

MAHI HAUHAKE **REVIEW OF RELEVANT LITERATURE**

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INTRODUCTION

The following selection of readings help set some parameters aimed at shaping the development of the Mataariki curriculum. These readings are authored by contemporary educational theorists, philosophers, researchers and commentators and cover a broad range of education issues including; curricular, education reform, teacher professional development, learning to learn, Matauranga Maori and future schooling models.

The common theme which emerges from these readings is that the underlying rationales of the Western education are no longer appropriate for a world which embraces democracy, pluralism, biculturalism and multiculturalism, creativity, technology, the rapid and enormous growth of new knowledge and the Learner as the centre of learning.

Moreover, any change requires a new paradigm and a degree of risk taking on part of reformers, educationalists, administrators, communities and care-givers, to better respond to the immense social changes which have taken place leading into the 21st Century.

While there has been a steady rise in Maori educational research over recent years, it has been accompanied by strong debate as to what constitutes Maori research and how and who should conduct Maori research. Some of the keys issues and themes in respect to Maori education and research are covered below and are generally consistent with current international indigenous educational scholarship and research.

Finally, this document remains a draft and is subject to change. The document is continually being added to as relevant material is sourced and the whole document is regularly edited.

CURRICULUM DEVELOPMENT

Erickson, H. Lynn. 'Concept based Curriculum and Instruction' Published by Corwin Press (2002).

The author is an independent education consultant and was formerly Director of Curriculum for the U.S. Federal Way Public Schools (1987-1994). She claims the goal of this book is '*to raise awareness of the differences between topical and concept models of curriculum and instruction, and to provide concept based examples from different school districts around the country*'. It highlights the importance of curriculum design aimed at '*facilitating complex thinking and deeper levels of understanding as an unfolding process*' and '*using critical content as a tool to understanding key concepts and principles of a discipline, and applying understanding in the context of a complex performance*'.

Impetus for the interest in 'standards' has its origins in the America 2000 Act passed in 1991, itself a

response to growing concerns over falling educational standards, and globalization. This has led to the establishment of a number of broad based committees comprising of experts and professionals from across a range of fields tasked with developing standards, which proved invaluable to state and local districts involved in designing their own curricular frameworks. Key to this is the notion that children learn best through *'performance'*, and the author points out higher scoring nations such as Japan and Singapore, which emphasize a curriculum and instruction around the understanding of discipline based concepts and principles. Here, facts and concepts are used as tools to help students develop a deeper understanding enabling them to reduce the number of topics covered; as many topics share the same concepts and conceptual understandings. In the US situation, a greater number of topics are covered, but in less depth. The affect is that time allocated to cover such a wide range of topics inhibits learning in depth, and on puts greater pressure on teachers to cover numerous topics who are already constrained by time.

This raises the issue of the packaging of information, which affects student retention and transfer. Research shows that information provided in a problem solving context made *'rich and extensive use'* of the information. A second affect according to the author is that learners adopted a *'conceptual lens'*. Their thinking was forced *'meeting challenges'* that required learners to use higher level integrative thought processes. For her, there needs to be a focus on focusing on topics *'to teach, assess and deeper, conceptual understanding'*.

Deep knowledge transfers across time and cultures and provides a conceptual structure for thinking about related and new ideas'.

- Taking thinking beyond the facts to facilitate deep understanding and the transfer of knowledge;
- Systematically developing a conceptual schema in the brain to handle new information;
- Meeting higher academic standards related to content knowledge, process abilities and quality performance.

Conceptual development is a lifelong development process. It requires understanding a higher level, integrative thinking ability that needs to be taught systematically through all levels of schooling. Integrated thinking is the ability to insightfully draw patterns and connections between related facts, ideas, and examples and to synthesize information at a conceptual level. She argues that well designed curriculum documents can facilitate this teaching / learning process. Erickson attempts to measure this research against national standards.

A coherent curriculum holds everything together. It fosters the increasing sophistication in critical content knowledge, conceptual inter relating and complex performance abilities. Thoughtful design is needed to ensure the time of student is maximized. It also means desired outcomes are achieved based on realities of living, learning in the 21st century.

The author concludes that schooling is predicated on the interaction of children with curriculum and instruction. Educational change he maintains is based on educators, who themselves are also learners and on the understanding that learning and teaching must change with time. A learner according to Erickson requires sophisticated abilities for the *'accessing, using, and sharing a growing body of knowledge'*. He argues that concept process curricular models are needed for student centered teaching strategies and that research based instructional strategies framed by a concept process structure for

curriculum is needed for teachers of the future.

Wiles, Jon & Bondi, Joseph. 'Curriculum Development—A Guide to Practice' (1998) Prentice Hall.

The authors describe curriculum as a plan for learning predicated on a vision of what should be; as well as a structure that translates a vision into experiences for learning. It is a process that necessarily reflects values preferences.

Curriculum development is a highly defined and deductive process involving analysis, design implementation and evaluation. The process involves the collation and ordering of information including: social forces, treatment of knowledge, human growth and development, as well learning processes. Critical is the need to match educational experience with the intentions of educational planners providing a clear purpose, as well as goal setting and formulation of objectives aligned to the curriculum content, which in turn focuses on the critical needs of learners and delivers the programme.

The authors assert that in the 21st Century new roles of curriculum leadership are required accompanied by a restructuring of schools and new demands of the workplace driven by globalisation and technology. As well, tougher standards and tests will force schools to improve both the curriculum and its delivery. This means new challenges for traditional school leadership, already unable to cope in a climate of increased competition and public scrutiny. The overall affect will be greater responsibility on part of curriculum leaders for dynamic leadership.

The authors believe the first decade of the 21st century will present the primary school as we know it with its greatest challenge. Social conditions and new understandings of human growth and development will demand changes to programmes and the means of delivery. Such a curriculum must include a variety of learning experiences for an increasingly diverse population of learners. This will provide major challenges for primary educators already affected by changing conditions which influence the ability of pupils to succeed in school. As well, the secondary school of the future will increasingly become a transition school orientated to higher education and the IT industry within a school environment which fosters greater democracy than at present.

Zais, Robert S. 'Curriculum : Principles and Foundations' Harper Row (1976).

Zais examines curriculum development in the US from a historical, social and philosophical perspective, to conclude that curriculum construction has been piecemeal and superficial. The overall affect for schools has been one of fragmentation, imbalance and incoherence.

He attributes this phenomenon to: a.) the relative infancy of curriculum development; b.) its complexity involving countless interdependent variables which influence curriculum and; c.) the American temperament to '*get the job done*'. It is the last he claims ignores the need to understand the '*basis and nature of curricular phenomena*' and '*the effects of their actions on the total curriculum*'.

For Zais, the most significant influences on curriculum are external to both the community and education profession such as:

- Bodies that establish (and or enforce) minimum curriculum standards and compliance;
- 'Alternative generators' – e.g. pool of trained teachers, curriculum materials (cash resources), corporate education and private foundations, government, professors and the interest groups

they may represent;

- Vested interests demanding curriculum change – (a.) developers of new innovations offered as alternatives to existing practices as apart from groups that demand change in a particular direction (b.) extra-professional groups promoting comprehensive political strategies are most effective in influencing change; suggesting that curriculum developers ought to consider developing political strategies to produce curriculum change.

To enhance the effectiveness of curriculum delivery Zais advocates cooperation and involvement of teachers, but acknowledges the numerous barriers and constraints to curriculum development e.g. teacher workloads, ‘the system’ etc. He lists other tensions as:

- Research & Development , and the contradiction between the systematic / scientific or technical orientation which seeks to reduce unintended affects, but requires control over all variables vs. the philosophical approach.
- Liberal vs. Vocational model orientated curriculum.
- The ‘invisible’/ ‘hidden’ and the ‘unintended’ curriculum, which must also be considered as part of the curriculum.

Curriculum foundations he describes as the basic forces that influence and shape the content and organisation of the curriculum often referred to as determinants and sources of the curriculum. They generally cover the following areas:

- **Philosophy and the Nature of Knowledge** – philosophical assumptions that underpin the foundations of curriculum. This covers basic assumptions about philosophy and the nature of knowledge;
- **Society and Culture** - exerts huge influence on the curriculum, having been invented by social groups to secure the survival of cultural heritage. These factors represent assumptions, values and ideas and what is important and is reflected in the curriculum, its content, content learning activities;
- **The Individual** – the biophysical nature of man (and woman) that place limits on the breadth and depth of his (and her) learning, and man’s (and woman’s) philosophical conceptions of his (and her) own nature will determine;
- **Learning Theory** – notions of how humans learn will affect the shape of the curriculum.

Curriculum design, he describes as covering all elements, the pattern of content organisation and how these are all brought together:

- Aims, goals and objectives
- Subject matter or content
- Learning activities
- Evaluation

A key function of a curriculum developer then is the need to understand the complex ways in which

culture shapes ideas.

Cajete. G. A. 'Igniting the Sparkle'. Kaviki Press (1999)

In arguing for a culturally responsive science programme, Cajete examines the theoretical underpinnings of Western Science and identifies some fundamental contradictions with the Indian worldview. He advocates the introduction of Indian science as a valuable tool for understanding the cultural influences in science for Indians and non Indians alike. Cajete believes learners will gain valuable insights about themselves and the unconscious cultural conditioning of their perspectives of natural reality. He describes this type of science as '*ethno-science*', which is local and reflects a cultural region and adaptation to a certain place. This involves teaching the history of Western science relative to Indian science, and its relationship with community, environment, history and people. Integral to the Native science curriculum are thematic areas of Land, Sea, Earth, Wind Fire and Water, '*the seasons*' and '*sense of place*'. Indian science is holistic rather than fragmented in nature. A key aspect of this curriculum is that of '*stewardship of place*.'

Indigenous science therefore, is about a worldview which integrates spiritual, natural and human domains of existence and human interaction characterised by;

- Culturally constructed and responsive technology mediated by nature;
- Culturally based education constructed around myth, history, observation, of nature, plants, and their survival;
- Use of natural materials to make tools and art and the redevelopment of appropriate technology for surviving in ones place; and
- The use of thoughtful stories and illustrative examples as a foundation for learning in a particular environment.

Traditional Native education systems were characterised by observation, participation, assimilation, and experiential learning rather than low formal instruction characteristic of Eurocentric schooling.

Cajete identifies the foundations of Western science as where:

- Time is uniform and linear direction; from past to present and on into the future;
- All matter consists of particles that obey universal laws and never change;
- Our mind is our brain;
- Only the fittest survive through natural selection;
- Modern science will solve all mysteries of the universe;
- Scientists are totally objective; and
- Scientific knowledge is universally applicable (Hayward).

Cajete lists the following cultural standards for Indigenous education which curriculum developers should take cognisance of:

- **Spirituality** –respect for spiritual relationships;
- **Service** – to serve the community given its needs;
- **Diversity** – Respect and honouring of difference;
- **Culture** – culturally responsive education process;

- **Tradition** – a continuance and revitalisation of tradition;
- **Respect** – personal respect and respect for others;
- **History** – a well developed and researched sense of history;
- **Relentless** - honing a sense of tenacity and patience;
- **Vitality** – instilling a vitality in both process and product;
- **Conflict** – bin able to deal constructively with conflict;
- **Place** – is a well redeveloped researched sense of place; and
- **Transformation** - the transformation of Native education.

Other points to note are;

- Culture is intimately involved in the nature and expression of scientific thought;
- Science is a creative process of thought and action, and therefore highly interrelated with other cultural styles such as art.

Indians believe science is an abstract symbolic and metaphoric way of perceiving and understanding the world. The mutualistic / holistic orientated mindsets of Indians as apart from the rationalistic / dualistic mindset of Western science which analyses and objectified on the other.

For Cajete, the ideal goal is to produce a graduate, who is literate and understands both the Western and indigenous approach to science and in the process becomes aware of his/her won creative abilities. This literacy extends to story telling as it provides the foundation for learning and teaching. Myth is holistic form of communication and provides a guiding philosophy in dealing with nature.

Other points Cajete raises includes:

- Teaching is essentially the processing and communication of information;
- Highlights the importance of research; and
- Indigenous knowledge is a direct way to self-determination.

Finally, Cajete argues that the ideal science curriculum model is where:

- Nature has within it a spirit that is part of each of us. We cannot encounter it without changing ourselves;
- Science education must incorporate both rational and intuitive thought processes;
- Science is simultaneously a cultural system of thought, a creative process of problem solving and system of communication;
- Science and art parallel each other as ways of relating to natural world;
- Objectivity is relative term. The reality of objectivity must be conveyed truth the curricula;

■ Science involves a literacy involves basic skills as tools for understanding.

Other observations Cajete notes:

- Cosmology is the lived story of place, kinship and environment knowledge forms the foundation of expression of Native Science and native communities;
- Through participation in the tribal community, as well as in the greater community of nature, Native peoples experienced being at one with nature;
- Each member of the community was involved with food gathering so each came to know the intimate relationships they had to maintain with their sources of food. Nature therefore, became the context in which all dimensions of Native science are expressed.

George, June. M. 'Indigenous Knowledge as a Component of the School Curriculum'. Falmer Press.

This article focuses on the role of Indigenous knowledge in science education in Trinidad and Tobago. Indigenous knowledge is defined as knowledge produced within a particular societal context used by ordinary people. It is usually associated with people in non-industrialised and traditional settings, **but it is also a type of knowledge that must exist in a Western setting.** Indigenous knowledge is not normally generated by planned procedures and rules. Instead it is generated by people seeking to find solutions to problems in their everyday lives, drawing upon existing societal wisdom and local resources and using a fair amount of creativity and intuition.

Indigenous knowledge can be expressed in a variety of forms, but whatever the form it has the potential to impact on the teaching / learning situation in significant ways. The main difficulty is that it cannot be 'packaged' like other school materials. The teacher must be able to access it, understand it and its likely relations to what is to be taught in class. As well, the teacher must devise teaching strategies for using it effectively. The primary consideration is that the learner can relate to either conventional science or Indigenous knowledge to their personal lives and their realities.

The incorporation of Indigenous knowledge into science requires the teacher to have a full understanding of the indigenous knowledge system operating in the communities his/ her students come from. As there is little information available the teacher is required to undertake research. The teacher must also be able to relate the local indigenous world to the wider world. In accepting that Indigenous knowledge is one way, teacher must also appreciate the traditional wisdom that plays in the lives of their children.

A liberatory education requires creativity and a dialogic relationship between teacher and student, where knowledge is questioned and remade. A curriculum imposed from outside precludes the development of a dialogic relationship.

Teese, R. 'Academic Success and Social Power – Examinations and Inequality'. Melbourne University Press (2000)

The author is an Australian academic, who believe the primary concern of the curriculum is '*to create thinkers able to regenerate knowledge*', where the priority of syllabus reform must be conceptual growth. This paradigm is reflected in contemporary education with its focus on understandings and theoretical insights, which has accompanied the growth of knowledge, breaking down of disciplinary barriers etc. The overall affect is the creation of a rift between conceptual structure and family culture (being critical to one's identity), thereby placing the teacher in an invidious position as mediator between both. This suggests the syllabus has ignored the historic and social contexts on which the traditional cultural ideal was formed. In other words, the school system has been developed without taking cognizance of the social structure in which it is located. For Teese, a prime aim of the curriculum is cultural and social development i.e. shaping of values, attitudes, the bringing of people together and not advantage one group over another, but claims this cultural ideal has been determined by the university system. As a result, and even though the schools actually deliver teaching, the curriculum continues to reproduce social inequalities of achievement and subordinate individual development to social domination. While the curriculum has been modernized in terms of content it has '*preserved the principle of cultural selection*' through the fact reforms were made without regard to the learning experiences of different student groups and the pedagogical experience of teachers working in different settings. As well, parental choice over school and subjects, and competitive performance suggests the curriculum as a '*coercive, authoritative structure*'.

Key findings of the book are:

- If the curriculum tests students, what is the test of the curriculum?
- That the curriculum structure is a translation of social structure;
- Academic subjects are academically exclusive in so far they admit '*the narrowest competition waged between advantaged groups*' i.e. specialist subjects act as a conduit for academic authority;
- For most socially advantaged students the curriculum operates as a structure for generalizing competitive achievement across all levels of ability, whereas for the working class, the curriculum limits academic merit to the most able;
- Curriculum reform cannot be undertaken without structural changes and particularly universities.

Teese writes about exercising power through the curriculum and selective schools that specializes in most lucrative subjects ensuring long term academic control over the curriculum. He refers to the relationship between elite feeder schools which need the top universities and power, and universities which need to assure their markets. As a result, the curriculum becomes stamped with the characteristics of its users and in the recurring cycle success is accepted as an outcome. This is reflected by private schools recognized as a '*mechanism for combining family advantages*'. Universities further assert their preeminence by the exercise power, offering hard options and monopolizing the training routes that the most competitive students seek to occupy and by superior research performance in the discipline on which professional training is based. Institutional domination enables socially advantaged families to assert economic and cultural dominance.

Other findings;

Participation and educational achievement highlights the significance of the group over the individual. The capacity to accurately predict certain sections of the school population will succeed or fail implies advantages and disadvantages, which have become institutionalized. In short, the curriculum is manageable only by a small minority;

Structural Reform - a collective response is needed on behalf of most disadvantaged groups to match the corporate power exercised by the socially most advantaged families. There must also be reform to allow for outdated pedagogical and assessment methods known to be ineffective;

Cultural Ideal in relation to secondary education namely, to provide for a, '*creative and independent thinker with a mind which can formulate ideas, marshal argument and evidence, engage human feelings could not be measured except through a whole work of intellectual production*';

Examinations and their social affects impose a cultural model of the successful student by preference of a set of learning criteria over others. Schools established to conserve a lifestyle and a community of interest. Pooling their resources in schools the most educated families and those with the greatest prestige create an environment with a binding model of behavior and promotes them as the only legitimate end in education. Selective schooling enables parents to combine their resources and organized d their efforts around the model of the successful student installed in the curriculum. Yet, failure by large numbers of students at state wide examinations has been interpreted by examiners as failure by teachers to teach;

English was aimed at the transformation of the Learner, as well as the expansion of knowledge and comprehension. The cultural heritage contained could not be communicated without changing the student and English has shifted toward becoming a moral discourse. Yet, the 'cultural ideal' of intellectual independence underlying the English curriculum had little chance of being realized to its full potential in those communities, where it was most needed to compensate for the lack of economic power;

Exporting of poverty – The intensification of advantages through social geography and selective schooling could lead to an institutionalized pattern in which competitive success was reserved to the most educated or economically powerful strata while failure was exported to the poorest communities Disadvantage was accumulated and concentrated in the high schools, poorer Catholic schools and technical schools in industrial suburbs.

Dependency of young people on high school education is reflected in the new curriculum, yet schools are being being drawn apart, while the new integrated curriculum are being drawn together;

Curriculum reform and design must be sensitive to a whole range of students and be accompanied by structural reform that enables young people and not just from from academic and professional families to access the cultural capital and cultural disposition of the most successful sectors of the community. i.e. which give the greatest economic power, cultural outlook and lifestyles of the most educated populations. The exercise of power through the curriculum and through selective schools that specialize in the most lucrative subjects rests on long term academic control over the curriculum;

Assessment - inequalities remain because: the lack of public information and system of subjects and assessment is assumed as fair, reasonable and the best available.

Social patterns of results remain intact in spite of curriculum reform because specific content of subjects is '*always subordinated to deeper and continuous demands on the qualities of the learner.*' These qualities such as powers of abstraction and concentration, sensitivity to form and structure, self confidence and maturity of perspective etc are the characteristics of the ideal student the curriculum seeks to inculcate through surface changes in material etc. Examiners have unfailingly demanded these qualities

Inequality - structural inequality exists when the locations in the school system typically occupied in different social groups yields advantages and disadvantages that are large, persistent and predictable. The higher up the scale Learners move the more they draw upon the cultural capital and cultural dispositions. Competition becomes more restricted in social terms with the bar being raised against groups new to upper secondary education. Students who do well are likely to come from managerial and professional backgrounds. This is reflected in economic power, cultural outlook and life styles of most educated populations which are likely to learn languages, advanced mathematics and physical sciences. The theoretical focus on these subjects places high value on early learning at home and school in language and number. Results in self-confidence openness to new challenges, risk taking, and creativity helping to establish school learning as a source of interest gratification and social identity.

Conclusions

The beneficiaries of secondary school education protect their collective interests by assuring the capacity of the strongest individuals to compete amongst themselves. Open competition enables them to impose on the curriculum a series of academic mechanisms – specialized subjects, hierarchical order of options within subject areas, external examinations , homogeneous reliable assessment measures and finely scaled graded of results.

Recommendations

- Need for Australia to build vocational training as a mass viable alternative to universities;
- Reform of the curricula must be accompanied by changes to the tertiary structure. Quality learning is dependent on pedagogical freedom;
- Tackling of multiple points where at which scholastic failure is generated or reinforced:
- Schools representing exposed sites in the education system need targeted support erg. smaller class sizes, tutorial where failure is rife, integrated programmers that base cognitive growth on vocational benefits;
- Role of TAFE's be reviewed through jointly constructed programmers;
- Certificates that lead to middle level technical awards through internal promotion.

Freire, P. 'Cultural Action For Freedom'. Penguin Books (1972)

The author an education philosopher and reformer initially developed his educational theories from experiences in adult literacy in Brazil. For him education is '*cultural action for freedom, and therefore an act of knowing and not memorisation*'. Education can never be reduced to mechanistic, a standardised process on a bureaucratic operation, or a set of '*complex techniques, naively considered to be neutral*'. Freire explores the deep underlying meanings of words used by the dominant interests to subordinate what loosely refers to as the Third World and believes literacy has a critical function in identifying these meanings thereby revealing their role in establishing a 'culture of silence'. The Third World must reclaim the right to defining words in order to reclaim its voice.

Adult literacy he claims, as a cultural action for freedom, is an act of knowing, where the learner assumes the role of knowing in dialogue with the educator. As part of this process the learner analyses and deconstructs reality in order to emerge into a new reality. This requires on part of the educator pursuit of greater clarity thereby providing a path for action. In literacy this involves critical reflection

on the process of reading and writing and the profound significance of language. The act of knowing involves a dialectical movement which goes from action to reflection and then action to reflection. For transform the world is to humanise it, but call also lead to dehumanising the world.

Here speaking the Word is only a true act if it is linked to the right of self expression, creating, recreating of deciding and choosing and ultimately participating in societies historical process.

Skilbeck. M. 'School Based Curriculum Development' Published by Paul Chapman Limited (1984).

A key theme of the book is the school as '*a partner and collaborator*', if not an '*initiator*' in curriculum development, which for all intents and purposes represents educational reform and change. In this scenario the school is not a '*vehicle*', '*recipient*' or '*adopter*', but must explain and interpret the social world, and apply different forms of knowledge into practice. Curriculum development therefore requires us '*to project forward preferred actions, desirable values, intentions and aims for the future*' (i.e. what could be, ought to be etc). Simultaneously, the curriculum must be viewed within the context of the wider community in which the school is located.

In doing so, Skilbeck also asserts the need to review, evaluate and develop the whole curriculum involving the whole school, demanding the educators to increase their overall knowledge of curriculum. This process requires comprehensive research but never in isolation to the wider community. Skillbeck proposes a research agenda which he outlines which combines the desire to achieve future end points, as well as '*descriptive, interpretative, evaluative and action studies*' In regard to the latter, he advocates self-reflection, '*the problem-solving school*' (i.e. *comprising of problem solving students*) and the development network (*community*).

Among the constraints to school-based curriculum development, Skillbeck identifies the following:

- '*Inadequate framework for building knowledge and understanding on reaching judgements;*
- '*Limited and weak capacity for gathering, storing, analysing and using the present miscellany of data sources including reports by schools on their own development work; and*
- '*New ways to prepare and under take research programmes*'.

At the heart of Skillbeck's thesis are the twin notions of the school as a dynamic organism and modernity, itself a powerful driver of change. It is in this environment schools must operate if they are to reflect and interact with the social world. This can be achieved by a partnership with the community directed at identifying the need of the whole child / youth, aimed at building-up the school's capability to respond creatively education challenges.

In concluding, Skillbeck makes the following points – the school has a critical role in curriculum development, and reflecting its role as an education provider of which curriculum review, evaluation and development are its fundamental responsibilities. Secondly, curriculum development cannot take place independently of the wider education system. It must operate from the basis of collaboration with other stakeholders and whose goals can only be achieved '*through its creative responses to the culture and society of which it is part*'.

INDIGENOUS WORLDVIEWS

Fixico, Donald L. 'The American Indian Mind in a Linear World'. Published by Routledge (2003)

The author is the Thomas Bowlus Distinguished Professor of American History at the University of Kansas and is of Shawnee, Sac and Fox, Muscogee, Creek and Seminole heritages.

In his book Fixico focuses on Thinking Indian and Indian logic, which he attributes to the traditional American Indian world view described '*as relationships with the natural environment and a circular philosophy based in cycles of seasons, migrations of animals, and the rotations of the Earth and stars*'. He attempts to explain the complexity of the Indian mind in the context of traditional cultural and natural environment and how it has evolved in and adapted to what he calls '*the linear Western world*'. He describes traditional Indian thinking as a combination of '*physical and metaphysical realities*' and cyclic in nature. More simply, listening and observing the natural environment (*seasons, lunar cycle, day & night, tides etc.*) are central to the Indian mindset where decision-making considers all of those factors affecting one's life. This takes into consideration human and non human entities, which can animals as well as spiritual entities.

This type of intellectualism and intellectual genius is not recognized by mainstream Western academia with the affect that Indian knowledge is not recognized at all. Therefore, exceptional Indian individuals are not recognized and where traditional Indian knowledge continues to be treated with disdain as primitive, superstitious and uncivilized.

In the book Fixico traces the development of Indian learning to the more recent explosion of interest in tertiary education reflected in the rapid growth of Indian tribal education institutions. This represents a huge change in mindset of previous times when Indians were averse to such education institutions, which they viewed with suspicion as underminig and destroying traditional Indian cultures and beliefs. While this new trend has demanded greater control of Indian intellectual property, it has also meant a loss of the traditional thinking now more attuned to the linear world not helped by mixed heritages.

'First Nation's Control and Jurisdiction of Education: State Praxis of Domination, Power and Control or Aboriginal Praxis of Self-determination'. A conference paper presented by Dr George E. Burns, University of Ontario.

The author claims that Indigenous Canadian education has always had at its primary purpose assimilation and never the inter-generational transfer of the wealth of Indigenous knowledge, language, culture and traditions. The overall affect has been the continued imposition of the Eurocentric education paradigm, as well as attitudes of Western racial and cultural superiority.

This education system has consistently failed Aboriginal children as represented by high grade repetitions, course in-completions, suspensions, expulsions, special education and school in-completions, under-representation in mathematics, science programmes leading to universities, high suicide rates, substance abuse, self-mutilation, family violence and incarcerations.

Burns concludes that a new paradigm, whereby Aboriginal control and jurisdiction over all aspects of Aboriginal education leading to self-determination, as the only realistic strategy left.

Cajete, Gregory. 'Look to the Mountain- An Ecology of Indigenous Education' Kivaki Press.

Cajete, a Native American academic and author argues for the integration of traditional tribal and

conventional education as critical for the survival of traditional communities. Modern education he asserts must be integrated into the *'cultural whole'* and is about the life and nature of the *'spirit that moves us'*. He defines spirituality as coming to know and experiencing the nature of the *'living energy moving in each of us, through us and around us'*. Therefore, the ultimate goal of Indigenous education was to be fully knowledgeable about one's innate spirituality.

For Cajete, the most tangible expression of the spirit in all living things is breath. Through breath humans have language which contains the power to move people and express human feelings, as well as thought, and together with water, it connects all living things in a direct relationship. Education therefore, is about learning the true nature of one's spirit in order to become more fully human. Traditional education represents ways of learning and doing through a *'nature centred'* philosophy.

However, he also claims that Indian education has and continues to be defined by American politics. It operates from a different cultural metaphor and Native people's have little defence against the onslaught of Westernisation, except possibly those whose cultures are orientated toward Nature and maintain their interrelationship with Nature. This represents a form of resistance to assimilation through Western style economic development. Secondly, the notion that *'we are all related'* represents a world view that only through an understanding of Nature can we truly become human, *'because humans not only live in relationship to the natural world, we are the natural world'*. In contrast the West (Christian) has operated in the belief, that the natural world must be disconnected in order to conquer it.

For American Indians, spirit and nature were the real world on which they formed a theology of nature. Living ecologically is living in a harmonious relationship to a *'place'*. The first way of knowing therefore, has to do with one's physical place; *'emanating from one's home, one's village, one's land and the Earth on which one lives'*. All of these provided the source and context for teaching. Living and learning therefore, were fully integrated. Education is based on language and oral communication including myths and stories. Language and its transmission therefore, are the foundations of the sacred traditions that bind them through breath to each to all living things. Myths glue communities of people together through shared metaphors of identity and purpose. Art is one of the languages of myth, which in turn is a foundation dynamic of indigenous teaching and learning. It follows therefore, that everyone is an artist.

The focus on making people literate fails to recognise or honour a powerful dimension of human knowing and understanding i.e. *'stop being children and stop being indigenous'*. As a form of oral poetry, myth is designed to discourage critical reflection on the stories and their content and instead enchant the hearers and draw them into the story. Ultimately, all education is the expression of story telling.

Story telling was a way of storing information and encouraged the four basic disciplines of thinking; attention, creative thinking, flexibility and fluency of thinking. Behind these mythic metaphors are philosophical infrastructures and fields of tribal knowledge that lie at the heart of American Indian epistemologies.

Visions are critical to life in that they provide meaning and *'are indeed for life's sake'*. Visioning has significant implications for education namely;

- They always holistic;

- Unfold through symbiotic cooperative activity with theirs;
- Teach us about the nature of learning as a journey toward a greater level of completeness; and
- Have an innate pattern that is characteristic of both the individual and the inherent nature of the vision itself.

Through vision, Indians can reconnect with nature, tribal heritage and honour their own nature and reconnect with their creative nature.

Cajete, G. 'Native Science – Natural Laws of Interdependence'. Clear Light Publishers (1999)

Cajete, a Native American academic and author examines the foundations of Western scientific epistemology and ontology which he compares to the Indigenous science paradigm, representing a metaphor for a wide range of tribal processes of perceiving, thinking, acting and coming to know. It is inclusive of both ritual and ceremony practiced by Indigenous peoples past and present and reflects the collective heritage of human experience with the natural world. Native science is maintained furthermore, through the continual interaction with nature and from which Indigenous peoples receive gifts of information and learning.

Cajete concludes that native science has evolved through interaction with nature and is akin to environmental science, its features he lists as follows:

- Native science integrates a spiritual orientation;
- Dynamic multidimensional harmony is a perpetual state of the universe;
- All human knowledge is related to the creation of the world and the emergence of humans, therefore human knowledge is based on cosmology;
- Humanity has an important role in the perpetuation of the natural processes of the world;
- Every thing animate has a spirit;
- There is significance to each natural place because each place reflects the whole order of nature;
- The history of a relationship must be respected with regard to places, plants, animals, and natural phenomena;
- Technology should be appropriate and reflect balanced relationship with the natural world;
- There are basic relationships patterns and cycle in the world that need to be understood; this is the role of mathematics;
- There are stages of initiation to knowledge;
- Elders are relied upon as the keepers of essential knowledge;
- Acting in the world must be sanctioned through ritual and ceremony;
- Properly fashioned artefacts contain the energy and thoughts materials and contexts in which they are fashioned and therefore become symbols of those same thoughts entities and process;

and

■ Dreams are considered gateways to creative possibilities if used wisely and practically.

Crosby. R.D. The Musket Wars. Published by Reed (1999)

The author is a lawyer with an interest in New Zealand history. In the book he covers the period of New Zealand history from 1806-45, characterised by inter tribal violence on a scale never before witnessed. While inter tribal violence and brutality was not new the sheer scale was through the widespread use of firearms. Crosby draws upon a large amount of written material in the form of recorded Maori oral traditions, missionary reports and other European observers at the time. If anything the author manages to put these numerous points into a coherent framework and thereby provide a better understanding of inter tribal warfare.

The book enables the reader to explore more fully our country's history, race relations and cultural encounters over the period 1806-45. The reasons for the growth in interest in New Zealand history he puts down to cultural nationalism and the Maori renaissance, that has coincided with the shift away from British Imperial history; and not least the desire by New Zealand authors to tell New Zealand stories. And among the key messages in the book is that Maori, as demonstrated by Hongi Hika were quick to adopt European technology to maintain Maori values, practices and institutions.

Davis. T. 'Vaka'. Published jointly by Institute of Pacific Studies, University of the South Pacific and Polynesian Press, Auckland (1992)

Tom Davis is a former Prime Minister of the Cook Islands and Nasa scientist, who is acknowledged internationally as an expert on early Pacific voyaging. In this novel he draws upon the huge wealth of oral traditions located in Polynesia involving ancestral characters renowned for their sea going achievements and weaves them into a coherent story of the peopling of the Pacific covering a period of some 300 years.

The novel follows the lives of ten or so generations of descendants Te Arutanga Nuku his partner Te Pori o Kare of Samoa and their relationship with a voyaging canoe originally owned by Te Arutanga Nuku's father Atonga Ariki. The canoe is initially used to voyage around the Islands of Samoa to restore relationships with members of extended family and establish new relationships. These voyages become increasingly extended with each generation including the colonisation of Fiji, where the characters become embroiled in local conflicts before moving to other parts of Polynesia. In each location the author draws upon local oral traditions and sailing technologies supported by knowledge of foods and other characteristics unique to that place. On several occasions the name of the vessel is changed to commemorate a significant event and the reasons for never ending exploration and migration are revealed. Overpopulation and the centralisation of inherited political power on living space produces a constant restlessness that finally ends in the migration to Aotearoa.

The underlying theme of the book is that the Pacific Ocean was never considered by the early Polynesians as a barrier, but rather as a 'highway' by which relationships across far flung Polynesian colonies were maintained and new Islands colonised. In this way the basic systems of Polynesian language, social structure and culture were not lost. It explains from a Polynesian perspective as to how Polynesia was colonised and provides a window as to the human and political dynamics that enabled this to happen. The book privileges the knowledge of Polynesian peoples and ways of knowing accumulated over 3000 years, as well as their achievements, thereby severely undermining attempts by

European writers to marginalise that same knowledge and seafaring achievements.

Doran, Edwin. 'Wangka: Austronesian Canoe Origins'. Published by Texas A&M University Press (1981)

The author, is an academic who surveys the sailing technology of the people's loosely referred to as the Austronesians, who share cultural linguistic similarities and spread between Madagascar, Islands of the Southeast Asia and across the Pacific. In the book Doran discusses in detail and compares the various water craft found in this part of the world including design, construction, sailing capacity, sails and sea worthiness. In doing so, he offers insights into how Austronesian speaking peoples became so widely distributed. The book draws upon observations of early European seafarers, missionaries, explorers and travelers supported by new information revealed by the voyages of the modern Polynesian inspired double hulled Hawaiian seagoing vessel Hokoule'a. He concludes with a hypothesis that the multi-hulled craft which is typical of Austronesian speaking peoples and associated with long distance voyaging evolved from double hulled vessels and later by 'tacking' single outrigger canoes.

Hogan, Linda. 'A Different Yield'. Printed in 'Reclaiming Indigenous Voice and Vision'. UBC Press (2000).

Hogan asserts that in recent times myths have become to mean falsehood when in fact they are a higher form of truth. They represent deep and '*innermost cultural journeys toward spiritual and psychological growth*'. Myths enable us to return to the mythological time and '*hear the world new again*'. The evolution of human consciousness has caused humanity to shift away from the natural world and have created another world '*within themselves*'. This separation and consequent spiritual fragmentation has been accompanied by environmental destruction.

What is needed is a language that heals this relationship. A language that can communicate with the '*fragile life of our life giving earth*' and goes beyond science.

Hogan cites a number of western trained scientists whose research supports her view concerning the limitations of human speech and hearing to interpret the natural world.

McLean, Mervyn. 'To Tatau Waka – In search of Maori Music' Auckland University Press (2004)

The author is a musicologist at the University of Auckland and well-known collector of Maori music from 1958-1979. These recordings are stored in the University of Auckland's Archive of Maori and Pacific Music. The significance of these recordings is that they are the voices of kaumatua, almost of who have since died. To record this extensive collection of waiata, patere, haka and karakia he travelled widely often putting up with primitive conditions, where his commitment to his task and sensitivity to tikanga impressed his Maori hosts.

In the book he records his visits and the numerous personalities he came into contact with at the time all of who are dead. In doing so, he give clues as to their characters, values and of a different era. Also important to the researcher are the insights McLean provides as to how Pakeha fieldworkers should operate in ways that are sensitive to Maori. It is his story.

Moore, Marijo. 'Genocide of the Mind – New Native American Writing' Avalon Publishing (2003)

This book is a collection of stories of individual Indian people and their struggle in the search of identity against a background of historical abuse and media produced mis-representation. The stories reflect personal and collective pain, but also the capacity to overcome immense adversity. The writers refer to the racism inherent in America political and societal mythology. This racism continues today manifested daily in violence perpetrated against Indians not helped by stereotyping such the use of Indian mascots at major sporting fixtures.

Some writers claim White America still have little idea that Indians exist in the belief the real Indians are no more their descendants a mixture of Anglo / Afro / Euro heritages. As one writer states '*the Native people's genuine voice has been silenced and their mere existence erased from public consciousness....since 1890*'.¹ Against this has been a movement to depict Indians accurately – in short to take control of Indian representation. These modern writers record their efforts to produce accurate depictions of Indians in a modern environment, as well as an Indian world-view. Indians have refused to accept their cultural banishment and have turned the prophecies of elders and '*listen to their own voices for revitalisation and renewal*'.² Here the claiming of cultural sovereignty means identity, and requires Indians to be portable moving between traditional reservation and urban community where most live. Only Indians can '*empower themselves to interpret their own culture and create a contemporary artistic presence and vision in the heart of Western culture*'. It is one way of helping Indians to emerge from the romanticism and Hollywood generated mythology.

