Curriculum: Core or Corset?

COMMUNITY AND BUSINESS VIEWS

NEW ZEALAND
Planning Council
Te Kaunihera Whakakaupapa Mo Aotearoa

Curriculum — core or corset?

COMMUNITY AND BUSINESS VIEWS

New Zealand Planning Council
Wellington
May 1991

ISBN 0-908601-75-1

Contents

Introduction 1

Manufacturing skills — for the global economy 3
Mike Smith Engineers Union

Forward — to the new 'basics' 9
Keith Huntington architect/arbitrator

A curriculum for education — not assimilation 17
Linda Tuhiwai Smith teacher

Education today: bandwagon, bandaid or beacon? 21
Gwen Gawith chief/teacher trainer

Movers and shakers in 1991 31
Sandy Callister advertising/TV

Management for change 37
Graeme Currie engineer

Towards a quality education system 41
Bruce Owen manager

Service and interpersonal skills 45
Cheryl McLeay entrepreneur/mgr.

Education and industry in partnership 49
Farquhar McKay trainer/teacher

To market, to market ... what's there for the Maori? 55
Wally Penetito education mgmt.

Introduction

Throughout the high income societies of the world, academics, business people, politicians and others concerned with the future wellbeing of their people, are looking at ways of improving the standard of living of their nation.

International researchers such as Michael Porter argue that there is not one simple answer, and carrying out policies in isolation such as lowering wages, devaluing, reducing government deficits or lowering interest rates, will not be sufficient.

While perhaps articulating slightly different views of the world, American writers such as Tom Peters and Peter Drucker, Japanese such as Kenichi Ohmae, and Bill Ford across the Tasman, in common with Porter, all place considerable emphasis on upgrading a country's human resources.

A range of New Zealand studies of productivity and international competitiveness, including the New Zealand Planning Council's *The Fully Employed High Income Society* and the local Porter study *Upgrading New Zealand's Competitive Advantage*, reinforce this view.

Equally important, Porter insists in his original work *The Competitive Advantage of Nations*, is fostering links between education and industry. Porter's current high profile and his insistence on a quality, respected, all inclusive, lifelong education, highlights the timeliness of these essays.

New Zealand needs every one of her young people to have a good education in practical technology and basic science, in communication and design, in maths and language. Similarly we need quality in every place of learning — not just from a few elite public or private schools.

Educators, like Porter, often look abroad to see where we should be making improvements. We note the retention rates Japan and Germany achieve. We see in Germany technological education being thorough, ongoing and highly respected. It is different, not second-rate. Both these countries expect workers to continue education and training through their working life — much of it provided by individual companies.

While looking overseas to other systems we need to identify and build on our strengths. Our highly respected and widely copied early-reading intervention programme means that very soon, 95 percent of twelve-year-olds will reach high school as competent readers.

What is a relevant curriculum for them? Should they start now on Japanese, Maori or French? Should they have been taking two languages from intermediate school, or perhaps have followed the example of Kohanga Reo and begun much earlier? If we make maths and science compulsory to the fifth form can we do this without excluding other important subjects? Should all students learn to use a word processor? Should they be allowed to specialise in languages or sciences? These questions concern the whole community.

Any real change, of course, has major resource considerations — not just for governments but for parents, employers and individuals. What is certain is that we need every one of our young people to have a good education in practical technology and basic science, in communication in its broadest sense, in design, maths and language.

The stimulus for these essays arose out of reactions to our *Tomorrow's Skills* publication. The wider *Tomorrow's Skills* programme of public presentations and the production of a video for fourth formers, itself arose out of the Planning Council work on economic development and a consequent concern about rising unemployment. But the Council's interest in education goes back a number of

years. In 1985 *Young People, Education and Employment*, then in 1988 *Our Education and Training Choices: Post Compulsory Education and Training in New Zealand*, were published.

One key question arising from *Tomorrow's Skills* was, could the business-industrial world contribute further to the debate? In an age-old tradition of teaching and learning, the questioners have become the soothsayers. The writers, who have varied backgrounds, were asked to produce a paper reflecting their personal response to *Tomorrow's Skills*. In turn we sought a Maori and 'international' overview of both our original publication and these essays. Unfortunately our chosen international writer, Bill Ford, was called onto a Royal Commission at a crucial time ruling out the possibility of his making a contribution, but Wally Penetito provides a challenging Maori overview.

Despite the real diversity of writers there are common themes. Several commentators reveal a belief that constant quality evaluation must be inbuilt at every level, and that technological training must go hand-in-hand with teaching children to use their imaginations, to think flexibly.

The argument that total quality management be all pervasive, should not faze teachers. Many classrooms already have embraced elements of it. Teachers who themselves pursue on-going professional development, who ensure children are taught to set their own learning goals and to understand how they learn — these teachers have grasped the essence of quality control.

Under another name it is used in early-reading teaching. Six-year-olds are using quality management when they have to explain how they worked out a new word. They are reflecting on their own learning. A polytechnic student using computer modelling in machinery design may apply this process of reflection on learning, on management, on routines. It is a management tool equally applicable to the classroom and the workforce. The value of this self-monitoring is such that it needs to be incorporated into teacher training in order to be routine in all areas of education.

A second idea common to several essays is the need for an innovative, thoughtful workforce. One writer calls on us to use children's passions and dreams as stepping stones to produce thinkers. Others point to the need for positive acceptance of other cultures and place a high priority on a curriculum emphasising communication and decision-making skills. On reflection, these writers support a curriculum where difference is celebrated as contributing to complexity and creativity. This may mean, for some, a full instructional programme in Maori language first, followed later by English language and literature.

There is an emphasis on a practical technological thread to be maintained for all students throughout schooling. A thorough grounding in the physical world as well as in design and the visual world are seen as strengths to be pursued. No-one is suggesting less reading/writing/arithmetic but they are all suggesting more thinking. Are these ideas new? While it may seem that some schools are still operating on a 19th century Dickensian model there are changes — in every area.

Intermediate and high schools are working closely with local industry to raise technology learning. The old technical drawing, for example, has been superseded by a unified syllabus incorporating design, technical drawing and technology. Some high schools are instituting all-inclusive programmes where basic sciences, technology, design, maths and communication courses are taken by *all* students for four years.

Kura Kaupapa are giving their children a rich start in Maori and English language and, in some Kura, Japanese. The New Zealand Qualifications Authority is looking toward the whole community. It advertises its new *Framework for Learning* in the business pages of a daily newspaper. Their proposed system of learning units is designed for portability, flexibility and continuity of the learning itself. One student may work and study at school, one may use a combination of a high school and a polytechnic. This sort of flexibility is exactly what is needed.

This debate focuses on how we can best educate *all* our young people because we need every one of them. We hope the ideas in these essays provide positive energy toward an enlivened education system.

Jill Holt
Deputy Chairperson
New Zealand Planning Council

Manufacturing skills — for the global market

"Work schedules that concentrate on whole functions and production cycles allow maximum facility for unlocking workers' creativity."

In a few places in New Zealand, tomorrow's skills are here today. State-of-the-art manufacturing at Fisher & Paykel or Toyota at Thames, for example, already demand new skills and a new industrial relations environment. These skills and this environment enable such companies to provide competitive products to the standard set by the world's most demanding markets.

The technology involved in computer-integrated just-in-time manufacture, requires a range of skills to maximise the opportunities it provides. Familiarity with the technology, lateral thinking and initiative, ability to combine and integrate a range of information into new and more interesting combinations — these are the basic skills possessed by the modern manufacturing worker.

Workers at Fisher & Paykel have to be able to think for themselves, to communicate openly with each other, and to work creatively in groups. As union members, they may take part with management in consultative processes to review work practices, set training requirements and organise staff amenities.

As *Tomorrow's Skills* points out, these skills are common to all value-added industries. The analysis in *Tomorrow's Skills* identifies the service sector and non-manual labour as the future for job growth.

If all New Zealand industries and all New Zealand industrial relations were run in the same way as our leading manufacturers, there would certainly be huge service industry growth in international consultancy.

The danger is that such analysis fosters a belief that our whole economic future lies in service industries. The reality is we do not have nearly enough genuinely competitive manufacturing industry in New Zealand. Manufacturing will be critically important if New Zealand as a country is to achieve the per capita income standards set by the Planning Council and the Trade Development Board.

One New Zealand commentary puts the problem thus:

"New Zealand politicians like to describe their society as post-industrial; that is, quite forward-looking. The reality is that throughout the Western world manufacturing is still the motor of growth.

During the sixties and seventies the service industries in the OECD expanded faster than the manufacturing sector. That led economists to the conclusion that industrialised countries are transforming into service economies with a steadily shrinking manufacturing sector. The conclusion was premature, to say the least.

While statistics showed a relative decline in manufacturing, the number of people depending on the profitability and the productivity of manufacturing steadily increased.

This study provided evidence for the following thesis: New Zealand will not return to a sustainable and steep growth path unless the manufacturing sector enters a strong recovery.

Manufacturing has gone through a tremendous amount of adjustment in the last

five years. In this process it has improved efficiency productivity, competitiveness and lately even profitability.

This adjustment process has now come close to the limits. Further progress is only possible with investment in new capacity with higher productivity than the existing average. Such investment needs a climate of confidence, prospective growth, low opportunity costs of investment and a positive attitude towards growth in a society."

(*Manufacturing in New Zealand*, Ord O'Connor Grieve, June 1990, 54-55)

To this we could add the development of skills and attitudes towards manufacturing technologies and careers that will provide the basis for such a development.

The challenge is before all sectors of New Zealand society. Analysis based on our recent past is less important than the level of skills we aspire to in New Zealand. The problem is that we may well fail to reach the goals set by the Planning Council of a high income, high skills society, or of the Trade Development Board's *Top 10 by 2010*.

There is a very real possibility that we could well see a shift in New Zealand jobs into the service sector, but that most of these jobs could be low skilled and menial.

So the question we are faced with is not what particular sectors new jobs might be in, but what do we need to do *now* to have any hope of achieving the high skills, high income society for our children?

On present policies and present evidence it is rather more likely that we will deliver to our children an even more crushing burden of debt, and an economy that consigns most of them to the periphery. The fact that jobs in the peripheral areas of the dual economy may well be manual labour in the service sector will be little consolation to those working for subsistence wages.

Given that New Zealanders do wish to commit themselves to the high-wage option, we must look at the particular contribution each sector might make towards achieving this common objective.

As a unionist commenting on industry's requirements for the school sector, it may be appropriate to begin by describing what unions are advocating and what a range of unions, such as the Engineers Union and Service Workers Federation, have been doing to bring about the required changes and work towards the desired goals.

The first thing to note is that unions operate in the market. Integration into the global marketplace means that New Zealand's manufacturers, services and workers are required to produce to

"Competitive industry's requirements for training and upskilling have major implications for our educational and training infrastructure, and teaching institutions."

equivalent standards of quality, flexibility, speed of response, variety and cost as the best producers in the world.

Manufacturing for the global market, where every toehold is a niche, requires an integration of four aspects. These are new technology, upskilling, new work design and changed industrial relations.

Technology will drive the new environment. Computer-integrated manufacture, combining the flexibility of microprocessors with the transforming power of machines, allows a completely new flexibility in the production process.

Maximising the benefits of technology requires a range of new skills, from manual keyboard skills to planning production schedules without supervision, and programming to meet a range of production requirements.

Upskilling individual workers requires a new approach to work design to make the best use of technology and skills. Work schedules that concentrate on whole functions and production cycles allow maximum facility for unlocking workers' creativity. Working in teams aids lateral thinking and continuous improvement of the process as well as working conditions.

These changes obviously require a new approach to industrial relations. Cooperative procedures, consultative committees, professional negotiation and dispute resolution all work to maximise production and minimise disruption to the mutual benefit of workers and employers.

The Engineers Union, among others, has adopted this integrated approach to building industries and enterprises that are able to compete in the modern environment.

Education and training provides the common core to all these developments. Training is not only required for upskilling, but a good base education will be required to make the best use of new technology. Both workers and management require training in new work organisation and new forms of management and industrial relations.

The major incentive for workers is provided by linking improved production methods to reform of bargaining and pay structures. Changing occupational classifications in agreements to those based on industry skills provides a career path, and a strong incentive for workers to engage in training and acquire new skills. Linking pay structures to skills and training in the enterprise provides the basis for increased productivity and future investment, for profit growth and job security.

Bargaining reform is proceeding with joint working parties in the plastics, packaging and metals manufacturing industries, and with the major hotels in the service sector. Other similar reform is taking place in many of the more progressive and advanced manufacturing companies such as Fisher & Paykel, J Wattie Foods and others.

Competitive industry's requirements for training and upskilling have major implications for our educational and training infrastructure, and teaching institutions. New Zealand's system has tended to grow like Topsy, with little ability to cross-credit skills and transfer learning.

Training needs, analysis and provision of training for state-of-the-art technology are also areas of weakness. Too much training is devoted to outmoded skills.

The need is urgent for better coordination and national concentration on the goals of a high income society. These is a general awareness that sector coordination needs to be improved.

Problems already identified, and in the early stages of resolution, include poor integration of the qualification system both internally and in relation to workforce upskilling, a better means of identifying school-leaver skills, an unsystematic approach to developing appropriate support institutions, and a chronic lack of strategic focus.

Recent administrative reform in the public sector has been driven by a purist debate among academics and bureaucrats drawn from the neoclassical right, determined to resist contamination from groups with an interest in the process. The result has been a lack of concentration on desired outcomes, and an absence of practicality in the measures advocated to bring about change.

Much of this debate has impacted on the school system, and the role that schools play in educating future workers. This has understandably led to a defensive reaction, as the interests of teachers and government service departments have been seen as inimical to providing students prepared for work.

In our view schools, as well as every other institution in New Zealand, should integrate general social and economic goals into their objectives.

Improving New Zealand's steady decline in living standards is at very best a medium-term programme, focused 20 years out, as the Trade Development Board's goal of *Top 10 by 2010* implies. Lifting the basic skill level of New Zealanders throughout the school system is obviously imperative.

It is equally important that the goal be raising the skill levels of *all* New Zealanders. The New Zealand educational system, with its emphasis on university as the acme, verbal fluency and numerical manipulation as the supreme skills, and norm-referenced examinations as the criterion, has produced a large crop of casualties.

Part of the reason for this is that the goals of education within schools tend to be linked to the expectations of parents, the status of schools, and the historical linkage of academic success with achievement in life.

What industry, society, justice and equity re-

quires is a school system that encourages diversity, acknowledges a communication skill range rather than verbal fluency, is competence-based in assessment, and provides all participants with meaningful outcomes as a result of their participation.

It is not a question of educational goals and values being subordinated to commercial ends, but of acknowledging that the type of flexibility required in the workforce of the future is the same flexibility required for living in the future.

This flexibility exists at three levels: *generic* with a broad-based education and skills formation that lifts the level of adaptability and provides the foundation; *transferable*, that provides a particular group of skills needed across a certain industry or industry group, that provides a base for job and investment security, and for new investment growth; and *specific* skills that relate to a particular enterprise or profession.

"Upskilling individual workers requires a new approach to work design to make the best use of technology and skills."

Schools have a critically important role in producing generic skills and some of the initial transferable skills. If the qualification system was integrated, there would be no reason, for example, why pre-apprenticeship modules should not be taught in upper schools. More resources in workshop technology would also increase awareness of the technology and skills required in modern manufacturing.

Integrating the school system into providing the generic skills base for the workers of the future, and the successful individual in the global market, requires a significant change in curriculum content, teaching methods and assessment procedures.

In future, the emphasis will be on skills rather than knowledge, because the skills include methods of acquiring knowledge, and on competence rather than competition as a method of assessment.

The future worker will be lateral-thinking, innovative, responsible, competent, an active communicator and cooperative co-worker, comfortable with technology and conducting industrial relations on the basis of mutual respect for skill. Ability to communicate, to solve problems, to integrate various bodies of knowledge, are as much the requirements of the factory floor as the boardroom.

This approach requires a major change in school curriculum, not in its content, but in the approach to its content. Ways will have to be devised to integrate technology much more actively into the curriculum, at the most state-of-the-art level possible, across the whole system.

It also requires a major change in teaching methods. A recent newspaper report described how medical education in a New Zealand university was shifting to a problem-solving method rather than a content-based method. What Paolo Freire called the 'banking' method of education will give way to problem-centred, real-world oriented methods. The real benefits of on-job training as a problem-solving method need to be reassessed, and systematic linkages between school and job encouraged and improved.

Assessment is another area that has major implications for curriculum and method. Assessing competence in communication skills, problem-solving, integrative ability, leadership and compatibility requires a syllabus that sets meaningful tasks and accurately assesses outcomes.

Education will thus become more a process of skill formation, with objective standards of performance at a range of levels. Ways must be found to recognise A1s and A2s for the floor, not reduce the required skills to C1s and C2s in the classroom. Fluency in textual interpretation is no real criteria of the communication skills required.

Such a change also requires a major commitment of resources, something only possible as a result of a national strategy. The current short-sighted and defeatist approach to policy will need to be rethought, but there is some evidence that such a commitment could pay massive dividends.

