participation of a range of stakeholders produce better and more relevant educational research, policy and practice (2003, p. x).

It is widely recognised that detailed research is needed to uncover the complexities of teaching and learning in university settings. Ideally, the five-year programme described above would link formally with the policy context or policy-makers. Possible modes could be government participation on an advisory group, or government resourcing of research into related areas. In effect this was a 5-year pilot study in preparation for in-depth research. This was a continual process of constructing meaning—as learner, teacher, and manager and within and across a range of organizations. The progression to a formal, planned relationship between practitioners, research and policy creates an environment that is about to be iteratively and intentionally informed by each other, and examined for national, strategic relevance through 'research-and-development' (Alton-Lee 2006).

6 CONCLUSION

Educational reform does not come from accepting the status quo. Nor does it come from those who advocate things for teachers or schools that they are not capable of practicing themselves within their own institution or Faculty of Education (Fullan 1993). Education reform is a dynamic force that creates change for all those taking part.

This paper has described education reform projects designed to bring about major improvements in primary and secondary school and tertiary student outcomes. This is a response to the clear value of teachers, research and policy working together for student success. The projects illustrate characteristics of educational reform in local contexts for primary, secondary and tertiary education. In combination they signal key components essential to getting large scale high-quality school and tertiary education cultures geared to student success:

Primary school reform components

- A developmental history
- A policy context
- Research capacity
- A collaborative process

Secondary school reform components

- Students first
- Inspiring teachers
- Social effects
- Community connectedness
- The place of technology

Tertiary education reforms

- Clarity of assignments
- Intensive support
- Social interaction
- Collaborative knowledge building

What are yet to be told in full are the diverse stories within and between population groups' experiences in tertiary education, for example, the stories of students from different Pacific nation heritages. Nor have we looked at the balance between matters of the heart in educational

reform and matters of the head. In other words, the business case dimensions of educational reform initiatives. Finally, over many decades the role of women in social reform, especially through education, has been recorded and commented upon (see Hooks 2003; Alipia et al. 2005). We are yet to fully understand or recognise gender in educational reform. This would ensure that the analysis of components of educational reform would include both community-based, and organizational contexts.

A big lesson from teachers, research and policy working together for student success is that positive change through educational reform does happen. This is a lesson about opportunities from different forms of partnership—some formal, some evolving, some informal; opportunities that make sense and create dynamic spaces for debate, insight and initiative. The best work in educational reform is deceptively 'simple' when done well, integrating critical components that we can describe. The best work is inspirational, explicit and evidential about what makes a difference in education, and supports enhanced professional practices as policy-makers, researchers and teachers. This is a continual process of constructing meaning and reform, within and across a range of organizations.

References

Airini, & Brooker, B. (1999). Quality teacher education: What helps or hinders learning in teacher education. Paper presented to the Pacific Circle Consortium Annual Conference, Hawai'i, July 1999.

Airini, McNaughton, S., & Langley, J. (2006). Cooperation among universities, schools and government: Partnerships for educational reform. Paper presented at the International Conference for Teacher Education (in association with the Y2006 ICTED Secretariat), SEAMEO INNOTECH, Quezon City, Philippines, July 2006.

Airini, & Sauni, P. (2004). Bring only the most beautiful: Towards excellence in adult education pedagogy. Paper presented at the AERC/CASA. University of Victoria, Canada. August.

Alipia, T., Gill, T., Seaborne, T., Tuafuti, P., Airini., & Jesson, J. (2005). *Ia Sua le Áva ae Toto le Áta: Stories from the Heart: What helps Pasifika students succeed in initial teacher education.* Auckland: University of Auckland, Faculty of Education.

Alton-Lee, A. (2005). Collaboration across policy, research and practice: knowledge building for sustainable educational development. Paper presented to the OECD/Netherlands Evidence Based Policy Research Conference 'Linking Evidence to Practice'. The Hague, September. [Electronic Version]. Retrieved from http://www.educationcounts.edcentre.govt.nz/research/Bes/Downloads/BESOECD-ColPolicy9-09.pdf.