Semali L.M. and Kicheloe (Editors), 'What is Indigenous Knowledge – Voices of The Academy', Falmer Press (1999)

The book challenges the academy and promotes the interests of Indigenous people's by studying indigenous knowledge's and epistemologies. It challenges the claim that Western knowledge is certain and argues that knowledge is also local and not universal and must be understood in terms of morality, history and cultural contexts. The book offers an opportunity to examine key concepts and issues leading to a greater awareness of neo-colonialism and the other Western practices that harm indigenous people's. The underlying theme of this book therefore, is the transformative power of indigenous knowledge, and the ways that such knowledge can be used to foster empowerment and justice in different cultural contexts. Indigenous knowledge offers a rich social source for any justice related attempt to bring about social change e.g. indigenous educators and philosophers wanting to use indigenous knowledge to counter Western sciences' destruction of the Planet.

For the authors, any study of indigenous knowledge must simultaneously allow for its evolution and ever changing relationship with Eurocentric scientific and educational practice.

The authors analyse the impact of the '*great truths*' attributed to Bacon, Descartes, Newton and Einstein on the development of Western science. The overall affect they claim was to de-spiritualize and de-humanize indigenous peoples. For instance, Bacon advocated the supremacy of reason over imagination, with the affect that rationality was deified. The '*one truth*' epistemology affected all aspects of Western life including education by defining knowledge and supporting the associated connotations concerning the production of knowledge e.g. the cultural norms of whiteness, maleness and middle class-ness.

The '*one truth*' paradigm precludes questioning of the scientific method and makes the world it studies and describes marginalising all other knowledges / epistemologies which have arisen from the cultural

1 337

2 Ibid

experiences of groups. It is a local knowledge system that denies its locality, seeking to produce not local but translocal knowledge.

The authors claim the denigration of indigenous knowledge cannot be separated from the oppression of indigenous people. A key to the power of Western science is its ability to depict its findings as universal knowledge. White science is cultural knowledge and a local way of seeing. Notions of Western superiority, racial hierarchy and colonial relationships are inscribed in Cartesian epistemologies. Western epistemological tyranny decrees that the reality constructed by Cartesian/Newtonian decrees what reality is worth discussing in academic settings. The overall affect is that knowledge became centralised and the power to produce knowledge became focussed in the hands of a few. Science is the most powerful cultural production of western society. Knowledge of Western science which was produced became the benchmark of Western society.

The educational benefits to be gained from analysis of academic practices versus indigenous knowledge are listed as follows:

- **Promotes a rethinking of our purposes as educators** - abstract reasoning outside of traditional notions and the multiple intelligences people possess. Teachers engage with learners to interpret various forms of knowledge and modes of knowledge production;
- **Focuses attention on the ways knowledge is produced and legitimated.** This awareness is often absent in Western knowledge and always confronts other knowledge forms. In the Indigenous situation, learners and teachers must come to appreciate what they know and how they come to know it; why they believe or reject it and how they evaluate the credibility of the evidence;
- **Encourages the construction of most just and inclusive academic spheres** - Curricular reforms based on our analysis of Indigenous knowledge requires that education becomes hermeneutist (*centred on helping students make sense of their world*) and epistemologist (*teachers who seek to expose how accepted knowledge came to be validated*) thereby proving there are other ways of knowledge production even within the Western system;
- **Indigenous knowledge's in dealing with local problem solving strategies** and their capacity to transform will always deal with the reality of colonisation, as well as economic globalisation;
- **Produces new levels of insight** – Indigenous knowledge's are local, life experienced based and non Western science produced. Such knowledge is transmitted over time by individuals from particular geographical or cultural locality. A curriculum that values Indigenous knowledge is important for the culture that produced it and other cultures. The Western world is finally recognising its value in health, medicine, agriculture, philosophy, ecology and education;
- **Since Indigenous knowledge's must be approached from understanding of their ambiguity and contextual embeddedness** and cannot be isolated from their world view and epistemologies embraced by their producers. The tension between both Western and non Western identifies the Western epistemologies and raised questions concerning productions of knowledge, consumption, subtle connections between knowledge and what is defined as successful learning, contestation of all forms of knowledge production and the definition of education itself;
- **Demands that educators at all academic levels become researchers** in education in order to achieve greater rigor and higher pedagogical understanding. In schools we could envision teachers and students understanding multiple epistemologies, possess primary and secondary research skills,

and can interpret the meaning of information from a variety of perspectives. Teachers therefore, will be more critical of the 'single truth' based education system, as question its status as universal or the only single body of cultural knowledge worth knowing;

The editors of the book propose a synergistic model that pedagogically works to create conditions where both intra and inter cultural knowledge traditions can transform one another.

Smith, C. and Ward, Graeme. K. 'Indigenous Cultures in an Interconnected World' Allen and Unwin (2000) The book is in effect the proceedings of the Fullbright symposium Indigenous Cultures in an Interconnected World held in Darwin in July 1997.

The symposium brought together people from sixteen countries. Two thirds of the participants were Indigenous and the symposium were conducted on the basis of empowerment. A key Theme of the symposium was the impact of globalisation that forces indigenous Peoples to assert new ways of asserting their rights and autonomy in a globalise World. The book explores the positive and negative aspects of globalisation, new possibilities and strategies for coping with new strategies.

Globalisation continues to ensure the acceleration of colonisation i.e. European goods, technology and beliefs. With travel peoples the geographic boundaries that formerly shaped people's understandings of them are collapsing. Corporate definitions – removal of limitation and exchange if ideas.

Telecommunications – identical information across the world simultaneously

This process is followed by Western understandings and attitudes become dominant and more people converse in a universal language of popular culture

Affects:

- Commodification of culture
- Entrenchment of inequality
- Growing feelings in insecurity
- Loss of identity

The key word here is control – over land, knowledge, past, present and future. The struggle is not for '*indigenous cultural and intellectual property but the continued future of indigenous societies themselves*'. (p3)

This coincides with the on going de-colonisation through the deconstruction of Colonisation and the many assumptions that underpin them, leading to the transformation of social and political orders. The value of Indigenous agendas are transformative in nature and are '*concerned with the change in and transformation of the roles and structures which control (them)*.' The focuses on international indigenous networks mean empowerment.

What are culturally appropriate methods for sharing Indigenous knowledge?

What protocols should be developed for its curation?

Teasdale,G.R. (Bob). 'Education and Cultural Rights: An Asia –Pacific Perspective' printed in 'Culture, Rights and Cultural Rights' Edited by Margaret Wilson and Paul Hunt. Huia Publishers (2000).

Teasdale refers to the 1992 Unesco sponsored regional workshop on '*Education for Development*' in

Rarotonga and its recommendations as the '*strongest, clearest and most comprehensive statements about human rights in education to come from a group of people representing local cultures in the Pacific region*'.

The workshop endorsed the right of local cultural groups to own and control all aspects of their education including, the right to determine the processes of the curriculum, assessment methodology and delivery. Integral to these aspects is the incorporation of local cultural and linguistic knowledge within the curriculum alongside global knowledge.

The workshop also called on governments to support all aspects of cultural revival, maintenance and development based on:

- The recognition of the role of language (*mother tongue*) in its own right, as a means of communication and to ensure the survival of the language (*mother tongue*) itself;
- The empowerment of the people and that every indigenous cultural group be provided with support to control its own cultural development;
- Teacher training in the mother tongue and learning styles, conditions and contexts appropriate to the culture;
- Curriculum development and the inclusion of cultural experts in curriculum development; and
- Access to Western education to enable Indigenous cultures participation in and to make choices about living in the modern world.

Some 10 years later, Teasdale admits the Rarotonga Declaration has made little headway against the impact of globalisation and the accompanying demands of economic rationalism, the continued erosion of Indigenous knowledge and the assumptions Western knowledge has greater legitimacy and validity.

However, this is not a reason for abandoning the Rarotonga Declaration. There still remains an urgent need to reaffirm the rights of local cultures of knowledge and wisdom to have a significant role within schools and other learning institutions.

In an attempt to move on from the mere affirmation of cultural rights, Flinders University has embarked on a research programme which has identified the following insights:

- The need to legitimise local cultural knowledge and wisdom. In doing so, challenge the notion that if knowledge does not fit into the Eurocentric model of education, it must be irrational and alien;
- Ownership and control of education can create exciting linkages between local and global;
- The actual processes of teaching and learning and processes of thinking and knowing are equally important as curriculum content. This creates possibilities for creating new and innovative ways of learning that allow for ambiguity and contradiction;
- The need for tertiary educators to support cultural rights of students from local cultures; and

- Educators must develop skills of critical reflection leading to deeper understanding of values and assumptions i.e. connectedness, inclusion, relativity of knowledge, truths and values.

Thaman, Konai Helu. 'Cultural Rights: A Personal Perspective'. printed in 'Culture, Rights and Cultural Rights' Edited by Margaret Wilson and Paul Hunt. Huia Publishers (2000).

Thaman defines 'culture' as '*a shared way of living of a group of people, which includes their accumulated knowledge and understandings, skills and values and which is perceived by them as to be unique and meaningful*'. The term 'Cultural rights' is defined as '*the collective rights of people who identify with particular cultural groups to self-determination, survival and sustainability in the context of global politics, economic and social realities.*'

For Thaman, 'Human rights' is a Western notion predicated on the individual as apart from 'the group', and is based on Western liberal beliefs that proclaim to be self-evident and which are necessarily value laden. It is based on a particular cultural agenda where Indigenous peoples together, with their assumptions and values continue to be disregarded and marginalised.

'Human rights' is increasingly becoming a global issue and in the context of Indigeneity is also a site of resistance. Cultural rights (collective) provides an opportunity to address collective problem solving, recognising the Pacific notions and understandings of community and all of the social obligations by its constituent members to the group that are part of it. At the heart of these two competing notions are the definitions of identity. The Western notion of identity focuses on '*biological descent (ethnicity), innate characteristics and unchanging boundaries*'. The Oceanic concept focuses on '*environment, behaviour and situational flexibility*' where a person is defined by way of his/her relationships in the context of their social relationships. Leiber refers this person as a 'consocial' person. Oceanic peoples therefore, are defined by way of their shared situations and experiences. This shared identity comes from sharing food, water, land, spirits, knowledge, values social activities etc. This 'consocial' person hood underlies what most Pacific peoples understanding of how children learn and what motivates behaviours. This notion also applies to human rights.

The differences in the relationship between a community and its environment creates differences in the structuring of the relationships within which people perform and behave. These same perceptions are important to new legislation including that relating to human and collective human rights.

Oceanic peoples place emphasis on 'context', 'situation', 'performance' and 'place' over biological descent. Pacific peoples have a tradition of adapting Western notions and concepts to suit. This concept has been applied to 'human rights' which in the Pacific context should be afforded through the group involving traditional consensus building as apart from Western 'legalistic' and 'democratic' formality. Here, emphasis should be on cultural traditions and values. Central to that process is need to unpack Western academic socialisation in various institutions which many no longer live by but many in the Pacific adhere to.

Tafaaki, Irene, J. 'Cultural Rights: A Curriculum and Pedagogy for Praxis' printed in 'Culture, Rights and Cultural Rights' Edited by Margaret Wilson and Paul Hunt. Huia Publishers (2000).

The author is a Pacific Island academic and writer claims that any discussion on 'cultural rights' is predicated on two principles:

- **Education is indispensable to the attainment of universal human rights and more specifically, cultural rights.** Education therefore, is an essential tool, indispensable for the identification, promotion and implementation of human rights. It is a process that has potential to instil sensitivity and an awareness to rights, freedoms etc; and
- **The conscious understanding that humanity is in reality one family and ‘oneness’.** It is recognition that every human being has rights and the violation of such rights is a violation of all humanity.

Tafaaki claims that education should be a means for advancement that facilitates critical evaluation of current lifestyles and expands knowledge of those sciences and arts, which enable the continued evolution of the culture. This type of education is predicated on:

- Educational programmes developed in their cultural context, where Learners have access to the resources and acquire the skills to become fully knowledgeable in their own culture. This will encourage the development of identity, whereby they will eventually make their own unique contribution to a diverse global culture. In the Pacific this means recognising ‘*circular thinking*’ and use of narrative, cooperation and collaboration being integral to culture. Critical to this process is the recognition of the ‘*mother tongue*’ as a means of cultural identity and transmission;
- On the knowledge and skills which will allow the full evolution of the culture. Education should not focus on the past but encourage Learners to explore cultural integration and their contribution to the expansion of knowledge. It should also focus on the role of science in linking the past with the future and cultivating a mindset for investigation and inquiry. The need for education that accommodates moral development and promotes tolerance and character development reflecting local cultural communities must be acknowledged. Finally, group process skills which recognises the diverse perspectives necessary to uphold the rights of others, how to build on the ideas of others, value the diversity of opinion to find solutions and collectively plan.

Tafaaki identifies some new standards required for the development of a curriculum aimed providing for a cultural rights education plan:

Cultural Rights Curriculum

1.1 The Oneness with Humanity

- That humanity is one, diverse and interdependent;
- Each individual and group of people have capacities and capabilities;
- Preservation of heritage and cultural rights as well as those of other cultural groups;
- Diversity of their own culture and multiculturalism;
- Past, present and future knowledge is derived from the inspiration scholarship and contact between all cultures;
- All cultures that remain static disappear; and
- Children’s consciousness that they become aware of class, race, and gender become key

elements in the power relationships between cultural groups.

1.2 Science Education

- All cultures are subject to change, evolve and are capable of advancement;
- Highlights the role of science in and scientific thinking in the dynamic of cultural evolution; and
- Fosters a belief that we can acquire and share knowledge of the sciences from all and with all peoples and cultures.

1.3 Moral & Spiritual Education

- Focuses attention on the spiritual qualities and moral capabilities that promote love, justice, tolerance and cooperation;
- Cultivates the notion that attached to each right is a responsibility; and
- Uses literature to gain insight into moral capabilities.

1.4 Social Education

- Teaches the benefits and procedures of conflict resolution and problem solving.

2.0 Curriculum Process Standards

- To consistently encourage, conveying the message that each student is capable and has the potential to successfully advance and contribute to the welfare of others;
- To ensure that children have opportunities acquire deep insights and apply their knowledge that demonstrates and expresses their understanding;
- To provide opportunities for students to engage in service activities;
- To allow for multiple intelligences and diverse learning styles;
- To ensure that children become fully functional in their mother tongue as lingua franca;
- To allocate time to experience and clarify a problem before focus on the solution;
- To provide a way of working that encourages cooperation, collaboration and to share of ideas;
- To teach the skills necessary for group work, consultation, problem solving, conflict and to resolve and make decisions;
- To allow children to freely express their ideas verbally and on paper creatively,
- To encourage individually and group development;
- To employ narrative in story as part of the learning process; and
- To encourage questioning and peer teaching.

Teacher Training will:

- Revisit content and processes for teacher training curricula to ensure it reflects standards set in a

- cultural rights curriculum;
- Explore the principle that each child is a vast store of potential and that we are all born with the capacity for complex thought;
- Provide opportunities for students of teaching to critically evaluate the cultural and social forces shaping their own attitudes towards gender and race;
- Provide strategies for teachers to analyse materials for ethnocentrism and stereotyping;
- Teach and practice group processes;
- Teach strategies for using teachable moments to foster awareness of cultural rights; and
- Teach strategies on how to translate and apply cultural awareness into service activities for the community.

Policy

- Prepare and ratify a legal instrument to implement the Plan of Action of the UN Decade for Human Rights Education;
- Provide curriculum that teaches cultural rights;
- Ensure protection and preservation of languages, folklore, history and traditional artefacts;
- Allow freedom of expression regarding cultural traditions and festivals; and
- Promote cultural interchange and intercultural activities.

Wickliffe, Caren. ‘Cultural Rights, Culture and Human Rights Education’. printed in ‘Culture, Rights and Cultural Rights’ Edited by Margaret Wilson and Paul Hunt. Huia Publishers (2000).

Wickliffe affirms the World Conference on Human Rights definition, that all rights are ‘*universal, indivisible, interdependent and inter-related*’. She argues that ‘*cultural rights and culture go to the core of identity, to the fundamental essence of a Pacific person’s personality*’ as integral to any definition of cultural rights are the cultural responsibilities, obligations and duties. She advocates the development of a regional philosophy concerning human rights, that is holistic reflecting the principles which ‘*underpin how Pacific cultures protect human dignity and well-being of individuals and communities*’. These would include;

- Cultural notions of spirituality and their importance to the well-being of individuals and communities;
- Cultural relationships with the environment and how that relationship enhances the well-being of individuals and communities;
- How cultural relationships that promotes well-being among peoples;
- Cultural forms of leadership – traditional and customary;
- Political consensus building on issues that concern the well-being of individual and communities;
- Models for political, cultural, social and economic development for individuals and communities;
- Protecting and promoting well-being of the weak and vulnerable in Pacific communities, particularly women, children, young people and people with disabilities;
- The cultural role of men and women in Pacific cultures;

- Modes of transmitting knowledge;
- Conflict resolution between individuals and communities;
- The role of customs and customary law in promoting and protecting the well-being of individuals and communities; and
- Forms of regulating behaviour between individual and communities.

Wickliffe concludes that the debate on cultural rights cannot advance without an understanding as to the role of *culture* in the interpretation of human rights.

Wolff, R. ‘Original Wisdom – Stories of an Ancient Way of Knowing’ . Printed by Inner Traditions (2001).

The author is a psychologist who documented his experiences living with the Sng’oi, a pre-industrial and pre-agricultural people in the forested mountains of Malaysia. He describes the Sng’oi worldview and how their understandings are intimately connected with their environment, which they believe themselves to be part. It is these same understandings and insights that provide the Sng’oi with an uncanny ability to know and ‘communicate’ with that environment. In the book Wolff reveals numerous examples of this ‘knowing’ and recounts how he once took one particular Sng’oi from his environment and to the coast on a trip. The person concerned was noticed to spend much time observing the ocean for the first time. On their return to the mountain ‘village’ the Sng’oi recalled his experience to others including a description of mountains, valleys and large animals living in the depths, knowledge he attributed to a Lord of the Ocean. This surprised Wolff, as the Sng’oi concerned had never seen the ocean before nor could he read or write, yet he was aware of the geography of the ocean below its surface.

Together, with other not so dramatic experiences Wolff concluded that knowing is another reality; of being at one with nature (universe) and operates outside of one’s thinking. Knowing is in the heart and is the ‘here and now’. In his case he had to put aside the western preoccupation of agenda’s, planning and making choices representing another reality in order to learn about knowing.

Whereas, there is a belief the old ways and ways of knowing are in danger of dying out, Wolff quotes traditional healers they are in fact in our heart and will never die. In support of that notion he points to the discovery of certain medicinal plants and foods requiring relatively complex preparation before they can be used safely. He suggests mankind intuitively knew the dangers of such plants as they did the means to make them safe for human use or consumption.

In respect to education, Wolff concludes that education (in the Western sense) has little to do with education (for living), as the type of education needed to survive (every day / Indigenous) is usually destroyed by (Western) education. Likewise, in tribal societies one’s worth is determined by the group and not one’s skills and competence.

Howe, K.R ‘Nature, Culture and History – The Knowing of Oceania’. The University of Hawaii Press (2000).

How do we know what we see? Why do we know what we know? In answer to these questions the author, a Hawaiian academic makes the assumption the external world must necessarily be viewed and interpreted through a cultural lense. The view of the world tends to be the product of the observer’s cultural positioning whose depiction of the world will be in a culturally specific language. ‘Seeing’ and

‘knowing’ therefore is neither neutral or value free.

Oceania / Pacific Islands has come to mean an *‘intellectual artefact’* and a *‘rhetorical device’* as it is does a place. This assumption has its origins in a complex range of Western ideas and assumptions. The Western idea and understanding of the Oceania and Pacific Islands is *‘culturally constructed mediated and organised’*. He concludes that Oceania was not only colonised economically and politically it has also been *‘intellectually occupied and shaped by the West’*.

Among the themes Howe presents include:

- The contemporary depiction of Pacific Island as a paradise which has its origins in Indo-European and Arabic philosophies and early Western notions of paradise, were in the late 18th and early 20th Centuries replaced with the depiction as places of *‘fear and loathing’*. The Pacific Islands as a paradise re-emerged the result of 20th Century tourism, itself a colonialist portrayal ignoring the complex histories, cultures and socio-political realities associated with smallness, poor resources, isolation, fragile infrastructure and colonial / imperial legacy;
- The paradigm which prevailed for centuries that the natural world determined culture. In recent times culture has come to be recognised as independent of its natural environment and able to determine itself based on new insights into the achievements of Polynesian peoples gained from new interpretations of archeology embracing a whole range of human practices such as the influence of environment on, nature of settlement, economic systems and social organisation;
- Two long held assumptions relating to the degeneracy; that Pacific Islander belonged to a single family which had become separated and lost condemned to wander the earth and end up in Polynesia and fatal impact, destined to die out as a result of contact with more technologically advanced Europeans. These two prevailing discourses have since overturned by cultural determinism of Boaz, Mead etc which must also be viewed against a background of biased anthropological research. In other words culture came to replace nature as the explanatory paradigm for social behaviour, organisations and history, whose full meaning is grasped only by semiotics and language theory instead of drawing on brain sciences, genetics, human development, social organisation and behaviour etc. In short, early Polynesians had *‘abilities and capacities to explore, discover, settle, adapt, modify, colonise and generally control their own destinies in parts of the world we regard as "remote" and "difficult"’*.

In order to highlight the themes, Howe draws upon a growing amount of research accumulated over recent years in areas of genetics, archaeology, linguistics, meteorology, astronomy and traditional Pacific navigation techniques, sailing technology to conclude the colonisation of the Pacific came from Asia and not from South America. Secondly, he advocates that the colonisation of the Pacific was deliberate and not by accident.

Deloria. V, ‘Spirit & Reason – The Vine Deloria, Jr, Reader’. Fulcrum Publishing (1999)

This renowned Native American academic and author of Indian knowledge, surveys three decades of his own writings to conclude *‘people have not made much progress in resolving issues’*.

Deloria refers to the notion that *‘we are all related’* as the basis of the Indian worldview, and that knowledge is derived from individual and communal experiences in daily life based on keen observation from the environment, as well as interpretative messages from ceremonies and visions.

Indians he claims never discarded information and general propositions evolved from generations of traditions and experiences. As a result, Indians '*accepted on faith*' what they had not experienced, making it an epistemological method. This contrasts with the western methods which holds that ideas, concepts and experiences, which can be replicated by an objective examiner. Indians believe everything that humans experience has value and is instructive. No body of knowledge therefore, exists outside the moral framework of understanding. Humans are creators and re creators, with the highest powers and therefore has importance for the universe.

Deloria claims education '*is wholly orientated towards science and secularism*', which in turn is enhanced by high technology. Indians should not use mechanistic models for describing the world. Apart from the question how does it work? What use is it? Indians ask What does it mean? What also distinguishes Indian from Western science is what they do with the knowledge afterward. Traditional people preserve the whole vision while scientists reduce the experience to its alleged constituent parts and inherent principles. Secondly, Deloria claims education trains professionals but does not produce people to function within an institutional setting, or contribute to a vast social / economic machine. Education for Indians confers on individual's responsibility to become a contributing member of their community. Moreover, kinship and clan were built on the idea that individuals owed each other certain kinds of behaviours and that each individual performed his or her task properly, society as the whole would function. Thirdly, education is not a process of indoctrination but by example. Elders are the best living examples of what the end product of education and life experiences should be. Any accomplishments are that of the family and not the individual. Finally, education must be a pre-requisite for other forms of education or training. Indian education was never conceived as a means of using the strengths of Indian cultural and tradition.

Allen, N.J. '*Indigenous Models for Science and Culture Curriculum Development*'. Paper presented at the 1997 Annual Meeting of the National Association for Research in Science Teaching, Oak Brook, Illinois, USA.

This study examines indigenous models for integration of science and culture in curriculum instruction. It responded to the call from Indian educational leaders for '*culturally compatible curricula*'. The study was conducted over an eighteen month period, during which the researcher worked with thirteen Native American schools on curriculum reform. In 1996, teachers, administrators, community members and students from those schools were brought together for a two week conference in culture, technology and curriculum development. At the conference the following questions presented for discussion:

- How is culture defined and expressed in curriculum and instruction by teams of Native American Educators?
- What science content, strategies, and skills are identified as consistent with or conflicting with local culture and educational goals?
- What thoughts and concerns are expressed by those directly involved in the education of North America students in regard to the new curriculum paradigm?
- What kinds of support may be offered at the university level to support indigenous school reform in science and culture integration?

The teams produced thematic curricula and multimedia projects that incorporated science and culture. Classroom discussions, electronic journals, informal interviews and curriculum products were used to

determine group priorities and concerns, models for culture and integration, and effective ways to support local curriculum reforms. Results indicated that although teams often shared areas of concern and thus targeted similar science content – the models used for curriculum development differed according to community values concerning culture and instruction. Suggestions include providing communities with continued instruction in curriculum design and encouraging local control of content.

In responding to the question concerning a culturally compatible curriculum, the study found a diverse range of meanings, but also found agreement – *‘it must reflect the needs, priorities, values, resources and richness of the local community’*, so long as it takes place at local level. The study identifies a major constraint as lack of resourcing and skills on part of already overworked teachers, but also suggests this maybe mitigated by collaboration with universities and local communities. Finally, it states that much research is needed find out what, why and how culturally appropriate materials are better for Indian learners.

MATAURANGA MAORI / MAORI WORLDVIEW

GENERAL:

Hastings, W.R. ‘The Right to an Education in Maori: The Case from International Law’. Institute of Policy Studies, Victoria University (1988).

Hastings, a lawyer provides a compelling argument based on International law, conventions and treaties

to argue that Maori have the right to be educated, the right to be educated in both the Maori and English languages, as well as an obligation on part of a state to make these rights effective. Under domestic legislation these rights extend to enabling the state to establish a new category of schools if for some reason, such education cannot be effected in existing public schools.

Marsden. M. 'God, Man and Universe: A Maori View'. Printed in Te Ao Hurihuri and Edited by Michael King. Longman Paul (1985).

Maori Marsden asks the question '*What is Maoritanga?*' He then answers the question himself '*that it is a corporate view that Maori hold about ultimate reality and meaning*'. This reality is best revealed in the powhiri ritual and the basic themes and approaches of the Maori to question of ultimate reality and relationships between God, man and the universe. He then goes on to explain the various concepts of *ihi*, *mana*, *tapu*, *wehi* and rituals, gods and creation all of which contribute to a Maori worldview of a universe, that is dynamic and constantly changing.

Only in this way will one be able to get an appreciation of the Maori psyche, which is rooted into the temporal and the transcendent world, and brings a person into an intimate relationship with the gods and the universe. A Maori human being therefore, is a spiritual-being endowed by the gods and is a receptacle of divinity that must be respected as such by others. In asking how is a non Maori to understand the Maori in this case? Marsden also identifies the inadequacy of non Maori scholars and Western knowledge in explaining Maoritanga and the Maori worldview.

Shirres, M.P. 'Te Tangata – The Human Person'. Sneddon and Cervin (1997).

Shirres examines the concepts *mana*, *tapu* and *noa*, their sources and manifestations. In doing so, he leans heavily on Maori Marsden and Dan Whata to assert these concepts operate in a universe that has its origins in Polynesia and comprises of two worlds or systems – one spiritual and one material, where the *atua* (or spiritual powers) influence the latter. These systems are not 'closed off' to each other. Rather, they are closely linked where the activities of the every day world are seen as being influenced by *atua*. The *mana* of the *atua* therefore, is the source of *tapu* of the human person ('*intrinsic tapu*') and extends to *tapu* restrictions surrounding the person.

We humans are linked with and receive our *tapu* from the *mana* of the different *atua* in different ways. We are also bonded to particular powers, through dedication and ritual dedication and consecration.

Everything has a *tapu*. Here, *tapu* is described as '*the potentiality for power*' and **mana is '*the power of being, a power that is realized over time*'**. *Mana* and *tapu* begin with existence, and everything has its own intrinsic *tapu*. Once any being ceases to exist it loses its *tapu* and *mana*. But in the case of the death of a human being this doesn't mean *tapu* and *mana* has gone completely, as cemeteries are *tapu* by virtue of the people buried in them. Women also have a *tapu* and a *noa*.

There is a constant meeting of *tapu* with *tapu* and Maori have devised ways of dealing with *tapu* in such situations. Maori participation in ritual is a way of identifying oneself with one's people. *Karakia* are rituals and are not the work of any single individual, but of a people with a strong oneness with each other. *Karakia* shows an extraordinary depth of understanding of what it is to be human, our relationships with each other, the world and universe.

Human beings have a particular role in ordering this world, through the word and *karakia*. It is through

Ranginui and Papatuanuku, that human beings receive their spirituality i.e. *mana* and *tapu* in order to carry out their role as human beings. To participate in ritual is to identify with one's tribe, ancestors and *atua*.

Pere, Rangimarie. 'Ako – Concepts and learning in the Maori Tradition'. University of Waikato (1985) monograph.

Pere identifies areas of commonality and difference between Pakeha and Maori education practices and philosophies. In exploring those differences she examines the various traditional concepts that underpin Maori philosophy and practices, but which are integral 'to the whole' and are reflective of Maori lifestyles. Education in a Maori setting she asserts is not divorced from Maori community life. In fact it reflects Maori community life, even extending to the range of emotional feelings such as those expressed at a tangi.

For Pere, the traditional Maori educator got to know his/her students personally, his/her family, his/her strengths and weaknesses. A certain reciprocity existed between teacher and learner, where the latter's knowledge was respected. This knowledge provided a platform for new knowledge and skills requiring an individualised curriculum, but within the context of and not exclusive to the group. Traditional education practices valued and continue to value cooperation and collaboration, '*lived experiences*', knowledge of the child's culture, as well as character and personal background. At the same time, the learner must be humble and learn by way of observation and imitation from one's elders, being necessary in order to become a member of his/her community. Those same social skills are also portable and applicable to wider and non Maori social settings.

Robinson, David (Editor). 'Building Social Capital'. Milne Print, Wellington (2000).

In the book Robinson summarises previous seminars and discussions about social capital which emphasised the value of voluntary organisations as '*providing a venue for the creation and expression of social capital*'. This in turn led to suggestions that social capital requires:

- Active and knowledgeable citizens – actors;
- A rich network of voluntary associations – agency; and
- Forums for public deliberation- opportunity.

The current collection of papers covers two major themes:

- Those exploring a framework for considering and understanding social capital; and
- Those coming from the position of placing the concept of social capital in relation to their lives in the community.

Together, the papers explore the potential of social capital as a concept to organise activity and processes.

Robinson approaches the concept in not how '*to build social capital, but how people in the community activate and make use of social capital*'. This requires us to investigate the rules of engagement, in order to determine how social capital is accessed and by whom, as well as what encourages or discourages participation and involvement.

Social capital he describes as a *'fluid concept that cannot be solidified and isolated in one activity'* where its strength is drawn from and influences a range of behaviour and activities.

For Robinson, the value of social capital is its use to vet and assess *'the mandate, status and trustworthiness of other actors – both individuals and organisations'*. This provides for options and allows for the level of risk to be assessed in respect to each option. In this context social capital is knowledge-based rather than trust-based. Trust and certainty grow from knowledge.

Robinson argues there is a close relationship between social capital and the idea of politics and self-government. The value of social capital is to identify whether there is space or opportunity to assess the relevance and value of a proposal.

Influences on access to social capital:

- The underlying political and legal environment;
- The terms of engagement - whose norms and values are dominant?
- The rules of engagement –forms of relationships such as giving sharing and the openness of information;
- Processes of inter reactions e.g. deliberation; and
- Physical and financial resources.

Maori social capital is distinguished from non Maori (Pakeha) based on the notion that there is no separation between family and community, where family easily extends to whanau, hapu, iwi and community. In this context the distinction between social and cultural capital disappears, and cultural capital is an expression of cultural capital in practice. A key component is locality which is confined to the tribal system and whanau, rather than to a particular locality or community. In other words social capital is not limited by space.

The Maori concept of social capital refers to:

- Extended relationships;
- Knowledge and knowing one's place in Maori society;
- Relationships in Maori society are developed around informal association rather than formal associations;
- Relationships and networks are holistic and integrating.

Secondly, the complex set of relationships which exist within the whanau, hapu and iwi structures characterises the basis in which social interaction and interchange occurs.

Possible differences in Maori and Pakeha social capital are listed as follows and operate at three different levels:

- **Personal and cognitive level-** are similar but require different terms and are given different emphasis;

■ **Structural level-** Maori structures are less formal; and

■ **the state-** which sets the external environment reflecting the values of the dominant group.

Maori society is required to pursue a course of action to protect and preserve its cultural rights and responsibilities.

Lesser (Editor). ‘Knowledge and Social Capital: Foundations and Applications’ Butterworth Heinmann (2000)

The book attempts to pull together ideas from some of the leading thinker in the area of social capital and ‘provide a resource for individuals trying to understand how they can effectively leverage social capital in their own organisations’.

Lesser refers to social capital as ‘wealth that exists because of an individuals social relationships’.

Three Dimensions That Influence And Enable The Development Of These Mutual Benefits:

A. The Structure Of Relationships

■ Connections that individual actors have with one another:

Sandefur & Laumann – ‘an individuals social capital is characterised by her direct relationships with others and by the other people and relationships that she can reach through those to whom she is directly tied.

However,

Mark Granovetter – ‘From an individual’s point of view, then, weak ties are an important resource in making possible mobility opportunity i.e. they have a role in effecting social cohesion.....weak ties play a role in effecting social cohesion’

■ Socio metric approach

Ronald Burt – that social capital is related to the position a person within a given network rather than direct relationship with others. E.g. Sara acting as broker across two groups (fills in an structural hole) rather than individuals.

Gordon Walker, Bruce Kogut, Weijan Shan – social capital includes entire firms involving long term relationships rather than structural holes.

B. Positive Interaction Between Individuals In A Network

Putnam – refers to ‘norms of general reciprocity: I’ll do this for you now, in expectation that down the road you or someone else will return the favour’.

Jane Fountain – ‘A key property of social capital as an enabler of innovation in science and technology, state; *‘A key property of social capital rests on the transitivity of trust; A trusts C because B trusts C and A trusts B’*. Therefore, relatively large networks may exhibit generalised trust without personal contact among actors’

Fukuyama – ‘Social capital is the capability that arises from the prevalence of trust in a society or in certain parts of it. It can be embodied in the smallest and the most basic social group, the family, as well as the largest of all groups, the nation, and in all the other groups in between’

C. Context Of Language

Janine Nahapiet & Sumantra Ghoshal – ‘To the extent that people share a common language, this facilitates their ability to gain access to people and their information’ To the extent that their language and codes are different, this keeps people apart and restricts their access’

In respect to comparing social capital with other forms of capital:

Paul Adler and Seok Woo Kwon – ask the question: Is social capital truly a form of capital in the traditional sense of the word? In response they have identified four parallels where social capital demonstrates many of the characteristics that define other forms of capital, such as physical or financial capital;

- Social capital is a resource into which other resources can be invested with expectation of future, albeit uncertain returns.
- Social capital is appropriable and to some degree convertible
- Like physical and human capital, but unlike financial capital, social capital requires maintenance to remain productive
- Like human capital, but unlike physical capital, social capital does not have a predictable rate of depreciation.

Social capital differs from other forms of social capital by way of;

- Social capital is a social good – it is not owned by a particular individual, but dependent on all members of the network.
- Social capital is located not in actors themselves but in their relations with other actors – dependent on individuals to create value.

The two primary drivers for recent interest in today’s business environment, which demand individuals, organisations and even government to consider the impact of social capital and its effect on economic growth and organisational success:

The rise of the knowledge based organisation – knowledge has supplanted land, labour and capital as the primary source of competitive advantage in the market place - the ability to create, share and apply knowledge. Here, knowledge can be explicit (relatively easy to capture without losing its value) or tacit (difficult to articulate and document without losing its value). Social capital is essential to manage both forms. Explicit knowledge can be in the form of libraries and tacit is sharing knowledge between sender and receiver.

Networked Economy

Gabriel Szulanski – social capital is a necessary ingredient to transfer best practices.

Steven Cohen and Gary Fields – argue that in the Silicon Valley, trust is performance based and not based on dense networks of civic engagement i.e. to create value rather than for the collective good. This type of trust is portable.

Globalisation and virtual have discouraged the development of social capital, as has re-engineering, outsourcing etc.

How Organisation Can Build Social Capital for Competitive Advantage

Foster the Development of Communities of Practice

In order to develop social capital, the book suggests the development of ‘*communities of practice*’ leading to;

- *Identify those with relevant knowledge and help people in the community to make connections with each other.*
- *Community acts as a reference mechanism, quickly enable individuals to evaluate the knowledge of other members without having to contact each individual in the network*
- *Connect with individuals from outside of the network to those already identified as community members*
- *Bring people together to develop and share relevant knowledge the community creates the condition where individuals can test the trustworthiness and commitment of other community members.*
- *Communities of practice help shape the actual terminology used by the group members on everyday work conversations.*

Create Experiences That Builds Trust Among Individuals

The provision of opportunities for interaction to achieve a common goal is necessary to create trust, being essential to develop a common history of interaction and common experiences. In short, to provide opportunities for individuals to find out whether others are trustworthy.

Allow Time For People To Build Common Context And Understanding

Time needs to be allocated to individuals to ensure they acquire ‘*common understandings of the task at hand and are familiar with the terminology and assumptions of others.*’ In short, remove opportunities for misunderstanding and mistrust, through pre-emptive training and on-going validation ‘*to ensure that individuals remain in agreement and are able to maintain their overall shared vision.*’

Use Appropriate Technologies To Support Network Formation And Maintenance

Technology now exists to maintain ‘weak ties’ across extensive virtual networks, thereby supporting social capital in an economic environment characterised by globalisation and mobility.

NZIER / Te Puni Kokiri. 'Maori Economic Development / Te Ohonga Whanaketanga Maori' Published by New Zealand Institute of Economic Research (Inc). 2003

Maori are frequently projected as a ‘*drag on the New Zealand economy*’, yet research collated from various government agencies suggest an emerging robust Maori economy. Here, the Maori economy is delineated from the wider New Zealand economy, ‘*where Maori can express their collective interests and aspirations*’, as well as Maori participation in the Labour market. The Maori economy enables the combination of cultural and economic aspirations providing potential for future growth. In short, Maori economic development will strengthen Maori cultural development, and Maori economic development will be predicated on the Maori cultural renaissance.

At a wider level, the rapid development of the Maori economy has significant benefits to the national economy, where both economies is dependant on the on going improvement of Maori human capital (skills including entrepreneurial skills). Together, with the growth of skills within the general Labour Market, will serve to enhance Maori economic development as skills are feed back into the general and Maori economy. Moreover, cultural self-determined development has the potential to widen and lift the horizons of many Maori, who are currently marginalized and unmotivated.