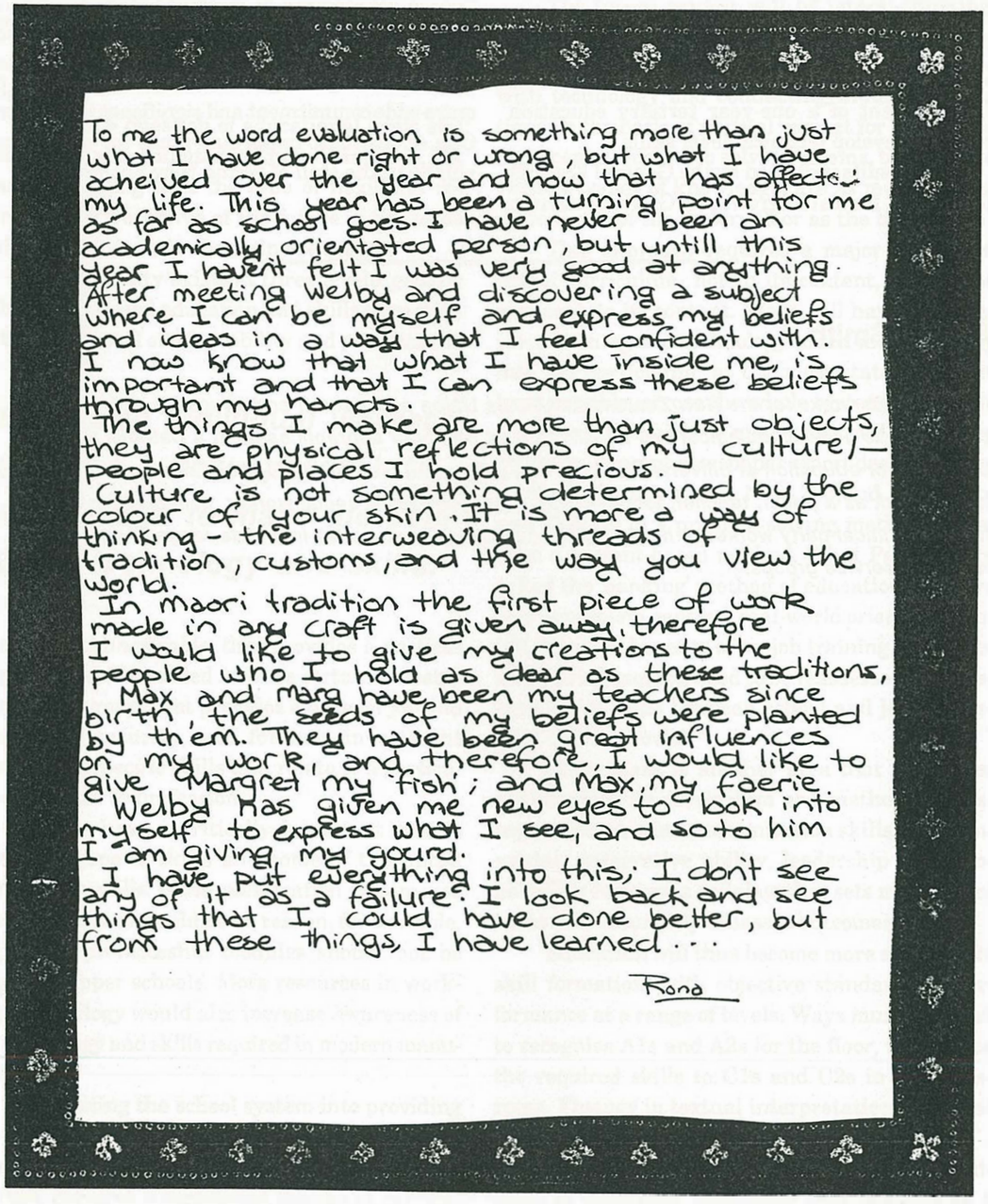
In a study prepared for the Manufacturers Federation, BERL estimated growth rates for the New Zealand economy assuming a 10% devaluation in the exchange rate combined with cooperation between private sector management and unions, work redesign and a government investment to train 63,000 New Zealanders over 1990-1995 in an equivalent of a one-year tertiary education course to develop technical level skills.

The results indicated by the General Equilibrium model indicated growth in GDP per annum of 4.4%, employment growth of 3.4%, and investment growth of 3.9% per annum. The projected government deficit in 1995 showed a surplus of $7.4m (*1990 Economic Policy Issues*, BERL, September 1990, 32-36).

Achieving the goals will be difficult, will require wide commitment and significant investment. One of the most important areas for investment will be in the skill of young New Zealanders.

Michael Smith

Michael Smith works for the New Zealand Engineers Union as research and education officer. His schooling was non-technological and he served a 14,000 hour apprenticeship at a Catholic seminary before further education at universities in the USA, Italy and Great Britain. His career path has led him through work as a priest, teacher, lecturer, educator, psychiatric social worker, community services director, political party worker to his current post. He has been active in a wide range of community and social service groups.



To me the word evaluation is something more than just what I have done right or wrong, but what I have acheived over the year and how that has affected my life. This year has been a turning point for me as far as school goes. I have never been an academically orientated person, but untill this year I haven't felt I was very good at anything. After meeting Welby and discovering a subject where I can be myself and express my beliefs and ideas in a way that I feel confident with. I now know that what I have inside me, is important and that I can express these beliefs through my hands.

The things I make are more than just objects, they are physical reflections of my culture/— people and places I hold precious.

Culture is not something determined by the colour of your skin. It is more a way of thinking - the interweaving threads of tradition, customs, and the way you view the world.

In maori tradition the first piece of work made in any craft is given away, therefore I would like to give my creations to the people who I hold as dear as these traditions, Max and Marg have been my teachers since birth, the seeds of my beliefs were planted by them. They have been great influences on my work, and therefore, I would like to give Margret my 'fish'; and Max, my faerie.

Welby has given me new eyes to look into myself to express what I see, and so to him I am giving my gourd.

I have put everything into this; I don't see any of it as a failure. I look back and see things that I could have done better, but from these things I have learned . . .

Rona

Thoughts from a fifth former

Forward — to the new 'basics'

"Perhaps those non-academic students who spend hours at the video parlour are developing natural abilities not recognised at school."

The views expressed in *Tomorrow's Skills*, of the need to upgrade the skills of the new entrants to our workforce, are another expression of the views of a growing number of commentators from widely varying interest groups with concern for both the immediate and long-term economic well-being of New Zealand.

The common theme is that, if we are to return to the prosperity of the past, we must have a more highly trained, innovative, adaptive and creative workforce, and that this can be achieved through retraining and changes to the pre-work education system. There is implicit in most commentaries an unchallenged absolute that the direction for the country is through 'growth' which will raise the 'living standards' to the benefit of all — that is, the way ahead is to do what was done in the past in more productive and efficient ways.

Before we can look at the requirements of an appropriate education system for tomorrow's skills we should first stand back and look at what sort of future society *'we' want* — first determine the question to be answered, rather than assume it and concentrate on the possible answers to the preconception.

The traditional common vision of the population is that success is measured by the acquisition of material possessions through having full-time employment during the normal working week. The reality is that most people do not achieve this wealth and that now many work outside the normal hours, often for short terms, or else they cannot find employment appropriate to their skills.

In the last few years a process of desegregation has gained momentum in commerce and industry in which the organisation contracts to its core activity and buys in services and resources as needed. The formation of SOEs and privatisation is its expression in the public sector. This is convenient for the companies in their cost control, but it also allows the workers new possibilities of self-determination in when and how they work, which may not be to the employer's advantage in the future.

This trend encourages radical changes in the perception of the way of doing work, and of its place in one's life, amongst a growing number of ordinary citizens.

Alongside the main-stream view of society there is a parallel social attitude rapidly developing where success is not judged by monetary wealth, but rather in much wider 'quality of life' terms, and is expressed in the 'greening of the economy' which will be the dominant global factor of the nineties. These attitudes are already well established outside of the main urban centres.

To my mind *Tomorrow's Skills*, and other commentaries, virtually ignore these alternative futures. When looking at education we must be fully conscious of the very long lead time involved, first in determining and implementing change to the system, and then the time for the students to become influential forces within their various sectors and levels of society. The radical changes of Rogernomics in the eighties were made by people educated under curricula developed in the forties. The 1991 secondary school students will only be in

their mid-sixties when New Zealand celebrates its Bicentennial and they will have determined the basic form of the celebrating society. Who can determine what their specific educational needs are?

As many writers have stated, change is so pervasive in society that the fact that there will be continual and accelerating change is the only certainty. These changes vary enormously from minor superficial irritations to fundamental restructuring of society and the economy. In less than two decades New Zealand's trade has moved from a focus on Great Britain to the whole world marketplace with a growing emphasis on the Pacific-rim economic zone, resulting in a fundamental upheaval in our perception of the world beyond our shores.

This change in our major markets has taken us from an exclusively monocultural trading process to a multicultural one, where our cultural and religious values are the minority amongst a multitude of very diverse views of, and attitudes to, the meaning and purpose of life.

There has been a rapid educational response to this with the teaching of non-traditional foreign languages such as Japanese but, as described in

"Graphicacy and the design process should simply be treated as generic skills necessary for our future adaptive and innovative society."

Tomorrow's Skills, the bulk of students still learn French, presumably because for many schools that is what has always been done.

It will be interesting to see if the impact of 'Tomorrow's Schools', of itself, produces courses more closely related to the needs of Tomorrow's Society, and its employment opportunities.

In rushing to teach new languages such as Japanese or German, a solution is being offered to the obvious problem of preparing people to write and speak with our new customers. But is this sufficient for real communication with, and understanding of, the market?

The people dealing face-to-face with the consumer certainly need a full understanding of language and culture, but for each of these there are many others in the production and marketing chain within New Zealand that must be equally conversant with the subtle cultural nuances of the customers for our products and services to be truly relevant to the buyer. I feel that to concentrate on the new foreign languages for the linguistically-able students is short-sighted (and in reality just an academic exercise), and that all students need to be made aware of the multiplicity of cultural factors that they will encounter in most aspects of their employment.

Learning to be positively accepting of the validity and values of other cultures, of which speaking and reading the language is only a part, is a vital principle for all to learn so that New Zealand can cope with the future. This awareness is, as I see it, one of the important spin-off values of the rise of Maoritanga in schools.

The other fundamental societal change that is firmly established, as can be seen by the backlashes that occasionally surface, is the place of women in the areas of real control in our workplaces and the wider society. I believe that, through the momentum built up from the seventies onward, this coming decade will see areas of radical change in the way that the commercial world is organised and operated, especially as the basic patterns of employment are being diversified at the same time.

One such area is management, where the methods and systems often have a strong masculine, aggressive orientation. Women are now moving in sufficient numbers to positions of responsibility, so as to be able to adapt and devise methods and systems based on a feminine view of the world arising from a fundamentally different socialisation during their formative childhood years 30, 40 and 50 years ago.

The best of their ideas will prevail because commerce is very accepting of changes that give real advantageous results no matter what their source. Our schools must now be somehow preparing students for the very different, but unknown, organisational structures and management

styles that they will be expected to work within.

How can the compulsory education system cope with educating students for the inevitable changes that will occur during their working life, or even just the first part of it? One way is to de-emphasise the requirements of careers and provide more general skills based on anticipated changes as perceived by employment planners. This

"Our schools must now be somehow preparing students for the very different, but unknown, organisational structures and management styles that they will be expected to work within."

may have worked in the past but, for example, how could the commerce/economics teachers deal immediately with the re-direction of 1984 and then the market crash of 1987?

Another way is to concentrate on educating for adaption by providing lifetime generic skills, such as those listed on page 15 of *Tomorrow's Skills*, that go beyond the specific requirements of today's vocations, and are not dependent upon the future taking a particular path. A lawyer's skill in the courtroom, or in case analysis, is not dependent on the particular laws in force or the facts of the case, and will still be valid after 50 years. Such skills are also applicable to a person's development as a person and a citizen, which surely is an important part of compulsory education.

Historically, organised education for the masses was developed to give basic skills to the workforce serving the needs of the group in control of society at the time.

Until now industry has tended to do its own training on the job — such as apprenticeships — leaving commerce to have its basic skills of literacy and numeracy taught prior to full-time employment. The skills and training required to control and operate the enterprises, and the society, were kept to a select few who were educated separately.

Today the workplace cannot operate in this manner. Forward-thinking companies like Fisher & Paykel have a philosophy of not wanting their workforce to "leave their brains at the gate", but our secondary education system is only now beginning to realise this and is changing accordingly.

In my opinion, in the past, for many vocations, college was just an interlude to mark time as you grew older as, when most jobs are properly analysed, no more than Form Two English and Mathematics are needed. Anything more complicated can be handled by a few specialists or a computer. If this is even partly correct then secondary school is ideally placed to forget about vocational training, which more appropriately can occur at tertiary level or on the job, and concentrate on education and generic skills that will allow real adaptability in an ever changing and unpredictable world, and be useful for a lifetime during more than just a person's working hours.

Of course colleges are actually moving with the times, far further and faster than society realises, but it is within a form whose essence would be recognisable to a Victorian educationalist when compared to the fundamentally restructured early childhood and primary sectors of education which are not hampered by set milestones of national grading examinations, and compartmentalising of discrete subject classifications.

From outside of education there is, from time to time, a call for a move 'back to basics'. To me the emphasis is always put on the BACK rather than the word BASICS. When the particulars of the future are unknown, and a highly skilled, adaptive and innovative workforce is required, then basics are what should be taught BUT the catch-cry should be 'Basics For The Future' with the emphasis on Basics. I think that in the development of the meaning of this noun will be found the real future and value of formal education to the career and social development of students and, therefore, the society and the country (as an integral part of the world), in the twenty-first century.

The basics called for are usually 'reading,

writing and arithmetic' — that is, literacy and numeracy — but this ignores the nurturing and development of more fundamental skills that have actually been of much more importance and usefulness for human survival.

For the past few centuries it has been sufficient to acquire them 'at one's mother's knee' in a casual manner, as needed, but now I believe it is vital that their development be immediately incorporated into the compulsory education system as mainstream core topics. These skills are those necessary to deal with the visual, three dimensional world, problem-solving, decision-making and creative thinking: described sometimes as graphicacy and the design process (but not design as in aesthetics, which is a specific topic within the wider design process).

"In ordinary number and word computing, new approaches to teaching are needed."

The foundations of our formal education system were laid down, and built on, by the decision-makers in the religious, political and bureaucratic spheres of society, rather than those from science, the professions or trade.

The senior people in these areas are those with a natural aptitude in written and oral language. This has given the 'important' parts of education a bias to literacy as the fundamental skill, with numeracy having importance due to the real needs of commerce in the days before computers. Our other 'serious' subjects have also been taught and tested primarily through words and numbers.

As babies and toddlers we live in a three-dimensional environment, but once formal education begins at the early childhood education level the world starts to transform to two dimensions as painting replaces blocks, and becomes one-dimensional as 'serious' learning predominates with the emphasis on literacy and numeracy in preparation for secondary school. English is one-dimensional, as illustrated by the word processor 'word-wrap' facility — only poetry has two dimensions as its line length and number of lines are not determined by the page dimensions.

School mathematics (except geometry) is a linear process where, once the beginning has been established, there is only one path to the result.

Scientific method as taught, and to a large extent as practised, continues this linear, one-dimensional attitude. This is in keeping with the European cultural philosophy that there is only one true path to your goal, with there being only rights and wrongs — greyness of opinion, and alternatives, are not allowed. In the real world the simplicity and order required for these attitudes to be valid just does not exist, although there has been enough flexibility for the inappropriateness to be glossed over or ignored.

All this creates a collective consciousness that makes lateral thinking, brain-storming and genuine creativity difficult to accept as subjects for formal education, especially when the need for the techniques is normally invisible due to their being all pervasive as a natural part of life.

Unfortunately the globe can no longer afford to allow its inhabitants to blunder along snatching the first answer that appears. With a little lateral thinking the capital cost of Motunui could have been used to provide free gas tanks to all petrol vehicles, and additional pipelines, so that we would not be throwing away half of the gas energy which is now lost in the conversion process.

We must think forward, not backwards, so as to get away from 'imagining the past, and remembering the future'.

For many decades the formal training for the design professions, in addition to spatial and form awareness, have included skills and techniques of creative problem-solving and decision-making. These same skills have also been taught from necessity for specific employment — such as in the law schools so as to facilitate the analysis of past cases for creative application in the future.

At the core of these professions are general processes for application in ever-changing circumstances, where there are needed unique methods to solve unique problems that often redefine themselves as the solutions are developed. It is perhaps

in part because of the basic skills of lawyers and architects that they are able to adapt to work in quite unexpected areas of the economy.

It is this adaptability/creativity and innovativeness that is being called for by *Tomorrow's Skills* and is needed if society is to 'prosper' in the ever-changing environment. Kiwis have an international reputation for being innovative and adaptive but this perhaps has been more a result of our social setting at the end of the world, rather than a product of the education system.

In secondary schools virtually no serious consideration is given to preparation for the visual world, and yet the visual aspects of life and work are at the core of the operation of our society. This is why blindness is such a handicap and much more difficult to cater for than other physical disabilities.

Driving is an activity where, for personal safety, it is imperative that the most efficient system of control is used, so therefore for critical aspects almost total reliance is placed on visual communication and symbols. In advertising, where value for money is paramount, words when used are more often in a graphical mode, or as sounds, rather than as words per se.

"Learning to be positively accepting of the validity and values of other cultures is a vital principle for all to learn."