Alton-Lee, A. (2006). Research and evidence in educational policy-making: New challenges. Wellington: Ministry of Education. www.minedu.govt/nz/goto/bestevidencesynthesis.

Annan, B., & Robinson, V. (2005). Improving learning processes for practitioners involved in school reforms. Paper presented at the American Educational Research Association conference, Montreal, Canada, April 2005.

Ashdown, J. (1994). Language problems and learning difficulties: The experiences of international students at the University of Waikato. Unpublished MA in Applied Linguistics, The University of Waikato, Hamilton.

Baker, R. (2002). Parental and community involvement in schools – opportunities and challenges for school change. Paper prepared for the International Symposium on Creation of Schools for the 21st Century. Tokyo.

Beaver, B., & Tuck, B. (1998). The adjustment of overseas students at a tertiary institution in New Zealand. *New Zealand Journal of Educational Studies, 33*(2), 167–179.

Buly, M., & Valencia, S. (2002). Below the bar: profiles of students who fail State reading assessments. *Education Evaluation & Policy Analysis, 24*(3), 219–239.

Clifford, V. (1999). The development of autonomous learners in a University setting. *Higher Education Research & Development*. Vol *18*(1), 115–128.

Coburn, C. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, *32*(6), 3–12.

Codd, J. (1993). Equity and Choice: The paradox of New Zealand educational reform. *Curriculum Studies, Vol. 1*. No. 1, pp. 75–90.

Crooks, T. & Flockton, L. (2005). *Reading and speaking assessment results 2004. National Education Monitoring Report 34.* Dunedin, New Zealand: Educational Assessment Research Unit.

Department of Education. (1988a). *Administering for excellence: Effective administration in education (The Picot Report).* Wellington: Government Printer.

Department of Education. (1988b). *Tomorrow's schools: The reform of educational administration in New Zealand.* Wellington, New Zealand: Government Printer.

Doyle, W. (1990). Themes in teacher education research. In W. Houston (Ed.). *Handbook of research on teacher education.* (pp. 3–24). NY: Macmillan Publishing Co.

Durie, M. (2006). The secondary Futures Project. *Think scenarios, rethink education.* Paris: OECD.

Easton, B. (1997). *In stormy seas: The post-war New Zealand economy.* Dunedin, New Zealand: University of Otago Press.

Fitzsimons, P., & Fenwick, P. (1997). *Teacher competencies and teacher education: A descriptive literature report to the Ministry of Education, New Zealand.* Wellington, New Zealand: NZCER.

Fraser, P. (1939). In House of Representatives. *Appendices to the Journals of the House of Representatives (AJHR) - Education Department Annual Reports.* Wellington, New Zealand: New Zealand Government.

Fullan, M. (1993). *Change forces – probing the depths of educational reform.* NY: Routledge.

Ginsburg, M., & Gorostiaga, J. (2003). Dialogue about educational research, policy, and practice: to what extent is it possible and who should be involved? In M. Ginsburg & J. Gorostiaga (Eds.). *Limitations and possibilities of dialogue among researchers, policy makers and practitioners: International perspectives on the filed of education* (pp. 1–36). NY: Falmer.

Hattie, J. (2003). New Zealand education snapshot. Presentation to the Knowledge Wave conference. Auckland.

Hitchiner, S. (1997). The quality assurance mechanisms in preservice teacher education: As part of the review of teacher education. Unpublished report: Susan Hitchiner, Public management consultant.

Hooks, B. (2003). *Teaching community: A pedagogy of hope.* NY: Routledge.

Lai, M., McNaughton, S., MacDonald, S., & Farry, S. (2004). Profiling reading comprehension in Mangere schools: A research and development collaboration. *New Zealand Journal of Educational Studies, 27* (3), 184–197.

Langley, J. P.(2002). Turning 16... what have we learned? Address to the Auckland Primary Principals Association conference. Auckland.