Among the recommendations in respect to Maori economic development:

- The concept of a Maori economy, which places a focus on the Maori economy and institutions, leadership development and the reconciliation of traditional attitudes toward Maori culture and its commercialisation
- Quality of governance and performance that will protect Maori assets from risk investment and the under performance of such assets.
- The establishment of a Maori financial institution to support and manage the risk associated with the Maori economy
- Trade with the growing Maori economy offers opportunities to cooperate with mainstream business
- Government to assist in improving governance arrangements
- Government procurement in ways that deliberately build ups capability of Maori organisations

Webster, Steven. 'Patrons of Maori Culture- Power, Theory and Ideology in the Maori Renaissance'. University of Otago Press (1998).

Webster, a social anthropologist at the University of Auckland traces the underlying ideology propounded since the 1960's by the university's Department of Anthropology. Here, the department promoted a view of Maori culture based on romanticism and neo constructivism, that obscured Maori

political, economic and historical realities. The overall affect was to frustrate social change while appearing to act in the interests of Maori. It is an ideology which masked the social deterioration of contemporary Maori society and explained Maori culture as a '*whole ways of life*', rather than '*whole ways of struggle*' inseparable from interaction with other societies and cultures.

Webster examines this ideology within the context of the Maori cultural renaissance represented by what appears to be major strides in Maori society, from which he asks some key questions.

Baker, Heretaunga Pat (Whakatohea, Ngati Kahungunu), '*Behind the Tattooed Face*', Cape Catley (1975)

This novel, and its successor *The Strongest God*, are quite probably the clearest and most accurate depictions of Maturanga Maori in print today.

Behind the Tattooed Face was the first historical novel by a Maori author, and is based on the whakapapa, or layers of memory, of the remembered stories, of the Whakatohea tribes. The stories are set against a background of constant jostling for military and economic power amongst the tribes of Whakatohea, and other neighbouring tribes. The balance of power was forever shifting from one tribe and one chief to another, and was contested through economic and / or military power, and through alliances. The most enduring alliances, and the most enduring periods of peaceful co-existence, were however created through intermarriage amongst the chiefly families.

Unlike modern academic writing Baker does not minimise or ignore those aspects of tribal Maori culture that seem abhorrent to us today, such as warfare, slavery, torture, human sacrifice and man-eating. He presents them matter-of-factly without judgement, as the accepted practices of the times, in their correct context.

In fact Baker uses these stories as the vehicle to present an understanding of a wide range of aspects of tribal Maori culture within its context of place and time. This form of presentation, as historical fiction, creates a living context that conveys a much greater degree of reality and understanding than is usually conveyed in academic writing based on ethnological, anthropological or sociological understandings of culture within the academy.

Baker also uses the figure of Tawhiro, the tohunga or high priest of Ngati Whakaari, to convey understandings about tribal spiritual belief and practice, and to muse upon tribal social organisation. He has Tawhiro speak in conversation with an ancestor about the nature of tribal Maori people; their independent spirit and individuality, in contrast to the tight communality of the tribe, bound together almost as a single living entity in common enterprise.

“Perhaps, he thought, it’s because they are extreme individualists that they can work together, and still retain their personal identity, to give the tribe cohesion.”

“I am sure, Tawhiro mused, that this results in a willingness to accept life within the concept of tapu – resulting again in an expression of the highest accomplishments of the individual in the communal life of our tribe. All our activities are conditioned by this thought”.

“Then again, no one ever thinks of working to his own advantage but only in order that the whole tribe should gain.”

“Generosity and kindness in peace, but a ruthless resolve in war or emergency – yes, this was always looked upon as one of those attributes of chiefly power for which the arikis [sic] and their descendants were renowned.”

“And when a person thinks of himself, it is always as part of the tribe, never as himself alone.”

“In fact no one at Tawhitiroa or even at our rival’s pa Tuanuku, or anywhere else for that matter, had ever experienced that strange feeling of self alone.”

I visualise our tribe as actually a person, and I as its chief with the Council of Elders as that person’s head, and realise too that one can’t function without the other.”

These extracts illustrate aspects of the Maori worldview that are retained in cultural memory, and explain the source of alienation of many Maori in mainstream New Zealand society and in the education and schooling system.

There are also passages of dialogue throughout the book that illustrate the somewhat minimalist nature of conversation in those times, based on the closely shared understandings of tribal people, requiring less verbal exchange than is needed today in a more complicated and less cohesive society. This mode of conversation was also prevalent in a time when non-verbal communication was at least of equal utility as verbal communication. Traces of this mode of dialogue are still observed in modern Maori exchange, and make us appear linguistically backward to western observers and educators who do not understand Maori communication.

Baker, Heretaunga Pat, ‘The Strongest God’, Cape Catley (1990)

This, the second of Baker’s novels is based on the story of the coming of the European to the Whakatohea district, and also recounts the story of the Volkners and Carl Volkner’s eventual death. This true story is used as background against which the author describes the totally different worldviews of the two peoples, and the resultant clash of cultures, sometimes violently.

This novel is quite probably the clearest written description of the clash of worldviews that is still apparent in today’s Aotearoa New Zealand society. A full understanding of the sources of this deep difference is important in designing any intervention in schooling for Maori.

On their arrival in Aotearoa New Zealand missionaries, politicians, administrators and soldiers engaged with tribal chiefs and priests in a battle for the loyalty and control of the hearts, minds and souls of Maori people. The people were also seduced by the worldly goods of the traders, particularly alcohol and tobacco.

This battle for the hearts, minds and souls of Maori became manifest in the schooling of Maori children in order to convert them to Western modes of thought. The rise of Te Kohanga Reo and Kura Kaupapa Maori, and other Maori educational initiatives, is a continuation of this same battle in modern times.

“And all knew what Nikora meant when he thundered, ‘Let not the voices of Tapoto or Punahamoa be drowned by those of Governor Grey or Bishop Selwyn, or their ideas will take control of our mind and we will be tools in the hands of the Pakeha’.”

“If for some reason we forget each other, and our aroha which holds us together, and if we follow after strange gods, then they will surely destroy us.”

“The communal mind of our people grows weak, becomes smaller day by day, because fewer and fewer of our people belong to it.”

“At one time our whole tribe was an unquestioning part of our communal mind – now many are following the Christian gods. We have allowed our mind to become a plaything. A puppet for the Pakeha, a dwelling place for his gods, for his ideas, for his language, for his culture, for his Queen, for his flag, for his ancestors!”

“You have left the sacred domain of our ancestors, which they call the domain of the aroha of the heart, mind and soul, for the aroha of lip-service and fleeting words.”

Interestingly, even the spiritual force of aroha, binding the people together as one, has fallen to the strange gods and in the 21st century is widely held to be a form of Christian love or romantic love, far from its true origins. The Christian appropriation of aroha as love, is raised as a central issue during a conversation between Tiwai and Volkner:

“Then you agree that love is the basis of your tribal life?”

“We know aroha is the foundation of our tribe.”

“You’re speaking of love with the lips of your church, which seems a different love from that which we feel”.

“In other words, aroha is life to Whakatohea.”

“We all work together because of aroha. We love our tribe, and know it needs us. It is this aroha that holds us as a people. Only in the company of many can we realise our true worth. Without this understanding we are nothing”.

“We’re leading a communal life as a long established tribe, but you lead life as an individual, like all Pakehas. Your love is not our love, your goals are not our goals, your thoughts are not our thoughts, your hopes are not our hopes.”

This last declaration, “*Your love is not our love, your goals are not our goals, your thoughts are not our thoughts, your hopes are not our hopes.*”, resounds with the rationale for the Mataariki Maori education initiative.

The issue of land is also covered in the novel as a source of discontent and animosity.

“Hori Te Tamaki and his friends were amazed that the Pakeha bought and sold land for money. As they talked, Hori scratched the back of a large pig they had brought for the feast.

“This is the worst thing about the Pakeha. He treats our land like this fat pig! Something to be slaughtered, to be bought and sold or eaten at some feast or other when it no longer suits his purpose. He sucks the fat of the land like a hungry octopus, then sells it again for more money.”

“Our people have always looked upon their land as their first cause – a gift from our gods to hold on trust for all time, a place for people to stand, our turangawaewae. First the land, then the tribe! Without land where would we be?

“Our land is like a much loved member of our family, for whom we would shed our last drop of blood. This land flows in our blood! It is the very essence of our being!”

Other matters such as the communal mind and the practice of muru are discussed to illustrate the stark differences between the two worldviews.

These clashes fuel the rising passions between settler and Maori, and against this background the story of Carl Volkner is presented as the inevitable consequence of Volkner’s inability to concede anything to the Maori worldview, his blind arrogance, and his assumption that all must give way to his god.

His death is the denouement of the battle for the hearts and minds and souls of Whakatohea. And although he lost his personal battle, his god won. At the same time, the chiefs and tohunga of Whakatohea lost – their people and their land.

Walker, Ranginui, 'Ka Whawhai Tonu Matou: Struggle Without End' Penguin, Auckland (1990)

In the introduction Walker states:

“This book is about the endless struggle of the Maori for social justice, equality and self-determination, whereby two people can live as coequals in the post-colonial era of the new nation state in the twenty-first century.”

Ka Whawhai Tonu Matou tells the story of the Maori people from mythological time to the end of the 1980s. It paints a broad picture across that time span, and provides a Maori contextual framework for the interpretation of the Maori relationship with the dominant culture, and with its people and institutions. *Ka Whawhai Tonu Matou* provides a backdrop, and a base upon which Maori teaching and learning can take place.

Under **mythology** Walker covers the Creation, including the story of Ranginui and Papatuanuku, the creation of the first human being, of te ira tangata by te ira atua, the stories of Maui, Rupe, Tinirau and his pet whale, Whakatau Potiki, Tawhaki and Rata. The story moves on in **Te Hekenga O Nga Waka** to cover Polynesian navigation in general, the migrations to Aotearoa, the first settlers, the moa hunters, the rise of tribalism, Te Tini-O-Toi, Kupe, later migrations, and the myth of the Moriori.

Having given a broad outline of the Maori peopling of Aotearoa in those two chapters, the next cover the main aspects of Maori culture and knowledge under the following themes;

Nga Korero o Nehera discusses the canoe traditions, mana whenua and tribal dispositions. In **Nga Tikanga Maori** he covers whanau, hapu and iwi, social rank, the tohunga, tapu, utu, whenua, warfare, wero, powhiri, tangihanga, hahunga and hakari;

Tauwi discusses the coming of the Pakeha, Pakeha diseases and their effect on Maori, the missionaries, the musket wars, the missionary peacemakers, the 1835 Declaration of Independence, and the 1840 Treaty of Waitangi. **Takahi Mana** chronicles acquisition, control and expropriation of land from the Maori. It covers the Maori economy, the response by Maori to the Pakeha transgression of mana, force as an instrument of colonisation, the takeover of mana whenua, pupuri whenua, and the Taranaki land war;

Ka Whawhai Tonu Matou shows the attempts made by Maori to limit or stop the encroachment of Pakeha across Maori lands and other resources. There were attempts at home rule through the establishment of runanga, followed by the invasion of Waikato, the battle of Rangiriri, the battles of Orakau and Gate Pa, the rise of the Maori prophets, the Hauhau struggle, and the struggles of Te Kooti, prophet and freedom fighter;

Te Ana O Te Riona is a sweeping chapter which describes the continuation of the struggle to retain land through the Native Land Court, and the process whereby Pakeha controlled Maori reserves. Walker also shows how the government expropriated Maori fisheries. This chapter covers attempts by Maori to obtain representation, and the use of schooling as a colonial tool of assimilation, the struggle for autonomy, the tribal assemblies, and the passive struggle of Te Whiti and Tohu;

Nga Pou O Te Iwi describes a period of Maori struggle to be heard, from the first deputation of chiefs to England, King Tawhiao's deputation to England, the establishment of the Maori Parliament, Tawhiao's Kauhanganui, the new Kotahitanga and Maori Councils, until the establishment of Maori

seats in Parliament. It concludes with the rise of new prophets, Rua Kenana and Ratana;

Mana Maori Motuhake is about Maori recovery and revival from the 1920s to the 1970s; Apirana Ngata's political and cultural activism, urban migrations, the establishment of the Maori Council and the Maori Women's Welfare League, the rise of modern activist groups such as MOOHR and Nga Tamatoa, the Maori land rights movement, the 1975 Maori Land March, and the Bastion Point occupation;

The final chapters are about Maori activism in the 1980s, the impact of the Treaty of Waitangi on the affairs of modern Aotearoa New Zealand, including Te Reo Maori, fisheries, the air waves and broadcasting, and other activities. It covers the founding of the educational and Maori development initiatives, Te Kohanga Reo and Kura Kaupapa Maori;

Walker's final words are:

"For the Maori, the inheritors of a millennial culture, theirs is a struggle without end into the world of light. They know the sun has set on the empire that colonised them. They know too it will set on the coloniser even if it takes a thousand years. They will triumph in the end, because they are the tangata whenua".

Simmons, Dave. 'Maori Auckland' The Bush Press (1987)

The author collates research and stories from a range of sources (but mainly from George Graham) to provide a history of Tamaki Makaurau supported by a detailed list of Maori place names and explanations. Graham who died in 1952 compiled his accounts from Maori at the time providing a valuable picture of Tamaki both pre and post European contact. These traditional accounts are interwoven with reports from contemporary Maori and non Maori scholars covering related topics including the maramataka (Maori lunar calendar), agricultural practices and oral traditions.

Durie, Mason. 'Te Mana, Te Kawanatanga – The Politics of Maori Self-determination'. Oxford University Press (1998)

The author, a well known academic and social commentator analyses Maori development and Maori aspirations for greater autonomy over the past decade. As part of that analysis he explores the relationship between Maori and the crown contextualised against a background of legislation, litigation, Waitangi Tribunal hearings and Hui over the past decade. From his analysis he concludes that the relationship between Maori and the State has been mixed, ranging from outright disagreement to at times more or less agreement and at times to one of uncertainty as to their '*respective roles, obligations and mutual expectations*'. Of particular significance to the debate is the changing Maori and non Maori attitudes, the growing national identity as colonialist attitudes are discarded and the world wide assertion by Indigenous peoples for the right to self-determination.

He also goes on to reveal the tensions between terminology such as sovereignty, kawanatanga, development and self-determination and how they have changed as a result of usage.

Durie goes on to explore the notion of a Maori nation and what it could mean for Maori and non Maori alike. For him, Maori self-determination will not divide the country and is not a rejection of other cultures, nor is it about threatening the nation state. He provides international precedents for a '*state within a state*' and believes it must be inclusive of all Maori without denigrating traditional structures.

On Maori development, he advocates any relationship with the crown must hinge on the future, rather than resolving historical injustices. In respect to Maori development, the author argues for a collective Maori approach where the central goal of tino rangatiratanga is ‘to govern and enjoy own their own resources and to participate fully in the life of the country.’

Barlow, Cleve. ‘Tikanga Maori Whakaaro – Key Concepts in Maori Culture’ Oxford University Press (1996)

The author is a lecturer in psychology at the University of Auckland. The preface is written by Sir Hugh Kawharu, who makes it very clear the book is neither a dictionary nor phrase book. It does however, provide better understandings into those key concepts and insights into Maori lore. Barlow explores the meanings of basic terms which many non Maori are likely to be familiar with such a 'aroha', 'mana' and 'tapu', but also delves into many other concepts not as familiar such as 'mauri', 'manaakitanga' and 'wananga'. To do this he draws liberally on personal experience as well as other Maori noted for their depth of knowledge and experience such as Dr T. Reedy, Dr Paki Harrison and Fr Henare Taite.

In doing so, the author manages to provide some key insights into Maori spirituality and worldviews, which are well articulated in both the English and Maori languages.

Ropiha, Joan, ‘Traditional Ecological Knowledge of the Maramataka – Maori Lunar Calendar’. Unpublished thesis completed in 2000, submitted toward the fulfilment of a Masters degree in Environmental Science held at the University of Wellington

The author explores the wealth of early writings that record Maori ‘traditional ecological knowledge’ compiled from the 1800’s, in respect to the lunar cycle and its affects on fishing, gardening, weather prediction and seasonal patterns.

Ropiha states that the Maramataka which refers to the 29-31 nights of the moons monthly cycle around the earth. More specifically, the Maramataka refers to a new month where each night is named as *whiro*, *tirea*, *hoata* etc. Although there are similarities from iwi to iwi there are also differences. She concludes these names are actually ‘*encoded ecological knowledge*’ reflecting wider cultural knowledge and traditions and a broader knowledge of ecological tradition and ‘*intimate knowing about New Zealand’s natural environment*’.

In the thesis Ropiha recognises that research into the Maramataka is problematic in that it is political in respect to cultural and property rights provided for under the Treaty of Waitangi 1840, and the fact one cannot ignore the tension between Indigenous / traditional knowledge and Western knowledge. She explores the definitions of traditional knowledge as ‘*an integrated system of knowledge, practice and beliefs*’..... where ‘*its value lies in the continuity of knowledge holders and their communities within their home localities, with supportive academics, researchers , developers and policy makers*’..

Ropiha concludes that the Maramataka is not lost and can be revived. What is lost is the ‘*knowledge from our practice*’. In concluding she argues the case for further study in the area Maramataka.

MAORI ORIGINS

Evans. J, 'Nga Waka o Nehera – The First Voyaging Canoes' Reed (1997)

The author attempts to bring together as many of the Hawaiki ki Aotearoa waka traditions as possible sourced from the early 20th Century researchers and scholars. He acknowledges the compilation of such records is problematic and points out the possibility of misinformation, contradiction and the adequacy of oral traditions. Evans acknowledges a key weakness of the book is the failure to examine Maori Land Court records which he concedes contain a rich source of information. Furthermore, he acknowledges the research of more recent academics such as Margaret Orbell and David Simmons, who claim some waka traditions passed down are in fact '*memories of voyages around Aotearoa and not from the Pacific*'.

In the book, Evans provides not only details of numerous waka but also accompanying karakia,

whakapapa, profiles and actions of tipuna associated with particular waka and their motivation for embarking on such long ocean voyages, but also their associations with landing places and place names. In some cases this research is cross referenced to details sourced from Rarotonga and Tahiti thereby adding credibility Maori waka traditions.

Sorrenson, M.P.K. 'Maori Origins and Migrations'. Auckland University Press (1979)

The author an academic at the University of Auckland analyses material surrounding some modern myths by Pakeha about Maori. At the heart of these myths are the observations of Pakeha explorers, missionaries and colonists, who not only recorded but interpreted what information they accumulated to determine the origins of Maori. These interpretations were always contextualised by the prevailing philosophies and 'scientific' rationales of the times and in doing so grossly distorted Maori origins.

Among the underlying rationales presented;

- That mankind had diffused from a particular point i.e. Middle East or India, thereby generating beliefs that Maori were descendants of Aryans or Semites, based on so called 'survivals' and 'embalmed' customs. The author takes the view that such positive attitudes toward Maori (comparative to Australian Aboriginals) arose from Maori responses to European contact which were in a manner Europeans could relate to;
- That Darwinism provided an explanation of social and racial change based on the 'survival of the fittest'. Missionaries were content to record '*dying cultures they wished out of existence*', which in turn provided impetus for greater urgency in recording of Maori culture;
- That Polynesians came into the Pacific 'ready made' when in fact the Polynesian culture and languages evolved in the Pacific; and
- That Maori arrived in New Zealand on the 'great fleet' of canoes from Hawaiki even though Maori oral traditions make no mention of a fleet, having been invented by early colonists.

The author interprets these myths as part of an attempt by some Pakeha to invent a 'New Zealand myth' which acknowledges a glorious Maori past of what they claimed was a dying race. Not that Sorrenson views this myth making as one-sided. For Maori had their own purposes to serve in reciting and reviving oral traditions. If anything the traditional use of oral traditions in Maori contexts were extended to support mana and ownership before Pakeha officials and judges over lands, thereby providing impetus the survival of oral culture. Sorrenson concludes that Pakeha myth making has since been appropriated by Maori.

Finney, B. 'From Space to Sea'. Published by Massey University (1992)

The author is a Professor of anthropology at the University of Hawaii. He is well known for his participation in the construction and sailing of the Hou'lea, a replica of an ancient Polynesian double hull voyaging canoe. In this book he records in detail insights and knowledge gained from three voyages across Polynesia contextualized against long held Eurocentric assumptions concerning the colonisation of the Pacific.

The author makes clear the key goals for building the Hoku'lea as to '*test Polynesian sailing technology and navigation methods*' for the purpose of gaining a better understanding of '*intentional*

voyaging' and secondly, to appreciate oceanic technologies and achievements of Polynesian ancestors. This desire to know follows critiques of Polynesian maritime achievements by European explorers such as Captain James Cook in late 1700's, Frenchman Dumont d'Urville (1828) who defined the cultural and geographic boundaries of Polynesian and Horatio Hale a linguist of the U.S. Exploring Expedition (1839-42), who traced the linguistic origins of Polynesians back to South East Asia. Like Cook, Hale believed the colonisation of Polynesia had been made by favourable winds from West to East.

Martinez de Zuiga (1803), a priest based in the Phillipines argued that a linguistic relationship existed with South America and the Phillipines and that settlement of the Phillipines had been achieved by way of easterly trade winds across the Pacific. In contrast, Harold Lang an Australian missionary argued that settlement resulted from '*a long series of hapless misadventures when hapless voyagers had been blown by violent westerly winds*'. In 1947, Thor Heyerdahl completed a voyage by balsa raft from South America to prove that Polynesian colonisation originated from South America by virtue of favourable prevailing easterly winds and ocean currents. In the 1960's Andrew Sharp extended Lang's contention to assert that Polynesians could not have intentionally colonised the Pacific other than by way of hapless misadventure.

In order to refute Sharp's assumption of accidental settlement whereby Polynesian oral traditions could be dismissed as mere stories, Finney and colleagues undertook to reconstruct a traditional voyaging canoe which also coincided with research by sailor / researcher David Lewis into navigation techniques without western instruments. In 1973, a 62 feet double hulled *Hokulea* was constructed along traditional lines out of modern materials and designed to be '*performance accurate*'. The goal was to learn about how ancient canoes sailed under rigorous experimental protocols.

With the key goal of the project to sail to Tahiti some 500 miles west of the same longitude as Hawaii; the question was how to sail south against north east trade winds and reach Tahiti? This was achieved by sailing against the north easterlies before exploiting south easterlies back to Tahiti. The overall affect was to overturn both Lang's and Sharp's thesis concerning accidental voyaging. Sharp claimed ocean voyages were limited to 300 miles. The voyage from Hawaii to Tahiti was in excess of 2500 miles.

Together, with observances of star guides, swell patterns and feeding habits of birds Hoku'lea's navigator Nainoa Thompson used this knowledge to navigate the Hokulea back to Hawaii in 1980.

Between 1985-87, the Hokulea embarked on a voyage from Hawaii to Tahiti, Cook Islands and Aotearoa. It later returned to Hawaii by way of Tonga, Samoa, Cook Islands and Tahiti having completed a two year experimental voyage of 12,000 miles of scientific and cultural rediscovery.

In doing so, the Hokulea provided evidence that colonisation took place against the prevailing easterly trade winds and ocean currents. While steady it was found these winds '*wax and wane*' sometimes for months on end providing a window of opportunity for Polynesian explorers to exploit. Secondly, the impact of the monsoon which created a westerly corridor of wind extending from New Guinea to Fiji during the months of January was identified. This corridor corresponds to the Lapita migration from the Bismark archipelago into the mid Pacific. Thirdly, the passing north easterlies sweeping off passing high pressure systems provided early Polynesian voyagers opportunities to sail against prevailing easterly trade winds.

Maori oral traditions recounting the arrival of early Polynesians to Aotearoa at the time when the pohutukawa flowered (November), which coincided with the prevailing north easterly winds

experienced by the Hokulea 'sweeping off' westerly moving high pressure systems (averaging 100 miles per day for 6 days) strongly suggests that sailing to Aotearoa was not accidental.

Finney, Ben 'Sailing in the Wake of Ancestors' Bishop Museum Press (2003)

The author is an anthropologist summarises the development of Polynesian voyaging spanning the period 1965-1995, culminating in six canoes representing various nations of Polynesia sailing from 'Enana to Hawai'i. The initial impetus for the interest in Polynesian voyaging responds to Andrew Sharp's claims that stone-age people could not have deliberately settled the Pacific. Instead Sharp claimed the Pacific was settled by groups of persons by way of accidental drift. The affect was to minimise the seafaring abilities of ancient Polynesians.

Encouraged by Hawaiian traditions and research of other Pacific canoe cultures, a Hawaiian canoe *Nalehia* was constructed in 1965 to test out theories and gain new knowledge. In 1973, the Polynesian Voyaging Society was founded and the fibre-glass constructed *Houkule'a* was launched in 1976 completing a voyage to Tahiti some 2000 miles to the South.

The author who was present on this and subsequent voyages to Samoa, Tonga, Rarotonga and Aotearoa documents the trials and tribulations of the Hokule'a, as well as the cultural and intellectual growth of the individuals involved in the project.

Finney, B. 'Experimental Voyaging and Maori Settlement' Printed in The Origins of the First New Zealanders published by Auckland University Press and Edited by Douglas Sutton (1994)

Finney is a founding member of the Polynesian Voyaging Society based in Hawaii. He backgrounds the re-construction in 1985 of the Polynesian voyaging canoe *Hokul'ea* as a practical response to Andrew Sharp's criticism of Polynesian sailing achievements. Finney and members of the Polynesian Voyaging Society believed that only actual sailing of a traditional voyaging canoe could such claims be refuted.

As part of an experiment in applied archeology Hokul'ea sailed from Hawaii to Tahiti in 1986 to demonstrate the legitimacy of Polynesian sailing architectural technology and navigation techniques. Further voyages were made to other parts of Polynesia including Aotearoa which provided understandings of weather patterns early Polynesians would have exploited such as the counter clockwise easterlies around high pressure systems. Secondly, he reports how the crew used the 'star compass' consisting of a catalogue of stars as well as the moon. In day light hours the sun was used as were ocean swells.

Likewise, the prevailing westerlies would have propelled a voyaging canoe back to eastern Polynesia.

From their voyaging experience to Aotearoa, Finney was able to conclude that early Polynesians travelled to Aotearoa when weather patterns were favourable (prevailing north easterlies) around November, which is supported by Maori oral traditions which tell of the arrival when pohutukawa flowers bloom.

Moon, P. 'Tohunga Hohepa Kereopa' David Ling Publishing (2003).

The author, a senior lecturer at AUT claims the book is both a biography and text book. It sets out to record the life of Hohepa Kereopa, as well as to capture his experiences and insights as to what is a tohunga. He views the 'institution' of tohunga within the context of social and economic upheaval of

the 19th and 20th centuries, to conclude that tohunga '*were the holders of the essence of what it meant to be Maori*'. The enactment of the Tohunga Suppression Act 1907 at the behest of Maori members of Parliament Sir James Carroll and Apirana Ngata. The effect was to '*force Maori communities to shift from a dependence on traditional knowledge to contemporary Western ones*'. This in turn forced tohunga to practice in secret with the result that knowledge was lost as their holders died out. Although the Tohunga Suppression Act was repealed in 1964, the damage was done.

It is this loss of traditional knowledge and the need to preserve it for future generations that gives impetus for Hohepa Kereopa to record his accession to tohunga. It records his thoughts and insights. In the book he identifies a number of characteristics which defines a tohunga such as the ability to be a conduit for external supernatural forces to work for the benefit of others, 'knowing' and power over the weather. He gives credit for his abilities to tohunga he observed when a child and wairua. It is the latter he considers of utmost importance to control weather rather than whakapapa, as no whakapapa is powerful enough. On traditional knowledge, Kereopa makes it clear this represents the on-going refinement of knowledge passed down over many centuries punctuated by episodes in his life. What makes him a tohunga is a combination as to his ever growing awareness of his abilities during his life, as well as major crises or turning points in his life.

In his sharing Kereopa is clearly a product of his social environment unique to Tuhoē. He explains the role of 19th century prophets Te Kooti and Rua Kenana and the impact of Presbyterianism on Tuhoē. These influences distinguish him and no doubt other modern day tohunga from those of the past. Yet, as a Christian he also believes in traditional concepts of tapu and mauri, which are not part of the church. The book also records many anecdotes, stories and insights which together with his experiences in Hawaii, South Africa and Australia presents as his last testament for future generations. Kereopa is dying of cancer.

Howe. R.K 'The Quest for Origins'. Penguin Books (2003)

The author a professor of history surveys the wealth of material in respect to origins of Pacific peoples compiled by early European explorers, missionaries, merchants and travellers from the 1700's to date. He analyses this material against the question '*How do we know what we know?*' In addressing the question he concludes that humans necessarily '*bring what we know and are familiar with our attempts to identify or explain something new*' supporting the argument that the process of learning and research is biased and value laden.

Howe analyses the material within the context of prevailing assumptions of the times and the fundamental change of paradigm from 'Nature' to 'Nurture', as the key determinant in human development. In other words, the 'primitive peoples' are recognised as having the capacity to change things for themselves instead of relying on external factors. In doing so, this paradigm seriously challenges previous notions that 'primitive' peoples representing earlier versions of their European selves (e.g. ancient Greeks) and the notion of ascending categories of humans associated by social Darwinism.

Also in ascendancy at the time was the notion of 'functionalism' which argues that culture consisted of various operating compartments – political, religious, economic etc. all of which are necessary for the success of the whole. As such, societies were regarded as static and required an injection of new ideas which in turn had implications for the study of Pacific peoples. This notion suggests that Polynesians came into the Pacific 'ready made' and not by invading waves of immigrants into Polynesia. Here, the inadequacy of anthropology as value free and unbiased science is revealed. Rather it tended to be paternalistic supporting colonialism in the Pacific.

Other paradigms are summarised as follows:

1940-50's – there was general acceptance amongst academics that Pacific peoples originated in South East Asia.

1960-70's - The introduction of radiocarbon dating and advances in archeology supported by scholarship in linguistics, physical anthropology, genetics etc. This decade also associated with the growing acceptance of the notion of local adaption to new and changing environments, thereby undermining widely held notions of 'diffusion and degeneracy'. This was a fundamental change in paradigm that change occurred within communities and not from external sources fuelled by paternalism and racism. In short:

- becoming Polynesian took place in Polynesia;
- Polynesian culture was diverse having responding to to diverse regional differentiation
- Settlement was deliberate and accidental as described by European observers with the affect of highlighting achievement as apart from deficiency theories.

The overall affect was to privilege the capacities of Indigenous peoples to explore, discover, settle, colonise, adapt generally control their destinies in remote parts of the world rendering a greater focus on achievement and adaptive genius rather than cultural, intellectual and genetic deficiencies

Thomas. S. D. 'The Last Navigator'. Hutchinson (1987)

The author is an experienced blue water sailor, who in 1983 journeyed to Satawal in the Caroline Islands to learn traditional Micronesian navigation under the tutelage of Mau Pailug. The latter had been navigator on the Hokulea in 1976, when it sailed from Hawaii to Tahiti.

In the book the author defines Micronesian navigation as '*non instrumental and non mathematical*' based on '*the organisation and memorisation of a vast quality of information about rising and setting position of stars, seasonal variations of in ocean currents, the properties of ocean swells, clouds and behaviour of birds*'. This type of navigation reflects a fundamental difference in world view from Western navigation as it integrates a system that relies on a vast body of lore and the navigator's own senses.

Integral to the Micronesian navigation is the *itang* or knowledge expressed in song containing metaphors and allegory that is understood by *palu* and is therefore of immense cultural significance. In learning the *itang*, one assumes the role as *palu* which in turn would flow into human interaction becoming a whole way of life. Thomas lists various Micronesian navigation concepts; *wofanu* (palu's chart case), *etak* (mental plotting sheet), *fatonomuir* (facing astern) necessary for determining the direction of current *kapesani serak* ('talk of sailing') and 'taboos'. His informant Mau Pailug claimed that navigation was woven into the social fabric and culture of the Caroline Islands in the form of songs and social behaviours.

Among the themes of the book is the tension between Christianity and traditional Micronesian lore, the growing dependency on Western style economy and education all of which erode Micronesian navigational lore. Whereas education undermines the seafaring skills of Satawal and Christianity attacks the extensive system of 'taboos' that formerly regulated everyday life and served to ensure the maintenance of ecological and human health.

Other points contained in the book:

- Refers to the navigator as the mediator of the physical and the metaphysical elements of the ocean;
- Envisions the 'reference island' as moving with the current and stars; and
- Represents the bringing '*together fierceness, strength and wisdom*' that describes the palu.

In the appendices, Thomas has compiled an extensive array of data and diagrams, star courses, terms, maps and photos.

Lewis, D. 'We, the Navigators – The Ancient Art of Landfinding in the Pacific'. Published by A.H. Reed (1972)

The author is a New Zealander, who grew up in Rarotonga and graduated in medicine from Leeds University. He served with the British Army in World War II as a medical officer and practiced medicine until 1964 before pursuing his passion sailing and studying Polynesian navigation. In 1968, he was granted a scholarship from the National Australia University to visit surviving indigenous navigators in the Pacific. The project covered some 13,000 miles of the Pacific Ocean and 1680 of them in open sea sailing without instruments and under instruction of indigenous navigators. Lewis uses the knowledge gained from his experiences, as well as reports from early European explorers to provide new insights in respect to the colonisation of the Pacific.

Impetus for researching indigenous navigation was the heavy reliance on theoretical approaches to Polynesian navigation put forward by academics and non sailors. To this end, Lewis embarked on an experiment to test Polynesian navigational methods. Of particular interest was the use of stars, winds and ocean currents to replicate the ancient voyages recorded in Polynesian legend from Tahiti to Rarotonga and Aotearoa. The experiment was structured to provide for scientific rigor and eventually involved indigenous navigators from Micronesia, where ancient navigation skills and knowledge had been maintained. From his experiences Lewis concluded:

- Every important navigational technique and concept in Micronesia was matched by its Polynesian counterpart: and
- The effectiveness of indigenous navigational methods substantially exceeded what recent scholarship would allow.

Lewis makes clear from the outset the focus of the book is on navigation and not sailing technology. He identifies a fundamental paradigm in the minds of indigenous Pacific navigators of oceans as 'highways' rather than barriers to human endeavour.

From his research he concludes that a typical indigenous navigator possessed an immense amount of knowledge of star patterns, seasonal of stars, weather patterns, wind shifts, ocean currents as well bird life. And a typical voyage on open ocean would involve the constant adjusting of all of these elements to compensate for the loss / increase of the others. Critical aids to the indigenous navigator were sun, star and wind 'compasses' found in many Pacific Islands, testifying to the idea navigators had an intimate knowledge of the sun, stars and seasonal winds based on observation, together, with concepts of zenith stars, 'dead reckoning', 'expanded' landfall based on land based indicators such as broken

swell patterns, birds, clouds, phosphorescence etc. Of particular significance' is the Carolinian concept of *Etak* described as providing '*a framework into which the navigator's knowledge of rate, time, geography and astronomy can be integrated to provide a conveniently expressed and comprehended statement of distance travelled*'. Here a navigator divided the voyage into stages or segments by the star bearings of a reference or *etak* island. A navigator's position at sea is defined in *etak* terms and comes into play in maintaining bearings and when tacking or when driven off course. In short, it is a method of visualising where the navigator is and of possessing the data already in his possession.

Finally, Lewis explores a number of scenarios as to the capacity of indigenous sailors to traverse vast expanses of ocean based on their expertise, early accounts by European observers, as well as research evidence gathered as part of his study. All of this material is congruent with indigenous accounts that indigenous voyaging was deliberate and not by accident as claimed by researchers such as Andrew Sharp.

**Houghton, P. 'People of the Great Ocean –Aspects of Human Biology of the Early Pacific'
Cambridge University Press (1996)**

The author is an Associate Professor in the Department of Anatomy and Structural Biology at the University of Otago. He has written extensively on biology in respect to Polynesia. The underlying theme of the book is adaption and genetic drift of human biology of the first Pacific populations suggesting the significance of evolution, though Houghton states the influence of environment cannot be understated. He claims the '*biology of any group needs to be considered in the light of its environment and adaptation to it*'.

Houghton discusses this theme in the context of the Pacific environment, climate and historical evidence compiled by early European explorers. Of particular interest to the author is the physique of Pacific people which was documented by those same explorers. With this in mind, he draws upon the wealth of historical and current data concerning skeletal makeup from across the Pacific providing an insight into the physique of early Pacific peoples. These insights are examined in relation to biogeographical principles, physical morphology, early meteorological inferences, nutrition and diseases prevalent in early times. The author also acknowledges the unique environment of the Pacific comprising of numerous small and large Islands lending itself to human variation providing opportunities for genetic revolution.

Amongst his conclusions, Houghton explains the accelerated maturation of Pacific peoples in terms of environmental factors and responds to a tropical conditions and past selective advantage. In this context accelerated maturation could possibly mean survival for small populations on a Pacific Island instead of extinction. In this environment where populations are subject '*to stress associated with sufficient metabolic energy to accomodate some adaptive change*' those same populations '*may show considerable phenotypic plasticity*'

In relation to the higher incidences of cleft palate, club foot recorded in Maori and Pacific Island populations compared with European New Zealand populations may be explained he says by the smaller gene pool of the former. It is the same small gene pool he believes rendered Pacific populations susceptible to introduced diseases during the 18th and 19th Centuries.

He concludes by stating the Pacific was colonised deliberately and not by accident of drift on the wind or ocean current.

WESTERN WORLDVIEWS

Ferguson, Marilyn, *The Aquarian Conspiracy, Personal and Social & Transformation in the 1980's*, Paladin, London, 1980

In the book, the author surveys changes of thinking and behaving taking place in science, medicine, social interaction, education, politics, business, religion and other fields of human activity, at the turn of the decade starting in 1980. Ferguson draws all those threads together to illuminate her theory of a sea change in thinking, or a change from one paradigm or worldview to another.

She calls this 'The Aquarian Conspiracy', firstly in recognition of the era, and secondly to describe the progress of the sea change, not so much a revolution as a quiet and leaderless conspiracy (thinking together) of people from all walks of life, drawn together in countless widespread networks of networks.