The explosive development of computer graphics means that it is already too late to prepare existing students with ever-rudimentary graphicacy skills and so they will have to learn from scratch, as also will the workforce, how to handle the techniques of 'virtual reality' and 'real-time computing' that are about to become a reality. Computer graphicsare hardly even at the stage of having invented the wheel. By the time today's teenagers finish their vocational training they will be required to handle information on computers in ways that can only be guessed at today.

As an example of the urgency for educationalists to recognise the need for graphicacy skills, today's medical graduates should have taken technical drawing as a compulsory subject instead of Latin at secondary school. The TV programme 'Beyond 2000' occasionally shows the applications of computer graphics that are revolutionising the teaching and practice of medicine. It is possible that very soon a specialisation will have to form where three-dimensional visualisation, rather than medical knowledge, will be the primary skill required.

Perhaps those non-academic students who spend hours at the video parlour are developing natural abilities not recognised at school, and in time may show that they have acquired a leading-edge skill.

In ordinary number and word computing, new approaches to teaching are needed. In my opinion it is the library staff (as information processors) that should be developing the generic skills for the evaluation, manipulation and processing of information.

Today computer hardware and programmes are as invisible as ignition systems and gear ratios are to driving, where the most important and lasting skill required to use a car is that taught by the geography teacher. A car is only of value when you have a destination and are able to devise a route to get there. We must deal with computers in the same way.

The design process skills are even now thought of as being only relevant to designers but they are used in all aspects of life, both work and play, from restructuring one's educational administration, to handling the speculative financial markets, to planning a holiday. Language is essential for society to operate so we teach English to all as a tool for everyone, rather than as specialist training for our future poets and novelists. Graphicacy and the design process should simply be treated as generic skills necessary for our future adaptive and innovative society.

In the past, in social and work settings sufficient proficiency could be gained by osmosis but now, if the directions advocated by *Tomorrow's Skills* are to be pursued, then a major change of attitude

towards these skills, and to the students that have the appropriate talents, is urgently needed.

The pressing need for the skills is expressed by the commercial and social world in the proliferation of all forms of management and self-assurance courses which, in essence, when stripped of their jargon and mystic, are just specific applications of the base principles of problem-solving and decision-making techniques.

The Ministry of Education is already addressing the need to teach graphicacy and the design process with the latest revision of the technical drawing syllabus — the objective-based 'Graphics and Design' course which is about to be presented for Ministerial approval. This subject bears no resemblance to the pre-1969 technical drawing subject that many readers will be aware of.

In those colleges where the syllabus has been trialled it is a resounding success with the senior students and teachers demanding a seventh form Bursary course. With the increase in the numbers of students remaining at school, due to social policies and unemployment, this subject will be well suited to expand the range of skills offered to cater for the more varying abilities and attributes to these young adults, as well as putting them in the vanguard of 'Education for the Future'.

The direction for education as advocated in *Tomorrow's Skills* is, to my mind, the way that

"In secondary schools virtually no serious consideration is given to preparation for the visual world."

society must accept that education should move so as to remain relevant as a first-stage trainer for the workforce. The only doubt that I have is that it doesn't explore the educational needs for alternative forms of society that are developing in New Zealand.

I also think that the focus on maths and science for "our new 'high tech' society" is wrong. They have had 150 years to bring us to where we are now. The future is orientated to information, thinking and problem-solving, and in dealing with 'greys' rather than 'blacks and whites'. Technology will be but one tool rather than the saviour.

I believe that education is generally well prepared, as a system, to provide the necessary skills. The problem perhaps is that society is not aware of what is actually happening, and of the potential possibilities. For those readers who have not visited a school in the last 10 years I suggest that they do so, as I am sure that most will be positively encouraged by what they see.

I consider that there are three basic components in the provision of education — the students, the teachers and the curriculum. The students are no problem as they are more capable and receptive than they are often given credit for. Education needs to ensure that it can identify the true abilities of each, rather than attempt to mould the individual to fit into an order arranged for the convenience of teachers and administrators.

Apart from ensuring that the new Graphics and Design syllabus is treated as a 'serious' subject (as being demanded by the student customers) I think that the approach of the 1988 Draft National Curriculum Statement is appropriate to the needs of education for the near future.

Most of today's decision-makers were educated under content-based syllabi, which is appropriate for these changing times where adaptability and flexibility are necessities. The one change that is needed is to break down the traditional compartmentalisation of subjects at secondary school and blur the edges so as to give a more holistic approach, as in early childhood and primary education. We also need to ensure that the teachers can keep up with the possibilities offered.

We are all aware from personal experience of teachers having varying strengths and weaknesses in their abilities. With an objective syllabus the quality of the teacher is a much more vital factor in the successful delivery of education. It is a statistical fact that 25% of the students are being taught by teachers who are less capable than three-quarters of their colleagues, no matter how high the overall standard is. To my mind there is a need to close the gap of expertise, through giving positive assistance in those skills that teachers feel they are weak, at the same time as raising the overall standards.

It is in the area of teachers' continuing professional development that I think attention should be focused to ensure that we have the best possible, and most flexible and adaptive, education system. This may mean that consideration is given to assisting teachers to move to alternative careers if they feel that they are not fitted to the new approach. Of the teachers that I have met most are enthusiastic for the new way and are eager to update their teaching knowledge, and to learn new techniques.

Education is a long-term investment whose dividends are not realised until decades later, which is quite contrary to today's desire for quick returns.

Keith Huntington

Keith Huntington is a principal in the firm of Toomath Irvine Huntington Ltd, architects and engineers of Wellington, which has a specialist involvement in education buildings, and the use of computers for design and drawing. Since 1988 Keith has been the non-educationalist member of the curriculum group writing the new Graphics & Design syllabus for secondary schools. He was a member of the Wellington East Girls' College Board of Governors for five years. Keith is a member of the New Zealand and United Kingdom arbitration institutes and has an interest in positive methods of resolving disputes. He has developed a mediation service over the last three years.

A curriculum for education — not assimilation

"The fact that many Maori were located in the manual or industrial areas of the labour market is not an accident."

The curriculum is a selected framework and body of knowledge which is connected to a political, economic and social context and competing sets of interests and ideologies. Over the years since compulsory, public schooling it has been packaged into 'subjects' and disciplines which generations of New Zealand children have studied as if these packages have always been the most logical, indeed the most common-sense, ways of organising and acquiring knowledge and skills about the world around them.

For Maori children the construction of the school curriculum began when Samuel Marsden established a seminary for Maori boys in Parramatta, New South Wales in 1813. It began with ideas about what education was, of what was necessary knowledge and of what "natives" had to know in order to be saved and civilised.

Samuel Marsden wanted to teach the "useful arts" of civilisation, but one early mission teacher found it extremely difficult to "make mechanics out of them or teach them the arts". The British Colonial Secretary, Lord John Russell, in his instructions to Hobson wanted education to improve "their ultimate advancement in the social arts and in the scale of political existence".

Governor Grey insisted upon a programme of religious instruction, industrial training and instruction in the English language. Maunsell wanted schools to form in pupils a "taste for the diet, clothing, comforts, and habits of the Europeans". T.B. Strongman wanted to turn boys into good farmers and girls into good farmers' wives. A Royal Commission investigation of Te Aute School in 1906 deemed a technical education to be far more appropriate for training Maori people "to fit them for a life among Maoris".

The Hunn Report on Maori Affairs in 1960 sought a greater emphasis on tertiary education and established the Maori Education Foundation to promote that policy.

The struggle over the curriculum for Maori children has always been a political struggle over what the long-term outcomes of education should be. It has been linked at various stages to the developments of salvation, of civilisation, assimilation and modernisation for Maori people.

It was assumed that in order for Maori people to be able to contribute to New Zealand's development as a nation they first had to undergo some kind of transformation as a people. This has tended to lead towards a development model which argues that before Maori people can even take part in development they must first be prepared as a people or made ready.

A significant part of the role of schooling was to assist in this preparation and any resistance by children or parents was interpreted as being an example of ill-preparedness, lack of motivation or poor attitudes.

In 1991 this legacy has come horribly unstuck. Regardless of the various ideologies being employed to justify changes in New Zealand's economic outlook, the reality for Maori people is one of severe under-development in a context of retracting state resources and commitment. Educa-

tion and schooling is not on its own the panacea for all of New Zealand's economic problems. It is but one factor which contributes to the conditions which make further development possible. Schooling on its own is a complex enterprise and the curriculum is just one part of that enterprise. However, the curriculum represents the selection of significant knowledge which children are thought to require in order that they may critically understand and contribute to the worlds in which they live.

Recent charges from several quarters that the curriculum of schools in most western nations is not delivering the knowledge and skills required for today's world is but one indicator of a crisis in confidence with public schooling. Criticisms have been levelled at falling standards, poor teaching and inappropriate content. In New Zealand these charges have been directed at Taha Maori, peace studies and sex education.

One solution proposed is for a return to a basic curriculum and another for an expansion of the curriculum. The struggle over the curriculum has been linked by some influential opinions to New Zealand's ability to perform with a competitive advantage in the world economy. Others wish it to be linked more explicitly to the social values of our nation.

It is a struggle which has been highlighted by a major review of the curriculum and by other reforms in specific school curricula.

Either way the current curriculum of New Zealand schools is being contested at the level of specific knowledges and skills, for example the selection of one text or the content of one specific class lesson. This level of focus has created 'stand-off' relationships between various interest groups, and an unhelpful context for discussing the wider issues and more generic elements of a curriculum which can take us into tomorrow's world — socially, economically, culturally and politically as a developed nation.

In tackling the *Tomorrow's Skills* project of the New Zealand Planning Council, one response is simply to scoff and say that the curriculum as it stands can meet, and indeed currently meets, the demands being made upon it in terms of knowledge and skill levels. The problem with this approach is that it fails to recognise the degree to which the crisis of confidence is contributing to continuing doubts about New Zealand's educational standards.

As an educationalist and a parent involved in Kura Kaupapa Maori I am more inclined to question the curriculum, not just at the levels of 'culture' and 'language', but also at the levels of 'knowledges' and 'skills' which I believe our children need in order to live as Maori in tomorrow's world.

"The ability of our children to function linguistically and culturally in two different systems gives them an advantage."

I see no contradiction in seeking a place for Maori in the twenty-first century. I see no contradiction in desiring a curriculum which is based upon our views of the world.

Our ancestors were explorers of new worlds, they knew the stars, the seas and the bush, they engaged in trade and commerce, they had an international perspective which enabled them to adapt to new technologies and new knowledge. They had levels of communication skills, particularly in oracy, that enabled them to seek to communicate with people who were not Maori.

The generic skills outlined in the *Tomorrow's Skills* project were part and parcel of an earlier, less formal Maori curriculum. These skills enabled a remarkable ability to adapt and pose solutions both conservative and radical for the problems presented by colonisation.

I want the curriculum in Kura Kaupapa Maori to be one means through which our children can look again to the stars, can look again to the wider world around them, can seek new knowledges and skills beyond Te Moana Nui A Kiwa (The Great Ocean Of Kiwa).

In order to do this I believe that they have to be assured that they are indeed part of the world and not marginalised spectators to the development of others. They also have to be *educated* rather than *assimilated* and the curriculum at the overt and hidden level has to reflect that new emphasis.

The days of getting rid of 'Maori-ness', however that was defined, are long gone. Maori knowledge, language and culture are part of a wider Pacific and Asian system.

The ability of our children to function linguistically and culturally in two different systems gives them an advantage when it comes to unlocking further systems of language and knowledge. International schooling at late primary and secondary level is a possibility to assist that process.

Thinking skills underpin all knowledge and all skills. Teaching children to *think* requires a curriculum which actually allows children to think for themselves about things which are worth thinking about.

It is a curriculum which is often scary for parents and the community because it carries the risk that children will think things that do not conform to the way adults think. It is a curriculum which does not prescribe too closely that children should think. It is a curriculum which enables children to think differently, to be innovative, to solve problems, to reflect on their actions, to change their thinking.

That kind of curriculum requires a sound kaupapa or philosophy of education and skilled and innovative teaching.

My response to the *Tomorrow's Skills* project has been to analyse what it means for Maori children. Clearly New Zealand's economy has changed in ways which have left disproportionate numbers of Maori without employment.

I do not accept that this means that they are necessarily unskilled or unemployable in the future. The fact that many Maori were located in the manual or industrial areas of the labour market is not an accident, they were educated into that sector and they can be educated out of it.

This requires a positive approach and a schooling system which is more open about the possibilities which abound in the world. It also requires children to be successful, to feel successful and to believe that they are successful.

All children need to be educated into tertiary education as if that is the natural path towards adulthood. They need to develop their creative skills and their sense of fun and wonderment alongside their literacy and numeracy skills. They need to balance the skills of cooperation with those of competition.

Finally they need to live in a society which actually deserves children, which values them and the care and education they receive, which actually wants them to live full and productive lives, which wants them to be healthy and which wants them to think, to be innovative, to be knowing and to be highly skilled.

It will also be a society which wants to employ all its citizens in the tasks of development in productive, meaningful and rewarding ways.

Linda Tuhiwai Smith

Linda Smith (nee Mead) is of Ngati Awa (Te Teko) and Ngati Porou (Ruatoria) descent. She has been heavily involved in the establishment of Kura Kaupapa Maori in Auckland. Linda was educated at Minginui, Waimarama and Whatawhata primary schools and at Waikato Diocesan, Carbondale High in the USA and at Auckland Girls' Grammar School. After graduating from the University of Auckland, Linda trained as a primary school teacher. After completing an MA (Hons) in education in 1987, she worked as a researcher on asthma management before being appointed to a joint position of senior lecturer in education at Auckland University. Linda is studying for a Ph.D. in education.

Education today: bandwagon, bandaid or beacon?

"We need to harness our pioneering fencing wire talent to become an inventive and independent nation of learners."

"I work in a pulp and paper mill. It's fully automated now, and I'm only just beginning to see how much that has changed things for everyone. For guys like me who used to be out on the plant floor, walking round the vats, checking gauges, acting really fast and instinctively when we sensed that something was wrong, the main differences are obvious. We now work in a sealed, air-conditioned fume-free room that overlooks the plant but, actually, what we look at is the computer screens. You're constantly monitoring the information about temperature, pressure, quantity and stuff. You've really got to understand all the processes, all the chemicals and what happens to the stuff at each stage in your head, because when things go wrong you can't just rush out and turn off a tap. You've got to know what information to look for, what screen to call up and how to shut down or alter the process by giving information or commands to the computer. I like it; it fascinates me, but some of the guys who were really respected when we were out on the floor just can't handle it. They freak out completely. But I think the biggest change has been for the managers. It really gets up their noses that we not only know what we are doing, but we can explain it more clearly than they can and we can often anticipate problems when they demand changes. Some of them just haven't got a clue but they still like us to think that they're all-powerful and all-knowing. It's a farce, but I just shut up most of the time because I need the job and I'd rather do my job than make their policy and financial decisions ..."[1]

It's common knowledge that education in New Zealand has gone down the gurgler. No one can spell anymore. No one teaches essentials like grammar and punctuation, general knowledge and discipline. In fact, no one can teach anymore.

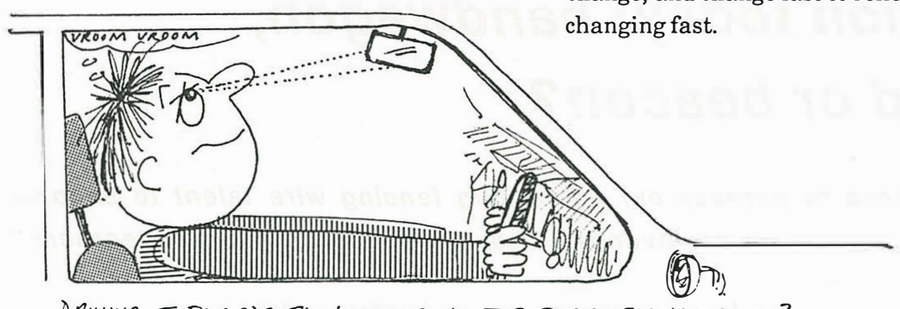
Teachers are themselves marginally literate. Everyone seems to know someone who knows a teacher who can't speak 'proper' English, who only works 9-3 and has 12 weeks holiday a year, just like everyone has a horror story about someone else's child's experience at x, y or z school.

Our own children, of course, have been 'lucky', with some good, some excellent teachers, and a richer and more challenging variety of learning experiences at school than we had in the 30s, 40s, 50s or 60s? Fact, fiction or public myth?

We try to drive forwards by looking in the rearview mirror

It is one of life's perennial ironies that we hold education at least partly responsible for many of the social ills that beset our time, without considering that the architects and builders of New Zealand society as it is *now* went to school 10, 20 or 30 years ago. *If schooling was so crash hot then, why is New Zealand the way it is today? Why is the New Zealand workforce aged 30-60 not responding more imaginatively to the challenges and opportunities of the 1990s?* If teaching is such a well-paid and cushy part-time job, why aren't we all

fighting to be in there making education exactly what we know it should be for our children?



DRIVING FORWARDS BY LOOKING IN THE REARVIEW MIRROR ?

We bash teachers: a new international olympic sport?

Teacher bashing is so widespread and *boring* that, when asked, I say I work at the Auckland College of Education. If asked what I do there, I say I'm a graphic designer (true). Asked to elaborate, I say I design courses and curricula. 'Really,' they say, 'how interesting', and I can go on to talk about my lifelong fascination with reading, learning and information; how anyone at any age can learn to learn better if they are taught to see the processes in terms of stages and skills so that they can teach themselves to learn, much as people teach themselves to drive with an 'expert' driver and 'confidence giver' beside them. Fine, great.