Langley, J. P. (2003). Onwards and upwards. Keynote address to the vision Schools conference. Auckland.

Langley, J. P. (2005). Finding strength in numbers. Feature article in the New Zealand *Education Review, 10* (39).

Literacy Experts Group. (1999). *Report to the Secretary of Education.* Wellington, New Zealand: Author.

Literacy Task Force. (1999). *Report of the Literacy Task Force.* Wellington, New Zealand: Ministry of Education.

McKay, J. (1999) Performance management in primary schools: A case study. Unpublished MSc thesis. University of Canterbury.

McCall, R. B., & Green, B. (2004). Beyond the methodological gold standards of behavioural research: Considerations for practice and policy. *Social Policy Report. Giving Child and Youth Development Knowledge away, Vol XVIII, No. II.* Society for the Research in Child Development.

McNaughton, S., MacDonald, S., Amituanai-Toloa, M., Lai, M., & Farry, S. (2006). Replicating a process: Research-practice collaborations across two contexts. Paper presented at the American Educational Research Association, San Francisco April 2006.

McNaughton, S., Phillips, G., & MacDonald, S. (2003). Profiling teaching and learning needs in beginning literacy instruction: The case of children in 'low decile' schools. *Journal of Literacy Research, 35*(2), 703–730.

Middleton, S. A. (2002). The dynamics of transformation at the Auckland College of Education 1985–2000: An analysis of the impact of socio-political and institutional change on pre-service teacher education. Unpublished PhD thesis. Massey University.

Ministry of Education. (1993). *New Zealand curriculum framework.* Wellington, New Zealand.

Ministry of Education. (1997). *Quality teachers for quality learning. A review of teacher education.* Wellington, New Zealand.

Ministry of Education. (2006). *School leavers with no qualifications.* [Electronic Version]. Retrieved from http:www.educationcounts.edcentre.govt.nz/indicators/downloads/dsau3-No%20qualifications.pdf

Nash, R. (1989). "Tomorrow's Schools": State power and parent participation. *NZJES, 24,*(2), 113–138.

OECD. (2001). Knowledge and skills for life: First results from PISA. Programme for International Student Assessment. Paris OECD. www.SourceOECD.org.

Picot, B. (1988). *Administering for excellence: Effective administration in education.* Wellington, New Zealand: The Task Force.

Pacific Islands Tertiary Education Providers of New Zealand (2006). *PITPONZ submission on developing the second Tertiary Education Strategy, 2007/12.* Auckland: PITPONZ.

Pressley, M. (2002). Comprehension strategies instruction: A turn-of-the-century status report. In C. C. Block & M. Pressley (Eds.). *Comprehension instruction: Research-based best practices* (pp. 1127). NY: Guilford Publications.

Ramsay, P. D. K., Sneddon, D. G., Grenfell, J., Ford, I. (1981). *Tomorrow may be too late. Final report of the Schools with Special Needs Project.* Education Department, University of Waikato, Hamilton, New Zealand.

Raphael, T. E., Goldman, S. R., Au, K. H., & Hirata, S. (2006). A developmental model of the standards-based change process: A case study of school literacy reform. Paper presented at the American Educational Research Association, San Francisco, April 2006.

Robinson, V., & Lai, M. K. (2006). Practitioner research for educators: A guide to improving classrooms and schools. Thousand Oaks, USA: Corwin Press.

Timperley, H. (2003). Shifting the focus: Achievement information for professional learning: A summary of the Sustainability of Professional Development in Literacy: Parts 1 and 2. Wellington, New Zealand: Ministry of Education.

Timperley, H., & Robinson, V. (2001). Achieving school improvement through challenging and changing teachers' schema. *Journal of Education Change, 2*, 281–300.

Yarger, S., & Smith, P. (1990). Issues in research in teacher education. In W. Houston, (Ed.). *Handbook of research on teacher education* (pp. 25–41). NY: Macmillan Publishing Co.