The "radical centre" of this changing worldview in education is a "constellation of techniques and concepts sometimes called *transpersonal education*". The name is derived from a branch of psychology

that studies the transcendent capacities of human beings. The learner is encouraged to be awake and autonomous, to question, to explore all corners and crevices of conscious experience, to seek meaning, to test outer limits, to check out frontiers and depths of the self.

Ferguson conducted a wide ranging literature review and interviewed a large number of educators to reach her conclusions. They are summarised in the table below.

Assumptions of the Old Paradigm of Education	Assumptions of the New Paradigm of Education
Emphasis on content , acquiring a body of "right" information, once and for all.	Emphasis on learning how to learn, how to ask good questions, pay attention to the right things, be open to and evaluate new concepts, have access to information. What is now "known" may change. Importance of context .
Learning as a product , a destination.	Learning as a process , a journey.
Hierarchical and authoritarian structure. Rewards conformity, discourages dissent.	Egalitarian. Candour and dissent permitted. Students and teachers see each other as people, not roles. Encourages autonomy.
Relatively rigid structure, prescribed curriculum.	Relatively flexible structure. Belief that there are many ways to teach a given subject.
Lockstep progress, emphasis on the "appropriate" ages for certain activities, age segregation. Compartmentalized.	Flexibility and integration of age groupings. Individual not automatically limited to certain subject matter by age.
Priority on performance.	Priority on self-image as the generator of performance.
Emphasis on external world. Inner experience often considered inappropriate in school setting.	Inner experience seen as context for learning. Use of imagery, storytelling and exploration of feelings encouraged.
Guessing and divergent thinking discouraged.	Guessing and divergent thinking encouraged as part of the creative process.
Emphasis on analytical and linear thinking.	Strives for complementary thinking. Analytical and linear thinking augmented by holistic, non-linear and intuitive strategies. Confluence and fusion of the two processes emphasised.
Labelling (remedial, gifted, minimally brain dysfunctional, etc) contributes to self-fulfilling prophecy.	Labelling used only in minor prescriptive role and not as fixed evaluation that dogs the individual's educational career.

Concern with norms.	Concern with the individual's performance in terms of potential. Interest in testing outer limits, transcending perceived limitations.
Primary reliance on theoretical, abstract "book knowledge".	Theoretical and abstract knowledge heavily complemented by experiment and experience, both in and out of classroom. Field trips, apprenticeships, demonstrations,
Classrooms designed for efficiency, convenience.	visiting experts.
Bureaucratically determined, resistant to community input.	Concern for the environment of learning: lighting, colours, air, physical comfort, needs for privacy and interaction, quiet and exuberant activities.
Education seen as social necessity for a certain period of time, to inculcate minimum skills and train for a specific role.	Encourages community input, even community control.
Increasing reliance on technology (audiovisual equipment, computers, tapes, texts), dehumanization.	Education seen as lifelong process, one only tangentially related to schools.
Teacher imparts knowledge: one-way street.	Appropriate technology, human relationships between teachers and learners of primary importance.
	Teacher is a learner, too, learning from students.

Alcorn, Noelene. 'To The Fullest Extent of His Powers – C.E. Beeby's Life In Education'. Victoria University Press (1999)

In this biography on C.E. Beeby, the author pays tribute to his immense contribution and enduring influence on New Zealand education.

The title of the book has its origins in a speech by the Labour Government Prime Minister Peter Fraser that called for *'every child whatever his/her social and economic position and whatever his/her level of academic ability has a right to a free education of a kind and length to which powers best fit him/her'* for life in a complex and changing democratic community. This policy provided impetus for a raft of reforms overseen by Beeby from 1935 on.

At the heart of the reforms was an attempt to address the social inequities in New Zealand society and encourage social change particularly for those sectors of the community without a history of intellectual participation. It also sought to assimilate Maori into the dominant Pakeha society. For Maori this meant education that ignored Maori and directed them into non academic learning.

Among the key reforms overseen by Beeby; the end of the Matriculation Examination, changes to primary and to a lesser degree secondary education as well as teacher training.

Friere, P. 'Cultural Action For Freedom'. Penguin Books (1972)

The author initially developed his educational theories in Brazil, where he was involved with adult literacy. For him education can never be reduced to a mechanistic standardised process, or a set of 'complex techniques, naively considered to be neutral', or mere memorisation. Rather, education is 'cultural action for freedom, and therefore an act of knowing'. At the same time, Friere explores the deep underlying meanings of words used by the dominant interests (i.e. 'First World') to subordinate the Third World. He claims literacy has a critical function in identifying these meanings to reveal their role in establishing a 'culture of silence'. The Third World therefore, must assert the right to define its words and thereby reclaim its voice.

Adult literacy, as a 'cultural action for freedom', is an act of knowing, where the learner assumes the role of knowing in dialogue with the educator. As part of this process the learner analyses and deconstructs reality (including words and meanings) in order to create and recreate reality. This requires on part of the educator the pursuit of greater clarity, thereby providing a path for action. In literacy, this involves critical reflection on the process of reading and writing and the profound significance of language. The act of knowing involves a dialectical movement, from action to reflection, and reflection to action. This process involves transforming the world, which according to Friere can either humanise or dehumanise the world.

Quinn, Daniel. 'Ishmael, An Adventure of the Mind and Spirit', Bantam, New York (1992). The Story of B, Bantam, New York (1996) & My Ishmael, A Sequel, Bantam, New York (1997)

In three novels Quinn presents a story of Western worldviews and culture beginning in the Fertile Crescent of Mesopotamia about 10,000BCE.

He describes a culture as *a people enacting a story*. A story is *a scenario interrelating man, the world, and the gods*, and to enact a story is *to live so as to make the story a reality*. The story usually describes the act of creation and builds the model of the universe according to a particular culture.

Every story is based on a premise, is the working out of a premise. For instance, he describes the premise of the tribalised world prior to the agricultural revolution 12,000 years ago as *man belongs to the world*. The premise of the new story, and of the culture that has since overrun most of the globe, is that *the world belongs to man*.

These are two fundamentally different premises. The first shaped human cultures for at least 3,000,000 years beginning with the appearance of *Homo habilis*, the first humans, during which time humans lived lightly upon the Earth. The second has led to the exploitation of the Earth. They are the master ideas that determined the fate of other species and of the Earth, and not just the fate of the human cultures based upon them.

The form of agriculture that appeared as a result of the agricultural revolution, and gave rise to the new set of beliefs, is described by Quinn as *totalitarian agriculture*. Totalitarian agriculture destroys its competitors (other human societies and other species), destroys their food, and denies them access to food.

The way that culture is continuously inculcated in its members is described by Quinn:

"Mother Culture speaks to you through the voice of your parents - who likewise have been listening to her voice from the day of their own birth. She speaks to you through cartoon characters and storybook characters and comic-book characters. She speaks to you through newscasters and schoolteachers and presidential candidates. You've listened to her on talk shows. You've heard her in popular songs, advertising jingles, lectures, political speeches, sermons and jokes. You've read her thoughts in newspaper articles, textbooks, and comic strip."

A worldview, and the culture it produces is based on a set of continuously reinforced ideas. The ideas are not immutable laws of nature, but human constructs that shape the way humans live within their culture. For instance the widely accepted concept of the market economy that prevails across the world today is based not in some immutable truth, but in a set of beliefs that are part of a worldview:

"All cultures have a set of beliefs or organizing principles that serve not only to guide behaviour but also to explain and justify the existing state of the world. Western cultural beliefs, in particular, serve to justify the peculiar material relationship that has evolved among the members of our society and between humans and the rest of the world. Our culture sees class divisions as inevitable, even desirable, and views nature as a collection of natural resources to be used to fuel the engine of economic growth and technological progress."

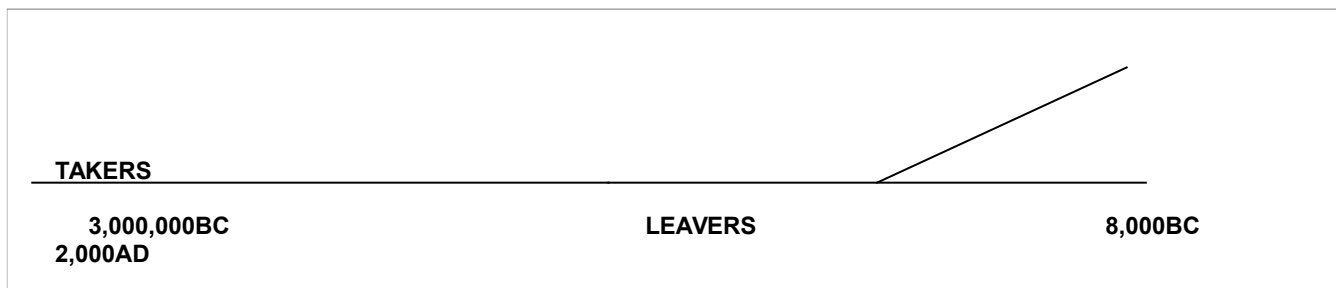
Quinn refers to the two cultures as the Takers and the Leavers.

"Yes, okay. The premise of the Taker story is the world belongs to man. I thought for a couple of minutes, then I laughed. It's almost too neat. The premise of the Leaver story is man belongs to the world."

The extension of this premise is that *the world was made for man, and man was made to rule it*, and in order to make himself ruler of the world, man first had to conquer it.

This fundamental change in the premise underlying the dominant culture and its worldview overturned a culture and worldview that had served *Homo sapiens* and its predecessors successfully for 3,000,000 years.

Cultural Time Scale

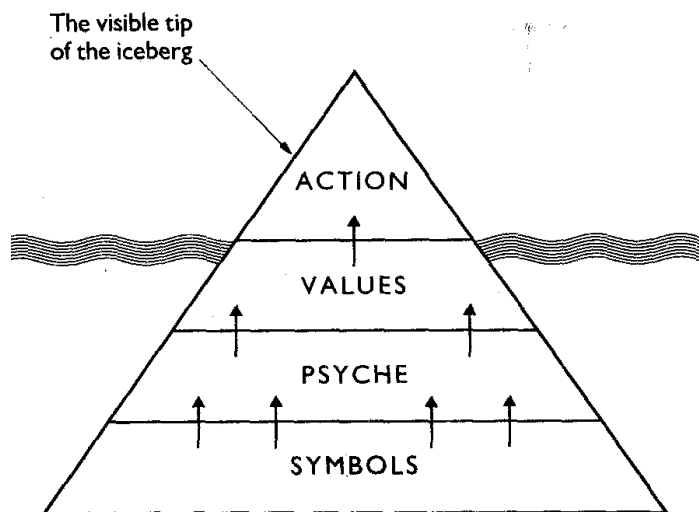


In the final 10,000 years of this time scale huge changes have been brought about worldwide, all as a result of a simple premise, or master idea that spread and eliminated another premise, thousands of other human cultures, and thousands of other species. The result has not been entirely beneficial for the world, or for humankind.

Skolimowski, Henryk , *The Participatory Mind, A New Theory of Knowledge and of the Universe*, Arkana Penguin Books, London (1994)

Skolimowsky describes culture as a pyramid:

"As long as we are within a culture (any culture for that matter), we are constantly under the influence of symbols. And this influence is subtle and often subterranean. For so often, symbols act on us through our subconscious and through our unconscious. Our psyche is structured by the symbols of our culture. The structure of our psyche shapes our values. Our values shape our action. Only on the level of action can we describe clearly what is happening. Action is the visible tip of the iceberg of which the hidden parts are our values, our psyche, our symbols."



He describes the development of the Western mind as *"the four great cycles of the Western mind"* (Mythos, Logos, Theos, and Mechanos) and then describes the emerging transition to a new Western worldview as Evolutionary Telos.

MYTHOS.

The Western mind has its beginnings in the ancient Greek worldview of Homeric times, based on a view of the cosmos dominated by the gods from their abode on Mount Olympus. The Greeks recognised that humans can be masters of their own destiny up to a point, and beyond that everything was governed by the gods of their mythology. The Greek tragedies were a dramatic representation of how people saw their frail condition. Mythos worked well for a number of centuries.

LOGOS.

Around the transition from the sixth to the fifth century BC Logos was born, as a radically new form of understanding, giving rise to new forms of art, philosophy, science, and social and political institutions. A new cosmology was created within which things were explained by the natural powers of reason. The gods on Mount Olympus no longer held sway. This was the time of Aristotle, Plato, Socrates and other Greek scholars. The Romans adopted Logos from the Greeks and incorporated it within their own culture, and the Roman Empire operating within a fusion of the Greek logos and Roman power, dominated the known world and carried the worldview to the world at large, until it collapsed in 410.

THEOS.

Out of the ruins of the Roman Empire a new worldview emerged, and consolidated itself over a period of about four centuries. It was fostered in small monasteries throughout Western Europe, with those in Ireland taking a leading role. The new form of reason spread across Western Europe from the eleventh century. The reasoning of Theos was inspired and guided by the monotheistic Judaeo-Christian God and emphasised the transient nature of physical reality and earthly existence. It was an hierarchical world in which the individual submitted to the preordained plan of God (and his earthly messengers). It was an enormously creative period exemplified by the Gregorian chant and Chartres cathedral. Theos began to disintegrate as the Church grew in power and became corrupt.

The Renaissance was an interlude between Theos and Mechanos, a period of exuberance and liberation from the strictures of Theos, in which painters and other artists flourished. It did not however mature into a cosmology and worldview, and was merely a transition.

MECHANOS.

A new worldview came into being in the sixteenth and seventeenth century, based on the view of the universe as a clock-like entity or a machine, operating according to deterministic laws. To know these laws is to understand nature, and to be able to control it. It was shaped by figures such as Galileo, Bacon, Newton and Descartes. Mechanos saw the rise of the reductionist scientific method in which only “objective” information is considered valid. It also introduced dualism, the separation of mind and body. The mechanistic cosmology has brought about enormous material benefits; but has equally brought ecological devastation, human fragmentation and spiritual impoverishment. Its guardian is the university, and it reigns still, despite the evidence pointing to the need for a new worldview.

EVOLUTIONARY TELOS.

“There is nothing static in our universe. Seen appropriately, the universe is one continuous story of extraordinary creative unfolding.”

“To begin with, the discovery of evolution does not start with Darwin, but with Charles Lyell. Lyell saw and described the geological evolution in his seminal treatise Principles of Geology (1830-33). By the time Darwin came onto the stage, the ground was prepared. Darwin applied Lyell’s idea a step further and showed that species were evolving as well.”

The next two stages of this discovery are happening under our very eyes. We are actually articulating them, sometimes consciously sometimes only gropingly. These next two stages of evolution are the

recognition of conceptual evolution, and then of theological evolution (the latter, because of the nature of traditional religions, is the most difficult for people to accept)."

After three centuries Mechanos is now collapsing, although its adherents cling to their outdated beliefs. Work on a new cosmology and a new worldview has been going on in many fields for at least three decades, in physics, ecological science, environmental science, biology, theology, and other disciplines. The central theme of this new worldview is the idea of wholeness, in a radical departure from the old mechanistic objectivist approach of Mechanos, and its main premise of fragmentation and separation. There is a new sense of the connectedness of all elements of the universe, a new sense of depth to the human person, and a reclaiming of meaning and spirituality as indispensable components of human life. The universe itself is seen as open and non-deterministic and evolving, as opposed to the outdated Newtonian design in which everything was static and governed by deterministic laws.

Hartmann, Thom. 'The Prophet's Way', Mythical Books, Vermont USA (1997)
'The Last Hours of Sunlight', Bantam, NSW (1999)

Hartmann writes of the need for transformation of personal and global worldviews from an ecological perspective. He has this to say about the stories that are the myths, paradigms and beliefs of a culture, that form the *reality* of that culture:

"Since so much of what we call reality is subjective, there are no right or wrong stories; instead there are useful and not useful stories, depending on what culture you belong to, and depending on your status in your culture. Depending on your relationship to the natural world and your vision of the future."

The point is that what is held to be valid or true in one culture is not necessarily so in another culture or in any other culture.

Hartmann describes the two pre-agricultural and post-agricultural cultures as Older and Younger Cultures:

"The Old Cultures, be they agricultural or hunting/gathering, live with an intrinsic connection to the Earth. For them, the planet on which we live is, itself, a living organism. It has its own life, its own destiny, and, in a way that they Younger Cultures could never understand, its own consciousness. Things that run counter to the Earth's nature will (naturally) not work in the long run - although the damage may be too slow to be noticeable on the Younger Culture time scale."

"The Younger Cultures live quite different lives: they view themselves as separate from the Earth, with "dominion" over it, and see the resources of the Earth only as things to be used and then discarded. Nature is the enemy, not the mother, father, or brother/sister of these Younger peoples, and their disregard for it is so visceral, so intrinsic to their world-view, that many live their entire lives without ever once questioning their own cultural assumptions about Man's place in the universe."

Mathews, Michael. 'Challenging NZ Science Education'. The Dunmore Press (1995)

The author, being the former Foundation Professor of Science Education at the University of Auckland attempts to generate debate on '*constructivism*' in respect to education generally and more particularly science education. He argues that constructivist learning theory continues to dominate education policy, as well as government science education projects and research, much of the impetus for its popularity being driven by Waikato University. In contrast to traditional science where '*the teacher had to first understand their subject, and then with all of the assistance of psychology, pedagogy and personality to be able to convey that understanding to students*', the constructivist approach requires a facilitator and is based on the notion that all knowledge comes from within rather than externally. This approach brings into question the role of a teacher and quality of science education.

The author goes on to analyse the growth of constructivism within the International context that challenges science based on objectivity, rationality and realism as well as the role of science in society. He claims that New Zealand education has moved from traditional Liberalism concerning the development intellectual competence, knowledge acquisition to what he refers to an a US approach orientated to personal development, job training, correct attitudes etc. In short, 'new Right vocationalism and soft Left political correctness'.

On Maori science education, Mathews disputes the assertion that Maori and Western science are of '*equal validity*' as argued by Professor Graham Smith and claims they are in fact incompatible where only the latter is superior. In an attempt to 'reconcile' both positions Mathews argues that Maori knowledge could be categorised as *matauranga*, so that the term '*makes no assumptions as to how scientific in the Western sense that knowledge is*' and that they do not seek the same thing.

On the issues of Science in the New Zealand curriculum, Mathews claims the conceptual structure has been neglected, whereby students can learn of the inter-relationship of concepts across a number of fields. There is also a lack of learning theory inspite of substantial research undertaken over recent years resulting in minimal pedagogical advice for teachers of science. He finally concludes that New Zealand culture will ultimately suffer as a consequence.

Poutney, Charmaine. 'Learning our Living'. Cape Catley (2000)

The author is a well known educationalist and the book documents her extensive experience in the education field and across a wide range of education sectors.

Charmaine is passionate about education as she is about young people and their participation in excellent education opportunities that transforms society. This view has immense implications education content, delivery, assessment methodologies, learning environment, monitoring of academic and non academic development. She is passionate about education as a means of addressing social injustice and inequity. With this in mind she promotes a range of strategies aimed at making education student focussed based on clear values, which in turn raises the human spirit and is devoid of violence, regimentation and obedience. She calls for an education that respects life and environment, as well as enhances cultural and religious diversity. Hand in hand with this approach, Charmaine advocates policy changes, improved teacher training, as well as a range of innovative practices aimed at promoting learning.

Rather than being an academic treatise, the book attempts to reflect on the author's long and

distinguished career in education It is based on actual practice and herein lies its value.

Baker, Dave et al. 'Challenging Ways of Knowing In English, Maths and Science'. Falmer Press (1966)

The authors of the book examine the terms '*literacies*' and '*numeracies*' being the plural of the same terms, representing a multiplicity of perceptions, activities, events that take place in different social contexts and practices in different communities. This view of literacy resists the more familiar view '*to regard literacy as a single psychological entity, something acquired, or learned or taught*' which enables groups to be categorised as '*illiterate*' or '*literate*'. In an education context this view has major implications for the construction of knowledge, curriculum, education materials etc. While this view is culturally defined it reveals the isidiousness of the dominant single Western paradigm upon which Western science is predicated that is Eurocentric effectively marginalising other forms of knowing e.g. Indian, Arab, Persian and Chinese.

Moreover, there is a growing wealth of scholarship by Western and non Western writers, who challenge the superiority of Western science claiming it is responsible for the widespread destruction of the planet. Likewise, they challenge the underlying epistemology of Western science that it is value free and objective. One particular writer argues that science is incompatible with democratic governance as it undermines the democratic rights of citizens rendering them as mere subjects of modern science and technology. Against this schools continue to adopt Western knowledge and science uncritically.

Among the strategies the book offers as solutions to the issues include:

- the need for international and multinational literature to challenge and subvert dominant literacies and their authorities;
- the need for school text books to be subversive and challenge their authority aimed at empowering people.

Ashcroft. B. 'Post Colonial Transformation'. Published by Routledge (2001)

The author defines Imperialism as where peoples, cultures and nations '*are prevented from becoming what they might have become*'. And rather than accept the argument colonialism destroyed indigenous cultures, which assumes that cultures are static and underestimates the adaptability and resilience of colonial societies, the author asserts the contrary. He claims colonised cultures have been so resilient and transformative, that they have changed the character of the imperial culture itself. On globalisation, Ashcroft refers to it as the '*radical transformation of imperialism totally reconstituted as it stems from no obvious imperial centre*'.

He further asserts that cultural identity does not exist outside representation. And as colonised groups attempt or have appropriated the means of representation (i.e. visual communications and arts), cultural identity is necessarily transformative in that it affects the strategies by which it is represented. The difference between representation by the coloniser and the colonised suggests that for resistance to be truly effective, it must be creative rather than simply defending. He concludes this provides local communities with the potential to resist and transform global culture itself.

NEW ZEALAND CURRICULUM

Simon, Judith. 'Education Policy Change: Historical Perspective' published in 'Politics, Policy, Pedagogy – Education in Aotearoa / New Zealand'. The Dunmore Press (2000)

The author traces the development of education policy as reflected in key pieces of legislation including the Education Act 1877, Secondary Schools Act 1903 and Education Act 1989. She concludes that universal education was introduced into New Zealand had less to do with egalitarianism, than it had with social control, politicians responding to their constituencies and the enhancement of productivity. Secularism, the other key issue was introduced to resolve a dispute between those opposed to religious instruction and those wanting state funding for Catholic and religious instruction in state schools. In the end, the state adopted secularism, where all students would be given the same knowledge based on impartiality.

The Secondary Schools Act 1903, embedded the inequities of the primary system by channelling middle class children into academic study and lower class children into trade type education. The overall affect was to reinforce inequalities of gender and social class. In contrast, Maori education as provided by Christian missionaries from the 1840's sought to '*civilise*' and convert Maori. The subsequent Native Schools Act 1867, provided the beginnings of state intervention by way of state funding to missionary schools, as well in the establishment of state schools, aimed at assimilating Maori into European society. Maori initially responded eagerly to schooling as a means of acquiring skills to support traditional lifestyles.

However, the progressive decline in interest by Maori in church day schools resulted in the establishment of church boarding schools whereby, children were removed from the influence of parents and villages. The period coincided with the wholesale alienation of tribal lands and the use of schooling to promote settler interests.

The election of the Labour Government in the 1930's coincided with a new metaphor, that of '*equal opportunity*' which proved no less a myth than policies of previous governments. While it is acknowledged opportunities were in fact created during this period, Simon concludes that the inequities of previous decades in respect to gender and social class continued to be reproduced. The election of

the Fourth Labour Government in 1984, was characterised by major reforms in education, not least the withdrawal of government intervention at the expense of the community.

Overall, educational policy in New Zealand is characterised by competing interests and had little to do with egalitarianism, although this ideal was never completely lost by politicians and educators alike.

COMPARATIVE EPISTEMOLOGIES

Maurial, Mahia. 'Indigenous Knowledge and Schooling'. Printed in 'What is Indigenous Knowledge? Voices from the Academy'. Falmer Press (1999)

Maurial calls for the reconceptualisation of education through the conceptualisation of Indigenous knowledge. This process requires us to view Indigenous education from the perspective of a '*circular continuum*' instead of the '*straight-line*' of human evolution. In this way, it challenges the accepted views of Indigenous societies as being or not being '*developed*', '*civilised*' etc. In doing so, it rejects the '*superior truths*' created by the West. Maurial suggests that a '*continuum between conflict and dialogue*' may provide a way of understanding the complexity of the problem of education among Indigenous people's.

In her native Peru, Maurial states that schooling has not fostered democracy. The foreign curriculum devalued Indigenous knowledge and the Western worldview has isolated humans from nature. On the other hand, a dialogical education validates Indigenous knowledge, in schooling and non-schooling settings and encourages critical understanding of Indigenous peoples themselves, resulting in strengthened dialogue with the Western world and nature. The key concepts of Western modernity are identified as: '*linear evolution of the world*', progress and civilisation, development and literacy. These concepts have come to dominate Indigenous concepts with the affect of marginalising Indigenous knowledge.

She proposes a dialogical education among indigenous peoples to foster ecological literacy i.e. how to read the world in a dialogical relationship in nature. Indigenous knowledge also represents people's cognitive and wise legacy as a result of their interaction with nature in a locale. And for those Indigenous people with a common history of colonisation by the West, that knowledge is constantly being regenerated. Schooling has created temporal (timetabled activities) and spatial breaks (migration) amongst Indigenous peoples.

Two key concerns for an educator supportive of Indigenous interests are:

- To analyse how Indigenous knowledge has been subjugated;

■ How to rejuvenate Indigenous knowledge?

In the historical continuum, conflict has been reduced when resistance has been derived from dialogue although two obstacles to indigenous education remain:

- Power of Western knowledge;
- Researchers and educators.

The underlying principles of Indigenous knowledge are as follows:

- Indigenous knowledge is local;
- Indigenous knowledge is holistic; and
- Indigenous knowledge is *agraphic*.

Through local traditions Indigenous peoples transmit their holistic culture which fosters a relationship with nature. Finally, Indigenous people's and their knowledge continues to evolve in a continuum between conflict and dialogue with Western people: and Indigenous knowledge requires dialogue between all stakeholders and nature.

McGovern, Seana. 'Education, Modern Development and Indigenous Knowledge' Garland Books (1999)

As starting point McGovern refers to Kincheloe's statement that,

'The foundation of postmodern theory states there is no universal knowledge beyond that which is developed within political, ideological and economic conditions of particular cultural and social formations'.

Postmodern analysis therefore must include the examination of:

- Assumptions and concepts associated with modernity;
- Exploration of forms of knowledge, practices and experiences that have not been recognised or legitimised: and asks *Who is silenced? Who is intimidated? Who is excluded?*

Postmodern approach to research involves questioning the dominance of certain ideas and practices over others. It is underpinned by the notions of power relations and Who has the power to create knowledge? From what sites or places is knowledge created? and Where is knowledge legitimated and circulated?

As academics have the power to legitimate the range and value of interpretations, that are involved in creating representations of reality, it follows that such representations are produced within '*cultural limits and theoretical borders*' and therefore implicated with what constitutes truth, methods and meanings, all of which reflects the cultural values, ideas, beliefs and practices of the author. Academic knowledge is therefore, constructed within cultural and epistemological contexts by those in socially legitimised positions as knowledge producers operating out of institutions of higher learning and regarded as the authoritative social institutions for knowledge creation.

Taken-for-granted interpretations of statements, definitions etc surrounding dominant concepts reflect the cultural norms and practices of dominant societies and direct peoples attention to dominant notions of e.g. schooling. In short, taken-for-granted ideas are continually promoted and applied, at the expense of physical engagement with students and families. Therefore, knowledge, culture and power relations inherent in the production of knowledge must be exposed through the examination of assumptions, values and methods that constitute dominant concepts.

McGovern supports the view that academics must create space for alternative knowledge's and ways of knowing leading to new ways of thinking and exploring ways of addressing social justice and development.

Moreover, she believes that the role and very existence of schooling needs to be examined as a social and socialising institution, if other useful ways of teaching, learning and producing knowledge remain excluded, devalued or marginalised. Academic knowledge is constructed within the cultural and epistemological contexts by those in socially legitimised positions as knowledge producers from within higher education, i.e. the authoritative social institutions for knowledge creation.

In order to achieve this it is necessary to reframe debate on knowledge production in terms of a postmodern analysis of power, knowledge and culture relations.

McGovern uses the field of international and comparative education to highlight issues of knowledge production as a means of understanding how assumptions, values and beliefs that underlie the concepts involved in defining reality. She believes that concepts require analysis, as they are 'knowledge generated mechanisms' which reflect particular notions, assumptions and rules of knowledge production, values within a discourse. Concepts depict certain ideas of reality and direct peoples attention towards a particular reality and therefore must be interrogated to determine what underlies those notions, assumptions etc and more particularly in respect to academic knowledge production.

McGovern claims education and modern development is the result of social science ideas, as well as the methodology from the field on international and comparative education, which have for all intents and purposes ignored Indigenous knowledge. The book is an attempt to reconceptualize the field of international and comparative education, using postmodern analysis and indigenous knowledge to alter the dominant social science paradigm. In doing so, the role of academic knowledge production is explored as well as how it is implicated '*in the relations of power and culture*'. Integral to this are messages to influence how one gets to know the world by working through culturally, socially, historically, politically and epistemologically defined concepts that help shape and define views of reality.

She argues for the need to question the role and very existence of the schooling system, and particularly its role to socialise, as other useful and valuable ways of teaching, learning and producing knowledge will / could be excluded, devalued and marginalised. At another level, academic knowledge is constructed within cultural and epistemological contexts by persons holding socially legitimated positions as '*knowledge producers*' in higher education.

Likewise, those working in the field of international and comparative education are not immune from promoting and reproducing certain ideas and methods for representing education in subaltern countries. Such representations and their accompanying concepts (i.e. social science concepts) are applied to subaltern countries without reference to the diverse cultural, social and historical realities within those countries. Local people are not consulted, silenced and or are reduced to analytical categories, '*in order to provide empirical evidence that a certain reality exists in different societies*'. The affect is the

application of concepts where people's realities are subordinated to homogenising generalisations about education and modern development. In short, the assumptions and values underlying concepts within the studies reflect the cultural, social, historical, political and epistemological context, that have formed as part of dominant societies, and reflect, as well, the power of authors to describe and define knowledge.

Moreover, Indigenous people's ideas of reality are placed within cultural, historical and social contexts where information, beliefs and values are presented not as universal ideals or standards, as the authors do not judge other societies in comparisons based on measures created by one society. Rather, they are presented knowledge and practices as part of a different and valuable ways of living, and not as indicators of education and development.

Scholars therefore have the capacity to seek and support other forms of reality and in doing so, legitimate other forms of diversity and realities as knowledge.

McGovern suggests the use of postmodern questions style questions;

- What constitutes knowledge in a discipline?
- Who produces knowledge and from what sites?
- What values and beliefs are represented by a particular type of knowledge?
- What is represented as reality and how?
- What is included and what is excluded?
- In what ways does the knowledge relate to certain historical, societal, political epistemological and cultural contexts?
- How do the topics, ideas, and assumptions shape the knowledge statements and recommendations within academic research?

The overall affect is to remove universal truths and singular global ways of social development, while allowing for diversity of ideas and practices to receive consideration.

May, Stephen. 'Accommodating multiculturalism and biculturalism in Aotearoa/New Zealand: Implications for Language Education'. Conference paper 14 June 2002

May asserts that second language learning in New Zealand is now an issue as a result of significant immigration over the past decade. We can longer presume that New Zealand students will be first speakers of English. Traditional educational approaches towards second language learning have been inadequate as they have been 'subtractive' rather than 'additive'. Here, a non English mother tongue is regarded as an obstacle to overcome, rather than a resource to be valued and used in the school. This has the affect of casting bilingual learners and bilingualism negatively.

Research into language education suggest:

- Active bilingualism is a cognitive and social advantage rather than a deficit;
- Additive forms of bilingual education are recognised internationally as the most successful

- bilingual programmes; and
- The least effective way of teaching a majority language is via the problematization and / or exclusion of first languages

In the New Zealand context, May advocates:

- Continued support for Maori medium immersion education;
- Exploring other forms of bilingual education for Maori;
- Extend similar access to bilingual education for other ethnic minorities where number warrant;
- Where bilingual education is not an option we need to develop critical language centred multicultural education programmes in schools; and
- Developing and adapting a nationally coordinated language education policy.

While there are clearly economic implications these are not as immense as they may appear and the policy encompassing first and second language learners must be given priority.

Baker, C and Hornberger, N.H. (Editors). ‘An Introductory Reader to the Writings of Jim Cummins’. Published by Multilingual Matters.

This book is a collection of papers written by Jim Cummins over his long and distinguished academic career, refuting some key assumptions concerning bilingualism and thereby helping to create a paradigm shift in respect to bicultural / multicultural education. To achieve this he attempts to research the issue in the context of a theoretical framework, where the results can be meaningfully interpreted.

A key theme of his work is the exploration and theorising of the relationship between language and cognition. In his research, Cummins makes the proposition that growth of a second language is dependant on a well developed first language and secondly, there are two thresholds a bilingual child has to pass to avoid negative consequences of having two undeveloped languages and achieve the thinking advantages of ‘balanced’ bilinguals.

Among the benefits of bilingualism in early childhood identified by Cummins, is the accelerated development of verbal and non verbal abilities, cognitive flexibility and divergent thinking. He observes that children in early immersion programmes also function as well as comparison groups in all school subjects other than English and acquire the ability to transfer their knowledge from one language to the other. In other words they can be taught in one language and assessed in another.

Among the strategies for teaching languages is the need for teachers to redefine their relationship with learners, schools with communities and inter-group relations with wider society. In short, empowering minority learners rather than disempowering and disabling them. Cummins also distinguishes between ‘*transmission*’ and ‘*reciprocal interaction*’ models of pedagogy. It is the later he asserts as most effective and appropriate for language learners from ethnic minorities. This model emphasises the development of a higher level of cognitive skills and involves collaboration to achieve learning goals. Cummins believes these reasons explain the failure of new and improved programmes and polices introduced over the past 20 years.

Viergever, Marcel. ‘Indigenous Knowledge: An Interpretation of Views from Indigenous People’s’.

Printed in Semali. L & Kincheloe. J. 'What is Indigenous Knowledge?'

Viergever points to the contestation of the definition of what is Indigenous knowledge, to identify strategies to conserve the social structures through which knowledge is generated, and to protect it from appropriation by others.

Viergever identifies three Schools of Thought, as to what is Indigenous knowledge based on differences:

- In the subject matters for research;
- Contextual grounds, as Indigenous knowledge is rooted in communities; and
- Methodologies used to conduct research.

Arrawal argues that none of these distinctions can be defended: in short, there are no substantial differences exist between Indigenous and scientific knowledge. While controversial the key point is that we should not focus on bits of specific knowledge but, on the generation of knowledge. The rationale is the value of the continuation of a system of knowledge and its long term benefits that differs from knowledge generated by the Western scientific knowledge system.

Indigenous knowledge therefore, is knowledge interpreted as knowledge of Indigenous peoples. The basic principles concerning Indigenous knowledge are:

- Biodiversity and a people's knowledge are concepts inherent of indigenous territoriality;
- Integral ingenious territoriality its recognition (or restoration) and its reconstitution are pre requisites for enabling creative and inventive genius of each individual people to flourish and for it to be meaningful to speak of protecting such peoples; and
- Knowledge and determination of the use of resources are collective and intergenerational.
- **Indigenous knowledge** is seen simultaneously as physical place and social structures. It not only means bonded space, but its physical aspects such as social, culture, political and economic aspects of the Indigenous people living in that space.
- If **knowledge production** is essential rather than the knowledge itself, then it depends on the physical and constructs the social realities of the people. In other words, knowledge production is a social phenomenon – there is little research on knowledge production and the social fabric of communities. This is true for scientific as well as Indigenous societies. On these grounds the distinctions between the generation of all knowledge is not great.
- **Indigenous communities** like the global community has formal and informal knowledge. This means knowledge cannot be 'owned' or traded like a commodity, as with the global system.

From the above, the three most important elements of Indigenous knowledge are;

- It is a product of a dynamic system (creativity & inventive genius);
- It is integral of the physical and social environment of communities; and
- It is a collective good.

Strategies to conserve Indigenous knowledge are listed as:

- Favourable environment;
- Support for education and raising awareness – language based;
- Support for indigenous research – what we know depends on the kind of questions we ask and the way we interpret the answers;
- Indigenous healthcare systems – training to support traditional practices; and
- Support for 'in situ' conservation of biodiversity - in association with conventional conservation institutions.

Deloria, Vine and Wildcat, Daniel. 'Power and Place – Indian Education in America'. Published by Fulcrum Resources (2000)

The authors argue for the Indigenisation of the American education system in terms of educational philosophy, pedagogy etc for the purpose of '*exploring ways of knowing and systems of knowledge that have been repressed for five centuries.*'

They claim that if framed within metaphysics, Indian knowledge of the natural world as well as reality beyond the human senses surpasses anything which can attributed to Western civilization. Central to this proposition, is that '*everything is related*' and part of a greater whole. This paradigm differs from the Western scientific approach which:

- Is reductionist;
- Claims that various fields of scientific inquiry represent sum total of human knowledge; and
- Forces natural experience and knowledge into predetermined categories that ultimately fail to describe anything.

The Indian world can be said to consist of two basic experiential dimensions – that of **power and place**, which if taken together are sufficient to making sense of the world. In other words, everything has a spiritual power (life force) thereby enabling Indians to '*discern where each living thing had its proper place and what kind of place allowed, encouraged and suggested.*' By knowing certain '*places*' enabled people to relate to the living entities inhabiting it, or personality i.e. **Power and Place = Personality.** Traditional Indian cultural practices acknowledges and engages the power that permeates and all living things recognised as sacred not by human proclamation or declaration, but by experience in those places.

Power and place constitutes a declaration of American Indian intellectual sovereignty and self-determination; that also requires action in order to avoid Indian education being absorbed into current American social and political mediocrity. Self-determination is defined as the transmission of knowledge of past to the future generations. Education must bring order and stability.

Deloria seeks to promote building educational practice on American Indian metaphysics and '*is a unified worldview acknowledging a complex totality in the world both physical and spiritual.*'

He argues that Western science lacks moral basis and is incapable of solving human problems except by making humans more machine like. For him there is a need for serious dialogue between Western metaphysics of time, space energy, and Indian metaphysics of place and power.

The key role of American Indian education is to first and foremost:

- To identify the many problems of the Western education tradition or worldview that produces many of the problems which Indians are immersed today; and
- To actively reconstruct indigenous metaphysical systems leading to experiential systems of learning.