However, if I say I'm a teacher (also true) I get regaled with a homily on falling standards, back to basics, lazy teachers, long holidays, remedial grammar and spelling at university, and a nostalgic reminiscence of 'real education', i.e. when they went to school and 'got' discipline, grammar, spelling and team spirit — the curriculum cocktail that has made New Zealand the society it is today?

We proffer bandwagons or bandaids

So, am I saying that education is fine, teachers are fine; just leave us alone and we'll produce exactly what New Zealand needs to drag our economy out of the mire, to stop our national dedication to bashing, drunken driving, negativity and she'll be right mediocrity, to ensure equity by way of success for all on the Auckland *Metro* School Leaving test of general knowledge and spelling?[2] No, I certainly am *not*. I think that education must change, and change fast to reflect a society that is changing fast.

But at the same time as saying that, I'm aware of the dual danger of bandwagons and bandaids, and deeply grateful for the well-documented inherent conservatism and resistance to change of teachers and schools. By *bandwagons* I mean simplistic, instant, paper-based solutions to problems that are not precisely or accurately defined or documented, but both reflect and feed public myths. An example would be the idea that if you give people vouchers, 'market forces' will ensure quality education for all. These 'market forces' will eliminate both inefficient schools and ineffective teachers, allowing educational 'outputs' to be assessed to national normative academic standards, and at the same time to respond flexibly to market needs as perceived by employers.

By *bandaids* I mean the equally simplistic view of education as some sort of social medication — 10 years in a child's life when we can address and redress all the social ills we have created.

While I have no difficulty with the idea of education as a 'social semiotic', both reflecting and shaping society, I think that much of the tension today is between bandwagons and bandaids. I see it as an energy- and time-absorbing, counter-productive juggling of the contradictory forces of social engineering and social control.

On the one hand the bandaiders want education to engineer a society which is egalitarian, democratic and equitable. Education is one way of eliminating the inequities and iniquities in society - racism, sexism, classism, ageism, war, unemployment, environmental destruction, drunk driving, etc. On the other hand, the bandwagonners clamour for 'back to basics', discipline, standards, and 'real' exams that normalise society into its 'natural order' of 50% sheep and 50% goats: sheep to be employed and goats to be taught (in school, naturally, along with the 'basics') how to use enforced leisure of unemployment to socially constructive ends (Leisure Studies?)!

Is there anything new about this paradox of social engineering and control? Doesn't it represent one of the pervasive discourses (to use the jargon) which results in a healthy tension and moderation in our education system?

"We need to look closely at curriculum change."

We educate to change or for change?

It is fashionable to say that the more things change, the more they stay the same. Truisms are true, but only to an extent. Look at the war in the Gulf. You can say it's evolution, not change, but it is true that the type of war being waged is different, even from Korea or Vietnam. It's a war waged with information, misinformation and disinformation, not just in terms of missiles with computers and lasers programmed to hit precise targets, but also in how we know and understand the war and its causes and contexts.

We've become attuned to the all-pervasive truisms, clichés, symbols and signifiers of information (the hackneyed information age, society, revolution, technology, etc.), as we have to the media-promulgated images of the violence of war. Even if we are not desensitised to war or information, few of us now have the clear perspective of C. E. Beeby in 1970.[3]

> "Modern prophets tell us that, in some subjects, knowledge is doubling every 10 years. Whether or not this is literally true I do not know - it is certainly true of wisdom, but there is some justification for the view, now commonly expressed, that new ways of teaching, learning and understanding must be found if the new generation is not to be intellectually smothered beneath a mountain of facts."

We look for new ways of teaching, learning and understanding?

Today's schools are, willy-nilly, part of this information society and we could do worse than think seriously about Beeby's invitation to find 'new ways of teaching, learning and understanding'. What have we actually *done* in the 20 intervening years? We've done superb things by way of teaching reading and developing outstandingly well written, illustrated and produced materials to support our world-renowned reading programmes and innovations. We've innovated in many areas — the Learning in Science projects, Beginning School Maths, in linking reading and writing across the curriculum, in transition education programmes. All of them reflect, to some extent, 'new ways of teaching, learning and understanding'. But despite the quality of our teaching and teachers, no one — teachers, the 'liberal left' (for example, the *Curriculum Review*[4] or Royal Commission on Social Policy[5]), the market-driven 'new right' (for example, Treasury's analysis of education[6]) — appears satisfied with the education system as it was before the 1989/1990 changes, *or* as it is now.

A lot has changed in New Zealand education. Much has been said about the changes being largely administrative, but no area of education is discrete. We need to look closely at curriculum change. Curriculum, after all, embraces 'ways of teaching, learning and understanding'?

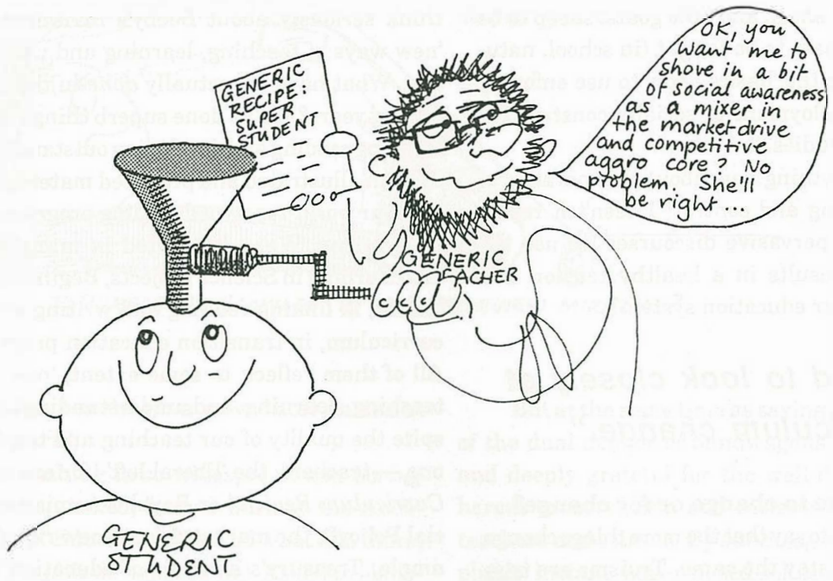
We mix a mean curriculum cocktail for today's school

In 1982 the Post Primary Teachers' Association Curriculum Advisory Committee, discussing 'A Curriculum Future', stated "The Committee believes that the present core is inadequate to meet the needs of pupils in a rapidly changing world" and suggested that "the core should be defined in terms of the following categories: *Creative and expressive skills, cultural awareness, functional skills, logical and symbolic relationships, personal and social skills, scientific skills and environmental awareness.*"[7]

In 1988 the Department of Education divided curriculum into *culture and heritage, language, mathematics, creative and aesthetic development, practical abilities, living in society, science, tech-*

nology and the environment, health and well-being.[8]

As the Goons would have it, strike a dark light!



The 1987 *Curriculum Review* depicts curriculum as 'all the activities, events and experiences that take place in the school learning programme' (p.6).[4]

It can be presented even more simply:

Curriculum is
WHAT is taught and *learned*) a learner-
HOW it is taught and *learned*, and) based model
WHY it is taught and *learned*) of curriculum

If you take away the HOW and WHY you have the syllabus — the narrow content prescription for what is *taught*. Curriculum provides the context, processes and reasons for *learning*.

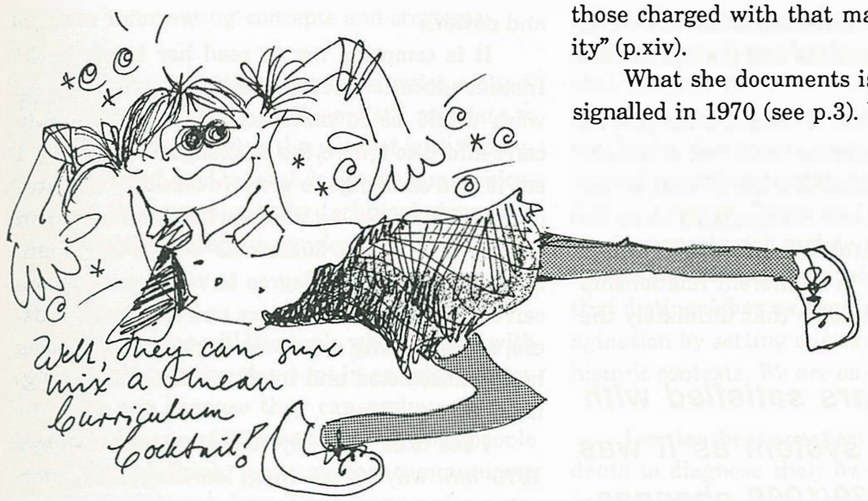
Until we (I mean all of us, not just teachers) look at curriculum in terms of WHAT and HOW and WHY people *learn*, I think we'll go on expecting more and more of education, and perceiving that we are getting less and less. In recent years I've compiled a list (from newspapers and radio) of what people say schools should *teach*. It includes:

Animals — endangered, and caring for pets; *safety* — home, road, water, harassment, sexual abuse; *homemaking* — budgeting, looking after babies, cot death, recycling, 'green' cooking, diet and gardening, plumbing, painting and home maintenance; *politics* — about democracy, political parties, using your vote; *self- and species preservation and development* — financial directions, avoiding 'sharks', mortgages, retirement (yes!), bank accounts, health, ergonomics, jogging dangers, decision-making, drugs, pollution, environmental and ecological crises, stress management, communications, body language, self-motivation, etc., etc.

This is not diminishing the importance of any of these items or issues, but to illustrate the problems of bandaiding — using school curriculum as a grab bag of opportunities to address social problems. How do you 'do' all the above, plus the 3 Rs, sport, and computers and... and... and... that everyone deems necessary? It's precisely because it is so hard that we (teachers, politicians, parents) often seem to seize any 'solution' — bandaid or bandwagon — that appears to be a beacon in this murky muddle.

We need to get back to Beeby

Simply, I think *we need to focus on educating children for the society they will inherit from us*. Call it outcomes, outputs, technocratic, if you like, labels. It's easy to confuse the issue with language, but surely we *already* know enough about what the future will be to see how we can adapt what we *already* do.



We need to question the flatulent promulgations of theorists who seem to say that no progress can be made in education until society itself is changed (by revolution). I wish that these people who talk so much about the hegemonic structures that oppress us would tackle New Zealand's privet problem!

Some now recognise that the peasants don't want to revolt as much as they, the academics, feel that we should want to revolt, but they still get all coy and cringy when anyone mentions educational *outcomes*— technocratic and redolent of marketplace language and thinking?

After years of reading, at last I've found a theorist, Shoshana Zuboff, whose book *In the age of the smart machine: the future of work and power*, has become my new Beacon Reader, the focus of much of my thinking, reading and writing![9]

Why is Zuboff so important to the future of education in New Zealand? The scenario at the beginning of this paper was *not* 'brave new still to be experienced world' stuff. It was a narrative derived from the *facts* of Zuboff's massive 10-year study of "the practical problems that would have to be confronted in order to manage the new computerised workplace in ways that would fulfil the lofty promise of a knowledge-based society and to generate knowledge that would be instructive to those charged with that managerial responsibility" (p.xiv).

What she documents is exactly what Beeby signalled in 1970 (see p.3). Workers are developing *new ways of understanding* in order to cope with the mountain of data that is the reality of survival in an information or knowledge-based society.

We need new ways of understanding...

It's impossible to do justice in one paragraph to the dense concepts and experiences of nearly 500 pages. To read the book you really have to expand your ways of understanding.

At the risk of being simplistic, I think what she is saying is that the nature of work has already changed. Any automated operation (pulp mill, bank, insurance office) has experienced profound structural and managerial change. At the heart of this change is the nature of work and the worker's response.

Previously, much of our work was learned with mind *and body*. For example, a skilled mechanic knows, by touching, by listening, looking, 'instinctively' what is wrong with a machine; this knowledge being built up over years of psychomotor tinkering, listening, feeling, thinking, experimenting.

The physical reality of the machine and its processes is very much part of this knowledge, which is internalised — real, accessible and useful but not necessarily able to be articulated. In the totally automated workplace this body/brain knowing becomes replaced by a totally intellectualised process of seeing *in the head*, being able to make

decisions based on an intellectual *abstraction* and visualisation of the machines and their processes through a VDU screen.

In other words, what is needed is not just an understanding of the process itself, but of the abstracted 'textualised' account of the process which is electronically stored and manipulated at an intellectual level to control that process. It places head, hands and heart in a different relationship to each other. And it means that ultimately the

"No-one appears satisfied with the education system as it was before the 1989/1990 changes, or as it is now."

organisational power base shifts.

To be effective, a worker must have the holistic, intellectualised understanding of the whole process that was previously the preserve, prerogative and *power* of the management hierarchy.

While we maunder on about hegemony and lacunas, I wonder that we haven't realised that the revolution *has* begun. The 'information revolution' is not a cliché. It's the most profoundly anarchic shakeup of the existing power base in our societies (socialist *and* capitalist). The few who have conceptualised the impact of the information revolution on the social order, like Toffler, Stonier, Jones, Naisbitt, have ironically been labelled futurists rather than sociologists. But it is happening to society *now*, as Zuboff demonstrates.

She makes one aspect of this revolution transparent by documenting it with scholarly precision (she is a professor at Harvard, and more academically respectable you can't get!). Two of her concepts have particular significance for education in New Zealand today:

- her concept of *intelligent technologies* rather than information technology

- her concept of *informating* (abstracting and intellectualising experience to make it accessible to reflection, leading to new conceptions about work and power).

It is tempting not to read her tough book! Instant education recipes based on accounts of her work would be so much easier! But we simply can't afford to ignore the challenge in her book. I see it as a challenge to prepare *teachers* and students for (possible but not guaranteed) work in an environment where success as worker *and* manager depends on the degree to which people conceive themselves as learners and information users, actively using, manipulating and interpreting highly abstracted and intellectualised clues, signals and signifiers.

I see it as perfectly congruent with Beeby's 1970 'new ways of teaching, learning and understanding', the how, why and what of curriculum. 'Owning', intellectualising and developing responsibility for whole processes is not new or unique. You can argue that it's already being done at Nissan, and in other workplaces as conscious employment and production policies. But is it being done consciously in our schools in response to curriculum policies? A lot is being done consciously and unconsciously by sensitive and intelligent principals and teachers, but we need policies and training at all levels:

- We need a national information curriculum policy — I don't mean computers in education. I mean 'informating' policy à la Zuboff!

- We need different teacher training, emphasising learning, learners, information and information skills.

- We need 'informating' courses for principals and teachers — no I don't mean courses in information systems, computers and resource management. I mean that we *all* need to learn concepts of information and apply them to education. 'Informating', I'm convinced, can be 'caught' by some, but it can also be *taught* and learned by *all*.

- We need to discuss 'informating' with parents, managers, industry, employers, politicians, bureaucrats.

- We need to introduce students at all ages and

levels to 'informating' concepts and strategies.

With the audacity of a graphic artist, a blank sheet of paper and the artist's mandate to keep it simple, to design the product with the audience in mind, and to treat design as communication, not the opportunity for technical virtuosity, what would a *'Zuboffian curriculum'* look like?

WHY?

The outcome will be people who can cope with employment or unemployment in an information-intensive age because they can make conscious and effective use of information. They are people who can read, think, learn, reason, communicate and manipulate numbers. They can organise, process and interpret large amounts of information at an abstract level, i.e. they can see themselves as learners, consciously and intuitively applying information skills to shape and make sense of the undifferentiated stream of data that is rapidly becoming the reality of *all of life*, not just work.

Brave words, but HOW?

HOW?

Learning to learn is an active process of thinking about what you are doing *while you are learning*.

The 'Zuboffian curriculum' will focus on learning to learn, learning to use information. Learners know that it is their responsibility to use their 10 years of schooling to learn the six key skills — to *read*, to *write*, to *think*, to *use numbers*, to *manage*, to *communicate* (interpret, articulate, explain). Teachers provide:

- contexts from different fields of knowledge because each requires different strategies for applying the core skills

- specific tutoring in, monitoring and co-evaluation of, the clusters and complexes of related skills, strategies and stages that comprise each of these six major information skill areas.

WHAT?

The content will be narrative — the story of the world and its people, its mathematical and scientific systems, its languages and structures (environmental, geophysical, political, sociological, etc.), its past present and possible futures. The story will be 'true' and imagined; oral story, people, books, documents, records, every conceivable way of recording human experience as so-called fact and fiction. There will be no 'subjects', only our immensely rich and detailed narrative legacy in various areas of knowledge, because it is story that distinguishes us from animals, fuels our imagination by setting our experience in social and historic contexts. *We are our text*.

I see teachers as expert learners, helping students to diagnose their own learning strengths, and suggesting skills and strategies for them to try.

I see teachers as working with students to create externalised texts from the text of shared human experience.

I see many teachers as well equipped to do this. I see many classrooms where it is already being done. I don't see it as something radically different from what many do already — more of a different focus and emphasis. I see teachers focus-

"The information revolution is the most profoundly anarchic shakeup of the existing power base in our societies."

ing more consciously on themselves as *learners*, learning to articulate the learning processes, skills and strategies that their students need. I see teachers learning how to intellectualise abstract processes so that they can guide students in learning to do the same.

I see many teachers who are already committed to the self-reflective learning/teaching experiential curriculum model outlined above. But I don't see many teachers who can relate what they and their students do to the inescapable realities of the INFORMATION age. Not true? OK, so why have we taught *computer* awareness, not information

awareness; why do we talk about *information* technology and 'computers in education' as synonyms? Obviously, because it's easier to teach people to use machines than to employ the highly abstracted and intellectualised processes that ultimately control the *tools* of information.

Zuboff says:

"The informated organisation is a learning institution, and one of its principal purposes is the expansion of knowledge — not knowledge for its own sake (as in academic pursuit), but knowledge that comes to reside at the core of what it means to be productive. Learning is no longer a separate activity that occurs either before one enters the workplace or in the remote classroom settings. Nor is it an activity preserved for a managerial group. The behaviours that define learning and the behaviours that define being productive are one and the same. Learning is not something that requires time out from being engaged in productive activity; learning is the heart of productive activity. To put it simply, learning is the new form of labour." (p.395)

Anyone who insists that school should pursue knowledge for its own sake and that trying to equip kids for the future is technocratic is living in cloud cuckoo land. Of course we need to equip kids to inherit a New Zealand society very different from its colonial past.

This could be seen as intimidating for a nation of No. 8 Fencing Wire Make-Doers who traditionally respect action more than theory, sportsmen (I mean men!) more than scholars. It *will* intimidate many, but why don't the rest of us do what we're good at and give it a go? What have we got to lose? More importantly, what have we got to gain or regain in terms of economic viability and national pride?

"I think we'll go on expecting more and more of education, and perceiving that we are getting less and less."

We need to harness our pioneering fencing wire talent to becoming an inventive and independent nation of *learners* in the middle of an information revolution which will demolish the old social order and power structure.

We currently have 250 teachers enrolled nationally for *Infolink* the first unit in the three-year part-time Information Studies and Teacher-Librarianship programme, a national distance education course coordinated by Auckland College of Education and delivered through all six teachers' colleges, tutored by trained teacher-librarians (full-time school information specialists).

The focus of *Infolink* is this 'informating process'; getting teachers familiar with information skills and processes so that they can ensure that all students *learn to learn*, i.e. self-reflective information-based teaching and learning. That 250 teachers are prepared to pay to attend a really demanding 2.5 hours weekly workshop at the end of a teaching day, plus do the 2.5 hours of work required with their students and five hours of weekly independent reading and analysis, says a lot about teachers' perception of what is needed.

So what's the problem? The problem is that this is a three-year Ministry policy and unless we get a *permanent* course there's little point in enrolling more teachers in Year 1 next year.

In addition, the jobs of the specialist teachers who are currently tutoring (in their own time) are due to be phased out in 1993. No tutors, no programme!

The suspension of our first specialist teacher training programme in 1988 after three successful years was demoralising. After the publication of National Council for Educational Research documenting the success of the first scheme and the value of the role of this specialist in developing effective learners, the demolition of the second will be unbelievably shortsighted given the value related to the savings (some course funding, 16 teachers' and two lecturers' salaries).

The final word belongs to Herbert Dordick:

"To understand New Zealand's entry into the information society, how the information technologies have been and are being diffused and with what impact, we need to appreciate the economic and social changes taking place in New Zealand."[10]

Education, whether we like it or not, is part of the economic and social changes taking place in New Zealand. These changes are, at least in part, causing and caused by an information revolution. When it comes to revolution, I'd rather *do* than have it done to me. How about you?

References

1. A narrative version of the research reported in Zuboff (below).

2. Referring to the efforts of the Auckland-based magazine *Metro* to reveal the 'real crisis' in New Zealand education.

3. Quoted in Beswick, Norman, *Resource-based learning*, London: Heinemann, 1977, p.5.

4. Department of Education, *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools*, Wellington: Department of Education, 1987.

5. New Zealand Royal Commission on Social Policy.

6. *Government management: brief to the incoming government: Vol II: Education issues*, Wellington: Treasury, 1987.

7. New Zealand Post Primary Teachers' Association, *A curriculum future...*, Wellington: NZPPTA, 1982, p.6.

8. Department of Education, *National Curriculum Statement: A discussion document for primary and secondary schools*, Wellington: Department of Education, 1988.

9. Zuboff, S., *In the age of the smart machine: the future of work and power*, London: Heinemann, 1988.

10. Dordick, H., *Information Technology and the New Zealand Economy*, Wellington: Victoria University Press, 1987, p.27.

Gwen Gawith

Born 1948, variegated geographic and professional background — four careers and four continents! After fine art and English degree worked as management trainee in bank. Did graphic art part-time and worked in publishing before five years of art, publicity and promotion for a public library service. Did librarianship and education training in UK. Settled in New Zealand in 1979. Involved for the last six years in teacher education, and writing and illustrating books for teachers on school libraries, reading and learning. Now based at Auckland College of Education, a happy workaholic, combining coordinating a national distance education course offered through New Zealand's six teachers' colleges with part-time never-never thesis and far too much ice skating!

Arthur William Edgar O'Shaugnessey
1844-1881

We are the music-makers,
And we are the dreamers of dreams,
Wandering by lone sea-breakers,
And sitting by desolate streams;
World-losers and world-forsakers,
On whom the pale moon gleams:
Yet we are the movers and shakers
Of the world for ever, it seems.

With wonderful deathless ditties
We build up the world's great cities,
And out of a fabulous story
We fashion an empire's glory:
One man with a dream, at pleasure,
Shall go forth and conquer a crown;
And three with a new song's measure
Can trample an empire down.

We, in the ages lying
In the buried past of the earth,
Build Nineveh with our sighing,
And Babel itself with our mirth;
And o'erthrew them with prophesying
To the old of the new world's worth;
For each age is a dream that is dying,
Or one that is coming to birth.

Oxford Book of Victorian Verse

Movers and shakers in 1991

"The major educational enterprise of our time is not happening in the classrooms, in the universities, our factories, but in the home, in front of the television set."

I grew up loving stories. One of the stories that held a special place in my childhood years was that of *King Arthur and the Knights of the Round Table*. The knights and fair ladies were my heroes and heroines: I was captivated by their adventures. On reflection this narrative contains all the essential ingredients of any great story: love, passion, betrayal, mystery, bravery. Other cultures also have stories that touch on these great themes. These stories have and will continue to fascinate and enthral their children.

There was something special about the story of King Arthur that particularly held me: the quest for the Holy Grail. I doubt that I understood the theological and historical implications of this quest but something of this quest, this journey forward, of its purity, touched my heart and held me enthralled.

I think this quest is an intentionally elusive sort of story. It's full of symbols, it's full of smaller stories which lend themselves to interpretation, to reflection and application in different settings at different times. People did things outside their everyday reality. Some mysterious sources of faith took them on a journey of unknownness.

Today in 1991 my heroes and heroines are not those knights and fair ladies. Some of their names will be familiar to you: Peter Greenaway, David Lynch, Bart Simpson, Jane Campion, Warren Viscoe and Madonna. Some of them are my friends: Trisha Morgan, Nicky Hager. Another, Nancy Grant, is remarkably kind and caring with older people in the community where I live. One of them is my husband. My heroes and heroines include film-makers, fashion designers, a peace campaigner, a preacher. These people have been my teachers, the sources of wisdom, inspiration and vision.

It is our preachers, novelists, poets, dramatists, film-makers and the like, purveyors of fiction, ambiguous people, deceivers, who play a guiding and representative role in our culture. From time immemorial these people have been our teachers because their words, their visions, have touched our hearts.

You as readers will have your own heroes and heroines and your stories emerging from your cultures. These stories, these people, will have inspired you in your journeys of unknownness.

I am no longer a child. I still attach immense importance to the stories and narratives of our times but I now understand that we have the freedom to choose which narratives we will listen to, reflecting the values we believe are important. It is on this basis that I am responding to the *Tomorrow's Skills* document.

We can only talk about tomorrow's skills from the point of the values, beliefs and attitudes we hold in today's world. It is not an easy task. One commentator aptly summed up the realtionship as:

> "Fortunately or unfortunately, in order to think, pray, or love one must at least be alive. In order to be alive one must eat. In order to eat, one (or at least some) must work. But to discover the relation between

the way we work and eat, and the way we think, pray and love is not so simple."[1]

The quality of life is something that only has meaning in the present. If our orientation is always towards the fulfilment of some future goal, there's a danger we will cloud out, forget or ignore the promise of today. The values and ideals we uphold and live for now will ordain what the future will be like. Think about Marshall McLuhan's words: "The future of the future is the present."

Here in New Zealand, what narratives, which heroes and heroines, will speak to us, guide us in our choices? Will it be the narratives of progress, globalisation, market economies? Will it be the

"Education must not only teach us to love life but also open our eyes to the social misery of the world and teach us to understand it better and transform it."

men and women prominent in our business community? Will it be the men and women leading our new SOE organisations? Will we choose these narratives, these people to speak about the way forward?

The commitment to fulfilling future market needs takes little account of the values and quality of life which provide for human fulfilment: for example, we might be told there is going to be a huge shortage of information systems personnel and that we should be training people to fill this perceived shortage.

Such a strategy takes no account of the fact that, even though such people may earn more money working at such a job, we may actually be producing very unhappy information systems people with all the attendant attitudes and behaviour of unhappy people. Even though we may have a good job and be earning lots of money we may still be depressed, lonely, unfulfilled people.

We may automatically assume that a wealthier society is an intrinsically better society. Yet when we see the wealthier societies in our world as measured by such narrow concepts as GDP — Japan, West Germany, some of the oil-rich nations in the Middle East for instance — we have to ask in what sense do their societies represent better values, more opportunities for human fulfilment and happiness? Are we also to assume that the people of these societies are better lovers, friends, care for their poor, their sick and maimed, hold in high regard their wisdom teachers?

We must be suspicious of any ideology which seeks to fully describe or evaluate the possibilities and direction for human learning and education. Both the liberal philosophies of the past and the supply-and-demand philosophies of the marketplace implicitly prioritise particular human values. Nonetheless we must begin from some starting point as we seek to develop a system of education for our people. This starting point requires from us all, courage and vision.

In many ways we are seeing now the breakdown of the liberalist, materialist dream: we are seeing that advancements in technology and progress do not necessarily benefit everybody and even those they do benefit in some material way, are not necessarily what we would call fulfilled human beings.

Our review of the education system comes at a unique time. As we witness 'the death of communism' in Eastern Europe, we see also the collapse of a particular political ideology that sought to address men's and women's material and physical needs but not those of the spirit. We know, too, that the gap between the rich and poor nations has widened dramatically over the last decade. Here in New Zealand the excesses of the 1980s, 1970s and 1960s must now be reckoned with.

Which way are we going to go, what assumptions are we going to base our choices on? What heroes and heroines are we dealing with here? Who holds the power? Whose stories do we hear? What stories are you going to choose to listen to? What is the moral way to use authority, privilege, wealth? Who do our actions and beliefs say we are serving?

Education in its best sense must be concerned with issues of life and death, especially the circumstances that dictate who lives and who dies, who has access to resources, who does not. Education must not only teach us to love life but also open our eyes to the social misery of the world and teach us to understand it better and transform it.

Here in New Zealand we know that in the economic reforms, in the exposure to global com-

"Television as a medium makes possible the re-creation of the idea of school in our times."

petition, there have been winners and losers. For a brief time in our history it was promulgated that everyone could be a winner in the emerging, market-led society. If you thought the right thoughts, adopted the market place jargon, networked and compulsively consumed you were 'successful'. If you were unfortunate enough to be a loser — to be young, to be a solo mother or unskilled then it was your own fault.

In some quarters these views still have a currency. I do not doubt that the 1990s will see a questioning of these attitudes, a questioning of the concentration of the country's wealth and assets amongst older New Zealanders, a questioning and growing outrage that this has occurred at the expense of the investment in our young people, our children and in the institutions that serve them.

It is time that those in positions of power and privilege within our society, within our communities, reassess their beliefs, their values and their hopes for the world their children and grandchildren will inherit. Ironically, Leonard Stern, one of America's immeasurably wealthy captains of industry, spoke out pointedly to America's wealthy citizens on this same issue:

> "If you want to keep your life-style, and you want to keep your fortunes and you want to keep the promise of this country for your children, we cannot continue on a course where the top level becomes ever wealthier and the bottom level becomes even poorer. And for those who make catchall statements like 'land of opportunity', 'free enterprise', 'personal incentives', 'my father came here penniless' — these throwaway lines are inappropriate now. They don't recognise the problem. The problem is that we are growing a generation of children who lack that opportunity, who lack decent education and proper food ... Unless we can address at great expense an effective programme for the underdog, this system will not continue. As it is, you have a growing contingent of the population that are not only convinced but right that the system doesn't work for them. And if the system doesn't work it gets changed."

In times of adversity other cultures, other societies across the ages, have reassessed their priorities, reformulated their visions. In the past our inherited seats of cultural knowledge — our schools, our universities, our churches, our temples — would have been the forums in which these issues were debated.

The greatest obstacle of all to the dialogic, multicultural classroom or forum which confronts even the most radical and committed teacher or visionary, is finding a common language in which to address us. It is to the medium of television that we must turn. The major educational enterprise of our time is not happening in the classrooms, in the universities, our factories, but in the home, in front of the television set — not under the jurisdiction of school administrators and teachers but of television executives.

Many educators are deeply concerned about the change-over to a culture based on the electronic media. There are many thoughtful papers and books pointing to the disturbing aspects of a television society. I do not intend to sing the praises of a television-based culture. It would be foolhardy on my part and inconclusive. Television cultures have no more monopoly on morality than do print-based cultures. What can be stated is that television is here, it's accessible to everyone and it's continuous — it doesn't take breaks for holidays. It already transmits, explicitly or implicitly, formative social messages about role models, values and attitudes for societies.

Television as a medium makes possible the

re-creation of the idea of school in our times.Those that own and manage television companies have not conspired to usurp the role of teachers, nor do they necessarily want this responsibility. Television in the institutional form as we know it has developed out of a complex of interacting cultural, political and economic forces.I do not envisage that schools, universities, training centres will be rendered obsolete. All of them can and do play essential constructive roles.

There are, however, some lessons that our educators can learn from the television world. The television world is vitally concerned with its audiences as 'consumers' of its products. Television exists and is sustained by the support and participation of its audience. While education tends to be associated with a temporal, spatial and institutional structure, television constantly has to evaluate its appeal to audiences.

A few generalisations which are supported by research evidence indicate that television doesn't do things to its audience, rather 'consumers do things with television'. In other words, the really active element in the television process is the consumer who brings to bear prior experiences, attitudes, and values and prejudices in order to interact.One of the implications of this is that audiences are not blank slates waiting to be bombarded with messages. Audiences come to television with a host of preconceptions and, in the vast majority of cases, they use television to confirm

"The commitment to fulfilling future market needs takes little account of the values and quality of life which provide for human fulfilment."

these preconceptions.

No doubt the same would apply to our children. Neither are they blank slates waiting to digest the school curriculum. If we were to approach the education of our children using the same tools applicable in the marketing world at its best we would seek to investigate their individuality, their likes and dislikes, passions and dreams and we would use these as stepping stones to build thinkers, questioners, optimists.

If we were to apply the lessons of market economies one step further we would suggest that we must move beyond our preconceptions with mass media, mass markets, mass education. All around us we are seeing the fragmentation of ideology and consumer society.

Can our educational system remain untouched? Some parents can already make choices in the education of their children. Yet these choices are often a function of wealth. However, we need teachers and schools with access to the relevant technology to communicate in the most accessible and compelling languages, symbols and words to inspire *all* of our children and us as adults.

I think back to King Arthur, and the quest for the Holy Grail. It's a story which asks us in a most profound way where we are going to set our priorities. To what should we be committing our most precious resources? To what use should we be putting our time, our love, our devotion, our commitment? The story of the quest for the Holy Grail implies, I believe, a profound openness to life. That what we have taken to be the most familiar may not be the best, that what we have accepted as the norm need not be beyond our reconsideration.

We must listen to our own wise men and women. We must recognise the destructive effect of those bad stories that dominate our thinking and decision-making, stories born of greed, conflict, ignorance, prejudices, fear. Our first priority is to ask about the stories that speak to people not from the acceptance of barriers and walls, but stories that begin from the point of a shared humanity.

To begin from the point that generosity, kindness, a readiness to listen and a commitment to understand are actions which speak a universal language. That whether we cry to Allah or God, or the market economy in pain or joy it is still human suffering and human delight that we are talking about. The challenge is to listen wisely to the movers and shakers. These are the people who will inspire us to take the step forward.

References

Baker, Martin, "The Challenge Is", Sermon, January 1991.

Baker, Martin, "Postmodernisation and Theology (an attempt)", Union Seminary Dissertation, December 1989.

Callister, S.J., "White-bread TV, the end of an era?", An Overview of the American Television Market, June 1990.

Callister, S.J., "Aids Prevention 'It's OK to say No'", Department of Health Discussion Paper, February 1989.

Callister, S.J., "Violence on Television", A TVNZ Discussion Paper, August 1990.

Greenaway, Peter, "The Cook, The Thief, His Wife and Her Lover", Interview by Brian McFarlane, *Cinema Papers*, 78.

Fabris, Giampaolo, "Consumer Studies: New Perspectives", *Marketing and Research Today*, June 1990.