However, there is a paradigm shift which the old western metaphysics predicated on which Western science was built never allows for certain kinds of knowledge but not all kinds of knowledge. The authors advocate a 'big picture' worldview that integrates both Western and Indian physical and metaphysical dimensions.

Understanding or wisdom ought to be the goal of education and less about shaping people to become more professional. Education should promote humility, generosity, and hope in the world and acting in confidence something good will happen.

Anglo America education insists on implanting a particular body of knowledge and a specific view of the world. With often alien to the life experiences that people have or are likely to encounter.

Key Questions about Indian Education:

- What kind of institution can produce professionals with indigenous values and beliefs?
- How do we reduce the lag time between policy to advantage Indian education leading to self-determination?
- How can you ensure goals or ends of tribal initiatives are practical?

Battiste, Marie. Introduction and summary entitled 'Unfolding the Lessons of Colonisation' printed in 'Reclaiming Indigenous Voice and Vision', UBC Press. (2000)

Battiste summarises the contributions of Indigenous educationalists who attended the Summer Institute held at the University of Saskatchewan in 1996. It is an agenda for the restoration of Indigeneity within a multidisciplinary context leading to human dignity and the collective dignity of Indigenous peoples.

In short, the new millennium is associated with a convergence of many voices and forums culminating in new perspectives on knowledge. These are the voices of indigenous peoples, who as victims of empire and once silenced are attempting to resist colonisation of thought and action, as well as restore Indigenous knowledge and heritage. In doing so, Indigenous educationalists are also attempting to diagnose colonisation, heal their people, restore their inherent dignity and apply fundamental human rights to their communities as well as harmonise Indigenous knowledge with Eurocentric knowledge. Herein lies the platform for new imaginings and post colonialism.

However, it is acknowledged that postcolonial societies do not exist. The term 'postcolonial' represents a symbolic strategy for shaping a desirable future. It also acknowledges that colonialism continues to exist in many nations, one's mentality and structures. Such structures can only be resisted and healed

by Indigenous knowledge and its imaginative processes.

In contrast, postcolonial thought emerges from the inability of Eurocentric theory to deal with the complexities of colonialism and its assumptions. It is based on our pain and experiences and refuses others to appropriate that pain. It rejects the use of any Eurocentric theory or categories. Indigenous knowledge exists as a legitimate form of knowledge and research. Together with its mode of transmission, history and consciousness, it is recognised by the Supreme Court of Canada.

Indigenous scholarship, research requires moral dialogue and the participation of indigenous communities is the foundation of postcolonial transformation.

It is recognised there is a need for more systematic analysis, complex and subtle ideologies that continues to shape the postcolonial indigenous educational policy and pedagogy.

The key strategy to postcolonialism is to identify sites of oppression and emancipation as well as, support indigenous scholarship to transform Eurocentric theory, so that it will include and value indigenous knowledge, thought and heritage in all levels of curriculum, professional practice as well as develop a cooperative and dignified strategy aimed at invigorating indigenous languages, knowledge and vision in academic structures.

Indigenous education is recognised as multiple struggles within multiple sites. Interventions and transformative struggles are no less complex and must be able to engage with or react to the multiple circumstances, shapes of oppression, exploitation, assimilation, colonisation, racism, genderism, exploitation, ageism and many other strategies for marginalisation.

St Clair, Robert N. "Visual Metaphor, Cultural Knowledge, and the New Rhetoric" Chapter 8 (pp 85-101) of "Learn in Beauty: Indigenous Education for a New Century" edited by Jon Reyner, Joseph Martin, Louise Lockard and W. Sakiestewa Gilbert, Northern Arizona University, 2000

In this essay Robert St Clair explores the differences between visual and verbal metaphor, and shows that Indigenous people's of the oral cultures are more attuned to learning through the use of visual metaphor. Where they attend schools run according to Western ways of knowing they are confronted by a system that is built around verbal metaphor.

He surveys the research among rhetoricians to develop some insight into how a non-Western system of communication, or discourse, works. They have found that non-Western systems of rhetoric tend to use visual instead of verbal metaphors. On the other hand, Western systems tend to rely on 'the verbal metaphor', and the printed word.

"What is significant about this dichotomy between the print culture of Western intellectual tradition and oral culture is the fact each medium provides substantially different ways of knowing. Where one sees words, the other sees visual patterns, shapes, colours, and moods. Where one finds education in the formal classroom with its structured textual requirements, mandatory certification hours, and rigid didactic requirements, the other seeks not knowledge, but understanding and employs an apprenticeship model in which the elders are given full opportunity to interact with the novice in an unstructured and experientially based system of learning."

"The differences between the print culture of the Western intellectual tradition and oral culture are informative because they demonstrate how the child must accommodate to the dictates of the formal

school systems to which they are exposed. The formal school systems tend to focus on analysis whereas the oral culture is concerned with understanding how things relate to one another."

"It is not surprising therefore, that the print culture has a high regard for mathematics, science, and literary criticism while the oral culture values the graphic arts, music, and dance. Since these cultures are separated by cognitive styles, they are also divided by the kinds of metaphors they use."

Children growing up in a bicultural system must learn to switch between the everyday reality of their oral and visual lives, and the demands of the textual and verbally dominant culture that schooling represents and promotes. Failure to do so causes social distance between the school and children, their families and communities. It also results in personal alienation within the school system.

Visual metaphors provide a dominant mode of information processing in oral cultures. If schools are ignorant of that fact, they come to believe that visual metaphors don't exist. In indigenous groups visual metaphors are used seriously to share cultural knowledge. Visual thinking occurs all the time, to which the host or dominant culture tends to be oblivious. Visual metaphors therefore, need to be seriously studied and understood.

Harris, Judith Rich. 'The Nurture Assumption – Why Children Turn Out The Way They Do'. Published by Simon and Shuster (1999).

The central question of the book is: *'How do children get socialised – how do they learn to behave normal, acceptable members of their society? ... What shapes the raw material of the infants temperament into the finished product of the adult's personality?'*

To answer this, the author draws upon a wide range of sources covering nature or nurture in respect to child rearing and concludes: *'behavioural genetic studies continue to show that the family home has few if any lasting effects on the people who grew up in it'*. She confronts this deeply ingrained paradigm to ask the question – *'how come everyone is so certain that parents do have important effects on the child's personality?'* Her research shows that differences in parenting between siblings and the quality of care has little or no impact on most children's development casting aside claims that non conventional rearing e.g. lesbian couples, single parent families and particularly ones without fathers or non married partners produce dysfunctional adults.

Harris offers an alternative view based on observations that children's behaviour systematically changes according to the context e.g. school versus home and the unequal relationships between older and younger siblings. In other words, children do not spontaneously transfer their behaviours from one situation to another e.g. home to school. From this Harris concludes that children learn separately in each social context and how to behave in that context, which is best exemplified in the acquisition of language. She produces numerous examples where children are left to their own devices to learn and dream in their 'native' language such hearing children of deaf parents or children of immigrants. Here she describes situations where children learners of a new language always adopt the accent of their peers.

In explanation, Harris believes the notion of parental involvement in the rearing of children is relatively new and can be attributed to children being recognised as individuals with rights and the new ideological dogma that people's adults lives are determined by childhood experiences. It is the latter Harris deems to be the *'nurture assumption'*. She defines the *'nurture assumption'* as a specific family

life and child rearing practice that is common but not unusual in Western society, and operates within the modern family unit that is '*privatised, nuclear, domestic and children centred*'. Integral to this assumption is the paradigm that parents seek and follow the advice of experts, who write books on child rearing practices and where failure on part of children i.e. acting outside of that paradigm or are described as dysfunctional is regarded as failure to follow instructions. The same, generally white middle class parents who maybe actively involved in research leading to child rearing practices are published and sold to parents repeating the cycle over again. In short, such practices are cultural and of our time, whereas as issues they are ignored by non Western societies.

Rather, she suggests, children learn to behave based on the social category they belong to namely, age and gender. In other words they socialise / identify themselves as part of a peer group from which they acquire: attitudes, behaviours, speech and styles of dress. Harris adds that the importance of group identification is such that peer acceptance / rejection is associated with overall life status adjustment in later life. Extending this line of thinking further, Harris draws on the work of developmentalist Thomas Kinderman, who found that cliques children had the same attitudes towards school work. If a group moved into a clique of academic achievers his/her attitude would improve, if she moved out it got worse. In other words children's attitude toward achievement was influenced by group affiliation and peer affiliation determined attitudes. From this she concludes that culture is learned behaviour contradicting the long held anthropological beliefs. This learned behaviour was acquired through a child's culture which had a direct influence on their academic performance.

Harris concludes therefore, that intervention programmes must aim to modify the behaviour and attitudes of a *group* of children, who view themselves as a *group* and where the *group* is constantly reinforced.

The notion of group is explained by their re-categorisation through rites of passage. She concludes by claiming it is not the children or adults who are 'changers' of culture, it is in fact teenagers, who desperately want to be different from the previous generations. The overall affect is that each new generation of teenagers will invent a new culture.

In her book Harris asks the following questions which she believes researchers should focus on:

- How can we keep a classroom of children from splitting up into dichotomous groups, pro-school and anti-school?
- How do some teachers, some schools some cultures manage to prevent this split and keep kids united and motivated?
- How can we keep kids who start out with disadvantageous personality characteristics from getting worse?
- How can we step in and break the vicious cycle of aggressive kids becoming more aggressive because childhood they are rejected their peers?
- And in adolescents they get together with others like themselves?
- Is there any way to influence the norms of children's groups for the better?
- Is there a way to keep the larger culture from having a deleterious effects on the norms of teenager groups?
- How many does it take to make a group?

Key mistaken assumptions in respect to 'the nurture assumption':

- The natural environment of the child is the nuclear family;

- A child's job is not to behave like all the other people in society, because all other people don't behave alike – kids socialise themselves;
- Learned behaviour is applicable in all situations, with home behaviour the most importance;
- The importance of genes continue to be ignored as a significant influences; and
- The importance of the group is ignored.

The corollary is that we as adults cannot blame our parents for what is wrong with us.

Atweh, B; Kemmis, S; Weeks, P. (Editors) 'Action Research in Practice – Partnerships for Social Justice in Education'. Published by Routledge (1998)

In the preface the Editors advise this book is a collection of stories about action research projects compiled by people involved in Participatory Action Research for the Advancement of Practice in Education and Teaching (PARAPET), under the auspices of the Queensland University of Technology. PARAPET is a network of action research projects and researchers of both academics and non academics. In examining the projects the editors identified some key features common to all;

- Participatory action research - each participant group sought to change a specific practice
- The desire to promote social justice
- Partnerships in research - PARAPET members were involved in developing communities of researchers

Common to each story were the questions;

- How can social justice in and through education be brought about through processes of partnership embedded in participatory action research (PAR)?
- What achievements have we demonstrated and what difficulties and challenges have we encountered in working towards the aspiration in our projects?

Some of the unique features of action research they identify as:

- Action research is cyclic and iterative, as apart from being linear and structured;
- Expressions of interest were made for chapters / themes were devised
- Editors were appointed to provide feedback on drafts
- Editing was both an individual and a collective process
- Themes were reinforced by two academics
- Peer review of drafts

Themes identified in the book include:

- That action research, social justice and partnership have played a role in educational change.
- Health promoting focus – that change has been good for children, parents, school environment, teachers who have participated in the project
- Collaborative projects involve partnerships aimed at supporting schools and personnel

Henderson, Youngblood Sakei. 'Ayupachi-Empowering Aboriginal Thought'. Printed in 'Reclaiming Indigenous Voice and Vision'. UBC Press (2000)

Indigenous peoples must continually struggle to resist arguments by Liberal society that they must 'fit' into the Eurocentric version of society, based on an individualistic legal tradition.

Critical to this process is the need for the decolonised to break their silence, and struggle to retake possession of their humanity and identity. Initially, colonised peoples have to share Eurocentric discourse and thought with their oppressors, but in order to exist they must renounce Eurocentric models and the ambiguity of thinking about themselves. New models must be created based on heritage and language as well as providing for a new postcolonial synthesis of law and knowledge, to protect them from old and new dominators and oppressors.

In Eurocentric thought it is essential to learn to think in a '*fragmented manner, balancing the tensions of failing polarities*'. To have mutually contradictory opposites or dualism requires a certain uniformity of thought about unpacking events in such a way that the opposites come out the same no matter who does the unpacking. Restoring aboriginal worldviews and languages is essential to realising aboriginal solidarity and power.

Aboriginal thought and identity are centred on the environment in which Aboriginal people live i.e. ecology. This has created a knowing that honours the diversity of life, rather than a single theory of culture or view of culture which characterises Eurocentric thought.

Finally, Henderson calls for a new framework for emancipation from Eurocentric thought based on natural contexts i.e. aboriginal worldviews, languages, knowledge, order, and solidarity that are derived from ecological contexts, as well as an understanding of these forces which is essential in order to understand aboriginal contexts and thought.

May, Stephan. (Editor). 'Critical Multiculturalism – Rethinking Multicultural and Antiracist Education'. Falmer Press (1999)

The author acknowledges at the outset, that while the book attempts to provide an international perspective to multiculturalism and antiracism, it is limited by virtue of the fact contributors are all located in 'First world' developed countries and the Indigenous voice has been ignored.

The book examines the issue of multiculturalism and antiracism from a number of perspectives and within various contexts such as postmodernism, various definitions of racism, rampant capitalism and hegemony. He concedes that numerous tensions exist, but at the same time sees opportunities to reconcile differing views including what he describes as the rift between the British and American multiculturalism and antiracism critiques i.e. the refusal to incorporate cultural dimension to racism vs. critical multiculturalism and its links to hegemonic discourse.

As a result, May concludes that multicultural education has promised much but delivered little. It has made little impact on the life chances of minority students and instead racialised attitudes of majority students, as well as the inherent monoculturalism of school practice and the wider processes of power relations and the inequality that underpins all of these. It is this paradigm shift which he acknowledges namely; from the preoccupation with minority underachievement to critical structural theory and practice.

Among the key issues examined in the book include;

- **Racism** and its overemphasis on curriculum development and under-emphasis on the impact of structural racism on students lives;
- **Identities** and the antipathy and privileging of racism by the Right against antiracism, preoccupation of black-white dichotomy in antiracist education of the Left, as well as the rift between the proponents of antiracism and multiculturalism;
- **Capitalism, Globalisation and the Nation-state** and particularly how critical pedagogy links multicultural education with socio-economic and political inequality;
- **Theory, Policy and Practice**, and particularly the failure to link multicultural and antiracist education with theory, policy and practice.

National Limits, where debates around antiracist / multicultural education have evolved within national boundaries and not across national boundaries thereby limiting the debate.

May concludes that education cannot compensate for society, but offers hope within the context of fast capitalism, poverty and marginalisation to make a difference.

INDIGENOUS & MAORI RESEARCH MODELS

Smith Tuhiwai Smith. 'Kaupapa Maori Research' Printed in 'Reclaiming Indigenous Voice and Vision'. UBC Press (2000)

Smith states that research is implicated in the production of Western ways of knowing, while denying Maori knowledge, language and culture. A key challenge for Maori therefore, is to retrieve some space by convincing Maori of the value of research as well as convincing fragmented Pakeha research communities of a greater need for Maori involvement in research, as well as take into account new and current approaches to research.

Kaupapa Maori research is an attempt to address the issue of creating such a space, that is culturally appropriate, relevant yet satisfies the rigours of a Maori researcher and not a researcher that happens to be Maori. For two Maori researchers - Bishop and Irwin, Kaupapa Maori research is predicated on whanau, although they disagree on how this ought to be achieved. Smith on the other hand extends this notion to include research that:

- Is related to being Maori;
- Is connected to Maori philosophy and principles;
- Take for granted the validity and legitimacy of Maori, the importance of language and culture;
- and
- Is concerned for self determination.

Central to this process is the notion of Kaupapa Maori as localised critical theory i.e. the possibility of emancipation through greater control over their lives and humanity. It represents a real way of repositioning ; to plan, predict and contain across a number of sites the engagement in struggle. Of equal importance is identity and identifying as Maori and as a Maori researcher, thereby grounding research in Maori worldviews. This does not preclude Maori research from being 'scientific' or ethical.

Kaupapa Maori research is predicated on the following key questions that relate to governance:

- What research do we want to carry out?

- Who is the research for?
- What difference will it make?
- Who will carry out the research?
- How do you want the research done?
- How will we know it is a worthwhile piece of research?
- Who will own the research?
- Who will benefit?

Yates, L. 'What does Good Education Research Look Like?' Open University Press (2004)

The author, a long time educationalist and academic at University of Technology Sydney, claims the book is about *'how good education research gets enacted, judged, defined and constructed in particular contexts, which is important in any discussion of education research methodology'* as well as *'educational research quality'*. She maintains that practices are not neutral *'abstract things'*, as they are *'performed in particular contexts with particular histories, and relationships, and using particular materials frequently specifically textual materials'*. Good educational research therefore operates in a multitude of judgment contexts and relates to *'who is judging the research in particular areas, how they came to be there, what might be influencing them, what signs are they going on when they make their judgments'*. The author seeks to write about the conditions we (i.e. researchers) work in.

In the book, Yates seeks to achieve a number of aims; including generating discussion on educational research methodology, *'contexts, relationships and conditions in which those engaged in such work are located'*. Here, she refers to 'contexts' as the field of education research and the more specific locations *'that have their own criteria and ways of judging good research'* e.g. the thesis; the grant application; the journal article; consultancy and partnership projects; schools and parents; the press and local publishers. She sets out to examine educational research as a broad field of practice, or an activity carried out in a particular contexts and done for particular contexts. In short, they are done by people with particular institutional contexts, and histories, and able to be examined. In defining good educational research, the author identifies the following as key elements;

- Must contribute to learning;
- Must speak to, and be useable by practitioners;
- Must mean scientifically based research.

Educational research therefore, seeks to identify *'the ways it is commissioned, accepted, judged as successful and unsuccessful in these'*.

Smith, Linda. 'Nga Aho o Te Kakahu Matauranga' Unpublished doctoral thesis (1997). University of Auckland.

In the abstract, the author, renown Maori academic Linda Mead describes her piece of research as *"a thesis framed within anti colonial discourse of 'writing back'"*. Here, she surveys Maori education

within a context of multiple sites of struggle and attempts to peel back *'the layers of Western imperialism and its localized expressions'*, with a focus on three issues namely;

- educational research;
- Maori social relations; and
- official discourses on Maori.

Smith argues that while these sites of struggle are different they are informed by the same underlying structures and intersected by similar tendencies and movements. And, it is within this context she explores Maori attempts to re-center and re-prioritize kaupapa Maori and tino rangatiratanga.

Smith defines kaupapa Maori research and its connection to Maori cultural values, principles, priorities and emancipatory aims, as means of 'talking back' to the West. Against this she surveys the plethora of research on Maori knowledge undertaken by 19th Century writers such as George Grey, Percy Smith and Elsdon Best, who in turn have provided a framework for latter researchers, such as Beaglehole and 'the Ritchies' of the 1950's and 60's. The overall affect was to marginalize Maori knowledge, and introduce the notion of 'deficit thinking', where the lack of Maori social and economic development compared with non Maori, was the fault of Maori themselves. Little or no regard was taken of the unequal power relations imposed on Maori. Until the 1980's the Maori culture, Maori people, Maori parents and Maori children were deemed to be culturally deprived. In short, *'research has not been neutral in its objectification of Maori'* and has necessarily marginalized Maori

In her work Smith claims that research must *'attempt to uncover aspects of research that lie beneath'*. It must critically examine Western concepts of science and the power of the West, namely its flexibility that allows for *'multiple traditions to weave in and out of what may constitute a dominant discourse'*. She is concerned over the affect of fragmenting of Indigenous knowledge, whereby Indigenous people must now attempt to consolidate their knowledge. We are researching back. The West classified knowledge which was destructive to Maori.

Two features characteristic of cultural imperialism include fragmentation and structure. The former refers to the underlying system of code, which is elaborated and expressed in through language, education, literature, intellectual thought, science and other aspects of social life, and the latter a cultural archive under which Maori people have resisted

For Maori the struggle concerns the reclaiming of humanity – in terms of human rights and capacity to imagine and create ourselves in the world. It enables individuals to indulge in imagination, which while not inherently emancipatory creates a language of possibility through which people can search for, create and claim back emancipatory spaces. Kaupapa Maori research re-centers Maori knowledge.

Smith, Linda.T, 'Decolonizing Methodologies'. Zed Books / University of Otago Press (2001)

Smith shows how research is implicated in the production of Western knowledge, in the nature of academic work and in the production of theories, which have dehumanised Maori and Indigenous peoples and which continue to privilege Western ways of knowing, while denying the validity of Maori knowledge, language and culture. In doing so, she argues that this has in turn impacted on Maori attitudes to research which is characterised by a rejection of all theory and research per se.

At the same time, Smith argues for the need by Maori to retrieve space in order to convince Maori of the value of research, the fragmented research communities for the need for greater Maori involvement in research and to develop new ways of research that are not restricted by legacies of previous research. This type of research she refers to as kaupapa Maori being located in critical theory being orientated to the notions of critique, resistance and emancipation. Inherent in Kaupapa Maori theory is the examination of power structures and social inequities. In doing so, Kaupapa Maori challenges the underlying assumptions and taken for granted 'truths' of Western knowledge.

Central to Kaupapa Maori is direct engagement with the notion of positivism and fragmentation, individualism, lineal conceptions of time and space all which underpin Western science and knowledge.

Moreover, the significance of Kaupapa Maori is argued as no less relevant to a globalized world, where dominant ideologies are actively promoted and alternative knowledge's (Maori Indigenous ones) are marginalised.

Yazzie, Tarajean. 'Culturally Appropriate Curriculum – A Research Based Rationale' Printed in 'Next Steps – Research and Practice To Advance Indian Education' Edited by Swisher, Karen and Tippeconnic III, John.W.

Yazzie draws upon the work of Inuit scholar Oscar Kawagley to argue that culture and knowing are inextricably connected. Kawagley claims that '*education is embedded in who Yupiaq people are and how they behave and communicate*' which in turn has a '*bearing on the survival of the people*'. This has huge implications on curriculum and requires an analysis of curriculum theorists and views:

Yazzie goes on to draw on Erickson's work; that majority and minority students learn and interact linguistically and cognitively differently. Nor is there one single way of reaching similar understandings. If a learner experiences a negative interaction this could generate distrust, whereas trust is essential to good learning. For Yazzie a teacher ought to build trust rather than promote cultural differences. '*A culturally responsive programme therefore, can transform educational practice*'. This is supported by numerous studies.

Trueba & Philips is also referred to concerning the importance of culture as a '*contributing factor to student performance and positive engagement in the classroom*'. For Trueba, learners need to internalise both local (home) and school cultural values equally.

Yazzie agrees with Butterfield, over the need for appropriate instructional elements such as:

- Materials;
- Instructional techniques;
- Learner techniques; and
- Meaningful parental involvement.

Lipka – cautions curriculum developers to the following challenges:

- Establishing trust where tensions between school and community is common;
- Overcoming assumptions that the school knows best for students and the community it serves;

- Dealing with controversies arising from development of culturally appropriate materials, discussion and knowledge tied to traditional rituals;
- Encouraging the community to use the school or university as resources, not the other way around; and
- Relate schooling to current controversies within or affecting the community.

The author concludes that the development of a culturally appropriate curriculum is both complex and difficult, and is influenced by our inherited values and ideologies.

Secondly, while research makes the point schools serving Native communities have consistently affirmed the importance of culture in the learning process, as well as ownership as to what is being taught, much more is necessary in order for informed decisions to be made.

Warner, Linda. Sue, 'Education and the law – Implications for American Indian / Alaska Native Students' Printed in 'Next Steps – Research and Practice To Advance Indian Education' Edited by Swisher, Karen and Tippeconnic III, John.W.

Educators need to have a general understanding of education case law. The scope for both case law and legislation while narrow, is also increasing and provides education with a philosophical foundation for decision making. For tribal schools this often includes Native culture and language.

Bishop, R. 'Whakawhanaungatanga – Collaborative Research Stories'. The Dunmore Press (1996)

The book is a compilation of experiences of a number of educational researchers, who challenge the ideological underpinnings of cultural superiority that have 'driven' the plethora of government policies since 1840, aimed at marginalising Maori cultural aspirations. In response they advocate 'Kaupapa Maori' defined as *'the philosophy and practice of being Maori and acting Maori' i.e. 'assuming taken for granted social, political, historical, intellectual and cultural legitimacy' of Maori people that it is a position where Maori language, culture, knowledge and values are accepted in their own right.*

Kaupapa Maori research represents a deconstruction of those hegemonies which have disempowered Maori from controlling and defining their own knowledge within the context of unequal power relations in New Zealand. Kaupapa Maori represents tino rangatiratanga and in terms of research which privileges Maori worldviews, aspirations cultural understandings, ways of doing things and knowing while simultaneously challenging the dominance of prevailing notions of research based on individualistic endeavour orientated toward benefiting the researcher alone. Kaupapa Maori research operates from *whanaungatanga* with all of its cultural understandings of connectedness, collaboration, sharing, relationships and accountability back to whanau. Here, the researcher is positioned as an active participant in the research not as an objective observer.

While Kaupapa Maori seeks to position Maori in respect to research, this does not exclude non Maori from participating in such Maori orientated research. Rather, non Maori are viewed as potential allies in Kaupapa Maori research, conditional to guidance and cultural support from Maori research colleagues.

Cleve. P. 'Rangahau Pae Iti Kahurangi – Research In A Small World of Light and Shade'. Campus

Press

The author describes 'rangahau' variously as '*a corpus of indigenous protocols and or prescriptions that function as aids in the process of inquiry*', and likens it to a '*hikoi*' and a '*holistic*' process. In doing so, he uses marae ritual and mythology as reference points while drawing upon an Auckland Institute of Technology, Te Ara Poutama Rangahau (1995) Module descriptor.

Cleve defines 'rangahau' as a '*collective inquiry*' or the '*right to speak*' and describes the '*research process as reclaiming the right to speak and inquire on the basis of an indigenous value system*'. For him 'rangahau' is a set of research procedures developed within the context of the marae making it significantly unique from classroom learning. Cleve also draws upon contemporary Maori scholarship and various discourses such as kaupapa Maori and critical theory, in an attempt to tease out common elements and points of difference. Of particular interest is his focus on whakapapa and its connection to a tipuna whare, as well as environmental linkages. This focus contrasts with Bishop's notion of 'whanaungatanga' as the basis of kaupapa Maori research.

INDIGENOUS AND MAORI EDUCATION MODELS

Tsianina Lomawaima, S. 'The Unnatural History of American Indian Education'. Printed in 'Next Steps – Research and Practice To Advance Indian Education' Edited by Swisher et al

The author calls for critical examination of the terms 'natural', 'normal', 'true' and 'commonsense', as they continue to project racist views and incorrect stereotypes of Indigenous peoples.

In the past such distortions and inaccuracies served to justify Western notions of settlement and oppression predicated on the following tenets:

- Indigenous people were savages in need of civilising;
- Civilising was predicated in Christian conversion;
- Civilising required the subordination of Indigenous societies, even resettlement; and
- That Indigenous peoples exhibited clear moral, physical, mental and cultural deficiencies demanding particular pedagogical methods for their education. This included mass regimentation, authoritarian discipline, strict gender segregation, manual labour and avoidance of higher learning, rote learning, drill to imbue desired physical and emotional habits.

Such tenets were culturally constructed and part of the specific agendas of colonising nations that assumed the status of being 'natural'. That agenda involved transforming Indigenous people and society by eradicating self-government, self-determination and self-education.

Only by way of examination of what is 'natural' and 'natural facts' will they be scrutinised, analysed and revised leading to a review of pedagogical theory and practice.

Tippeconnic III, John W. 'Tribal Control of American Education'. Printed in 'Next Steps – Research and Practice To Advance Indian Education' Edited by Swisher, Karen et al

Tippeconnic argues that *'in tribal settings, American Indian Languages and cultures must form the foundation on which knowledge is built'* and that even mainstream schools will have an opportunity to explore new ways of teaching, learning and *'ways of knowing'*.

The failure of assimilationist education policies of the past demands a change of 'point of view' which values Indian languages and culture in education i.e. infrastructural control over curriculum, reflecting language, teachings and values aimed at enhancing Indian educational outcomes. Such outcomes can only be achieved by way of tribal control.

Some of the features of current Indian education are:

- Tribal control to strengthen the achieve self-sufficiency through the use of tribal languages and cultures in schools;
- Tribal schools are young and experimental;
- Must involve parents;
- There is a need for alternative assessment systems; and
- Research must be integral to the development of tribal schools in order to enhance outcomes and incorporate Indigenous ways of knowing effectively.

Skinner, Linda. 'Teaching Through Traditions – Incorporating Languages and Culture into Curricular' Printed in 'Next Steps – Research and Practice To Advance Indian Education' Edited by Swisher, Karen et al

The persistence of native languages in North American against the onslaught of hostile policies and practices highlights the significance and value parents have placed on it. Communities understand the just how critical language is for the maintenance of community continuity and identity.

Education is critical for finding the meaning of life, and educators have a responsibility to provide for an education that is respectful of our children, nurtures the human spirit, to act in love, acknowledges diversity, encourages the growth of wisdom, reason and responsibility.

Cajete, Gregory. A. 'The Native American Learner and Bicultural Science Education' Printed in 'Next Steps – Research and Practice To Advance Indian Education' Edited by Swisher, Karen and Tippeconnic III, John.W.

Cajete argues for bicultural education based on understanding the Learner culturally, socially and individually. Efforts to improve education of such Learners must be guided by the learners themselves. Successful learning is linked to the degree of relevance the student perceives in the educational task. This is supported by research that suggest that an 'insightful, well integrated and cognitive map and worldview results in a healthy concept of self and positive social adjustment'.

At the heart of this process is the need to understand the core cultural values of Indigenous groups and how such values differ from mainstream education. For core values inevitable affect educational outcomes and therefore must be exposed early on as a student's own core values can energise and enhance self image.

In Indian cultures curriculum is grounded in the development of practical skills and knowledge in the real world context. Education therefore, must acknowledge the community / home realities of Learners while acknowledging the need for diversity in learning styles.

Smith, G.H. *The Development of Kaupapa Maori: Theory and Praxis*. Unpublished Thesis. (1997)

The thesis examines educational and schooling resistance initiatives of 'Kaupapa Maori' which have emerged in the New Zealand context. Of significance is the central organising concept of 'Kaupapa Maori' which has developed within (Maori) community contexts in response to the reproduction of state and dominant Pakeha interests, both within and through schooling and education. The notion of theory emanating out of an affected group of people aligns well with Gramsci's notion of organic

intellectual and Friere's notion of transformation. Smith's adopts both positions which refers to as 'kaupapa Maori' as a theory and transformative praxis and suggests that these new formations of resistance mark a significant shift within Maori transformative strategies. While these arguments are generally situated within the broad field of critical theory they are also concerned with contested multiple relations of power. In the New Zealand context these complex relations can be represented as a struggle between dominant Pakeha; state interest and subordinate Maori; iwi interests. Gramsci's notion of '*intellectuals*', '*hegemony*' and '*war of position*' provide key insights which are used in this thesis to develop an argument around the making intellectual space for Kaupapa Maori.

This work develops critical insights into '*what counts*' as meaningful educational transformation for Maori. Beyond this, it also provides critical interrogation of the notions of conscientisation, resistance, praxis; it involves, '*war of position*' in developing educational resistance against the dominant; state; Pakeha interests; it argues for the notion of utopian idealism within emancipatory practice. It tests critical theory understandings against the practical circumstances derived from the '*lived experience*' of Maori. Finally, this thesis repositions Kaupapa Maori not just as a cultural practice, but as a structural intervention which makes space for cultural practice.

FUTURE SCHOOLING MODELS

Postman, Neil. 'The End of Education – Refining the Value of School'. Vantage Book (1996)

Schooling has two key issues to solve: 'technical' and 'metaphysical'. 'Technical' is the means how the young will become learned i.e. to appropriate an insight, a concept, a vision so that their world is altered. In regard to 'metaphysical', there is a need for a transcendent, a spiritual idea that gives purpose and clarity of learning.

There must be a narrative to give life meaning. For to have meaning is to have purpose. Without purpose, schools are houses of detention not attention. Narratives include the story of science, technology, democracy etc. A critical element is the transmission of morality and ethics. Public education depends on the existence of shared narratives and the exclusion of narratives that lead to alienation and divisiveness. *'Public schools that serve the public, makes the public'*.

What type of public does schooling create? Is dependant on a shared narrative and the capacity for such narratives to provide an inspired reason for schooling

There is little evidence that national productivity is related to the quality of schooling.

The vitality and creativity of humanity depends on diversity which makes intelligent humans out of all of us. Schooling helps us to become human. The use of language is used to recreate the world.

Beare, H. 'Creating the Future School'. Routledge Falmer (2001)

The author profiles an emerging school as:

- Self-managing, partly self-funding and being encouraged to operate as a stand alone enterprise;
- Receives government funding by way of contract to perform a service i.e. school agrees to deliver key learning in core areas of skills and knowledge with appropriately negotiated outcomes;
- User pay's and alternative income streams, where a growing amount of the school's work will be done from leased premises;
- Schools are becoming networked through a rich variety of alliances and interactions;
- Greater selection over staff, many being non teachers and project based employees;

- Schools are becoming increasingly global;
- Community facilities – ‘full service centres’ such as welfare and medical provision; and
- Education is being offered from ‘found space’ in the homes of the children and parents and leased accommodation.

Other Features:

The traditional education system will be replaced by a polymorphic educational provision – an infinite variety of multiple forms of teaching and learning;

- Schools will become less labour intensive by using technology and move toward rapid, tightly targeted, goal orientated, specific targeted and efficient learning;
- Ideally schools should be ‘anticipatory’ communities, modelling the conditions in the emergent world which young people are about to enter as adults;
- Teachers will provide an education that transforms the learner based on three principles;
- Development of a reliable ‘enabling’ belief system;
- Becoming a responsible global citizen; and
- Growing a personal life story which defines who you are and where your life is going.

Education must concern itself with ‘belief formation’: in order to develop critical faculties, give methodologies for research and for making judgements as well as present data for analysis and understanding. Developing beliefs, forming values and fostering constructive attitudes *‘must permeate the entire fabric of education and learning and be at the heart of any worthy school’*.

A great school knows about this kind of moral incarnation and tries to educate its students about how to cope with being a responsible citizen of the world.

Much of schooling is about intangibles: about the depth from which we generate our life purposes and aspirations. *‘Schooling therefore, is concerned with the formations of constructive and systematic beliefs and acceptance of responsibility for the intertwined and complex task of the development of stories or worldviews, which convey deep meanings as to who we are, useful knowledge and enabling skills’*. With these skills every student must face the world about to be. Learning of this kind cannot be haphazard and will always require the involvement of sensitive adults.

In designing a new school one must take cognisance of three Mega trends:

- **Vestigial thinking relating** to pre industrial schools which have outworn their usefulness and hinders school design. This period is associated with imagery of superior education and it is inappropriate and socially dysfunctional to let obsolete ideas about learning based on these concepts to continue unchallenged;
- **Assumptions about school and curriculum** which are derived from factory production and manufacturing industry; and
- Post industrial economy has been moulded around markets and commerce. Underpinning this

paradigm is the **enterprise metaphor**.

Curriculum – Research Shows That:

- The curriculum is ‘clad like’; branching into diverse learning’s and not bounded by subject divisions;
- The curriculum moves beyond a reliance on the scientific method alone, but without discarding it either;
- The curriculum introduces the learner to the power of analogy and metaphor, including the way the metaphor shapes theory;
- A curriculum which is based on the notions that views knowledge as dynamic, not static and encourages interconnectedness and studies which jump across the traditional subject barriers, that creates a map of learning which looks *mandalic* in shape not linear and encourages the learner to develop different stances from which to view and interpret reality;
- The curriculum accommodates group or team learning, as well as individual learning and finds a way to give credit for group learning;
- The search for knowledge is in the final analysis more important than arriving at the final knowledge;
- The expressive and the imaginative are featured across all areas and subjects in the curriculum; and
- The curriculum develops an appreciation of how belief systems and mythologies - both personal and collective are fundamental to all life and learning: and supplies the learner with the skills to build, hone, change and use a reliable set of beliefs.

Mega trends affecting schools:

The new reality images the planet and universe as single complex **interconnected living energy**;

- **Globalisation** is a powerful factor impinging on how we image our world – borderless and where one’s humanity is more important than nationality, nation states have lost their powers and we all have a collective responsibility for the planet;
- **Change is values** more than permanence, where transcendence and meaning are often found in what is fleeting and temporary; and
- **Technology** surmounts geography and provided access to people, information and things.

It is the responsibility of schools to produce programmes which incorporate these trends, designed to produce people who are courageous, robust, well-informed and confident.

The new **enterprise paradigm** that has replaced the bureaucratic one are summarised as follows:

- If the private sector can do it, then let them do it – based on service and value for the dollar, profit driven, efficiency because of competition and customer service;
- The role if government is to set performance frameworks for delivery and not provide the service itself; and

- Government to be a provider only when it is a provider of the last resort.

Nine Propositions of a modern school:

- Education is an industry, a sector in the economy;
- Education is a service;
- Government is the regulator of an essential service;
- Schooling is a process;
- Schools are simply providers of the schooling process;
- Schools are or will become brokers of educational services;
- Every service including an essential service has to be paid for;
- The term teacher will undergo redefinition as the teaching service professionalizes; and
- Funding of education and meeting the costs of schooling will become split level and more complicated.

Stereotypical things about schools which ought not to be repeated in new schools:

- ‘Egg crate’ classrooms, long corridors and cellular ground plans – must take into account more sophisticated learning spaces for small and large group instruction;
- The notion of set class group based on age grade structures. Life-long learning where opportunities are provided for all ages as stratified learning by chronological ages is unproductive;
- The division of day into standardized slabs of time, equalised portions of the day devoted to particular subjects;
- Linear curriculum in which there is an apparent one best way approach and the sequences of knowledge proceeding from simple to complex;
- Parcelling of human knowledge in predetermined boxes called ‘discipline’ and ‘subjects’;
- The divisions of instructional staff by subject specialisation;
- The allocation of most school tasks whatever their make up or kind to an all purpose category of person called a teacher;
- That learning takes place in a geographical bound space called school;
- The artificial walls: some real some symbolic that separate school from community and home;
- The notion of a ‘stand alone’ school isolated from other schools in same town or suburb;
- The notion of a schools system bounded by locality or by geography or province or country; and
- Limitation of schooling to 12-years and between 5-18 years, where educational facilities are not bounded by or limited to year levels.