Hinkelammert, Franz J., *The Ideological Weapons of Death*, Maryknoll NY, 1986.

Postman, Neil, "Engaging Students in the Great Conversation", *Phi Delta Kappan*, Vol 65 No.5, January 1983.

Rushdie, Salman, "Is Nothing Sacred", The Herbert Read Memorial Lecture delivered by Harold Pinter at the ICA on 6 February 1990. It was also published in Granta *The General*, 31, Spring 1990.

Thomson, David, "The Early Adult Years: Parents and Children at Century's End", New Zealand Planning Council Social Monitoring Group Discussion Document, October 1990.

Shnayerson, Michael, "Doing the Right Thing", *Vanity Fair*, February 1990, p.60.

Vidal, John, "No Confidence in Aid Trick", *Guardian* Service, Reprinted Auckland *Star*, 9 October 1990.

[1] Jose Miguez Bonio, Professor of Systematic Theology and Ethics, Institute Superior Evangelico de Estudios Teologicos, Buenos Aires, Argentina.

Sandy Callister

Sandy Callister has worked in a shearing gang, as an apple picker, on an archaeological dig in Britain and as an art gallery assistant. In recent years she has worked for Saatchi and Saatchi in their Wellington and New York offices. Sandy lives in St Heliers Bay, Auckland and is the general manager research, for Television New Zealand. She enjoys hiking, winning at tennis, writing lists and collecting costume jewellery.

Management for change

"Competition is like spice;
only fools try to make a meal of it."

New Zealand is in a mess — economically and socially — and every economist, politician and businessman can tell you why! Every expert will give you a different reason, which is not surprising in view of our national sport of leaping to conclusions from inadequately investigated facts, little or no rigorous analysis, with no formal training or interest in how to test cause and effect relationships.

The real roots of our problems, I believe, lie partly in our adherence to an obsolete concept of how power should be distributed and maintained in a society or system, and partly in the subconscious attitudes we have built up in our minds as a result of living with this system. The most obvious of these attitudes are a morbid worship of aggression and a preoccupation with looking after self to the detriment of others.

Plato first systematically described and analysed his ideal power system for the city-state 2,400 years ago in Athens. It was rigidly hierarchical, ruthless with those who attempted to change the order in any way, and hence inflexible, and relied on most of the work being done by slaves at the bottom of the class system. Several of his contemporaries had other ideas, and sought a society with greater flexibility in which knowledge was the key resource and hence, perhaps, source of power.

We live in what we see as a democratic country, but Plato is still alive and well within our systems, many of which are rigidly hierarchical, empower the few and disempower the many. We empower men at the expense of women, the children of the upper classes within the education system at the expense of those of the lower, to name only two areas of discrimination.

But we are not living in ancient Greece! We have since been through the Industrial Revolution, the emergence of science and modern technology, and are now supposed to be in the information age. The key resource used to be land, gradually changed to capital, and has shifted to knowledge today. Knowledge, however, needs to be managed differently to other key resources — it can be passed on to others without losing it, and is invisible.

Yet we continue to govern and manage substantially in accordance with Plato's principles, and wonder why it doesn't seem to work well. In a knowledge-based society, change is endemic, hierarchical power and class systems are anathema, and aggressive, selfish attitudes only retard progress. Wasting 75% of the available thinking power only leaves one cylinder firing in our four cylinder economic engine, and the drag of the other three pistons means our output is close to zero.

We simply must find a better way.

Recently we have seen a rash of reports on why our progress is so poor in world terms, where an accusing finger has been pointed at our education system and practice. Some of this criticism is justified. It has been said that two main processes take place in our education process.

First and most productive is the educative process which increases pupils' knowledge and stimulates the desire to continuously learn. Second and most insidious, comes schooling, which

seeks to rank and hence brand the apparently less gifted, to suppress the maturing process, reinforce social prejudices and fit pupils into preordained slots in the economic and social system.

The end benefit of education depends on how much we can increase the educative, and decrease the schooling, processes. 'Tomorrow's Schools', for all its good intentions, by devolution of management power, often to those with elitist tendencies, may have created pressure to reinforce schooling aspects, since they favour the preservation of class privilege, to the detriment of national economic and social progress.

Educational change is one of the hardest things to manage effectively, for the simple reason that we don't find out whether we did well or badly until long after we create a change. We are looking for changes which will produce the best possible results a quarter of a century ahead. The recent proposal to run every school according to current commercial management practice, I find rather ironic, in view of the fact that one of the reasons the country is currently in such a mess, is because those practices have got it wrong so consistently in predicting future conditions and needs over the last few decades.

What we are doing is making changes in our education system in an endeavour to prop up a paradigm of management of our social and economic systems which has failed us badly, and is clearly out of date.

There are many definitions of a paradigm but, for brevity, let me offer one: "A perceptual model of reality, including a set of rules of the game, which tell you how to be successful within the boundaries of that model." Paradigm shifts are often initiated by mavericks, and it usually takes a long time for a 'critical mass' of believers to build up and finally cause an abrupt change, after which virtually everyone accepts the new paradigm.

In a recent address, Joel Barker, a well known U.S. futurist, said that he now believes that Total Quality Management is the most important paradigm shift which will impact on our lives as we enter the twenty-first century. Total Quality Management evolved out of a new theory of how to use the power of modern statistical mathematics to manage any process so that the outcome is always acceptable.

These ideas first appeared in a book by Walter Shewhart in 1930, and were further developed by a group including Dr W. E. Deming and Dr J. Juran in the U.S. It was put to good use in U.S. war production in World War Two and then abruptly discarded as upper management was taken over by finance and legal experts who knew and cared nothing about managing work outside their own narrow perspective. Japanese upper managers, who were predominantly engineers and scientists, had meanwhile heard of the new concept of statistical process control, and invited Dr Deming to instruct them in the art. The rest is history — Japan introduced a massive campaign to educate millions of managers, engineers and workers in the new knowledge of skills. Deming promised them that, within five years, their standard of living would equal that of the world's most prosperous nations. No one believed him, but they studied and put to use the new insights, and it worked! Meanwhile the U.S. and the rest of the Western world have been steadily slipping behind and are only recently starting to realise why.

When operating under the new paradigm, organisations do not rely simply on competition to drive them to make random and often hastily conceived improvements in efficiency, but rather, have continuous improvement woven into the fabric of their systems. Competition is like spice; only fools try to make a meal of it. It is useful as a seasoning in a diet composed mainly of collaboration, continuous learning, scientific thinking, wise use of technology, concern for internal and external customers, sound visions and large doses of continuous improvement. Whatever the theory, the results speak for themselves. Japan's average rate of economic growth has not been matched by any other nation for the last 40 years.

"The end benefit of education depends on how much we can increase the educative, and decrease the schooling, processes."

No tampering with New Zealand's system of management, politics, education or economic policy-making is going to get us back into the race. We have all witnessed the procession of 'loony tunes' played by successive governments, such as 'Think Big', 'Rogernomics' and 'Tomorrow's Schools', and seen the appalling results. We are going backwards relative to the world's most productive nations in both economic and social terms, because nobody has bothered to study the overall system well enough to see whether the engine is coupled to the driving wheels. It has been demonstrated by people who study systems that optimising subsystems does not optimise overall systems, yet that is precisely what we keep on doing. An adversarial system is simply unsuited to drive a customer-oriented society — what is required is a self-disciplined, self-managing, customer-focused, cooperative system in which millions of process decisions can be correctly made by all the people within it. The knowledge that, without their input, such good results would not have been possible provides the positive feedback which is vital for the self-respect of the participants.

"Education is one of the major means of achieving a more productive, just and rewarding society in New Zealand."

At the moment, there is precious little sign of a recognition that a change to the new paradigm is urgent, or even needed at all. Certainly it is very unlikely that the Government, the Treasury, the bureaucrats, the lawyers or the accountants are going to be interested in a system where their power and privilege is diluted through devolution to those for whom they presently show scant respect. However, paradigms have a habit of actually shifting quite rapidly into a dominant position because one or two organisations or individuals embrace the new system, fumble, stumble, recover, improve, do well, and finally excel. Others tentatively follow and do likewise. Others wait until it is proved beyond doubt, and lose their businesses. Even the 'fat cats' in their ivory towers eventually get the message — 'change or perish'.

What does this mean for education? Since managers would change from being 'order givers' to teachers, listeners and system improvers, and workers would be the process managers and need to be knowledgeable, skilled and technically literate, education becomes a key activity in making the new system work. But education clearly does not mean purely of the young and adolescent — that is the easy part. The harder part is to teach those already in the social, commercial, industrial and bureaucratic system. All have to learn new roles, goals and priorities. Education has to be accepted as a continuous process through life, and some of it will be accomplished within organisations as a normal part of living, learning and working on problem-solving and improvement.

Education will cease to be used to sieve out the intelligent few from the unintelligent majority, and become a means of improving the thinking effectiveness and knowledge base of all. Examinations will only be useful as a means of finding where we have got to, rather than for ranking. Adversarial attitudes will need to be moderated, and teamwork learning styles developed.

An intelligent review of desirable changes within the education system of New Zealand requires that we recognise that knowledge and constructive thinking ability are becoming increasingly the key resources which drive the economic engines of the most productive and economically advanced nations. Also, we must realise that there must be compatibility between the knowledge and thinking skills developed by graduates of the education system, and those that they are empowered to use through the inadequacies of the management system that they work in as employees and team members in various organisations.

Fortunately there are some small glimmers of light at the end of the tunnel. A few weeks ago I read with interest two papers presented at a conference on Total Quality Management in Decem-

ber 1990. They described how Oregon State University and Mt Edgecumbe High School, Alaska, had made major improvements in their respective organisations by using TQM as their basic operating paradigm over a period of several years. These are pioneering efforts in a field with more potential difficulties than manufacturing and service industries, but nevertheless with major opportunities for improvement.

TQM has transformed their capacity to make improvements in rates of learning, morale and teamwork, as well as involving themselves more productively with pupils, parents and the community. As the primary activities of this model include studying causes of variability of the learning process, and acting to continuously improve every process involved in making education useful to all, it becomes a valuable technique for introducing changes while carefully monitoring the results and readjusting as necessary. This is a dynamic system which empowers everyone to become involved in the processes of change and improvement, and contrasts starkly with the hierarchical and hence static systems of traditional management.

Education is one of the major means of achieving a more productive, just and rewarding society in New Zealand. But a new vision of what needs to be done, and how, needs to be developed through widespread collaboration throughout society. We do not need another version of 'Tomorrow's Schools' with decisions being taken unilaterally, without involving those who know most about the problems and the means of making improvements. Progress will only be made when we forgo instant answers, and decide to work as a nation, involving competent representatives of all sections of society with their diverse knowledge and skills, on an ongoing strategy of continuous improvement, step by step. And the curriculum we will need to follow will evolve gradually from the ongoing debate.

Graeme Currie

Graeme Currie, after graduating BE (Mech) from Auckland University in 1948, worked in Queensland on mechanical, hydraulic and electronic research projects. He returned to Auckland in 1950 and joined Fisher & Paykel Ltd. Over a 37-year period he worked in product, process and plant design, production engineering, quality and productivity improvement, new facilities design, capital expenditure management, and was a director for 14 years until retirement in 1987. During these years he studied technical, manufacturing and management matters in many organisations in Australia, UK, Europe, USA and Japan. His major interest has been to learn how knowledge, skill and technology can best be acquired and utilised to benefit the organisations involved including all staff, the customers, and the nation.

134 Pah Rd., Howick
534-6408

Towards a quality education system

"There is no reason to suspect that quality education should have a different meaning from the quality expected of any other product or service."

There is a widely-held view in New Zealand that somehow our education system is 'failing'. In other words, the various community expectations of the education system are not being met. This immediately raises a number of issues:

- Have community expectations (or requirements) of the quality of the education system changed in recent years, and are these likely to continue to change?

- What are the community's expectations of the education system now and have these been precisely defined and communicated?

- Is satisfaction of community expectations the primary purpose of the education system, or does it strive to achieve some other intrinsic purpose?

These issues suggest that the purpose of our education system — that is, what it should reasonably be expected to achieve — is not at all clear. Unless any system or process has a measurable and achievable purpose, then simply changing that system or process (in this case the process is the education curriculum) will be, at best, a random activity. Some would no doubt argue that some of the system and process changes that have been applied to education over the last 20 years or so, demonstrate this principle.

So it's important to distinguish between purpose, and the system which is required to achieve that purpose. Having established the purpose, the process can then be continuously improved. Progress towards that purpose can then be measured, to evaluate the effectiveness of any process changes being applied.

What, then, is the purpose of our education system? Certainly the educational achievement of the 15- to 20-year-old age group, who are the subject of this study, will be a measure of the results of this purpose. We have said that we want to achieve a quality education system. But what do we mean by a 'quality' system? Implicit in the notion of quality are products and services which satisfy customer expectations in every respect. There is no reason to suspect that quality education should have a different meaning from the quality expected of any other product or service.

Assuming this is the case, the considerable body of quality management knowledge may provide a useful perspective on this complex issue.

Managing for quality primarily involves identifying:

- Who are the customers for the product and service?

- What are their expectations and requirements?

- How can these expectations be satisfied, and continue to be satisfied as expectations continue to change?

If the customer of the education system is

principally the community, what are community expectations and are these being met? For example:

- The New Zealand Planning Council has drawn attention to the low participation rates in post-compulsory education in New Zealand compared with other major OECD countries. Around 46% of the New Zealand workforce has no formal qualification of any sort, and 60% no tertiary qualifications.

- Economists argue that in order to achieve full employment at high wages, we must add high value, but low cost, to our raw materials. This can best be done through utilising the talents of a highly skilled workforce. It appears, however, that we do not have a highly skilled workforce in New Zealand in comparison to our major competitor countries with which to achieve this kind of highly desirable economy.

- Some of the end-users of the education system — employers and tertiary colleges — say that students seem to lack proficiency in the basic educational skills of reading, writing and numerology.

- Students say that what they have learned at school is not always consistent with the kinds of skills they need to achieve their employment expectations.

- The New Zealand economy is changing significantly, and points towards the service sector as the source of most employment in the next decade. These jobs will involve a high level of non-manual skills.

- Rapid technological change indicates the need for retraining, and continued learning throughout an individual's career. Major career changes, with associated relearning, will be an increasing, frequent feature of future employment trends.

- There is an increasing emphasis on competition for high quality goods and services. The New Zealand community is recognising the need for all activities to be internationally competitive. This means a national commitment to excellence through innovation, creativity, cooperation, flexibility and attitude.

From this necessarily brief snapshot there is a case to be made for a thorough re-examination of the various purposes of education consistent with community needs, and which of these the education system should be designed to reasonably achieve.

Broadly categorised, some of these system influences may be:

- pre-school/primary education
- community values
- home environment
- student attitudes.

Clearly it is not possible to analyse here how all these factors can and should be shaped to achieve the defined purpose of our education system. I will therefore confine comment to just a few of these factors:

- It seems that, at the very least, the education system should equip students with the basic skills they will need to go on and achieve their various vocational expectations, consistent with the needs of the community economy. Yet, is this basic performance criteria measured in any way? Is there any systematic feedback from students leaving school on how usefully their curricula prepared them to achieve their vocational expectations? What did they really need to know, and how can this be incorporated into the system? There is surely a mine of good information to be gained from research here.

- Different schools will, of necessity, serve different communities. The feedback is therefore likely to be somewhat different from one school to another. This raises the question of different systems or curricula to serve the needs of different communities. If education is really going to meet customer expectations, then its systems must be flexible enough to recognise differing abilities and aptitudes and offer appropriately differentiated curricula.

This is not only consistent with a basic principle of human development — that of individual differences — but also perhaps the best way to maximise the whole range of individual abilities.

It seems in New Zealand, however, that we have opted for a rather singular national curriculum — of an academic nature. However, this may be quite inappropriate for the less academically inclined and not sufficiently challenging for those who are.

Given the whole range of new skills that the community expects from the education system, it seems logical to establish high quality vocational options within the education system, clearly related to the changing needs of the workplace. Vocational systems and qualifications should be given equal resources and status with the academic.

"The education system should equip students with the basic skills they will need to go on and achieve their vocational expectations."

This would suggest that schools serving different communities should have the flexibility to develop particular curricula consistent with that community's needs.

Schools offering such differentiated curricula should therefore have the flexibility to select their students on the basis of their ability and aptitude for the curricula, or mix of curricula, offered. Curricula may be single- or multi-streamed. Consistent with community demands for excellence and, consequently, increasing competition and choice, which are now important elements of the world of work, students entering secondary school may be expected to compete for places at their chosen school based on the curricula offered.

- The community and home and family contribution to the education system also needs brief comment. As a community, we need to place a high value not just on education and training, but on children and young people as a whole. There needs to be a high level of communication with the families of students on how the education system will impact on their children's futures.

Prior to entering secondary school, an individual education plan or perhaps even a 'contract' needs to be agreed between the student, the family and the education system, consistent with the individual student's aptitudes, abilities and career expectations. This plan should operate until the student is in paid employment or moves on to a tertiary learning stage, where a new plan can be established.

- In looking at process factors, it is important to recognise that even the most highly adapted systems designed to meet customer needs still require plain hard work to make them function effectively.

In discussing education curricula, the quantity of learning required to achieve the various key milestones is also an important system issue. It is likely that New Zealand students, in comparison with our competitor countries, simply spend less hours working at their education system. A work ethic is fundamental to achieving career expectations, and can be learned like any other community value. For example, there could be summer school programmes for those who have not achieved a particular education milestone or standard, or for those who want to prepare for the following year.