Hattie, John. ‘New Zealand Education Snapshot’ Paper presented to the Knowledge Wave 2003 – The Leadership Forum (February 2003)

The key underlying theme of the paper is the relationship between the quality of education provision of Years 1-13 and the nation’s capacity to:

- 1 Attract skilled immigrants into New Zealand
- 2 Attract expatriates to return to New Zealand
- 3 Improve the quality of life for all New Zealanders
- 4 Project a New Zealand 'brand' worldwide that is synonymous with quality

While the author acknowledges that 80% of New Zealand students are competitive and performing well by world standards, he notes that 20% are systematically falling behind. He identifies statistics which reveal an immense gap between 'achievers' and 'non achievers', where the latter being less mobile will eventually become school leavers and social problems demonstrated by:

- 1 Third of the unemployed lack qualifications and of these one third are Maori and another 10% are PI.
- 2 Third of our students leave school at or before the minimum leaving age with no school qualifications,
- 3 In a 1996 study, 42% scored below the minimum literacy rate, meaning they could not cope with the level of reading encountered in the workplace.

In respect to Maori, Hattie points to cultural relationships (i.e. relationships between teachers and Maori students) as immensely significant in learning and concludes that *'we have not engaged Maori and Pacific students in schooling, not belonging to the school climate and we have not encouraged them to gain a reputation as learners within our school system – regardless of socio-economic background'*

He identifies the significance of external influences on student learning the greatest of which is 'teachers', supporting the view that, the onus is not on students from different cultures, but on supporting teachers to engage with all students and *'to assist parents to appreciate that their children can learn to high standards'*

This calls for a re-definition of the purpose of schooling, where the student is valued and world class standards are attained. Hattie believes that all this is necessary to attract and retain excellent teachers as well as the technologies of practice, based on effort and not intelligence or family. In short, every student can learn and none will be left behind.

Donnelly, K. 'Why Our Schools are Failing'. Duffy and Snellgrove (2004).

The author is a former teacher, educational consultant and commentator who critically examines the Australian education system, which he claims is failing the nation's children. He attributes this systemic failure to education fads, which he lists as follows;

- The adoption of the outcomes-based approach to curriculum, which has since been abandoned by the USA;
- Fails to recognise the syllabus or a standards approach to curriculum development utilised by successful systems in Singapore, the Netherlands, Czech Republic and South Korea;
- Fails to recognise the importance of educational content and has adopted a process based curriculum;

- The emphasis on student-centred view of education of learning to the detriment of structure and discipline;
- Adopts an ideologically driven approach to education rather than an objective and impartial approach.

He then summarises from his research what constitutes a successful educational system, which he lists as follows;

- A strong , discipline-based approach to school subjects (especially in maths & science);
- Enforce a system accountability and explicit rewards and sanctions (identify under-performing schools and reward successful teachers);
- Define clear educational standards (not outcomes based curriculum, as is the case in Australia) linked to textbooks, teacher training and classroom reserves;
- Have greater time on task in the classroom and an emphasis on formal, whole class teaching;
- Regular testing and examinations which students should be promoted from year to year; and
- Provide a varied curriculum and a range of school pathways in recognition students has different abilities, interests and post school destinations.

Stoll, Louise and Fink, Dean (Editors). 'Changing Our Schools'. Open University Press. (1997)

The mechanistic linear world view based on the scientific logic which has traditionally guided our academic traditions and looks at the 'parts' rather than the whole no longer has merit. A school in the new context is more aptly described as an 'ecosystem'.

School effectiveness is becoming a key research area and if it is to have credibility it must bring about **meaningful change**. Attempts at school reform which are often 'top down', have often failed, thereby undermining and discrediting such research. Much of this can be put down to resistance on part of teachers and others. Others failed because of a lack of focus on the important issues of schooling such as pupil outcomes and an inability to show results. This can be achieved by school development planning leading to the development of a school culture, that doesn't affect teachers of students.

Educational change depends on what teachers do and think. And what they do and think is predicated on their beliefs, values and assumptions which in turn shape norms. In terms of change, underlying values are more difficult to reach than surface behaviours, but it is important to understand them and how they motivate norms and actions. These are particularly important in understanding how they influence teacher's perceptions and definitions as to what it means to be effective.

As policy decisions take on market approaches, divisiveness and isolation tend to follow. Isolated schools in this world cannot meet the needs of students without help from other sources. Schools therefore, require togetherness with their stakeholders to ensure coherence in the lives of students and to continue to develop as organisations. To achieve these goals schools, districts, other partnership organisations must become learning organisations in order to function within a larger learning community. It is a matter of learning for all.

Wanting to develop one's self means that one takes responsibility for one's learning. This can be achieved by just being a member of a particular school – whether one is a teacher, parent, board member etc. It is essential that schools evaluate what they believe is important. But not all things of value can be evaluated. In excellent schools, the monitoring of process, as well as progress is monitored.

Apple, M. E. 'Cultural Politics and Education' The Open University of Press (1996)

On-going efforts at educational reform are reflective of the macro and micro relations of power in our schools and of exploitation that provides the social context in which our education operates. Such relations determine every activity that happens within a school. We must not only make our students critically literate, but ourselves as well about the economy, cultural conflicts, and the role of the state. Secondly, we must be aware of the politics of language in maintaining or reproducing undesirable power relations. We need to build more just and caring models of curricula and teaching.

Ciancutti, Arky and Steding, Thomas L. 'Built on Trust - Gaining Competitive Advantage in Any Organisation' Published by Contemporary Books (2000)

The authors operate consultancy firms that focus on team building, and the book is based on their shared experiences and research of various American businesses. In pointing out the value of trust to any business they provide a framework as to how trust can be created within any business.

In the introduction they draw upon the insights of Francis Fukuyama who concluded that *'a nations well-being, as well as its ability to compete, is conditioned by a single, pervasive culture al characteristic: the level of trust inherent in the society'*³ and in our struggle for economic predominance, he believes that *'social capital represented by trust will be as important as physical capital'*

The authors believe that social capital based on trust within organisations create connections and cohesion among team members, which leads to greater productivity.

Some advantages they claim, which are specific business include; ⁴

'Enduring competitive advantage – an environment rich in trust creates an engine for innovation. There is no upper limited to the combined intelligence and creativity of a team. The promise of trust is extended to the customer, which makes for an extraordinary level of loyalty.

Self regulation – people at all levels of the organisation are inspired to identify and resolve open issues without unnecessary or intrusive supervision by leadership. People become committed to developing habits of reliability follow-through and clear communication.

Efficiency – eliminates energy lost to suspicion, unresolved issues, forgotten commitments, and unclear agreements, missed deadlines and the associated propensity for gossip, blame, resentment and frustration. This energy is directed to positive pursuits.

Inspired performance- the connected team discusses and processes ideas at every stage, so incremental fixes and improvements can be made as needed. Ideas pass through many hands and are improved at every turn, so these teams have an unusual ability to create superior products and services.

Capacity – trust based organisations have a knack of holding opposite conditions and points of view simultaneously with grace and clarity. This can lead to conditions until a new synthesis is reached.

3 Francis Fukuyama, 'Trust; The Social Virtues and Creation of Prosperity' Tama, Fl, Free Press 1995)

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Meaning- *anchors an organisation in a set of values that everyone finds attractive and meaningful*'.

A culture of trust makes an organisation more effective, more productive, more competitive and a better place to work.

Competitive advantage that trust provides is free for the taking.

The authors define a leadership organisation as one *'which consciously and intentionally creates a culture of earned trust based on closure and commitment'* p3. When people feel free and safe to contribute you create win win situations across the entire organisation. P3.

Advantages of a leadership organisation; p3

- Increase in profits
- Productivity
- Productivity – organisational and individual
- Competitive advantage – self-sustaining and self reviewing.

In a leadership organisation, one *'can perform more effectively, efficiently and creatively'*. P4.

The authors invite the reader to develop a Trust Model – which is based on two elements;

Closure – which means that each time people come together to get something done everybody knows who is going to do next and by when. p5

It effectively removes time for wondering on part of people seeking an undertaking into anything. Wondering breeds suspicion, and suspicion is the antithesis to trust, Therefore closure is critical to trust. p21.

Commitment – means people are tasked with actually doing it, although they acknowledge there may be slippage from time to time which part of the Trust Model process. p5

Commitment means promise not guarantee.

The antitheses are that the authors refer to as a 'random organisation' – where fear and distrust predominate i.e. 'Them vs. Us'.

To have a competitive edge, firms need to innovate. To be innovative firms need to be in an environment of trust and where people can be trusted. As teamwork is an emotional interaction, there must be trust in order to release creativity. Earned trust rather than fear is the binding agent for a team.

The 'connected team' they claim represents team life at its highest. Team members are part of process that keeps creating new of competitive advantage forever. The trust Model becomes *'generator of technique, not the technique itself'*. It integrates the raw intelligence of and creativity of individual team members into new synthesis that operates at a much higher plane'

'The moment you interact with another person, you are a team' p6..

The author's research finds that people have a natural inclination to give or passionate desire to

contribute' p11

They define trust is a dual concept – ‘it is both a feeling or emotional component and an intellectual component p14 the latter is based on a track record of performance that confirms trust, or assured reliance on another’s integrity, veracity, justice etc. The active result of trust is confidence, - honesty & reliability. They passive are the absence of worry or suspicion. The Trust Model is the confidence in absence of suspicion, confirmed by track record sands our ability to self-correct.

The premise behind the Trust Model is that *‘people are willing to trade more quickly when principles that promote trust have been explicitly and universally adopted by the team’* p15

To work effectively it must ‘be bigger than all of us’. p15

Leadership organisations are proactive, vision based, and service orientated. Their leaders are people who forge new pathways, model new behaviours, of closure and commitment. They create new environments that foster peoples desire to excel and contribute.

Trust based leadership have the power to support people, in contributing their best, boldly vision based teams, and harvest the higher intelligence of diversity convert energy into innovation, development, growth and profits. P19

Trust based principles:

- Closure- close all communications;
- Commitment – avoid false commitments;
- Communication – use direct and open communication;
- Speedy resolution – clear up unresolved issues as soon as possible;
- Respect – use tact and respect in communication; and
- Responsibility – own your own problems but be willing to give and receive help.

Other rules:

- No surprises;
- Management is responsive within 24 hours;
- Deal with issues at the lowest possible level;
- Tell the truth;
- as a role model;
- Covenant.

Closure and commitment require communication is learner skills

Illich, Ivan.D. ‘Deschooling Society’. Calder & Boyars (1971).

Illich claims that the existence of schools removes the ability of the poor to take control over their own learning and has an anti educational affect on society.

Among the reasons as to why he believes the monopoly of the school should be disestablished are;

- The distribution of an individual's chances;
- Because most learning takes places casually and happens outside of school;
- The insidiousness of the hidden curriculum, which claims that increased production leads to a better life.

For Illich, school acts as the repository of society's myth, the institutionalisation of society's myths and contradictions, as well as the rituals which masks the disparities between myth and reality.

In an attempt to reform education we must accept that neither individual schooling or social equality can enhanced by the ritual of schooling as most learning takes place as the result of unhampered participation in a meaningful setting.

School teaches that teaching needs to be taught leading to institutionalisation.

He describes curriculum as a *'bundle of goods'* produced as any other form of merchandise, delivered to the consumer-pupil, whose reactions are assessed resulting in continually improvement. It is a *'bundle of meanings'*, a *'package of values'* a commodity to appeal to sufficiently large numbers to make it justify the costs for its production.

A good education system should have three purposes:

- To provide all learners with access to available resources at any time in their lives – i.e. 'things', 'models', 'peers', 'elders';
- To empower all who want to share what they know and to find those who want too learn it from them;
- To furnish all who want to present an issue to the public with the opportunity it make their challenge known.

New models of education should be based on the premise: **What kinds of things and people might learners want to be in contact with in order to learn?**

Shipman, Martin. 'In Search of Learning – A New Approach to School Management'. Blackwell Education (1990).

Shipman highlights the need for school management training as a means of producing improved education, raising attainment levels and help children learn. The benefits of such training for teachers, parents and students alike are obvious and respond to social and economic changes that will continue to accelerate into the future. These changes in turn will place pressures on teachers, to ensure that effective ways of teaching are retained and nurtured.

Integral to this process is that teachers must take cognisance of diverse student abilities and backgrounds which in turn acknowledges the importance of enterprise. The message to school management is that, it must encourage enterprise in order to encourage teachers take on leadership roles. Teachers must feel empowered and be informed. These issues are critical to management, as apart from administration.

At the same time, **effective schools are known to have a clear sense of direction and how to get there. They are well organised and have high expectations.** Effective schools also make use of ideas

from day to day decision making in classrooms and among the teachers. They are characterised by empowerment, good ethos and full communication across the school, from bottom to the top. These factors are critical to managing change affecting the curriculum effectively.

The context for learning i.e. concentrating on the school as an environment in which teachers and children should have the maximum opportunity for support are as follows:

- **The resources for learning** - concentrating on the teacher and material resources inside and outside of school
- **Elements of learning** - where the national curriculum has disturbed the balance between knowledge, concepts, skills and attitudes;
- **Teaching styles**- concentration on only individual pedagogy but on coordination of styles across the school;
- **Responsibilities for learning** – concentrating on policies for involving students and parents as well as teachers in negotiating targets , contracts and roles;
- **Entitlement** – concentrating on achieving a broad and; balanced curriculum for all children through efficient monitoring and management; and
- **Assessment in learning** – concentrating on the way assessment can be used to inform, directs and motivate in learning.

Shuker, Roy. ‘The One Best System?’ (Chapter 8 Maori Education – Schooling for Assimilation). The Dunmore Press

Shuker provides a brief overview of Maori education as well as identifying the key political themes that directed Maori education development such as assimilation, integration etc and the role of the church, colonial administration and State in that process. Underpinning this process was social control, detribalisation and deculturalization. For much of the 20th Century, Maori education focussed on agricultural skills and in the 1930’s became more vocational orientated.

In the 1960’s the Hunn Report identified education as the primary means of driving Maori social advancement. In reality Maori were locked into the working class, itself representing a huge major barrier to social and economic advancement.

In the 1970’s and 80’s the focus changed as a result of a fledgling Maori educated class that challenged Pakeha hegemony. Maori sought to reinforce Maori culture and communities as a result. Separatism became the catch cry amongst Maori. The notion of equality shifted away from seeking to compete with Pakeha on an equal footing to one of equality of cultural status. In essence the policy based on the ideology of equality as espoused by the State contradicted by an ideology of cultural homogeneity. The policies of assimilation, biculturalism and integration was in fact mere rhetoric as no serious attempts until recently were ever made to modify Europeanization of Maori education.

Schlechty, Phillip.C. ‘Shaking up the School House – How to Support and Sustain Educational Innovation’. Jossey – Bass (2001)

It is ‘systems’ that define what must be done and what can be done. Systems are defined by the structure of rules, roles, relationships, values, beliefs and norms that determine and prescribe human action within the context of a group or corporate body. In order to enhance the effectiveness of a group or corporate body requires a system to accommodate a new programme. Change-adept organisations are organisations that manage new programmes and projects effectively and efficiently and in doing so

manage the structural changes required for innovation. Schools on the other hand are not change adept organisations.

When schools manage to achieve congruence between curriculum and their overall objectives, the outcomes will be enhanced student engagement and satisfaction, being critical to good learning that is verifiable and measurable. Education must learn from the experience of the business sector and its focus on customer service, understanding competitors, recognising the needs of a diverse customer base and responding with customised curricular, as well as a commitment to continuous improvement.

Any needed structural changes and change in our schools must be predicated on the following questions;

- What is our business?
- Who are our customers?
- What product do we provide to our customers?
- What improvements in existing products can we imagine and what new products might we create?

Yates, L. 'What does Good Education Research Look Like?' Open University Press (2004)

The author, a long time educationalist and academic at UTS, claims the book is about *'how good education research gets enacted, judged, defined and constructed in particular contexts, which is important in any discussion of education research methodology'* as well as *'educational research quality'*. She maintains that practices are not neutral *'abstract things'*, as they are *'performed in particular contexts with particular histories, and relationships, and using particular materials frequently specifically textual materials'*. Good educational research therefore operates in a multitude of judgment contexts and relates to *'who is judging the research in particular areas, how they came to be there, what might be influencing them, what signs are they going on when they make their judgments'*. The author seeks to write about the conditions we (.i.e. researchers) work in.

In the book, Yates seeks to achieve a number of aims; including generating discussion on educational research methodology, ***'contexts, relationships and conditions in which those engaged in such work are located'***. Here, she refers to 'contexts' as the field of education research and the more specific locations ***'that have their own criteria and ways of judging good research'*** e.g. the thesis; the grant application; the journal article; consultancy and partnership projects; schools and parents; the press and local publishers. She sets out to examine educational research as a broad field of practice, or an activity carried out in a particular contexts and done for particular contexts. In short, they are done by people with particular institutional contexts, and histories, and able to be examined. In defining good educational research, the author identifies the following as key elements;

- Must contribute to learning;
- Must speak to, and be useable by practitioners;
- Must mean scientifically based research.

Educational research therefore, seeks to identify ***'the ways it is commissioned, accepted, judged as successful and unsuccessful in these'***.

Glasser.W. 'The Quality School – Managing Students Without Coercion'. Harper Perennial. (1998)

Glasser distinguishes between 'boss-management' and 'lead management'. The former is associated with authoritarianism and control whereas the latter is associated with quality culture that always leads to increased productivity. As boss-management is prevalent in the modern schooling system, the assumption is that quality is poor and productivity low. Inherent in boss-management are various sanctions that are available to teachers ('the bosses') to coerce students ('workers') which is also characterised by external motivational factors. Such sanctions represent impediments to a highly productive workplace. The adversarial relationship between teachers and students severely undermines the development of quality. In short, Glasser sees parallels between the workplace and school and whereas the workplace management style has changed driven by the need for high productivity schools have not.

It is only within a learning environment where the teacher ('lead manager') assumes a facilitation role that is totally free of the coercion that quality learning can take place and productivity flourish. The absence of coercion reflects the lack of an adversarial relationship between teacher and student. Boss-management inevitably creates resistance amongst students to learn.

In a 'lead management' situation, a manager learns how to run a system so that the workers see it is to their benefit to do quality work. Rather than being passive recipients of information as in the boss-management situation they become participants in learning. To encourage learning, Glasser urges that learning is best done in co-operative groups which appeal to one's sense of personal power and belonging.

In contrast to boss-management, Glasser suggests 'choice theory' referring to 'best thing we can do at the time' or attempts to control ourselves and others although in practice we can only control ourselves.

Illich, Ivan.D. 'Deschooling Society'. Calder & Boyars (1971).

Illich identifies the following as issues which influence his ideas about education:

- Poor people in particular have no control over their own education;
- Most learning takes places casually and happens outside of school; and
- The insidiousness of the hidden curriculum, which claims among other things that increased production leads to a better life.

For Illich, school acts as '*the repository of society's myth, the institutionalisation of society's myths and contradictions, as well as the rituals which masks the disparities between myth and reality*'.

In an attempt to reform education we must accept that neither individual schooling or social equality can enhanced by the ritual of schooling as most learning takes place as the result of unhampered participation in a meaningful setting.

School teaches that teaching needs to be taught leading to institutionalisation.

He describes curriculum as a *'bundle of goods'* produced as any other form of merchandise, delivered to the consumer-pupil, whose reactions are assessed resulting in on-going improvement. It is a *'bundle of meanings'*, a *'package of values'* a commodity to appeal to sufficiently large numbers to make it justify the costs for its production. A good education system he believes should have three purposes:

- To provide all learners with access to available resources at any time in their lives – i.e. 'things', 'models', 'peers', 'elders';
- To empower all who want to share what they know and to find those who want to learn it from them;
- To furnish all who want to present an issue to the public with the opportunity it make their challenge known.

New models of education should be based on the premise: What kinds of things and people might learners want to be in contact with in order to learn?

Darder, Antonia. 'Culture and Power in the Classroom – A Critical Foundation for Bicultural Education' Bergin & Garvey (1991)

In her analysis the author claims the homogenisation of American democracy has led to the marginalisation of minority groups, whose growing physical presence in major US urban centres can no longer be ignored. This is contradiction is particularly evident in education where minority students are confronted with a learning environment that devalues their mother tongue, fails to recognise learning styles and right to maintain their cultural identity, while attempting to integrate 'constructively' the values of the dominant culture.

While there is an argument for *'curricular materials and educations approaches that are sensitive to the student's history, socio-political reality and cultural orientation'* they do not are not sufficient per se. Darder instead advocates the need for critical pedagogy where *'student's develop the critical capacities to reflect, critique and act to transform the conditions under which they live'*. In doing so, students acquire a critical understanding of their reality as minority students as part of the process leading to their intellectual transformation, provision of hope and liberation from social oppression.

Inherent in critical pedagogy is the notion that deep rooted contradictions exist in current education theory and practice. These contradictions are often multi-layered and must be examined critically in order to identify their relationship between culture and power and the need for an emancipatory political construct. This process is crucial to the formulation of a classroom practice that governs the development of curriculum and associated learning resources, engenders student participation in classroom activities and relationships between teacher and students, as well as between students. In this situation the teacher perceives his/her role as emancipatory aimed whose key function is to create the conditions for students to learn the knowledge and skills which they can critically examine how society has contributed to their formation as social beings. The author then provides examples and strategies as to how a bicultural education programme that recognises the educational needs of minority students can work.

Myers, K. (Editor). 'School Improvement in Practice' The Falmer Press (1996)

The book analyses the performance of Hammersmith and Fulham education providers established for the primary purpose of raising educational standards as part of a strategy called *'Schools Make a Difference'* (SMAD). Both providers administer schools located in socially turbulent communities. SMAD encouraged schools in its districts to look outside their immediate district and, based on their

own individual needs, plan and implement strategies to lay the foundations for raising student levels of attainment, achievement and morale.

SMAD is based on research from four fields:

- School effectiveness;
- School improvement;
- Managing change;
- Action research.

School Effectiveness – while research reveals that schools can make a difference to the quality of the educational experience and educational outcomes for students, there is little research as to why some schools are more effective than others. An effective school here is defined as one that ‘*adds extra value to its students*’ and will not always be effective with all their students. However, the literature claims that schools can make a significant difference to student outcomes even when background factors such as age, sex and social class are taken into account.

The characteristics of effective schools are identified as (p8);

- Professional leadership;
- Shared vision and goals;
- A learning environment;
- Concentration on teaching and learning;
- Purposeful teaching;
- High expectations;
- Positive reinforcement;
- Monitoring progress;
- Pupil rights and responsibilities;
- Home school partnership; and
- A learning organisation.

A key outcome of SMAD is the need for research based practice for teachers, or teachers as researchers as it leads to high quality curriculum development and improved professional practice. A feature of such action research is that it is both emancipatory and participatory, The author however, makes it clear SMAD is not intended to be replicated in other contexts.

Outcomes of SMAD include:

- Need for sound resourcing for research projects;
- Smaller projects are easier to support;
- A project shouldn’t be too short in duration as time for evaluation of longer term results is necessary;
- There can’t be a single strategy for all schools;
- Local cultures and conditions must be acknowledged; and
- Aspects of the project cannot be applied elsewhere.

Ridley, Matt ‘Nature via Nurture’ Published by the Fourth Estate’ (2003)

The author is a scientist, author and journalist. Impetus for the book is the media hyped publicity concerning the discovery that the Human Genome consisting of just 30,000 genes, being much less than the 100,000 or so predicted even just weeks previously. For many this strongly suggests the importance of genes had until then been overstated at the expense of the environment and cannot explain the diversity of human behaviour per se. Authorities on the subject claim even a fraction of those figures could provide the diversity apparent in the human race. However, it introduced a new paradigm that challenged *'biological determinism'*.

Ridley takes neither position. Instead he asserts that genes are designed to take their cues from nurture. He believes that as humans begin to understand the genome more fully *'the more vulnerable to experience genes appear to be.'* Nurture depends on nature and genes need nurture. He contends that nurture comes via nature. It is genes as well as experience that makes us human. In describing this view Ridley draws upon anecdotal as well as scientific evidence from studies of animals to diminish the Cartesian divide. It is genes that allow the human mind to learn, to remember, to imitate, to imprint, to absorb culture, and to express instincts. They are both the cause and consequence of our actions. Most of all genes are 'friends' and are not 'unfriendly' entities that determine our lives.

Henton, D, Melville, J.,Walesh, K. 'Grassroot Leaders for the New Economy' Published by Jossey-Bass.

The purpose of the book is to *'describe and explain the nature of leadership necessary to compete in the 21st century, based on observations of effective civic entrepreneurs'*. The book represents a sharing of collected experiences of civic entrepreneurs and provides insights into their motivation, purpose, lessons learned, and advice. In doing so, they draw upon the experiences of corporate and community leaders, as to what they consider to be secrets to a particular regions success.

The book is written against the context of globalisation and its transformative effects on industry, government and diversity. In doing so, the authors profile four US communities: Austin, Texas; Cleveland, Ohio; Wichita, Kansas and Silicon Valley, California, as well as two US States namely, Arizona and Florida. In spite of the diversity of culture, politics, economics and geography of these regions, their underlying economic success is attributed to *'a collaborative model for regional resilience lead by a new civic leader, namely the economic entrepreneur'*. The authors claim all of these regions represent a new economic model i.e. *'an economic community'*, defined as a place characterised by *'strong, responsive relationships between the economy and community, that provide companies and communities with sustained advantage and resiliency'*. Economic communities integrate the economy (*the world of work*) and the community (*the world of living*), thereby providing for effective collaboration among business, government, education and community leaders, aimed at addressing new challenges and opportunities. Here, economic communities take responsibility for their future and use their own resources not those of government. This paradigm has given rise to new leadership to help US regions to become strong economic communities.

Whereas regions previously viewed globalisation as a threat, leading regions view it as a huge opportunity i.e. to participate as critical regional contributors to value adding global industries. In the 'new' globalisation scenario, healthy local roots are essential for global reach, with key drivers being, access to local markets, workforce, technology and suppliers. This involves creating specialised habitats that can grow high value business, and can be achieved by effective people and places policies. Sustainability will be achieved by policies that are supportive of;

■ Education and training policies for workers;

- Research;
- Modern infrastructure; and
- Development of institutions that facilitate collaboration with business, government and independent sector.

Secondly, Information Technology, characterised by decentralisation simultaneously highlights the importance of relationships. This has encouraged autonomy and enabled small companies overcome the main advantages of large companies. In short, decentralisation and specialisation (by way of outsourcing non core activities) has given rise to the networked economy.

Three features of a Economic Community:

- Engaged clusters of Specialisation: concentrations of firms that create wealth in regions through export and are engaged by their communities to meet mutual needs;
- Connected Community Competencies: the community assets and processes that creates the foundations for competitive clusters and sustains a high quality of life. Here, economic communities develop a set of competencies that are responsive to business needs and
- Civic Entrepreneurs: economic community leaders that connect economic clusters and community competencies to promote economic vitality and community quality of life, where '*relationships are the glue of strong economic communities*' (p28), and economic strategy is underpinned by relationship building.

Through observations of high performance economic communities, the authors claim that social capital is generated (p30), by the catalyst role of a 'civic entrepreneur', who creates opportunities for people to work together on specific projects to advance economic community.

A key conclusion of the book is that communities cannot be strong if they are economically weak.

MAORI EDUCATIONAL PERFORMANCE

Jefferies. R. 'Maori Participation in Tertiary Education – Barriers and Strategies to Overcome Them'. 1997. Prepared for Te Puni Kokiri

The report acknowledges the dearth of research making it difficult for policy makers to make conclusive decisions about what is happening to Maori in the education sector. It also identifies a number of barriers to Maori participation a key one being, poor participation at primary and secondary levels which directly impacts on Maori participation at tertiary level.

The report also calls for more research into Maori education and particularly kura kaupapa and Maori immersion education.

Hollings. M, Jefferies. R, McArdall, P. 'Assessment in Kura Kaupapa Maori and Maori Language Immersion Programmes'. Report to the Ministry of Education (1992)

Maori language immersion programmes are handicapped by the lack of assessment methodologies for second language learners, quality resources and teachers who are both fluent and trained in immersion teaching. Of particular importance is the need to develop assessment procedures that test competency and assessment guidelines that are diagnostic, rather than norm referenced. Finally, the development of such assessment methodologies and tools must be appropriate for Maori.

Smith. G. H., . A Report to the Ministry of Education (1990) compiled by the University of Auckland

In order to uplift academic performance within Maori Boarding schools, change strategies must be formulated that require the involvement of all stakeholders including state, church, BOT's, principals, teacher, parents and students. Furthermore, such strategies must operate across multiple sites to cover policy, structure, institutional and educational delivery. Naturally, the comprehensive change strategies Smith advocates must have major resource implications for the Ministry of Education, being critical if meaningful progress is to be made in respect to improving academic performance in Maori Boarding schools.

Smith concludes that in view of the potential of Maori Boarding schools to deliver high academic outputs, the ministry must be proactive in identifying what is needed to be done in order to reposition these schools for success.

Cormack, Ian. "Creating an Effective Learning Environment for Maori Students". Chapter 11 in "Mai i Rangiatea - Maori? Wellbeing and Development", Edited by Pania Te Whaiti, Marie McCarthy & Arohia Durie, Auckland University Press/Bridget Williams Books, 1997

Ian Cormack presents his model for teaching Maori students, based on his 25 years active involvement in the education of Maori children. His model is based on the axiom - "*groups compete, individuals cooperate*".

The teacher must begin by creating an *esprit de corps* in the class, to get the class to function as a whole. Once that is achieved the teacher then introduces activities that make students work in groups or pairs. Only when the sense of belonging and *whanaungatanga* has been achieved, should individual activities be introduced. Maori children work best as individuals when they know they are part of a

group which is in turn part of a larger group. This gives them the security and confidence to perform to the best of their ability.

The characteristics of this type of learning environment are:

- A class *esprit de corps* - class cohesiveness
- Group competitiveness
- Co-operative individuals

In addition, creating and maintaining an effective learning environment will be assisted by teachers who:

- Readily identify with and affirm things Maori,
- Allow Maori issues to be openly discussed in class,
- Allow students the choice of whether or not to identify as Maori,
- Continually work at developing teacher-student rapport,
- Use humour that is relevant to the task at hand to focus the mind and maintain interest,
- Challenge Maori students to succeed;
- Emphasise praise and reward rather than criticise and punish;
- Recognise and confirm individual as well as cultural differences;
- Deliver the curriculum in a way that is socially and culturally relevant; and
- Use Maori imagery, models, practices and tikanga to illustrate points.

Cormack uses the presentation-reinforcement-exploration model for curriculum content delivery, presentation and reinforcement to ensure long-term memory, and exploration to give relevance in the context of the real world.

In his experience with Maori learners, visual learners tend to predominate and Maori students that he has taught and who have succeeded academically have almost invariably been visual learners. He emphasises however that good practice for Maori students involves not just presenting them with activities that are visually oriented, but also with activities that are auditory, haptic (touch), and kinesthetic (motion).

Jenkins, K. 'Maori Education: A Cultural Experience and Dilemma for the State – A New Direction for Maori Society' printed in Coxon, E et al (Editors). L. 'The Politics of Learning and Teaching in Aotearoa / New Zealand'. The Dunmore Press (1994)

The proliferation of Maori programmes both within the state schooling system including those through Maori initiatives reflects the existing crises in Maori education. Whereas the state recognises one crisis in education, namely under achievement in schooling, Maori argue this is but one which extends throughout every aspect of Maori life of which schooling is but a small part. The state for its part has

co-opted Maori language and culture as a means of giving credibility for its own Taha Maori and Bilingual programmes. Maori education policy as stated in the '10 Point Plan' appears more concerned with what should happen in respect to improving Maori education, rather than a deliberate plan to integrate Maori education as part of the national education system.

More recent Maori education initiatives reflecting the will of Maori communities to take responsibility for Maori education conforms with Freire's notion of *conscientization* leading to transformation and eventual liberation. Such initiatives legitimate Maori culture and knowledge and are inherently liberatory in nature.

The State attempts to address the Maori education crisis is characterised by high levels of dependency and limited control. Moreover, the knowledge is effect 'state knowledge' or 'official knowledge'.

While these features are reflected in the state's '10 Point Plan for Maori Education', any commitment to a Maori curriculum that can deal with Maori underachievement in a culturally appropriate way is non existent. Also apparent is an emphasis on the removal of barriers to education, rather than a pro-active strategy to increase Maori participation.

Maori education initiatives such as Te Kohanga Reo and Kura Kaupapa ensure that Maori communities must take responsibility for their own education, where Maori philosophy, practices, beliefs and values are taken for granted and remain paramount. In doing so, these communities become '*conscientized*' and politised leading to transformation because they legitimise Maori knowledge, processes, content, culture and values.

Smith, Graham Hingangaroa. 'The Politics of Reforming Maori Education: The Transforming Potential of Kura Kaupapa Maori' printed in 'Towards Successful Schooling'. Lauder.H & Wylie,C. (Editors). The Falmer Press

Smith provides a wide ranging analysis of the reasons that contribute to the continued failure of educational reform in regard to Maori. A legitimate means of altering this trend may be found in Kura Kaupapa Maori, which provides the radical potential to transform the Maori schooling experience generally, including those children in the state schooling system.

However, this transformation is dependant on dominant Pakeha interests relinquishing power and resources to Maori, to enable Maori to take greater control over their lives as guaranteed under the Treaty of Waitangi i.e. devolution of power and decision making.

Chapple. Simon, Jefferies. Richard, Walker. Rita. 'Maori Participation & Performance in Education'. Report to Ministry of Education (1997) by NZ Institute of Economic Research

The study examines the gap between Maori and non Maori in an attempt to fully understand the mix of factors behind variances in education participation and performance. It concludes that the education gap in participation and performance is multidimensional and that Maori do less well on almost all measurable dimensions. Some key reasons for major disparities are; cultural, access to resources as well as under investment in education. Of them all the study concludes access to resources by families as probably the most significant.

Hattie, John. 'New Zealand Education Snapshot'. Presentation to the Knowledge Wave 2003

The author is a professor of education at the University of Auckland and advocates the need for quality

provision of Years 1-13 education in order to attract:

- the best and the brightest to stay in New Zealand;
- the best immigrants from overseas;
- New Zealanders living offshore to return home.

Against this Hattie is concerned over the extreme degree of inequality in the New Zealand education system namely, the growing gulf between the lowest achieving students and those achieving at the middle.

He asks why the education debates over the past 20 years have had little affect on improving education and summarises the messages young people presented which contradict the realities of the labour market such as:

- *You need to do maths and science* – whereas graduates in these disciplines are the highest unemployed of university graduates;
- *You need more education to survive in this world* – for those who see they are not going to succeed in this world, they might as well drop out earlier than we did

Hattie argues for '*social capital venture investment*' that will make a difference for all students by raising the performance of the lowest 20%, thereby averting major social problems later on. He then goes on to analyse research data collated from the TTe project, which he interprets as strongly suggesting the need for greater investment in '*relationships between teachers and Maori students*'. In short, Maori student performance is related to cultural relationships not socio economic resources which occurs at all levels of socio economic status.

His solution is:

- For teachers to relate to students of different cultures
- To esteem culturally rich schools
- To provide support for teachers to engage all students
- To assist parents to appreciate their children can learn to high standards

In identifying the key success factors Hattie provides a percentage variance factor as to the significance of each:

- Students – 50%
- Home – 5-10%
- Schools – 5-10%
- Principals – unspecified
- Peer Effects – 5-10%
- Teachers – 30%

In concluding, Hattie advocates the need to focus on the teachers and teacher training rather than buildings and school structures etc as is currently the case. This emphasis is necessary for higher quality teaching and higher expectations about the challenges teachers set for students. He suggests

three ways as to how this can happen;

- The need to recognise excellence in teaching that is fair and dependable and to use these excellent teachers to lead improvement of teaching
- To accelerate the transition from co-educational practice as a craft, to educational practice that is evidenced based.
- To redefine the purpose of schooling

Furthermore, he calls for teachers to engage students in a bold new curricular which prepares them for:

- Critical thinking
- Persuasive argument
- Setting and meeting challenges
- Ensuring cultural loyalty
- Provision for attracting graduates back to New Zealand

Teese, Richard & Polesel, J. 'Undemocratic Schooling – Equity and Quality in Mass Secondary Education in Australia'. Melbourne University Press (2003)

The author is Professor of Post Compulsory Education and Training and Director of the Educational Outcomes Research Unit at the University of Melbourne. In the book the findings of a survey conducted on the secondary school population in Australia are interpreted providing insights surrounding the relationship between curriculum and social inequity in Australia.

Teese highlights the economic dependence on secondary schooling revealed by the growth of credentialism over recent decades as well as economic marginalisation of schools and its affects. The key underlying feature of this development is the existence of a hierarchical curriculum operating within the traditional stratified schooling system. This raises questions as to why the curriculum offers the least support for schools which serve the most vulnerable communities, which in spite of strong social support are left poor academically and ultimately economically.

On the other hand, the focus on academic excellence which is characteristic of the elite establishments is based on the high concentration of economic and cultural resources as well as their high level of integration where, *'most students feel they belong to their schools, get on well with their teachers are confident about results and are willing to work hard.'* According to Teese, such schools fortify themselves against failure and *'the curriculum itself becomes inseparately linked with these schools and what they do'*. Central to the dominance of the traditional curriculum is the role of universities which serve to maintain the status quo and entrench social and economic advantage.

In contrast, poorer schools are linked to social and economic disadvantage and yet are required to manage the same curriculum used by elite schools with each other.

School reform therefore should focus on the question; For whom? School effectiveness means tackling those structures that *'disable'* them. In Australia he advocates vocational education and training which represents a major departure from the traditional liberal conception of education. In order to embed

vocational studies into the curriculum he believes any reforms must parallel the reforms of the academic curriculum in terms of design, teaching and management. This avoids vocational education becoming the pretext for *'indefinite deferral of reforms on which mass education depends.'* For Teese the key motivation for school reform is achievement, which he claims is the *'near exclusive source of social integration of young people'* no matter what educational pathway they pursue. The corollary is failure at school means low self-esteem, self recognition and the *'cutting adrift'* of the individual from social institutions. He concludes that retention must be supported by strategies to raise achievement to make the school curriculum more genuinely inclusive.