- Any successful system must be highly valued for what it produces. Not only must the community place a high value on education and continuous learning, but also on the system itself — that is, the teaching professionals and schools as institutions.

Bruce Owen

Bruce Owen is director of personnel at Nissan New Zealand Limited. He has had 15 years experience in personnel and industrial relations management in the New Zealand motor industry, including Nissan operations in Japan and the UK. Bruce has contributed articles on Total Quality Management at Nissan, to a number of publications and is a principal author of a forthcoming book on this subject. He is particulary interested in the role of human resource management as the basis of managing for quality. He is a graduate of Auckland University in psychology and sociology.

Service and interpersonal skills

"The ability to communicate and to give top personal service is paramount."

"Take away my people, but leave my factories, and soon grass will grown on the factory floors. Take away my factories, but leave my people, and soon we will have a new and better factory."
Andrew Carnegie

Economists, accountants and financiers measure the success of the New Zealand industry by the GDP, the pulse of the currency market and mega corporation profits.

Educationists, those who set discipline and develop the curriculum, measure the success of the business by 'high tech' study, Government money spent on education, and the fact that students are staying longer in school.

As an owner of a service industry business, my personal measure of success has little to do with dollars in the bank or certificates on a wall. Human values, natural 'people cycles', social responsibilities and self-sufficiency are my measure.

We need to be educated, we need to earn a living, but not at the expense of people and their culture. And since it is human nature to resist change, many will view my measure of success with trepidation. My message is simple. So back to the 'used to be' human values natural, people cycles, social responsibilities and self-sufficiency, which is my measure.

Basic human values

The education system needs to be redrawn to take into account the basic skills required for today's workforce. The mega corporations, unions, mega financial institutions, huge bureaucracies and government departments must all go back to the basics. Learn to talk plain English — not abstractions, and identify community needs as human beings, instead of expounding words of wisdom with 'average productivity, average inflation and average unemployment'.

Education is beyond economics, beyond mega projects and beyond unemployment.

The economist's concept of productivity does not take into account the welfare cost for those who have been made redundant, the cost to society for broken families, child abuse or mental illness. I do not mean dollar costs, I mean the cost in negative effects on the health and culture and people of this country.

Employers must shift their priorities back to understanding people, human nature and basic human values.

We have been teaching our young executives to be 'high fliers', high performance and high risk takers, because their initial position within their chosen field, is directly in management — no 'hands on' experience at the 'coal face' with honest promotion on merit. This requires immediate change. Interpersonal skills between the shop floor and executives no longer exist.

Communication

Office buildings today are based on *floor space efficiency*. There is no longer the personal space, the personal office, unless you are top management.

This is a cost-cutting exercise that is expen-

sive to people. Ideas, suggestions and communication can only occur when people — together in the same room, communicate. Not in a partitioned-off area, in a stressed out environment.

Sophisticated interhouse telephones — once again cost-cutting, supposedly making contact between each other easier and cheaper. But at whose expense? Telephones are portrayed by the makers as an efficient, productive and money-saving tool.

But eyeball conversations and face-to-face dis-

"We need to be educated, we need to earn a living, but not at the expense of people and their culture."

cussions are not wasting corporate time. Real personal contact is efficient.

Business-jargon — the high tech vocabulary, is cold and calculating and totally unwarranted — 'average inflation' 'average unemployment' 'corporate mission' 'strategic marketing'.

New Zealand was the first country in the world to give women the vote, to have a social policy. Why is it that we are now following America and Japan? We do not have to . . . we can start change . . . we have the human resource to do it our way . . . as New Zealanders.

The key issues

1. Service

We must teach that which will be relevant within the growth industries of New Zealand. The growth industries are the services, especially tourism. The ability to communicate and to give top personal service is paramount.

A second or third language must be taught to financial advisors, bus drivers, flight attendants, hotel receptionists and the like.

Communication skills and the ability to serve (not be subservient) needs to be taught at tertiary level.

2. Lifelong training and learning

To develop new curriculum will require 'in-house' training at the workplace. However, there is no company that can budget for costing and time and 'one-on-one' training. Funding should be diverted to trade associations/federations that have cadetship and apprenticeship or trainee programmes already set in place.

The Hire and Rental Association is a prime example. Within its membership it has set up a training foundation from membership finance. Lack of funding for paid teachers and lack of assistance has found the initial thrust slowly dwindling. It is imperative that education for tomorrow's skills be relevant to the job. Curriculum should not be set by educationalists, rather, by training programmes within industry.

The downturn of primary industry and the upturn of service-related industries should ensure long-term funding, not in the hands of advisory groups that are education facilitators, but in the hands of industry.

3. Personal skills humanity

The young executive can dream big dreams, the young apprentice may wish to achieve exciting things and the young entrepreneur may have a lust for life and want to try daring ideas. but within their training, they must learn to work with, and through, people. Without the understanding of human nature, the ability to communicate with fellow workers, the ability to lead or motivate people, all the education they acquire within their chosen field, is useless.

New Zealand has the technology and talent.

New Zealand has the human resources, but we lack understanding and have lost the ability to care for our fellow men and women.

Women

It is a fact that the community workforce is basically made up of untrained, unpaid women. These women are now returning to the paid workforce, and quality training must be made available at no cost to themselves.

These same women are taking up paid positions in non-traditional areas. Existing business management courses are not yet comfortable with the social, psychological or indeed bodily difference of women in business.

The new breed of women are broadening and expanding the past limitations of their own field of vision, and are now achieving greater results. Further enrichment will only come from greater knowledge and positive education.

Managers who do not employ women in their workforce at boardroom level, are cutting themselves off from half the talented people in New Zealand, and half the potential sales/customer base in New Zealand.

Also lacking are skills for community employment. The unpaid workforce within the community service sector is now challenging local bodies for payment. Community employment and community development can only progress and achieve goals with skills in resource management, marketing, planning and enterprise development. These skills should be paid for as part-time or full-time positions or as supplementary income.

The education process must be facilitated in such a way as to ensure and encourage those who have been left out of the 'high tech' work force, to proceed to the service industry and to push back the barriers of their own personal limitations.

In the end it will still be people versus profit, unless we teach the alternative.

Thought for the reader

After 18 years of formal and informal education, I was ready for the workforce. There were no computers, televisions, high tech machinery or space travel.

How come it still only takes 16 to 18 years to be educated for today's skills?

What basic learning do we omit in place of high tech education?

Cheryl McLeay

In recent years Cheryl has been managing director of Bay Marquee Hire (1990) Ltd with bases in Auckland and Tauranga. She is a regular speaker at conferences, and recently she has addressed the Commonwealth Community Employment conference and symposia of the Businessmen's Clubs, Professional Women's Clubs and Wanganui Tourist Board. Cheryl lives in Tauranga and is vice chairperson of Ngati Ranginui Iwi. She was awarded a 1990 Commemorative Medal for services to New Zealand. She enjoys ten pin bowling, guest speaking and is a philatelist of 30 years' standing.

Education and industry in partnership

"Industry needs to be able to participate in an informed way in the debate about educational change."

"Within the 'enterprise culture', emphasis is now being placed upon very direct personal skills — self-reliance, self-confidence, decision-making, opportunity costs, leadership, risk judgement, and so on."

D. Warwick, *Linking Schools and Industry*

The term 'industry' as used below refers to all non-educational working organisations and institutions ranging from business and manufacturing, to services, government agencies, local authorities and trade unions.

'Education Industry Liaison', or 'Partnership', refers to the range of activities which can take place across the curriculum for the educational benefit of students and teachers, as a result of collaboration between the teachers and people in industry.

New Zealand business and industry is learning to survive through participating assertively, from an unprotected environment, in the international economy, where the emphasis is on competitiveness, quality, customer care and management of change. Business people are having to devise new products and services, and look to new markets, taking account of such factors as accelerating technological innovation and increasingly sophisticated consumers.

Change is, of course, often uncomfortable. People in business and industry have had to respond with great flexibility in order to survive and prosper, and there have been many casualties on the way. Significant changes in management practices are taking place. Many managers recognise the benefits of consultation and collaboration, and worker participation. Many also understand the potential of developing worker expertise, and the value of involving their staff in the process of manufacturing or in the function of the service they are providing.

In the current exposed and vulnerable circumstances, employers need to be able to call on a flexible, creative workforce, and they regard it as the responsibility of schools to develop in young people the skills and attitudes which are summarised on page 15 of *Tomorrow's Skills*. Additionally, the self-employed make up a large, and increasing, proportion of New Zealand's working population.

In order for people to flourish working in this flexible way, schools need to encourage young people of all abilities to develop personal enterprise and confidence. They also need to encourage and value those areas of the curriculum which are not traditionally academic but which have potential for personal enterprise, for example, information technology, design, business studies and media.

Tomorrow's Skills draws on the needs of industry for its analysis. There has always been contention about the degree of responsibility held by schools to prepare young people for their working life. While many employers regard schools as failing to equip young people with the basic skills necessary for active and responsible participation in work, many teachers fear that they are being asked to produce 'factory fodder', to teach a nar-

row range of skills rather than to develop the full potential of young people within a broad and balanced curriculum — to train rather than to educate. Teachers and people from industry need the opportunity to meet each other professionally in order to debate and resolve this issue.

As well as defining the generic skills which are essential for young New Zealanders to acquire if they are to participate fully in a prosperous national economy, *Tomorrow's Skills* identifies vital issues which need to be addressed by people in education. These include the need to improve dramatically New Zealand's very poor post-compulsory staying-on rate, and to make sure that what is taught is relevant to the New Zealand economy.

Tomorrow's Skills states that "the most effective means of encouraging students to continue learning is for schools and other post-compulsory institutions to provide interesting, stimulating courses ...", and elsewhere, "... each school needs to consider ways of making their own teaching programmes and subject courses more relevant to the new economy".

Clearly then, schools, working in Partnership with adults other than teachers, parents and experts in the community, can ensure that their teaching is responsive to community needs while being interesting and relevant to students.

There is, of course, no doubt that schools recognise their responsibility to contribute to the well-being of the country through offering a relevant

"Schools need to encourage and value those areas of the curriculum which are not traditionally academic but which have potential for personal enterprise."

and appropriate education system. Current curriculum development is taking place within schools and colleges of education with the specific intention of ensuring that what is offered to young people is relevant and appropriate, and individual subject curriculum development (such as science) is taking place with greater emphasis on learning through local experience.

However, many of the difficulties that schools have to contend with in promoting change are presented by the shape of the curriculum that they currently have to offer, and by dominance of the public examination system.

The secondary curriculum is fragmented into individual subjects which are 'overfull', so that the emphasis tends to be on the content of learning rather than on the learning process itself. Particularly at School Certificate level this system values 'academic skills' above technical skills, and yet it is ironically on these technical skills that our economy will increasingly depend. It is worth noting that these subjects tend to demand an active, problem-solving approach to teaching and learning:

> "In School Certificate, technical or practical subjects are weighted lower, i.e. they receive greater proportions of lower grades. Such practices again lead to low participation rates and to the shortage of technical skills in New Zealand. Compare that typically `British' attitude with West Germany where a master carver is a respected professional on a par with a lawyer, accountant or academic."
>
> D. E. Hood, "Scaling in School Cert."

This situation has, of course, been deeply discouraging to those young people whose skills are not academic but who have the potential to make a vital contribution to the nation's prosperity in their adult life:

> "Such practices have been accepted internationally as harmful. A large percentage of students are automatically allocated failing grades. That means a large proportion of young people are turned off education and training. It is the reason why a large proportion of New Zealand's workforce has no qualifications. It is the prime cause of our low participation rates in education and training in comparison to other countries."
>
> D. E. Hood

> "... how can you accept a system that allows so many of our young people to stumble at the first rung to adult life (School Certificate)?"
>
> G. Wong, "Ready, Set, Fail"

Fortunately this particular problem is currently being addressed by the Government in its recently (February 1991) announced plans for revising the secondary education examination sysem in which scaling in School Certificate is to be abolished. The New Zealand Qualifications Authority

> "... is saying is that the current practices of norm-referencing of School Certificate with the arbitrary fixing of grades irrespective of standards and the artificial comparison between subjects must go. That is our understanding of what the Minister of Education wants, and we believe such a move will have the support of the majority of New Zealanders."
>
> D. E. Hood

All of this argues for a more flexible skills-based curriculum, responsive to the needs and interests of young people within the context of the contemporary economic situation, and a curriculum which emphasises active, participatory learning over the acquisition of information.

It also argues for a more informative, positive evaluation system which produces records of the achievements of young people and informs readers, whether they are parents, employers, further education establishments or the young people themselves, of the standards that they have reached. And so it is heartening to note that the Minister of Education recognises that "our education system must focus on the realities of the modern highly competitive international environment" (*New Zealand Herald*, 12 February 1991).

Education Industry Liaison work, or Partnership, has arisen in the U.S.A., Britain and Australia from the principle that the education process should meet the individual needs of students within the prevailing economic and cultural contexts. It operates on the premise that students should be encouraged to develop their individual strengths while understanding the kind of society within which they need to participate in order to have a positive and fulfilling adult life.

Through Partnership, essential communication can be established between teachers and adults other than teachers, so that each understands the other's needs and purposes regarding the education of young people.

Partnership can also, importantly, expose young people and their teachers to practical applications of the knowledge they are acquiring at school, so

"Many of the difficulties that schools have to contend with in promoting change are presented by the shape of the curriculum that they currently have to offer."

that they can learn with the vividness of real experience, and understand why they are learning. It provides the opportunity for relevant resources, and expertise from industry, to be used valuably in the classroom, and in all subjects across the curriculum.

It is through a positive example of Partnership that pioneering work has been done in this field. The New Zealand Employers' Federation has worked closely with teachers in the designing and trialling of a 'Record of Achievement'.

Records of Achievement aim to give young people the opportunity to demonstrate their strengths and also give them a framework for improving in their weaker areas. Because the purpose of Records of Achievement is to provide useful, positive information about the students, they do not have the demotivating factor of the current pass/fail system of evaluation.

There are, of course, many other ways in which teachers and people from industry can work together to ensure a relevant and interesting curriculum development for students and professional development for teachers. For example:

- work exploration/shadowing

- use of resources and expertise from industry in the classroom
- industry-specific study
- industry-based problem-solving exercises
- pre-vocational training including mock interviews
- management consultancy
- teacher secondments to industry
- joint professional training.

As well as providing the framework for delivering such important activities, Partnership establishes the medium through which curriculum and evaluation changes are effectively communicated to the non-educational community, and people outside the education system are given the opportunity to express their concerns and interests regarding education.

There are encouraging developments in this direction already:

- Quest Rapuara's investigative work into the feasibility of promoting Partnership has elicited extremely positive responses from both teachers and employers who find the potential in partnership for shared training, and teacher secondment, for example, very exciting (see "Towards Partnership: Education Industry Liaison in New Zealand").

- The New Zealand Employers' Federation is enthusiastic about promoting closer links between industry and education, not just in the area of evaluation — they recognise the vital contribution they can make in the educational process, and the importance of ensuring that adults other than teachers are informed about educational change and are able to participate in an informed way in the debate.

- Colleges of education are encouraging the development of continuous assessment techniques and experiential learning in their training programmes, where these are appropriate to the existing curriculum.

- Transition education programmes in schools have engaged very successfully employers in the educational experience of young people and, in some cases, have developed interesting individualised learning programmes. These tend, however, to become marginalised within the whole curriculum of the school, especially when they are offered only to at-risk students, even though the skills and attitudes addressed in these programmes are of vital importance to all young people.

It is through Partnership, then, that essential communication processes can be established:

- Industry needs to be able to understand how schools operate and what constraints there are on teachers in terms of, for example, class size and resources.

- Industry needs to be able to participate in an informed way in the debate about educational change.

- Teachers need to know a lot more about the current economic trends and developments in industry, both for their own personal development, and to ensure that their teaching is relevant and up to date.

- Students should have the opportunity to learn through experience, and to follow an interesting relevant and stimulating curriculum.

An environment in which all the relevant participants are well informed will ensure that appropriate changes can be made in an atmosphere of consensus. Partnership between education and industry enfranchises the whole community to be involved positively in appropriate education change.

Successful partnerships do not just happen. A framework must be established within which teachers and volunteers from industry can operate so that clear developmental goals can be set, procedures established; and regular evaluation can take place. In Britain, where Education Industry Liaison has taken place successfully through a wide range of agencies for many years, a Foundation for Education Business Partnerships (FEBP) has been established to coordinate and plan developments in this field. The work which has been tentatively begun by schools and such organisations as Quest Rapuara, and the New Zealand Employers' Federation, could provide the basis for a similar organisation here.

Such an organisation would be a powerful voice for positive and essential change in education. It would ensure the effective use of the limited resources available and contribute to the development of a coherent and responsive education service.

References

Confederation of British Industry, *Towards a Skills Revolution*, 1990.

Department of Education, *But will it get me a job?*, A Leaver's Profile Resource Booklet, 1986.

Hood, D.E., "Scaling in School Cert.", *The Press*, January 24 1991.

Levett, A. and Lankshear, C., *Going for Gold — Priorities for Schooling in the Nineties*, Daphne Brasell Associates Press, 1990.

McKay, Farquhar, "Towards Partnership: Education Industry Liaison in New Zealand", Quest Rapuara, December 1990.