Teese further concludes that secondary education is *'massified and not democratised'*, where school improvements in site management, greater accountability and the broadening of the school curriculum etc will not affect social inequality, as neither school effectiveness or the breadth of the curriculum attack the fundamental elements that unite academic success to social power. The hierarchy of curriculum are kept in place by the positional power of universities and is served by the hierarchy of schools kept in place by the funding models. In the case of the former the academic curriculum emphasises the cognitive and cultural demands in school subjects dividing them in 'soft' and 'hard' based on academic severity. In the case of the latter, the school system is divided into fortified sites where economic and cultural resources are highly concentrated and where social and educational disadvantages are pooled.

Structural reform therefore, must address both issues where social resources are concentrated in education i.e. in the curriculum (*as a hierarchical system of learning needs*) and in schools (*as a hierarchical system of learning opportunities*) as any educational investment in a child must be made on behalf of the child: where more teaching is needed the more resources should be provided. Teese however, is also realistic enough to recognise the immense difficulties in reforming the curriculum.

PEDAGOGIES (GENERAL)

Freire, P. 'Education for Critical Consciousness'. Continuum Press (1973)

For Freire, education is an act of love and thus an act of courage. It does not fear critical analysis. Education must prepare humans for democracy and transform society, enabling citizens to become more human. From his experience in Brazil, this process requires a form of literacy that not only enables people to read, but to also release their natural creativity. It also assists in the development of a better understanding of causality: there are three types of understandings i.e. magical, naive and critical. Only critical understanding leads to critical action. Critical understanding can only be based on dialogue, described by Freire as a horizontal relationship, one based on equal power relations and mutual respect. Literacy therefore is much more than mere learning of letters, words, reading and writing. It is the act of creation and recreation as well as self-transformation. Teaching moreover, involves entering into dialogue with an illiterate person, and where an illiterate person is offered the instruments to teach him/herself. In short, learning becomes a collaborative process and cannot be 'top down'.

Polk Lillard, Paula. 'Montessori Today – A Comprehensive Approach to Education from Birth to Adulthood'. Published by Schocken Books (1996)

The author provides an overview of Montessori teaching and practice, which she describes as an approach to education that '*balances freedom and responsibility in the classroom and also sets high standards of intellectual and social development for children*'. In doing so, the Montessori approach provides a vision for development of human beings from early childhood to adulthood predicated on the development patterns of children. It is vision that is coherent, holistic where a child's education must be viewed in its entirety and is firmly focussed on the goal of education rather than the methodology. For Montessori, that goal is '*the development of a complete human being, orientated to the environment and adapted to his or her time, place and culture*'. In short, the Montessori approach is student focussed, future focussed and orientated to providing learners to deal with change.

The success of the Montessori approach to education is derived from observation of children's development corresponding to the child's development periods which are universal and transcend culture. Two key themes which underpin the Montessori approach are: *exploration* to enable the child to '*finish his or her own body*' through the development of the brain via exploration of the environment and the capacity to '*adapt to the group into which he or she is born*' coupled with the ability to imagine and problem solve. However, these are dependant on '*environment, a prepared adult, and freedom and responsibility*' and are synonymous initiative, independence, self discipline and social behaviour.

Montessori, Maria. 'The Absorbent Mind' Henry Holt and Company (1995) Reprinted.

The author wrote the book during World War II in which she laments over the failure of humanity at having achieved maturation, where people shape their own destinies and futures rather than being victims.

While education could be an effective means of advancing humanity, it is still widely viewed as the mere transmission of knowledge. As such, Montessori believes that education has failed to keep up with human development, for if we value positive change then we must recognise those qualities that comprise a human being. For her, education must aim to nurture the innate qualities of young children starting at birth. This requires new ways of teaching that recognises the psychic energy of infants which

have been ignored by humanity for thousands of years. Yet, infants continually present us with revelations for us to study, including the power to teach themselves. Montessori provides an example of this power, namely language acquisition, which is achieved without adult involvement, yet infants manage to achieve this to perfection. Infants also follow a programme of development in accordance with a schedule, being a phenomenon that is universal. In short, it is as if there is a teacher inside each of them. She puts this down to a source of *psychic force* at work, helping a little child to develop, to counter adult reasoning.

Montessori advances on this line of argument to state each stage of a child's development leading to her claim that education is not something which the teacher does, rather it is '*a natural process which develops spontaneously in the human being*'. It is acquired from the child's interaction with his /her environment which requires the '*teacher to prepare and arrange a series of motives for cultural activity in a special environment made for the child*'. It is not the role of a teacher in this context to talk. The underlying aim of education must be to assist the child to become independent.

Any reform of education must therefore, must be based on the '*personality of man*'. It is man / woman during the first three years of life, who must be the centre of education.

**Wise, J and Wise-Bauer, S. 'The Well Trained Mind – A Guide to Classical Education at Home'.
Published by W.W. Norton and Co (1999)**

The authors are mother and daughter veteran homeschoolers. They provide what is essentially a comprehensive manual for parents contemplating or intending homeschooling based on a classical education. The book commences with the opening statement that '*if you want to child to have an excellent education, you need to take charge of it yourself*'.

The authors describe a classical education as one that:

- 🎬 Is language intensive / centred and not image focussed (TV etc)
- 🎬 Is history intensive which celebrates the progress of human endeavour
- 🎬 Trains the mind to analyse and draw conclusions
- 🎬 Demands self-discipline
- 🎬 Produces literate, curious human beings who have a wide range of interests and capacity to follow them up.

Classical education is systematic and is centred on the *trivium* comprising of a three stage pattern of learning namely:

- 🎬 **Grammar** – is fact and language centred based on words that demands the mind 'to work' The emphasis at this stage is content and memorisation.
- 🎬 **Logic** – are tools for organising those words leading to conclusions. It teaches the learner to think through the validity of arguments and to weigh up the evidence in relation to an argument.
- 🎬 **Rhetoric** – is idea centred and dependant on the first two stages. In this stage all knowledge is interrelated and progresses from ancient history to modernity. This stage actively engages with the ideas of the past and enables the learner to study the principles of self-expression both in writing and speech, and in doing so, recognises emotion and the expression of emotion through writing and music. A key focus in this stage is greater understanding of civilisation, country and

place arising from '*what has come before us*'.

The authors conclude by stating that a learner with a well-trained mind continues to read, think and analyse long after formal classes have ended i.e. a life-long learner, being the primary if not sole aim of education. At the same time, they make the point they are not anti-technology and in advocating home schooling based on a classical education, offer advice and resources covering internet and computing resources. As well, they provide sample schedules / timetables, how to plan teaching on a daily, weekly and yearly basis for parents, advice on testing and where to get help.

MAORI PEDAGOGIES

Hemara, Wharehuia. 'Maori Pedagogies – A View from the Literature'. Published by the New Zealand Council for Educational Research

European settlement of Aotearoa was accompanied by the introduction and entrenchment of Western beliefs and mindsets. Maori were willing to adopt only some aspects of an imported systems, but unwilling to change their ways of being or world views.

Any 'gaps' between Maori and non Maori therefore, is not deemed to be important. Rather, the gap between Maori aspirations and achievements are deemed more appropriate. Consequently, new educational initiatives should be seen as reinforcing mana of Maori communities and therefore, must take cognisance of what Maori consider important; and that traditional values and operating standards can be translated into contemporary contexts.

Key points to emerge in respect to traditional Maori education:

- Traditional curricular were closely related to the spiritual, intellectual, social and physical well-being of the community and individual;
- Teacher/learner relationships, experience and experimentation were cooperative ventures;
- Lessons had direct and immediate application;
- Learning progressed from simple to complex;
- Feedback was normal;
- There was formal and informal learning;
- Rote combined with ritual was common; and
- Low student / teacher ratios existed.

Tau, M. 'Matauranga Maori as an Epistemology'. Printed in Histories; Power and Loss

Tau examines the Western concept of history and its reliance on chronology compared to Maori oral traditions i.e. *whakapapa* where time is measured genealogically, and where *mana* forms one's perception of the past.

Traditional *whare wananga* taught the student of his spiritual relationship to the world. Its purpose was to categorise knowledge in relation to *whakapapa*, which also determines Maori thought, whereas universities categorise thought based on Western concepts and ideas.

Matauranga Maori is defined as Maori epistemology (i.e. how Maori think) and underpins or gives point to Maori knowledge; i.e. Maori language, symbols e.g. tapu representing movement, places, interaction with objects, facial expression, artwork, food gathering etc. Other points to emerge:

- Modern forms of *whare wananga* need to be driven by Maori;
- Students ought to be trained in *Matauranga Maori* as a foundation to other study;
- *Whare wananga* are not incompatible with the modern university and stand as an adjunct to the

other; and

- As an adjunct, students will enjoy the benefits of exposure to non Maori learning and international experiences

Smith, Graham Hingangaroa. 'Protecting and Respecting Indigenous Knowledge'. Printed in 'Reclaiming Indigenous Voice and Vision'. UBC Press (2000).

Smith calls for the protection of Indigenous knowledge, warns of the new formations of colonisation and describes some new Maori education initiatives, representing innovative examples of resistance to these new forms of colonisation in Aotearoa.

He highlights the need for Indigenous people to be proactive rather than get diverted by the '*politics of distraction*' promulgated by non Indigenous peoples. Secondly, Western science must be engaged critically in order to examine its colonising potential. Thirdly, Indigenous peoples must be cautious as to how they describe themselves which could easily become self-fulfilling prophesies. Fourthly, Indigenous peoples must at all times be mindful they are accountable to their respective communities and must be committed to transformation. Fifthly, Indigenous academics must consciously identify other scholars and encourage them to contribute to the struggle with support and guidance from the community. Finally, Indigenous academics must develop theoretical understandings based on Indigenous knowledge and assist in formulating critiques and effective interventions. Theory is important in organising struggle and developing transformative action as well as critiquing Western theory that can make space for our own theoretical frameworks. A critical aspect of this process is the need to engage the new economic based 'individualism' such as individual rights which undermine Indigenous solidarity.

Smith also refers to the commodification of Maori knowledge by NZQA representing a new formation of colonisation. Here, Maori knowledge is 'packaged up' for convenience and on sold. He concludes with a description of recent Maori education initiatives that were derived from concerns by Maori parents such as Te Kohanga Reo, Kura Kaupapa and wananga.

Cleve. 'Tikanga Maori Whakaaro – Key Concepts in Maori Culture' Oxford University Press (1996).

The author is a lecturer in psychology at the University of Auckland. The preface is written by Sir Hugh Kawharu, who makes it very clear the book is neither a dictionary nor phrase book. It does however provide better understandings into those key concepts and insights into Maori lore. He explores the meanings of basic terms which many non Maori are likely to be familiar with such a aroha, mana and tapu, but also delves into many other concepts not as familiar. To do this he draws liberally on personal experience as well as other Maori noted for their depth of knowledge and experience such as Dr T. Reedy, Dr Paki Harrison and Fr Henare Taite.

In doing so, the author manages to provide some key insights into Maori spirituality and worldviews, which are expressed in both the English and Maori languages.

**Fitzsimmons, F and Smith, Graham. *'Philosophy and Indigenous Cultural Transformation'*.
Printed in Educational Philosophy and Theory (2000)**

Historically, Maori have not featured in debates within educational philosophy and have not enjoyed speaking positions in that dominant discourse. Such debates have generally been Eurocentric in nature and have not made space for Maori. There is a requirement therefore, for Maori and education philosophy to engage with each other in a dialogue, that is inclusive of both traditions the benefits of which can only be mutual.

LEARNING TO LEARN / LEARNING TO THINK

Calvin.W.H, ‘How Brains Think – Evolving Intelligence, Then and Now’. Published by Weidenfeld & Nicolson (1997)

The author, a psychologist attempts to identify ‘*What Intelligence is, When it is needed and How it operates*. He identifies some of what intelligence is as; ‘*cleverness, foresight, speed, creativity and how many things you can juggle at once*’ Calvin also refers to Piaget’s definition of intelligence, ‘*is what you use when you don’t know what to do*’ and ‘*the process of improvising and polishing on a timescale of thought and action*’ (unknown source) and Horace Barlow’s definition ‘*that intelligence is all about Guessing well*’. Intelligence the author says is not about purpose and complexity, but means a ‘*broad range of abilities and efficiency in which they’re done*’ and implies flexibility and creativity i.e. ‘*the ability to slip the bonds of instinct and generate novel solutions to problems*’ (Carol Gould).

For Calvin, intelligence is manifested in the size of the repertoire of words and speed of learning, creativity and imagination as well as innovation and multistage planning, but states that versatility, foresight and creativity are predicated on a base of existing knowledge.

Secondly, intelligence at higher levels requires consciousness and both broadly overlap each other. He goes on to quote Paul Churchland who describes consciousness as;

- Utilizing short term memory;
- Is independent of sensory inputs in that we can think about things not present and imagine unreal things;
- Displays steer-able attention;
- Has capacity for alternative interpretations of complex and ambiguous data;
- Disappears into sleep;
- Reappears in dreaming; and
- Harbours the contents of sensory modalities within an unified experience.

Thirdly, intelligence is predicated on syntax, i.e. the ability ‘*to convey to another who did what to whom*’, suggesting the existence of a bio-program referred to as Universal Grammar i.e. ‘*a predisposition to grammars in one’s surroundings*’ or the ability of humans to string meaningless sounds into meaningful words. It is this ability to create and recreate new combinations of sounds meaningfully that distinguishes humankind from animals. Universal Grammar therefore has a biological base and complies with the view put forward by evolutionary psychologists that syntax underpins human levels of human intelligence.

Gardner, Howard. ‘Frames of Mind – The Theory of Multiple Intelligences’. Fontana Press

Two key considerations policy makers need to keep in mind in respect to education are:

- The goals of a particular intervention or an education programme must be reviewed, and more specifically any rhetoric, and generalities as well as potential conflicts and contradictions identified (e.g. literacy may conflict with religious values, political attitudes etc);
- The assessment of the means to achieving those goals, which should focus on the traditional methods that are available – observation learning, informal interaction, apprenticeship, prevalent media, varieties of school, curriculum, mode of transmission, values and roles.

For every goal currently being pursued there is presumably a set of intelligences, which could be

readily mobilised for its realisation; and a set of intelligences, whose mobilisation would pose a greater challenge.

Within different cultures there are characteristic blends of intelligences which have been favoured over the years. It is possible to delineate those configurations that have been prominent in diverse cultural settings e.g. in agricultural settings: interpersonal, bodily kinaesthetic, linguistic forms of intelligence and in pre-industrial settings: rote learning and mathematical intelligences etc.

Individuals are not unlike in their cognitive potentials and their intellectual styles and that education can be better carried out if it is tailored to the abilities and need of particular individuals. It follows therefore, that effective learning is more likely, if methods are devised for assessing the intellectual profiles of individuals.

A review of pedagogical experiments - successful or not call for a close analysis of educational processes as they have traditionally existed in a culture, as well as careful consideration of how these might be mobilised to meet novel needs in a changing world.

Buzan, Tony. 'The Mind Map Book – Radiant Thinking'. BBC Books

The key goal for all individuals, especially in business and education is to accelerate their ability to learn, remember and record information. The mind map's radiating structure reflecting the natural architecture of the brain allows rapid processing, storage and retrieval of information.

The purposes of the book are outlined as follows:

- To introduce a new concept in the development of thought – Radiant Thinking;
- To introduce a new tool that allows one to use Radiant Thinking, to best advantage one's life – Mind maps;
- To introduce profound freedom that allows you to use Radiant Thinking by demonstrating that one can control the nature and development of your thinking processes and that ability to think, is theoretically infinite;
- To give practical experience to Radiant Thinking and in so doing, raise significantly the standard of many of your intellectual skills and intelligences; and
- To give one a sense of excitement and discovery as you explore this new universe.

Every area of knowledge requires the asking of some basic questions:

- How do I learn how to learn?
- What is the nature of my thinking?
- What are the best techniques for memorising?
- What are the best techniques for creative thinking?
- What are the best current techniques for reading?

- What are the best current techniques for thinking in general?
- Is there a possibility of developing new thinking techniques or one master technique?

Dryden, G and Vos, J. 'The Learning Revolution'. Profile Books.

The authors identify key trends that will shape the future which in turn demand new attitudes to education and learning. These are;

- The age of instant communication
- World without economic borders
- One world economy
- New service society
- From big to small
- New age of leisure
- Changing shape of work
- Women in leadership
- Decade of the brain
- Cultural nationalism
- Growing underclass
- Aging population
- Do-it-yourself boom
- Cooperative enterprise
- Triumph of the individual

These trends also reaffirm the human condition and capacity to manage change (trends) comprising a mix of **thinking smarter** and **learning how to learn**.

Both authors provide various strategies as to how people can exploit and benefit from these trends, rather than be slaves them.

In order to provide for a '**Great Education System**', the authors list the following essential requirements;

- Rethink the role of electronic communications in education;
- Everyone is a computer expert;
- Dramatic improvement in parent education, especially new parents;
- Major overhaul of early childhood health services to avoid learning difficulties;
- Quality early childhood development programmes;

- Catch-up programmes in every school;
- Define individual learning styles and cater for each one;
- Learning how to learn and how to think;
- Redefine what should be taught in schools;
- 4 x part-curriculum with self-esteem and life skills training as key components;
- Redefine teaching venues – not just at school; and
- Keep it simple and cut out the jargon.

Hermann, Ned. ‘The Whole Brain Business Book’ Published by McGraw Hill (1996)

The author claims the purpose of the book is to provide business readers with a *‘fresh understanding of familiar business processes, issues and critical events’*. It seeks to provide a new way of organising mental processes and diagnosing business situations, as well as key business and leadership issues that have eluded researchers to date.

Among the benefits to be gained from the book are listed as:

- Better understanding of how the brain works enabling an individual to better cope with everyday business situations
- Better understanding of your mentality and that of others one regularly interacts with
- Identify leadership issues such as productivity, motivation, job design and placement , creativity and strategic thinking form a totally new perspective
- Question old assumptions about human resource issues and be able to develop a new paradigm
- New and innovative career development advice and direction

In his book Hermann challenges the old paradigm of Right Brain / Left Brain paradigm advocated by Roger Sperry, Joseph Bogen & Michael Gazzanaga. Instead he introduces a new metaphor he calls ‘Whole Brain Model’ to describe how he believes the brain works. This model draws upon the Right / Left Brain as well as Lympic model argued by the above writers, and admits his is not a clinical model but a metaphoric one even though clinical evidence is still in development. Comprising of four parts he claims are responsible for a specialised function, and goes on to claim that the dominance exhibited in respect to limbs is also apparent in the brain. The dominance of one part / or ‘preference’ over the other becomes evident with life experience and accounts for specialised / preferred thinking. Whole brain technology evolved from a personal experience, which helps make it reality, based rather than another psychological construct. Brain dominance leads to preference, which leads to interest and ultimately competencies.

What we hear and see therefore is based upon our perceptions, which in turn influence our thinking preferences that result from our brain preferences. Hermann also claims that the brain is the source of creativity. Our understanding of the brain and its our ability to control the flow of creativity is predicated on understanding the brain, as well as our learning process.

For him the left / right brain dichotomy popularised by the press is too simplistic and incomplete to serve as a model on which to base a reliable and valid brain dominance assessment. We are in most cases the reselect of nurture which enables us to change. Interesting work turns us on are the most powerful influence on our mental preferences.

Idea creation is a neural event. Creative thought processes are the result of specialised mental modes that respond situationally to life's experiences. Neural transmitters streaming across the synaptic gap convey the electrochemical elements of an idea in formation. Through massive interconnections, can come into contact with other ideas and together form the basis of synergy.

Creative brains operate best when the brain is up to it. Neurotransmitters are chemicals, which cause synapses to take place. Leading to brain waves leading to creativity. Synergy among the four quadrants contributes strongly to the creative process. Individuals gravitate if allowed to the creative processes that work for them. Teams can be formed of these creative process champions for multiple applications to major problems; creativity in critical mass can be powerful and self-sustaining.

Creativity must be encouraged and change form a culture of killing creativity by stimulating, supporting and rewarding it. Creative teams should be formed on the basis diversity of thinking preferences. Creative champions stem from being naturally turned on to a particular set of mental preferences aligned to a particular creative process. Establishes a naturally linkages to things you prefer to do and techniques that facilitate your doing it doing them.

Creative people have low tolerance for rules and regulations and resist being supervised. On the basis of step by step processes Likely take risks and experiment. Require trust, Patience, encouragement and realistic goals. Best to be clear about objectives and goals sensitive to conditions

Supervisors therefore must avoid close supervision, adherence to procedures mad application of quantitative performance procedures

Changes to allow creativity and innovative potential – education program that reveals innovation and creativity who they are, why they do things they do, the way to do them.

- Right climate –
- Free of precise scheduling
- Is an inefficient process from a standpoint of productivity – the more you structure the more you shut it down.
- Creative results cannot be guaranteed
- Mistakes will be made
- Personal relationships can be stressed.
- Must tolerate ambiguity, flexibility & diversity of thinking.

Successive skunk works requires:

- A highly competent champion with authority
- Report to senior level; only
- Freedom and ability to make immediate decisions
- Hot line to top manager

- Staff be limited in number
- Minimum paperwork
- Entire team be involve in a project
- Multifunctional
- Creativity always involves change p239Id almost exclusively a positive process. Synergy is one of the ingredients of the creative process. It feed on itself. Leading to sustainability.

Creativity defined

Creativity means different things to different people. And in doing so limits our understanding.

From brain dominance we each experience the world differently, as they are determined by our particular array of mental preferences. Therefore it is unlike there will be a single definition.

'What is creativity?

Among other things, it is an ability to challenge assumptions

Recognise patterns see in new ways

Make connections

Take risks

And seize upon a chance'

Ruef, Kerry. "The Private Eye: Looking / Thinking by Analogy - A Guide to Developing the Interdisciplinary Mind: Hands-on Thinking Skills, Creativity, Scientific Literacy" The Private Eye Project, Seattle, Washington, 1992

Ruef builds this teaching and learning programme around the "*enormous power of the metaphor mind, the mind that sees the world not only literally but through the lens and network of analogy.*" It is a programme to develop higher order thinking skills, creativity, and scientific literacy - across the curriculum.

The Private Eye programme uses a simple set of tools and processes to develop:

- Thinking skills (looking closely, thinking by analogy, changing scale and theorising);
- Creativity (seeing/thinking by analogy, i.e. metaphor and simile, founded on close observation); and
- Scientific literacy (the skill theorising, and of decoding or reading the natural or manmade world).

Metaphors and similes are compressed analogies; allegories and parables are extended analogies. Thinking by analogy is the main tool of the scientist, poet, visual artist, mathematician, humorist, teacher, preacher, ad-man and more.

The programme is based on the use of the jeweller's loupe (magnification tool) to study things in fine detail, and the use of a short series of questions:

- What else does it remind me of?
- What else does it look like?
- Why is it like that?
- If it reminds me of that, might it function like that in some way?

In this way, the thinking, creative and theorising skills are developed.

The programme as well as simple teaching and learning techniques are explained in the book, with many practical exercises. Ruff then takes the reader through a tour of the curriculum, using the Private Eye method - through writing & language arts, art, science, math, social sciences and multi-cultural studies.

While the programme was not developed specifically for oral and metaphorical cultures, it has application in indigenous education, and is recommended by renowned indigenous educator and researcher, Dr Gregory Cajete of New Mexico ("Igniting the Sparkle: An Indigenous Science Education Model", Kivaki Press, USA, 1999, p 145).

Ellyard, Peter. 'Ideas for the New Millennium'. Melbourne University Press (1998). Chapter 4 'Empowerment for a Planetist Future'

Ellyard argues that the success in the 21st Century, with its propensity for change lies in learning. This calls for a new pedagogy for learning which would apply to all learning from cradle to grave and is predicated on learning well, learning rapidly and learning continuously. Key questions that need to be asked now are:

- What skills, knowledge and capabilities will an individual need in order to thrive in a spaceship culture?
- What type of education system will endow an individual with the skills, knowledge and capabilities to thrive rather than merely survive in such a culture?

Education is the most important investment in the future and in shaping the future:

- there is a need for people and organisations to remain adaptable and to learn continuously in order to thrive in a rapidly changing world;
- the need to develop a knowledge based or brain powered economic and industrial system where prosperity is found between the ears not in the ground. Knowledge is the wealth to wealth generation; and
- need to maintain education for creating an equitable society.

The traditional Western (individualist) approach to education is one of problem solving social issues. This results in an overcrowded curricula leading to tighter planning, pressure on staff etc. The 'new' education system will be deinstitutionalised affecting structure and traditional roles.

A new learning culture is needed and shall comprise of eight elements:

■ **Life long learning;**

If adopted nationally LLL could remove the over crowded curriculum as learners will have all their lives to learn key things. Learners will have an opportunity to develop their own learning pathways, by conscious choice and by negotiation with providers.

🏠 **Learner Driven Learning;**

Here all learning will be learner initiated and learner managed. This approach encourages learners to become independent learners and eventually interdependent learners. This type of learning is consistent with Internet, CD Rom and other forms of technology supported by 'knowledge navigators' and mentors.

🏠 **Just in Time Learning;**

This refers to curiosity learning and where there is high motivation made easier through new technology. JIT reinforces LLL and LDL.

Customised Learning;

Or favoured ways of learning to cater for favoured learning styles. Technology is now available to address this issue.

🏠 **Transformative Learning;**

Learning should transform people as well as challenge and change belief systems and behavioural patterns to meet new needs and remove disabilities and disadvantages. Transformation is critical for the world of rapid change.

🏠 **Collaborative Learning;**

Collaborative forms of IT are emerging as the world moves towards 'communitarianism' and independence to interdependence. Collaborative learning can be powerful as well as synergistic e.g. 'groupputer'.

🏠 **Contextual Learning;**

Here Ellyard argues that the most effective learning occurs in an environment which makes the learning relevant to experience and to the expectations of the learner. This has characterised learning in the last century whereas the best learning is experiential and validates / affirms learning.

🏠 **Learning to Learn;**

Learner need to have the capability to understand how they think and learn and how to develop their capacity in both fields.

Cummins, Jim. 'Language, Power and Pedagogy – Bilingual Children in the Crossfire'. Published by Multilingual Matter Ltd

Cummins writes this book in response to the growing issue of bilingualism and multilingualism, the result of movement of peoples across international borders, which produce challenges for which many national schools systems, particularly urban schools are not equipped to deal with.

He examines these challenges contextualised within theory and practice aimed at repudiating myths surrounding bilingualism, such as the negative impacts on dominant language. Cummins draws upon a wide range of International research which supports bilingualism as a means of promoting identity being critical for the development of meaning and intellectual skills. Inherent in this process is its transformative potential to challenge unequal power relations at macro and micro levels. To achieve a progressive pedagogy that is transformative, Cummins argues that language development must be holistic and collaborative in nature (i.e. learner and teacher). It must be meaningful by affirming the learner's previous knowledge and strengthen identity. This has implications for curriculum content, as

well as its delivery to ensure the coercive power relations are not reproduced. Integral to any transformative curriculum is critical literacy, whereby the learner is required to question coercive social relations.

Cummins, J & Sayers, Dennis. 'Brave New Schools – Challenging Cultural Literacy Through Global Learning Networks'. St Martins Press (1997)

The book represents a vision of schooling in the 21st Century and serves as guide to students and teachers, confronted with new technologies which have the potential to overcome the myths and 'official knowledge', which has marginalised and oppressed whole nations of people.

The tensions between control and possibility, coercion and collaboration has long existed in our schools, the official and sanitised versions of which are transmitted from one generation to the next by what society deems important and is contained in text books and curriculum. This in turn raises the question concerning the role of teachers: to transmit uncritically 'official knowledge' and skills or help students analyse issues and their underlying meanings. The advent of new technologies provides new opportunities for marginalised individuals / groups, who were previously silenced and to challenge oppressive metaphors, myths and belief systems.

The authors debate these struggles against the three key issues which are widely debated in the U.S., namely; *directions of contemporary educational reform, increasing cultural diversity and immigration; and the global networking possibilities*. A central underlying theme is the book relates to 'cultural literacy' but not in the way E.D. Hirsch prescribed that is biased, monocultural, marginalises minority groups and actively discourages diversity. The overall affect was to provide (as happened in some parts of the U.S) an officially prescribed definition of cultural literacy, which was incorporated in school curriculum. The authors refer to Hirsch's 'cultural literacy' as 'cultural illiteracy'. For them cultural literacy enables schools to play a crucial role in helping us to live and grow together in a global village. Rather, teachers must help '*develop student's capacity and commitment to collaborate across cultural and linguistic boundaries in pursuing joint projects and resolving common problems*'.

The assumption here is that collaboration will require and promote higher order thinking and literacy skills, which differs considerably from the narrow back to basics curriculum rhetoric of the educational reform movement. The author claims that reform will only be effective if it '*actively challenges the real causes of underachievement which are rooted in the social conditions of schools and communities*'.

The authors discuss *critical literacy* and its capacity to allow individuals to analyse and challenge discursive discourses, as well as to resist marginalisation. They point out the close relationship between critical literacy and identity, which inevitably has positive outcomes for academic achievement.

The authors conclude that functional literacy and cultural literacy amongst marginalised groups must be mediated by critical literacy.

Gibbons, Pauline. 'Scaffolding Language Scaffolding Learning'. Heinmann (2002)

The author, a specialist in ESL draws upon the analogy of 'scaffolding' first used by Wood, Bruner & Ross (1976) and Vygotsky (1978) which describes the process, whereby students are supported by teachers to move from a dependant to independent learning relationship. Such learning requires teachers and students to work collaboratively, to develop new skills, concepts and levels of understanding. Inherent in 'scaffolding' is the temporary nature of the assistance provided to complete

a task, its orientation to the future and the high expectations on part of teachers in respect to their students. Central to this type of learning is the role of teachers in creating classroom contexts that foster both their student's academic, linguistic and personal growth. It is a role that emphasises the provision of information to students about the 'nature of particular linguistic genres and rules of the game that operate in different texts', and through which the student's knowledge of the world and knowledge about language emerges.

This type of learning is in contrast with the '*service delivery*' paradigm current operating in mainstream education dominated by economic rhetoric e.g. '*accountability*', '*performance indicators*', '*benchmarking*' and '*teacher proofing*' of curriculum etc. Rather, students are 'constructed as active seekers after meaning capable of motivational inquiry, insight and intelligence, whereas teachers are constructed as professionals capable of making creative links between theory and practice'.

Gardiner. H. 'Frames of Mind – The Theory of Multiple Intelligence' Fontana Books (1993)

The author questions the value of intelligence tests on the grounds they fail to assess competencies that exist across cultures and and reflects only one view as to what constitutes as human intellect. In response he puts forward a new theory of human intellectual competencies which directly challenges the view '*most of us have absorbed explicitly (from psychology or education texts) or implicitly (by living in a culture with a strong but possibly circumscribed view of intelligence)*'.

We use the term intelligence so often that we have to come believe in its existence as a genuine, tangible measurable entity rather than as a convenient way of labeling some phenomenon that may or not exist. As a result he refers to a number of intelligences such as '*spatial intelligence*', '*linguistic intelligence*' and '*interpersonal intelligence*' which he admits are fiction, but are useful tools that enable discussion on processes and abilities. They serve as useful scientific constructs

Gardiner identifies '*several relatively autonomous human intellectual competencies*' which work in harmony and in doing so reveal themselves. He produces examples from different cultures around the world where people's activities and abilities reflect a union of intelligences. Here, the cultural perceptions of what constitutes intelligence becomes apparent, the Western perception tending to marginalize non Western perceptions which maybe described as something else e.g. navigation skills.

Among the aims of the book:

- 🎬 Expansion of knowledge of cognitive and development psychology;
- 🎬 Examination of the educational implications of multiple intelligences within various cultural settings; and
- 🎬 Provision of policy change with the development of others.

Gardiner concludes by describing multiple intelligence as entities that:

- 🎬 operates to its own procedures;
- 🎬 has its own biological base;
- 🎬 have a life cycle;
- 🎬 has a positive connotation and can be observed when being exploited; and

- should be thought of as a potential.

He goes on to claim the various intelligences he identifies are subject to the control exerted by the structure and functions of the particular objects an individual comes into contact with e.g. language and music. In short, while thinking processes are transcultural, the products of reasoning to which individuals are sensitive, cultures mobilize basic information processing capacities .i.e. core intelligences and fashion them to their own ends.

A major weakness of intelligence testing is that it has been overused and biased to those who can use a pencil and paper. It has little predictive power over those outside of school. IQ is blindly empirical based on tests and only marginally based on how the mind works:

- They rarely assess skills in assimilating new information or solving new problems;
- Reveal little about an individuals potential;l for further growth; and
- Fail to show or yield any indication as to an individuals '*zone of potential*' for development.

Two major features he notes:

- Huge advances in biochemistry, genetics and neurology will offer new insights into intellectual phenomena.
- Culture makes it possible to examine the development and implementation of intellectual competencies from a variety of perspectives, the role of social values, pursuits in which individuals achieve expertise

Intelligences rarely develop in a vacuum but are mobilized by symbolizing activities in on-going cultures where they have practical meaning and tangible consequences.

Among the conclusions Gardiner makes:

- That intelligence becomes rigid and canalised with age is questioned. Instead he believes a young child may possibly have a range of intelligences operating in isolation, and only deployed once adulthood is achieved. Furthermore, this could account for the high degree of flexibility and creativity in adults. If correct this could implications for education.
- That cognitive development takes place in stages, which are different from each other thereby stipulating different worldviews. The assumption here is that if a child doesn't go these stages his development is askew.
- Early intervention and consistent training can raise performance in an intellectual or symbolic domain within the context of a supportive environment.
- In any society, it is the amalgam of intellectual and symbolic intelligences deployed to achieve socially valued roles.
- Gardiner builds on existing research to state an analysis of culture enables a proper explanation of the acquisition of cognitive capacities. (He quotes Cole where it was found that given acknowledgement of cultural differences little difference was detected in relation to candidates on intelligence testing.)

Finally, Gardiner draws an overall conclusion consistent with current research:

'While the products of reasoning and the kinds of information to which individuals are sensitive may differ significantly across cultures, the processes of thinking are the same everywhere; cultures utilise these basic information processing capacities – basic core intelligences and fashion them to their own ends'

Here a culturally based argument stresses the likelihood yet undiscovered cultures might perform cultures we are yet to envision. Intelligences never develop in a vacuum, rather they become mobilised by symbolism activities in on going cultures, where they have practical leaning and tangible consequences.

Within an educational context, Gardiner concludes:

- A lengthy mature educational process is necessary before the raw intellectual potential can be realised in the form of a cultural role.
- The motivation to learn may the biggest single difference between a successful and an unsuccessful education program and learner.
- New education innovations need to be have continuity with the past if it is to succeed. (e.g. the dramatic introduction to Western scientific style curriculum which de-emphasised social ties, dramatic shift in uses in which language was put, insistence on the application of logical-mathematical thinking to diverse realms of existence proved too stressful in entrenched cultural contexts.)

Reccommendations:

- There needs to be close analysis of traditional education practices in a culture and careful consideration as to how these processes might be mobilized to meet the novel needs of a changing world.
- Educational development must take heed of biological and psychological processes in human beings and to the particular historical and cultural contexts of the locales where people live.

Gardiner, H. 'Intelligence Reframed – Multiple Intelligences for the 21st Century' Basic Books (1999)

The author claims that intelligence is too important to be left to the intelligence testers. He poses three questions which have confronted scholars, namely: Is intelligence singular or does it comprise of relatively independent faculties? Is intelligence predominantly inherited? Are intelligence tests biased?

In an attempt to gain a better understanding of intelligence, the author provides a historical overview from Galton, Binet and Darwin through to today. His own studies over some twenty years reveal that a

strength in a particular cognitive area doesn't mean weaknesses in others suggesting that the human mind is a series of relatively separate faculties that are non predictable and loose, rather than a single all purpose entity that performs consistently independent of content and context.

After many years of research, Gardiner has formulated a definition of intelligence as '*a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture*'. Inherent in the traditional definition of intelligence is the notion of problem solving as apart from creativity coupled with the assumption intelligence would be evident everywhere regardless of what was (or was not) valued in particular cultural at particular times. As a series of potentials, it is suggested intelligences will be activated dependant on the values of a particular culture, the opportunities offered within that culture '*and the personal decision made by individuals and or their families, school teachers and others*'. This requires a new approach other than relying on psychometric instruments, namely, eight criterion which he has formulated:

1. The potential of isolation by brain damage: '*the separation of language from other faculties and its essential similarity in oral, aural, written and signs suggest separate linguistic intelligences*'. This is evidenced by the damage to a particular faculty but where others function as normal.

2. An evolutionary history and evolutionary plausibility: New studies show how early hominids were capable of finding their way across diverse and difficult terrains. From such studies as well as observations of mammals evolutionary psychologists can infer the development of a particular faculty over thousands of years.

3. An identifiable core operations or set of operations: specific intelligences or sub intelligences operated in rich environments typically in conjunction with other intelligences. These must be teased out for analytical purposes.

4. Susceptibility to encoding in a symbol system: in learning centres, people manipulate and master various kinds of symbols to convey culturally meaningful information systematically accurately. They code information to which human intelligences are most sensitive suggesting symbols exist only because of their pre-existing, ready fit with the relevant intelligences.

5. A distinct development history along with a definable set of expert end of state performances: individuals do not exhibit their intelligences in the 'raw' rather '*they do so by inhabiting certain relevant niches in society*'. This requires certain developmental paths to be followed to become mathematicians; clinicians with well developed interpersonal intelligence etc. Just as importantly, each would operate within a cross-cultural perspective.

6. The existence of idiot savants, prodigies and other exceptional people: Prodigies represent a person who is outstanding in a particular domain. Which are often subject to rules rather than life experience and generally become specialists in areas that draw on one or more intelligences, and are unlikely to leave a permanent mark on the world.

7. Support from experimental psychological tasks: where two operations can be observed, how well both are carried out simultaneously and whether one interferes with the other suggesting the extent of discrete brain and mental capacities.

8. Support from psychometric findings: Over recent times there has been an accumulation of

evidence from psychometric testing to support multiple intelligences.