New Zealand Qualifications Authority, *Designing the Framework: A discussion document about restructuring National Qualifications*, March 1991.

Warwick, David (Ed.), *Linking Schools and Industry*, Blackwell, 1989.

Wong, Gilbert, "Ready, Set, Fail", *New Zealand Herald*, December 15 1990.

Farquhar McKay

Farquhar McKay who was educated in Christchurch (M A [Hons] in English and Dip. Teaching), has spent most of his working life in the British education system. He taught English and Careers Education in East London and in 1983 was appointed divisional industry/school coordinator in Hackney becoming closely involved with the School Curriculum Industry Partnership (SCIP). With the abolition of the ILEA, his employer, he was appointed education/industry development officer in Hackney. He returned to New Zealand, on leave, in 1990 to work as a lecturer in education at Auckland College of Education and has recently completed a report, "Towards Partnership: Education Industry Liaison in New Zealand", for Quest Rapuara.

To market, to market ... what's there for the Maori?

"Basically, schools are conservative institutions created to perpetuate the dominant culture of the society."

I was asked to produce a paper which gave a Maori perspective on the New Zealand Planning Council's *Tomorrow's Skills*. The paper was to take into account the views expressed in the eight or nine commissioned essays from writers out of service and manufacturing areas. Finally I was asked to keep it brief and to address it primarily to curriculum developers and those who work with young people in the 15- to 20-year-old age bracket.

At the outset I anticipated that I would have difficulty locating information which could be useful in helping me to put together a Maori perspective on the topic of the essay. This proved to be true.

Secondly, I assumed there would be a wealth of information on themes related to relevant skills, the relationship between education and the economy, on training, upskilling, technology, on how to prepare students for the job market as well as the non-job market and so on. Again, this assumption proved to be true.

Finally, I assumed that there would be a significant difference of opinion between Maori ideas — on how, why and what needs to be done to make a better future for all young people — and mainstream perspectives about the issues. This last assumption is based on the premise that even though we (Maori and Pakeha) share much in common there is some basic and fundamental opposition which will always be in tension (this is not to imply a judgement about the worthiness or otherwise of that opposition).

It is making explicit the elements of this third assumption that this essay is about. I begin with my own views as a Maori, but rather than trying to identify a Maori perspective I think it might be more useful if I tried to clarify what would have a better chance of succeeding with Maori clients and what would not.

A Maori is not a brown Pakeha. Maori do not aspire to be Pakeha. Maori have resisted for almost 200 years incredible pressure to turn us into Pakeha. But we need not pretend that we are today what we were in the past. That is patently not true. But that is equally true of course, of everybody else — a minor detail often overlooked.

From a Maori point of view the breakdown of New Zealand's economic system due to our inability to compete with international markets is as bewildering today as it must have been to our ancestors in the nineteenth century.

They proved beyond any reasonable doubt their ability, motivation and capability to grasp the essential ingredients of capitalist development — that is, the production of surplus goods and their supply for a profit to a market in need. (Harold Miller, 1964; Tony Simpson, 1983; Elsie Locke, 1988). Maori are certainly not new to the business ethic yet the number who are practising daily in the business world is negligible. Why? Schools are an important part of the reason I believe.

Basically, schools are conservative institutions created to perpetuate the dominant culture of the society. If they actually functioned to endorse the dominant culture of communities there would have been numerous schools, mainly in rural enclaves,

that would definitely have enhanced Maoritanga. Some almost did but I think it was more in a romantic sense than in any substantive way.

What most schools actually did to Maori young people, and eventually to Maori culture, was to create doubt about their value as an identity for present and future societies. The very soul of the Maori was exposed and then damaged. What began as a process of education turned into capture through schooling. The sentiment expressed vividly in the words of the American educational humanist, Arthur Combs (1981), was seriously dislocated in the education of Maori children.

> "One thing we know for sure; significant learning is always accompanied by emotion or feeling because learning is a deeply human, personal, affective experience. It is profoundly influenced by student self concept, values, personal need, experience of challenge and threat, and the learner's feeling of belonging or identification."

Unfortunately, the cultural context for the education of Maori young people was and still is too foreign to them. The secular orientation legitimated the removal of a necessary wairua Maori.

"The knowledge, skills and abilities Maori have does not seem to attract much attention from Pakeha ."

The content of the taught curriculum was frequently irrelevant because it didn't build on past experience. The way in which the learning was organised, transmitted, assessed and evaluated was according to Pakeha norms and values. Indeed, cultural, social and educational discontinuity was and remains widespread and ingrained.

The question is whether Tomorrow's Schools or the drive to raise skill levels will have a positive impact. In spite of *Tomorrow's Skills* best intentions I am plagued with doubts. Some of the papers I reviewed seemed not to share my scepticism.

Cheryl McLeay was basically in tune with the base document but with a heavy emphasis on 'understanding people, human nature and basic human values'. These themes are talked about in her paper as though there was a consensus over both meaning and content of human nature and human values — there is not. Understanding might come sooner when people stop taking for granted other people's meanings as being similar to their own.

Very recently I was in the company of a visiting Japanese-American entrepreneur who talked about how schools teach young people how to be employees, and how they continue to do so even when there aren't jobs about. He wanted kids to learn 'business' and by that he meant for them to use their 'street smart'. He argued that learning business was using intelligence of a different kind than that recognised in most existing education systems.

I have a great deal of sympathy for much that this visitor had to say although I will admit learning business had me stumped. He told us that the world had turned into a business: the church is a business, so is sport, so is education and so on. That too I could confirm from my own experience.

What then are the chances of the Maori in this new world business? Not very encouraging I would think because schools have real difficulties recognising the qualities that Maori children bring to them.

Linda Smith's paper raises this concern in several places but with powerful effect in her spelling out of the advantages Maori have with cultural continuities between themselves and the peoples of the Pacific and of Asia.

In my knowledge I can recall little more than cultural exchanges between Maori and Asian/Pacific peoples and even these have been more in the nature of ritualistic and symbolic ceremonies than commercial or communicative ventures.

Paul Callister (1990:4) in answering the question of who we will sell to, says, "We need New Zealanders who can speak different languages and who are sensitive to a wider range of cultures." I wonder whether we will witness the growth of Maori entrepreneurs and diplomats into Asia and the Pacific. After all, it is the Maori New Zealander who already has the closer cultural affinity and proven linguistic capacity to generate empathy for these peoples. Theoretically at least, Maori should be quicker to train than Pakeha.

It was not by chance that I attended this seminar run by a Japanese businessman. I was aware that Japan as a nation was at the forefront of world economic development and was a clear leader in innovations related to high technology.

What also seemed unusual, given New Zealand's Anglo-American bias, was the way in which the Japanese could excel in this debatably sterile, individualistic, scientific and rational world while holding fast to the core elements of their traditional cultural milieu.

According to Chinnery (1983) the Japanese formula for success can be distilled down to four commodities: homogeneity of values, group accountability, mutual trust and subtlety developed through intimacy. These elements would rest very comfortably with Maori norms and values so there have to be other reasons why Maori are infrequent visitors to the world of business.

Tomorrow's Skills (1990:2, 11, 12) recommends a course of action for "an emerging information and knowledge-based society" which Tomorrow's Schools will need to address. If *Tomorrow's Skills* is the answer I think we ought to be clear about what the problems are. It seems to me that at least one of the new educational agencies has seized its opportunity (as they would be expected to) and produced a package called *Tomorrow's Skills — Your Skills* (Quest Rapuara, 1991) thus carving a niche for themselves in the educational resource marketplace.

Tomorrow's Skills sets out to capitalise on the shift of focus of education from cognitive, intellectual development as the priority to 'how-to' learning mainly concerned with putting information into use and promoting the application of practical skills. The acquisition of knowledge is different from that of information and each serves a different purpose.

How-to learning is short-term learning and lends itself easily to modularisation. How-to learning can multiply the available choices very quickly. How-to learning is easily packaged, easily organised into behavioral objectives, easily assessed and, because of all the above, is likely to be trivial most of the time.

Mike Smith's paper makes a valuable contribution by embedding a skills-based curriculum onto a wider educational development framework. If this is a common point of view of those in manufacturing there is clearly a need for greater dialogue between their sector and educationists.

"Cultural, social and educational discontinuity was and remains widespread and ingrained. "

However, in spite of this one-sided attack on a skill-based curriculum emphasis, there remains some attractive features to it and some necessary reasons why there is a sense of imminence about the successful implementation of a behaviourist-technicist educational movement.

Liberal approaches have promised much but have not delivered. Left-wing Marxist perspectives have produced devastating critiques about what is going on in education but they have not been able to come up with actions to match their perspectives.

The New Right has filled the gap revealed by the Marxists but their policies are diametrically opposed to Marxist solutions. Their ideas revolve around the 'minimal state', 'individualism' takes on cult dimensions, 'choice' is the slogan of the times, and 'the market' becomes the raison d'etre for most policies and practices. Because the market, business and the commercial world provides the standards by which most decisions will be measured, it is not too difficult to understand its initial attraction in a field that seems to be plagued with uncertainty.

Farquhar McKay reiterates the need for employers to expect schools to prepare in students the skills and attitudes necessary for a "flexible

and creative workforce" and to ensure that they have requisite qualifications — that is, those that are "relevant and appropriate" (to the world of industry).

Business is about getting results, it's about making progress, it's about giving people what they want, it's about style and appearances, it's about being quick and sharp, it's about adapting and changing. In short, the business ethic says liberal views are too soft for a hard world.

The paper by Bruce Owen comes nearest to an exemplar of how education needed to respond, if a highly skilled and motivated workforce was to be our major resource for the future.

> "There is no reason to suspect that quality education should have a different meaning from the quality expected of any other product or service."

There is a giant queue of people in the education business who would take Mr Owen to task on that sort of reasoning. Liberals will probably prefer 'a soft world' to a canned and packaged world most times.

The paper by Keith Huntington is a more liberal interpretation of Owen's paper but is nevertheless in a similar tradition.

I haven't the space to elaborate or argue some of the assertions I've made but I am concerned that market philosophies and practices at least in the short term will be very attractive to a significant proportion of Maori people.

Should they take this path, I believe that in 10 to 15 years' time their social power, as a people, will be totally replaced by an elite Maori middle class. This cohort will be distinguishable from their non-Maori brethren on one count only and that will be the fact that they will have one more choice than any Pakeha — they will be able to claim a Maori whakapapa.

Are the power and control problems, that the Maori continue to face, stemming from the fact that they are Maori? Does their culture in some way inhibit them from being able to fully integrate with the Pakeha? Are the problems Maori face really the result of the dominating influences of western civilisation and the Pakeha cultural interpretations of those roots? Are we focusing on the wrong elements and would it be more productive if we looked at features of social class rather than ethnicity? Is racism at the heart of the problem?

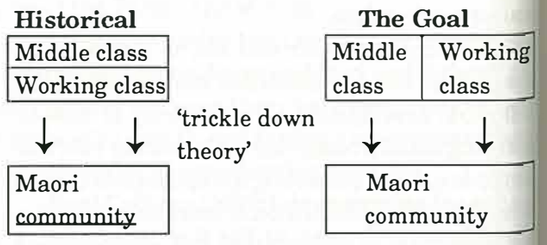
I will briefly explain two arguments then revisit the New Right ideology before concluding this essay. Here is one version of the social class/ethnicity debate.

"The only way for Maori to be part of the new world 'business' is for them to be part of the 'new world'."

The struggle of the working class is with the middle class. Working classes are supposed to believe in the 'trickle down theory'. In crude form, the argument is that when middle class aspirations are satisfied then the working class can expect to profit. When the middle class is benefiting, some of that advantage will trickle down to the working class. When the working class is satisfied, then Maori communities will also benefit.

However, in the struggle for power and control, even if the working class became completely absorbed into the middle class, Maori communities would still be left to catch anything that trickled down.

In general, the Maori community views the struggle of the working class according to this diagram.



Benefits are also likely to include the information, knowledge and skills necessary to be able to take advantage of the benefits of a future society.

Let me illustrate the cultural difference question which I raised in the first of the power and control problems.

I thought the paper by Sandy Callister was a strong plea to focus on "the now", to begin from where we are, about present realities. For a Maori, this is a sensible assurance which is consistent with the only other time we can know, and that is the past. Cultures which treat the future as a known do it to have power and control over the future. That idea does not sit comfortably with most Maori.

If I can paraphrase once again our visiting Japanese speaker, he touched on an element of cultural bias which is certainly not a new one in Maori circles. It is about attitudes to money.

Maori like to accuse Pakeha of being money-grubbing: of doing anything to get lots of it; of squirrelling it away; of revering the mighty dollar and other such negative connotations. Our visitor said money is not an evil. Cultures that treat it so are under a misapprehension. It's like holding a pencil responsible for writing nasty words. The same pencil can also write a love poem. Only people can be good or bad and it is our culture being transmitted to our young where value is placed on objects.

The point of view is decidedly naive, albeit plausible. For too long have we listened to victim-blaming excuses like unemployment being the fault of 'dole-bludgers', the crisis of crime because of the absence of discipline in the home, Maori underachievement because of negative peer pressure, etc. Korndorffer (1988:224) says this about transition education:

> "The crisis of youth unemployment is not that of 'skills', 'qualifications' or 'adaptability' — it is a crisis in the reproduction of the 'work ethic', 'work habits' and 'disciplined attitudes' in young people and it is this crisis that the state attempts to resolve at the ideological level by the provision of transition education programmes."

Now there is a very simple explanation why some cultures appear to devalue certain objects while other cultures appear to almost worship the very same objects.

Value is likely to have something to do with familiarity, with availability and with utility. Money is a manifestation of wealth. Maori people basically have neither money nor wealth.

The knowledge, skills and abilities Maori have does not seem to attract much attention from Pakeha even when such commodities are reasonably available.

Non-reciprocity is in itself good enough reason why many Maori won't allow themselves to value what those in power and control say must be valued.

Gwen Gawith's contribution seemed to outline a kind of critical pedagogy in the Freirian tradition, but there were too many concepts left unexplained to convince me that her critique was indeed a genuine one. Focusing on cultural differences can do everything except change power relations and it is at this point that the New Right will make a real contribution to Maori-Pakeha relations. I doubt it will be in line with their anticipations but it will be their policies which will permit an articulation of the roots of Maori discontent, and those roots are central to New Right philosophy.

"What most schools did to Maori young people was to create doubt about their value as an identity for present and future societies."

The only way for Maori to be part of the new world 'business' is for them to be part of the 'new world' and that will only happen when what they have to offer it is first of all accepted and, perhaps in time, valued.

I was fascinated by Graeme Currie's interpretation of the education/schooling differentiation, his statements about distributive justice, and his argument about paradigm shifts. Currie at least

argued with the new ideology and reflected on his experience of the old ideology. I entered into a dialogue with his ideas because they made me think.

I wonder what skills were called to task in this exercise and what training took place over what period and how I should decide whether someone succeeded or not and how we would know ...

References

Callister, Paul, *Tomorrow's Skills*, New Zealand Planning Council (Revised Ed.), 1990.

Callister, Sandy, "Movers and shakers in 1991", 1991, Response to *Tomorrow's Skills*, 1991.

Chinnery, Peter, "Educational Accountability in a Changing Community: An Attack on Mindlessness", Paper presented to Third NZEAS Conference, Auckland Teachers' College, 1983.

Combs, Arthur W., "Humanistic Education: too tender for a tough world", *Phi Delta Kappan* 62 (6): 446-449, February, 1981.

Corson, David (Ed.), *Education for Work* — Background to Policy and Curriculum.

Currie, Graeme, "Management for change", Response to *Tomorrow's Skills*, 1991.

Gawith, Gwen, "Education today: bandwagon, bandaid or beacon?", Response to *Tomorrow's Skills*, 1991.

Huntington, Keith R., "Forward — to the new 'basics'", Response to *Tomorrow's Skills*, 1991.

Korndorffer, Wanda, "Vocational skills training in Transition Education — Successful practice in NZ?", In Corson, D. (Ed. 1988: 221-231).

Locke, Elsie, *Co-operation and Conflict* (pp.6-7).

McKay, Farquhar, "Education and industry in partnership", Response to *Tomorrow's Skills*, 1991.

McLeay, Cheryl, "Service and interpersonal skills", Response to *Tomorrow's Skills*, 1991.

Miller, Harold, *The Invasion of Waikato* (pp.9-14).

Owen, Bruce, "Towards a quality education system", Response to *Tomorrow's Skills*, 1991.

Quest Rapuara, *Tomorrow's Skills — Your Skills*, 1991.

Simpson, Tony, "What Happened at Rangiaowhia?", (pp.1-2).

Smith, Mike, "Manufacturing skills — for the global economy", Response to *Tomorrow's Skills*, 1991.

Smith, Linda Tuhiwai, "A curriculum for education — not assimilation", Response to *Tomorrow's Skills*, 1991.

Wally Penetito

Wally Penetito is descended from Ngati Haua, Ngati Raukawa of Tainui. All his formal schooling was done in the Matamata District. He trained as a teacher at Ardmore Teachers' College and is a graduate in education and sociology from Massey University. Wally did a year's post-graduate study at the University of London. He spent five years in Auckland as a senior education officer for the Department of Education. He has also taught education at Waikato University. At present he is manager development, in the Education Review Office. Wally is a frequent presenter at conferences in all areas related to Maori Education. He and Sheena have a grown-up family of three.