In *Frames of Mind*, Gardiner identifies seven intelligences:

- Linguistic intelligence
- Logical mathematical intelligence
- Musical intelligence
- Bodily – kinaesthetic intelligence
- Spatial intelligence
- Inter personal intelligence
- Intra personal intelligence

He lists three 'new' intelligences representing an 'end state' - a socially recognised and valued role that appears to rely heavily on a particular intellectual's capacity e.g. poet with linguistic intelligence etc.

- **Naturalist intelligence** - is established in evolutionary history where survival of an organism has depended on its ability to discriminate among other similar species e.g. avoiding predators, discriminate from similar species.
- **Spiritual intelligence** - based on human's preoccupation with questions Who are we? Where do we come from? What does the future For us? Why do we exist?
- **Existential intelligence** - can be manifested by anyone who exhibits facility, clarity, depth of thinking about ultimate issues whether the thoughts are positive, negative, moral, or immoral, open ended or conclusive. This type of intelligence refers to ultimate issues, capacity to locate oneself to the furthest reaches of the cosmos, meaning of life and death

In this book Gardiner reinstates two theories:

- Each human being possesses a basic set of six or seven intelligences where, evolution has equipped each of us with the intellectual potentials connected to our own inclinations and our cultural preferences; and
- Each human being has a unique blend of intelligences, which we can minimise or maximise.
- While intelligences are **amoral**, Gardiner advocates both intelligences and morality should be nurtured.
- This raises a dilemma – to continue to assess intelligence in the traditional way or develop a new and better way of conceptualising human intellect. For the author the challenge of the new millennium is to devise just how intellect and morality can coexist to create a world in which diversity of people and cultures can live.
- Gardiner states that moral intelligence rests on the existence of a moral domain. People in this domain might show:
 - Ready recognition of issues related to the sanctity of life in its diverse facets;
 - Facility in mastering traditional symbolic renderings and solidifications that deal with sacred issues;

- Enduring commitment to reflecting on such issues; and
- Potential for going beyond the conventional approaches to create new forms or processes that regulate the sacrosanct facets of human interactions.

Gardiner identifies and distinguishes intelligences from creativity;

People are creative when they can solve problems, create products or raise issues in a domain in a way that is novel, ut is eventually accepted in one or more cultural settings. Likewise a work is creative when it stands out, but eventually becomes accepted within a domain. The key test is whether a creative work has changed the domain substantially.

Parallels – both involve solving problems and creating products, but;

- A creative person always operates within a domain or discipline or craft;
- Most creators do something that is initially novel and different;
- Affects that domain.

Gardiner refers to psychologist Mihaly Csikszentmihalyi – who asks the question not who or what is creative, but where creativity is? He claims creativity results from the interaction of;

- An individual creator, being the holder of talents, ambitions, personal foibles etc;
- Domain of accomplishment that exists in a culture; and
- The field – a set of individuals / institutions that judge the quality of works produced in a culture.

In short, creativity represents a communal judgement and is removed from an individual's psyche. Intelligence reflects what is valued in a community, but ultimately it involves the smooth and skilled operation of one or more computers in the mind and brain. In contrast, a cognitive computer doesn't lead to creativity.

So, what is likely to encourage budding creators?

- Early exposure to other people who are comfortable with taking chances and who don't readily admit to failure;
- Opportunity to excel when young;
- Sufficient discipline so that the domain can be more mastered in youth;
- An environment that constantly stretches the young person so that triumph remains within grasp but is not too easily achieved;
- Peers who are willing to experiment and not deterred by failure;
- Late birth order or in a unusual family configuration that encourages or tolerates rebellion; and
- Some kind of physical, psychic or social obstacle or anomaly that makes a person marginal within his or her group.

So, how does creativity interact with intelligence?

- Creative individuals possess an amalgam of at least one or more intelligences, and while they might tend to be deficient in others, they recognise their cultural / cognitive niches and learn to pursue them with the full knowledge of their competitive advantage.

Multiple Intelligences in Schools

Gardiner claims the most appropriate way of assessing what multiple intelligence is:

- Through the creation of a rich environment where children feel comfortable i.e. 'spectrum classrooms'. The underlying characteristic of 'spectrum classrooms' is the provision of materials that would encourage them to interact regularly, thereby revealing the richness and in as natural a fashion as possible; and
- By inviting resources designed to reveal the spectra of intelligences and sophistication of children's interactions and their particular array of intelligences. Gardiner is adamant multiple intelligences cannot be an end in itself or serve as a goal for a school but must be reflected on its goals, mission and purposes on continuously and at times explicitly.

A major obstacle to multiple intelligence is a uniform school, where student is assessed the same way. This requires an 'individual configured' education which involves knowing all aspects of a student - anxieties, strengths, preferences, goals etc. This in turn provides key information in relation to curriculum, pedagogy, assessment etc and responding to different ways of learning etc.

Nonaka, Ikujiro & Takeuchi, Hirotaka. 'The Knowledge Creating Company' Oxford University Press (1995)

The authors insist the focus of the book is on knowledge creation and not knowledge per se. For them knowledge fuels innovation, but not knowledge per se. In other words, knowledge created within an organisation in the form of new products and services or systems becomes the cornerstone of innovative activities.

In the book the authors claim the reason Japanese companies have been successful is because of their skills and expertise at 'organisational knowledge creation' i.e. the capacity of a company as a whole '*to create new knowledge, disseminate it throughout the organisation and embody it in new products, services or systems*'. Japanese companies have operated in a climate of uncertainty since WWII which has influenced a certain way of thinking. Japanese companies are therefore required to embark on a process of continuous innovation by way of linkages between '*outside and inside*'. In other words knowledge is accumulated from the outside and shared widely within the organisation and then stored as part of the company's knowledge base. It is a 'conversion' from outside to inside and back outside again. Continuous innovation in turn leads to competitive advantage.

The authors contend that that West is obsessed with the notion of knowledge as a resource and those possess it will exert powerful influence in the new global / information economy. None of the proponents of the knowledge wave / economy they argue have examined the processes and mechanisms as to how knowledge is actually created. The authors believe this arises from the 'taken for granted' view of an organisation as a machine for 'information processing'. This view is deeply ingrained in the works of Frederick Taylor and Herbert Simon, where knowledge is 'explicit' i.e. formal

and systematic, as well as Descartes's notion of the separation of mind from body, known as the Cartesian split / dualism. This had given rise in the West of the primacy of explicit knowledge, which they refer to as knowledge which can be expressed in words and numbers and easily communicated and shared in the form of hard data. Japanese companies have a wider understanding of knowledge that also includes 'tacit' knowledge that is not easily visible or expressible. It is highly personal and hard to formalise making it difficult to communicate, or share with others. Tacit knowledge is also deeply rooted in an individual's actions, personal experiences, as well as ideals, values or emotions he or she embraces. It can be described as a craftsman's 'know how' developed from long experience but which cannot be articulated into scientific or technical principles. Tacit knowledge also refers to a important cognitive dimensions – schemata, mental models, beliefs and perceptions so ingrained we take them for granted and reflects our worldview and vision. Whereas explicit knowledge can be easily communicated, tacit knowledge must be converted into explicit knowledge and it at this point that organisation knowledge is created.

The overall affect is that this view provides a different view of an organisation:

- Not as a machine but an organism
- Knowledge is subjective and includes insights, hunches
- Embraces ideals, values, emotions, symbols and images
- Soft and qualitative elements

Japanese thinking:

- Oneness of mind and body and learning from direct experience.
- Ideals are as much as it is about ideas – involves identity and the collective desire to recreate the world in accordance to a particular vision or ideals.
- Creating knowledge is a laborious enterprise
- In must requires intensive inside outside interaction
- Western managers must unlearn traditional thinking gained from books, manuals etc and focus on hunches, intuitions and highly subjective insights gained from the use of metaphors, pictures and experiences.

The key to Japanese success is the conversion of tacit knowledge to explicit knowledge.:

- Metaphors and analogy – can unite individuals to a common vision
- From Personal to Organisational Knowledge – while an organisation cannot create knowledge an individual can.
- Ambiguity and Knowledge – can prove useful in that it provides various meanings.
- Redundancy – provides a range of viewpoints to the mix

The process of creating knowledge is achieved by:

- Leveraging tacit knowledge of an individual and making use of socialisation to transfer throughout the organisation
- Amplifying that knowledge creation across different levels of the organisation
- Enhancing and enabling conditions

- Continuing to create new knowledge constantly – it is an never ending process because the environment and customer preferences change constantly and existing knowledge becomes obsolete quickly. New knowledge must be constantly justified against the latest intention.

What distinguishes a knowledge company from any other is that it systematically manages the knowledge creation process. The author's propose a middle / down management structure rather than a top/down or a bottom / up one. In this situation middle management is '*to orient this chaotic situation towards purposeful knowledge creation.*'. Middle management interprets the vision of top management for the front line employees. In short it creates a mid range theory that it can test on empirically on within the front with the help of front line employees.

The authors argue that the creation of new knowledge requires participation of front line employees, middle managers and top managers. Secondly, knowledge creating people are those who use both their heads and hands.

Practical Implications:

The authors distinguish companies that just train and absorb knowledge from those which set out with the intern to create knowledge – at an individual, group and organisational level. Knowledge moves laterally and in one direction and knowledge moves in a spiral when creating organisational knowledge.

The authors advocate the following model:

- Create a knowledge vision
- Develop a knowledge crew
- Build a high density field of interaction at the front line
- Piggy back on the new product development process
- Adopt a middle up/down management
- Switch to a hypertext organisation
- Construct a knowledge network with the outside world.

Davenport T.H and Prusak. L. 'Working Knowledge-How Organisations Manage What They Know' Harvard Business School Press (1998).

The authors examines thirty 'knowledge rich' firms to examine how all types of companies can effectively understand, analyse, measure and manage their intellectual assets and transform those assets into 'market value'. Notwithstanding the primary aim in the book to develop an understanding of what knowledge is in an organisation they ask:

- What is knowledge?
- What does it sound and look like?
- Who has it?
- Where is it?
- Who uses it?
- What are specific knowledge skills?
- What cultural and behavioural issues must managers address to use knowledge?
- What are the best ways to use knowledge?

In their book the authors define knowledge as;

'a fluid mix of framed experience, values, contextual information, and expert insight that provides a

framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organisations it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices and norms'

This definition simultaneously recognises the complexity and simplicity, structured and fluidity, tacit and implicitness of knowledge. It is a uniquely human quality where data leads to information which leads to knowledge. The authors claim this transformation is reliant on;

- **Comparison**-how does information about this situation compare to other situations we have known?
- **Consequences**-what implications does the information have for decisions and actions?
- **Connections**-how does this bit of knowledge relate to others?
- **Conversation**-what do other people think about this information?

Knowledge is used 'to action', can and should be evaluated by the decisions or actions to which it leads and better knowledge leads to measurable efficiencies in production and development.

Experience

Knowledge develops over time through experience from both formal and informal sources. Experience has been tested and trained by experts and knowledge from experience recognises familiar patterns, and makes connections between what is happening and what has happened.

Truth

Experience changes ideas about what should happen into what does happen i.e. real experiences.

Knowledge contains judgement. It grows and changes as it interacts with its environment. Those with knowledge can identify patterns in new situations and respond appropriately. Some times it can be intuitive. Intuition means 'compressed expertise' and is not mystical. Knowledge also offers speed.

People's values and beliefs have a powerful impact on organisational knowledge. They are made up of individuals and are derived from histories from people's words and actions. In short, organisations are not neutral.

Values and beliefs are integral to knowledge determining in large to what the knowledge sees. It absorbs, and concludes from his/her observations. Nonaka & Takeuchi say that knowledge is about '**beliefs and commitment**'. The power of knowledge to organise, select, learn and judge comes from values and beliefs as much as and probably more than information and logic.

Power of knowledge:

- Speed
- Complexity
- Sense of history and context
- Judgement
- Flexibility

All add to an increasingly global economy and managers need to know what they do well in order to take advantage of that knowledge as effectively as possible.

Knowledge is sustainable, as it generates increasing returns and continuing advantages. Knowledge

assets increase with use. Ideas breed new ideas and shared knowledge stays with the giver while enriching the receiver. Paul Romer claims the potential combinations of the steps that make up processes or components of a product is virtually inexhaustible.

Key principles:

- Knowledge originates and resides in peoples minds
- Knowledge sharing requires trust
- Technology enables new knowledge behaviours
- Knowledge sharing must be encouraged and rewarded
- Management support and resources are essential
- Knowledge initiatives should be begin with pilot programmes
- Knowledge is creative and should be encouraged to develop in unexpected ways.

Trust is essential for the functioning of the knowledge market. It must be visible, ubiquitous, start from the top. A thriving knowledge market continually tests and refines organ knowledge.

Knowledge generation:

Acquisition – purchase / merger

Organisational learning –

- Organisations as a system
- Building and facilitating communities of practice
- Focussing on the issues of personal development and mastery
- Creating less hierarchical more self organising organisation structures
- Planning with use of scenarios

CREATIVITY

Richard. ‘The Rise of the Creative Class, and How its Transforming Work, Leisure Community and Everyday life’ Basic Books (2002)

The author, a professor of regional development at Carnegie Mellon University, asks the question: *In a world that is highly mobile, why do creative people cluster in certain places?* He responds with what he describes as the ‘Creative Capital Theory’ which states ‘*regional growth is driven by location choices of creative people*’, being the holders of creative capital. His research shows that creative people are attracted to places that are diverse, tolerant and open to new ideas. The Creative Capital Theory differs from Human Capital Theory in that, it identifies a type of Human Capital, namely creative people as the key to economic growth and identifies the underlying factors which shape their location decisions. Human Capital is described by Robert Lucas and Edward Glaeser, as concentrations of educated people

will drive regional development.

Comprising of people engaged in the creative industries such as scientists, engineers, poets, novelists, artists, entertainers, actors, designers, architects, thinkers, analysts, cultural figures and academics who work in a wide range of knowledge intensive industries, these people represent a sizable proportion and growing section of the workforce. Like the emergence of other social classes in history, the '*Creative Class*' will shape and redefine societal values, desires and aspirations in fact '*the very fabric of our everyday lives*'.

The role of creative people in rejuvenating local economies has not gone unnoticed by decision makers. Their approach has been to encourage creative industries to establish themselves in selected places, as a means of generating economic growth. Florida concludes from his own research that economic growth was taking place independent of such industries and occurring anyway in places which are '*tolerant, diverse and open to creativity*'. Such places attract creative people of '*all types*' wanting a lifestyle, where the human spirit is nurtured.

Florida claims that creativity is critical for competitive advantage. He goes on to describe creativity as multi-dimensional, multi-faceted and comes in many mutually reinforcing forms. It is a highly prized commodity in our economy, but itself is not a commodity. Creativity is also essential to the way we live and comes from people. It requires a social and economic environment that nurtures creativity and encourages people to cluster in places where they like to live, which in turn become centres of creativity. Apart from a socially supportive milieu (artistic, cultural, technological and economic), creativity involves distinct form of thinking and habits, which must be cultivated in the individual and society. Organisation on the other hand can stifle creativity supporting Florida's view that business per se is not responsible for the regional development.

As a way of determining a socially supportive milieu, Florida draws upon a 1990 study by Gary Gates, who found a direct correlation between concentrations of gays and high tech industries. Gates later developed the Gay Index, which among other things indicates whether a place is tolerant and open. Similarly, the author developed the Bohemian Index, which links the artistic and cultural health of a region to regional development. The author quotes other researchers to claim that creativity is not limited to nerds, but draws on ordinary abilities e.g. '*noticing, remembering, seeing, speaking, hearing, understanding language, and recognising analogies*'.

Moreover, as knowledge and information are tools and the materials of creativity, innovation is its product, it is creativity which drives the Knowledge Economy and not knowledge per se. He believes therefore, the new economy ought to be referred to as the Creative Economy instead, which is empowering the individual and demands new forms of social cohesion.

Florida challenges the assertions of renowned social capitalists Putnam and Coleman that a healthy civic minded community is a prosperous one. From his research he states that traditional views of cohesiveness tend to inhibit economic growth and innovation. In contrast, '*weak ties*' are more effective, whereas strong ties tend to be both inclusive and exclusive. He also quotes Robert Cushing in that creativity and social capital communities are moving in opposite directions. While creative communities are centres of diversity, innovation and economic growth, social capital ones are not.

At the end of the book, Florida calls for a new model of social cohesiveness that is accepting, rich in history and tolerant. In short, he claims that '*people climate*' is crucial and based around three elements:



Technology - where universities are centres of cutting edge research.

- **Talent** – where universities act as effective talent attractors
- **Tolerance** – where universities help create a open, progressive tolerant people climate.

Finally, in order to cultivate investment in creativity, he advocates the education and skill development of creative people and reiterates the point concerning arts and culture, all of which are linked together within the context of strong communities.

Gardiner, Howard. 'The Arts and Human Development'. Published by Basic Books (1994)

The author is a developmental psychologist and poses several questions:

- *What is the most suggestive way to speak about the nature and course of human development?*
- *What factors enable individuals to create and appreciate works in various art forms?*

Gardiner argues that common links between both fields i.e. psychology and art are related.

Psychologists have traditionally assumed individual development leads to the 'end states' of the scientific thinker or normal personality. In doing so, they have dismissed other ways of knowing. In responding to these questions he claims one is obliged to provide an answer leading to a different 'end state' thereby identifying a more comprehensive view of human development processes. Gardiner decides focusses on the 'participation in the artistic process' i.e. 'the capacity to be creator, performer, critic, or audience member in an art form'

For Gardiner, '*art involves a communication of subjective knowledge between individuals through the creation of non translatable sensuous objects; one may vary one's distance from and involvement with these objects while contemplating the various messages embedded in them*'

He defines three systems;

■ **Making system:**

Consists of behavioural acts, elements or schemes, which tend to become combined into more elaborate, hierarchically arranged skills. Initially isolated it increasingly interacts with other facets of the organism, nor can it be divorced from the capacity to define and solve problems. Problem solving requires choice and coordination of behavioural acts either with reference to material objects or to symbolic representations.

Perceiving systems:

Is an exercise of one action only, that is making discriminations in the external world. Refers to the sensory organs and the differentiation they are able to make.

Products, being discriminations or distinctions

■ **Feeling systems:**

The basic units of the three systems are, patterns / scheme

Gardiner claims that children are artists which psychologists would find abhorrent, as children have not completed the cognitive stages as established by Piaget. While he acknowledges such stages are significant for the development of a scientist, they are not for a creator, performer and audience

member. Nor are they important for the mastery and development of language, music or plastic art. Conversely there is no need for them to master logical operations or pass through the cognitive stages highlighted by Piaget. However what is important to artistic development is the evolution of and gradual interaction of the 3 systems during the sensory motor period (from birth to 2 years).

- *What is the most suggestive way to speak about the nature and course of human development?*
- *What factors enable individuals to create and to appreciate works in the various art forms?*

Von Oech, Roger 'A Whack on the Side of the Head' Published by Thorsons (1990).

This book follows a previous one published in 1982, where von Oech proclaimed *'the creative process, namely creativity is fun, necessary and accessible to all of us'*.

For him creativity is a survival skill for the future which needs to be cultivated in our institutions such as schools and families. Creative skills therefore, need to be developed and encouraged.

So why be creative?

1. Change – when things change, then new information comes into existence. Yesterday's solutions are no longer appropriate for tomorrow's problems.
2. New ideas have a life-span and therefore we need to generate new ideas.

Creative thinking is based on knowledge. It requires an attitude that allows you to search for ideas and manipulate your knowledge and experience. This is predicated on a creative outlook where you open yourself up to both new possibilities and change. We can make the ordinary extraordinary and the unusual commonplace.

The author distinguishes creative thinking from routine / habitual thinking (more of the same) and identifies two barriers to creative thinking: a.) mental locks (own attitudes get in the way) and, b.) the education system, which discourages us from thinking creatively. Instead he advocates a **WHACK ON THE HEAD** to shake us out of routine patterns, rethink our problems and stimulate questions etc. Whacks can come in all sizes, shapes and colours and get rid of the presuppositions. They tend to force you to even for a moment to think something different and could be positive.

Logic is a creative thinking tool and can be either negative or positive. The author suggests the use of metaphors to give a different slant on thinking. Creative thinking is both constructive and destructive. Practicality is important to human activity but will not generate new ideas per se. He states that we should value our own ideas and employ the 'What If' question to force ourselves to move beyond the status quo.

Barker, George. 'Cultural Capital & Policy'. Australia National University (2000)

The author is an economist. He claims there is no widely accepted definition of culture as it is multi-discursive i.e. *'what the term refers to is determined byits discursive context, and not the other way around'*

He draws upon the work of David Throsby (1997), an early contributor to cultural economics, who identifies two definitions of culture:

'To describe the set of attitudes, beliefs, practices, values, shared identities, rituals, customs, and so on which are common to a group, whether the group is delineated on geographical, ethnic, social, religious or any other grounds'

Here, culture can be understood to have direct influence on how people behave and on what actually happens within the formal rules of 'the game' made by a society's institutions. It influences how 'the game' is actually played, through the affects on the aesthetic, cognitive and moral preferences, as well as the propensities, standards, norms, routines or habits of individuals. Individuals may associate in a formal / formal group or collective association with others according to the degree to which the individuals in such groups share something in common, or more of the aesthetic cognitive or moral dimensions of culture.

Secondly, *'the term, can be usedto refer to the set of activities, and the products of those activities, and the products of those activities, such as the practice of the arts.* He refers to these activities as 'cultural industries' simply because they involve people in producing, exchanging, and consuming things, and because some rudimentary markets exist to facilitate the process'

Barker naturally views culture from an economic understanding i.e. covering a set of organised interactions between;

- **On the supply side** – *'artists, musicians, theorists, teachers about the social, natural and super-natural world, and leaders and thinkers on moral and ethical codes and standards';*
- **On the demand side** – *'those interested to enjoy or learn from those on the supply side think, do or say'*

Another view of culture is that it represents *'the most successful means of biological adaptation the earth has ever witnessed'* (Dictionary of Cultural and Critical Theory cited in Barker p.19), particularly by cultural reinforcement and cultural development.

The author concludes that an economic approach enables culture to be analysed and evaluated having regard to the well-being of individuals and decision-making. In regard to decision-making it must be viewed in the light of constraints i.e. culture is likely to incur costs in expectation of future rewards (excess of returns over costs) leading to well-being in a world of scarce resources. In other words culture maybe conceptualised as a form of capital i.e. stored as assets, which maybe carried forward to another period. However, it is an intangible capital as apart from tangible capital (physical).

This raises questions such as What is cultural capital? How might it usefully be distinguished from other forms of capital? What is the relationship to these other forms of capital? The answers remain unclear owing to;

- variety of understandings and meanings of the word 'culture'; and
- the role of culture in the lives of individuals.

In response Barker suggests a working definition; *'cultural capital is a commonly shared form of human capital embodied in individuals'* and is best understood separately as an aid to connectivity between individuals i.e. something that standardises interaction, modes coordinates actions and reduces

uncertainty by facilitating the formation of consistent expectations across a group of individuals that is either / mix of aesthetic, cognitive & moral. His conclusions are consistent with Casson's statement that *'The success of an economy depends on the quality of its culture'* (M.Casson 1994) which suggests that an *'effective culture has a strong moral content – morality can overcome problems'*

Barker identifies two features of cultural capital:

- That it impacts on others forms of capital quite significantly – from of physical capital maybe influenced by the significant aesthetic. The choice of forms of physical capital will be influenced by common cognitive modalities (i.e. The language spoken or science learnt).
- Is the limited in extent to which individual decision making may be said to contribute to its development?

Government has a role in creating cultural capital by way of defining rights, as well as entitlements and conversely obligations for others e.g. Creative NZ expenditure policies will have downstream affects e.g. decision making and people's behaviour.

He identifies two types of consequences:

- Efficiency -
- Distributional -

The major forces, which will continue to impact on New Zealand, are:

- Decline of Europe vs growth of Asia (especially China and India);
- Globalisation; and
- Advances in human knowledge, innovation and technology.

In order to foster social cohesion and economic growth, two reciprocal conditions are needed;

- **Opportunity** – people need to acquire things they value highly from their society if they are too feel good about it;
- **Responsibility** – individuals need to give something back, make a contribution to society if it is be cohesive and grow;
- **Security** – individuals need to feel secure about opportunities and responsibilities they can expect; and
- **Identity** – people will associate or cohere with others because of mutual advantages and security, by identifying with others from a sense of belonging or identity creates the quality of culture will potentially influence not only social cohesion but also economic growth and performance. To the extent it shapes and facilitates economic activity. Collective cultural groups may offer incentives to form clubs and express systematically different demands for culture .g. aesthetic, cognitive and moral.

On the emergence of culture, Barker claims this is in response to particular demands of particular groups and involves decentralised activities of particular artists, writers, musicians etc. To facilitate the process, he refers to the 'cultural sector' where people develop, create, represent and enjoy their shared culture. This requires time, effort and resources. It requires organisation, thereby influencing outcomes including the nature of cultural sector and how it is ordered, especially the demand side and influence:

- The extent to which resources are allocated on the supply side to different forms of cultural

- activity such as music, art, film etc;
- The extent to which resources are efficiently used on the supply side so that cost is kept down per unit of quality;
- The degree of dynamic change innovation and evolution in the way cultural products and services are enjoyed, created delivered and even organised;
- The extent to which the artefacts and traditions of past times are preserved.

It is possible to explore the institutional arrangements and the relationships observed between outcomes, outputs and inputs of the ‘cultural sector’ which according to Barker justifies government policy intervention.

Csikszentmihalyi, Mihaly ‘Creativity’ Published by Harper Collins (1996)

The author is a professor of psychology at the University of Chicago, and the book documents the findings of a research project involving 90 creative individuals, who were interviewed, and from which he concludes that: *‘creativity is any act, idea, or product that changes an existing domain into a new one. And a ‘creative person is: someone whose thoughts or actions change a domain’.* He asks not what is creativity but where is it? This suggests that creativity can be observed in the interrelations of a system made up of;

- Domain – i.e. a set of symbolic rules and procedures
- Field – i.e. includes all individuals, who act as gatekeepers to the domain.
- Person- i.e. when a person using the symbols has a new idea, or sees a new pattern, which maybe incorporated by the field into the domain. New generations will learn these changes and may change this domain once more.

The author therefore, qualifies his conclusions by claiming that a domain cannot change without the explicit and implicit consent of a field responsible for it. In short, a person is deemed creative or not, only if the novelty produced is accepted by others in the field, for inclusion in the domain.

Also clear is that a person cannot be creative in a domain to which that person is **not** exposed. The person must know the rules, and receive recognition from the field to recognise and legitimise an individual’s novel contributions. Creativity therefore, can be manifested only in existing domains and rules, and depends not so much on individual creativity, but on the diffusion of ideas and novelty.

For the author *‘creativity is a central source of meaning in our lives’* in that it recognises that all that is interesting and important to humans results from creativity, and secondly it makes us feel more fully alive.

He goes on to describe knowledge mediated by symbols is *extrasomatic*, and must be passed on and learned. Such symbols are not transmitted through chemical codes inscribed in our chromosomes, and *extrasomatic* information makes up what we call a culture. This knowledge i.e. meme’s (unit of information) conveyed by symbols is bundled up into discrete domains e.g. geometry, religion etc. where each has its own rules and notation, leading the author to claim that the existence of domains is the best evidence of human creativity. By learning the rules of a domain an individual immediately steps beyond the domain and enters the realm of cultural evolution. He argues that each domain expands the limitation of individuality and enlarges our sensitivity and ability to relate to the world. However, he is realistic to believe that most individuals live within the constraints of biological existence.

The author notes that creative people engage a particular domain because of a calling, rather than as an income generating vocation, and in the 21st century, domains have become quantifiable, subordinating those which are not, thereby distorting of reality.

In concluding, the author identifies the importance of creativity for human survival and how it can also have undesirable affects. He provides a list as to how individuals can enhance their creativity.

SCHOOL REFORM & EFFECTIVE SCHOOLS

Shor, Ira. 'Empowering Education; Critical Teaching For Social Change' The University of Chicago Press (1992)

Shor asks: *What kind of education do we have? What kind do we need? How do we get from one to the other? Can education develop students as critical thinkers, skilled workers and active citizens?*

He asserts that all forms of education are political because education can enable or inhibit the questioning habits of students thereby, developing or disabling their critical relation to knowledge, schooling and society.

Shor defines empowering education as '*a critical-democratic pedagogy for self and social change*'. The goals of this pedagogy relate personal growth and to public life, academic knowledge, habits of

inquiry and curiosity about society, power, inequality and change. While he argues for '*student centred*' education, Shor makes it clear this does not mean that students can do whatever they like in the class room, or that teachers can do whatever they like. Rather, the learning process is negotiated requiring leadership by the teacher and mutual teacher–student authority. An empowering education does not teach students to be self-centred while ignoring public welfare. He believes that to dis-empower students is to '*deposit or fill*' them with information for the purpose of regurgitating the same on call, at a later time.

Empowering pedagogy is '*a process through which students learn to critically appropriate knowledge externally outside of their immediate experience, in order to broaden their understanding of themselves, the world and possibilities for transforming the taken for granted assumptions about the way we live*'. **An empowering curriculum must be transformative in nature** and help students to develop knowledge skills and values needed to become social critics, who can make reflective decisions and implement those decisions into effective personal, social, political and economic action.

The teacher leads and directs the curriculum and does so with the participation of the students balancing the need for structure with openness. To be democratic, implies orientating subject matter to student culture and student needs, while creating a negotiable openness in class, where student input jointly creates the learning process.

An empowering pedagogy involves an agenda of values which are listed below:

- Participatory
- Affective
- Problem solving
- Situated
- Multicultural
- Dialogic
- Desocializing
- Democratic
- Researching
- Interdisciplinary
- Activist

Delors, Jacques and others. '*Learning: The Treasure Within-Report to UNESCO of the International Commission on Education for the Twenty First Century*'. UNESCO Publishing / The Australian National Commission for UNESCO (1998)

Education is an indispensable asset in the attempt to attain the ideals of peace, freedom and social justice and it has a fundamental role to play in building relationships among individuals, groups and nations. Apart from ensuring respect for the human condition, education must ensure respect for the natural assets that we have a duty to hand on in good condition to future generations.

Education has a critical role to help humankind overcome some critical tensions namely;

Global and local people – enabling people to become world citizens without losing their roots and cultural identities;

Universal and individual cultures – that local cultures remain sustainable and not diminish at the expense of globalisation;

Tradition and modernity – adaptation to change without loss of the past;

Long term and short term considerations – the need for quick answers and ready solutions versus the need for well thought out strategy and reform;

Need for competition and concern for equality of opportunity – the issue of equality of opportunity must not be suppressed by the pressure of competition;

Extraordinary expansion of knowledge and the human capacity to assimilate it – the pressure to expand curricular to include new knowledge requires choices and most essentially a basic education, that teaches the student how to improve their lives through knowledge, experimentation and the development of their own personal cultures;

Spiritual and material – that education’s task is to encourage everyone acting in accordance with their traditions and convictions and paying full respect to pluralism, to lift their minds and spirits to the plane of the universal and transcend themselves. The survival of humanity is dependant on this element.

The role of a school is to impart the desire for and pleasure in learning, the ability to learn, how to learn and intellectual curiosity

The foundations of education are:

- Learning to live together;
- Learning to know;
- Learning to do; and
- Learning to be.

Underpinning these foundations is the notion that every person has the necessary qualities to participate in education many of which remain untapped i.e. memory, reasoning, imagination, physical ability, aesthetic sense, aptitude to communicate with others etc supporting the need for greater self-knowledge.

Fiske, Edward B. & Ladd, Helen. F .’When Schools Compete – A Cautionary Tale’. Brookings Institute Press (2000)

For the authors the primary objective of the book is to examine how New Zealand implemented Tomorrow’s Schools in 1989, representing in affect the most radical transformation of any public compulsory education system in any industrialised country.

They identify three strands to those reforms:

- **Self-governing schools:** that offered schools a high degree of autonomy by handing over control to elected Boards of Trustees responsive to local communities.
- **Schools as agents of the State:** the government uses schools to achieve national goals. The government provides the resources, sets curriculum guidelines and oversees a system of accountability.
- **Competition:** Exposes education to market forces including parental choice, academic quality and fosters accountability on the assumption that the public good is served by motivating schools to pursue their own interests in a competitive environment.

The underlying notion here is that local schools are the fundamental building blocks of a public education system.

While the affects have been mixed the reforms dismantled the former system based on education delivered by professional bureaucrats. It also highlighted the significance of ethnicity to a greater extent than socio-economic class in the make up of schools. High performing secondary schools attracted higher percentages of higher performing students, whereas lower performing schools attracted lower performing students.

Some 10 years on the Ministry of Education is in the process of dealing with the negative impacts on schools not well served by the reforms. Nor does the neo liberalism ideology absolve government responsibility for schools which experience difficulties. Rather there must be special provisions whereby the ministry must intervene directly by way of support.

Among the lessons learnt from New Zealand school reform process:

Oversubscribes schools – there must a mechanism for rationing places in popular schools. The point here is that it is impossible to sustain a system in which all parents are completely free to select the school for their child;

Low performing schools- market based solutions are not in themselves solutions and cannot be addressed by governance and management changes alone. Here the problem of schools serving concentrations of disadvantaged students will not be addressed by schools autonomy and parental choice. Rather, school reform exacerbate the problem for such schools;

Self governance combined with competition- doesn't work for all schools because of a) 'polarisation' b) 'winners and losers' and c). the need to balance interests. This is particularly true for schools serving disadvantaged areas, where the pool of parents with desirous skill sets available for Board of Trustees are limited. Together with the negative publicity derived from ERO reports has resulted in disastrous effects on the school's public image. The contradiction here is that in applying a market solution to failing schools is that every school must have access to a school.

Possible solutions:

- Financial assistance – as apart from governance and management support;

- Residential zoning; and
- Extended interventions with support for teaching and learning.

Coleman J.S. and Hoffer T. ‘Public and Private High Schools – The Impact of Communities’ (1987). Basic Books Inc

The authors make the claim that American schooling is based on two divergent orientations: (a) as society’s instrument to provide new opportunities for students that transcend diverse social and cultural backgrounds, which socialises them into mainstream American society and (b) as an extension of the family, both reinforcing and reproducing its values inter-generationally. Each of these orientations are characteristic of public and private schooling.

The same orientations are also synonymous with structural and value consistency. The former refers to the structural consistency between generations, creating what is described as a ‘*functional*’ community and in doing so, augments the resources available to parents in their interactions with the school, management of their children’s behaviour, with others and with adults. It is the author’s belief that functional communities with its norms, sanctions and rewards have been historically responsible for helping lower class parents shape the young in the mould of the middle class. Lower class parents are generally associated with low education, few organisational skills, little self confidence and little money. There is a relationship between the absence of resources, those with the least resources and social disadvantage. The authors contend that these resources were once located in functional communities (rural or ethnic neighbourhoods in urban areas). In contemporary society such functional communities i.e. social resources are on the decline, leaving middle and lower classes to draw upon whatever individual resources they may have.

In contrast ‘*value communities*’ offer education based on specific values which in turn appeal to parents with such values. Such communities may support either private or public schools. Such parents may be members of a ‘value community’ but not a functional community.

Functional communities are in decline owing to the decline of residential functional communities and mass communication. Schools are increasingly reflective of a values rather than a functional community. Parents and children make a choice to attend a school based on the set of values around which a school is organised. The implications of such a school is that they are easier to manage and teach in, the balance of power lies not in the children, but parents and the principal and may be relatively more oppressive owing to consistency of values. If the students are there by choice, then it is likely to be less oppressive than a school serving a traditional values community and / or a geographical functional community.

The public school with a geographically based student body has become increasingly heterogeneous in values and unmanageable for staff, but increasingly popular both within and without the public sector. Policy and social change have severely weakened the role of public schools reproducing a dominant set of values to one of diverse and often incompatible collections of values and conflicting claims of authority. Among these changes is the growth in importance of the nuclear family at the expense of the extended family.

If policy is to make schools run well and make parents to raise their children well, then policy must address the broader question of what parents need if they are to raise their children well and how these are to be met.

Coleman explains these observations in terms of human capital and social capital. Human capital for example, the level of parents education etc. Social capital they refer to as the relationships between children and parents. It is the absence of social capital within the family the authors describe as 'deficiencies'. For the authors, a 'structural' deficiency may be the absence of a father in a nuclear family, or even the absence of an extended family in respect to a nuclear family. Social capital resides not just in a family that adheres to a set of values, it resides in a functional community i.e. with a high degree of 'intergenerational closure' as reflected in institutions where dense social relationships (albeit narrow) exist e.g. religious schools. In short, social capital is a public good and the absence of social capital represents a real loss for young persons growing up.

Functional communities with intergenerational closure constitute social capital that is of widespread value for young people in high school. It is particularly valuable for young people where the human and social capital in parents is weak. This conclusion contradicts traditional social science theory which purports that teacher's expectations can raise or lower student's expectations to achieve.

The authors ask the question; given the changes that have reduced the social capital outside schools, what can be done to increase the social capital available to children?

The authors identify three elements where human and social capital may be found:

- Human capital in the family (educational and cultural level of the parents)
- Social capital within the family (presence of adults in the household)
- Social capital in the community manifested through intergenerational closure in the community)

Ways of enhancing social capital in schools:

Parents - Can increase the social capital within the family by playing a stronger role in their children's lives;

Principal – (a). Can enact policies that promote relations between students themselves being a very powerful form of social capital e.g. to have a student body that is integrated and cohesive in the lives of students and directs that force away from education. (b). As relationships between teachers and students is potentially important for learning, these can be enhanced by timetabling and intensive contact with teachers with a smaller number of students, as well as parents by strengthening relationships with one another and with the school. (c) The involvement of community and its power to enforce norms for the youth of the school. Here, parental involvement in the school is recognised as the joint school / family task of bringing youth into adulthood.

Superintendent – Enhance the role of PTA in terms of activities and membership.

'The Appraisal on Investments in Educational Facilities' Published by OECD, Paris (2000)

The report follows a conference convened jointly by the European Investment Bank and the OECD Programme on Education Building. This conference sought to address issues concerning basic investment in physical educational facilities and key issues covering the economics of education. Among the key questions asked:

How are the economic rates of return of an educational investment to be evaluated?

- How can we be reasonably certain that the right sort of projects are financed, given the

educational policy implemented in each country?

The report also focuses on some key themes:

- The presentation of a state of the art economic analysis of educational projects;
- The contribution of performance indicators in the evaluation of educational systems; and
- Management of physical resources for education – the relationship between school environment and student achievement.

The report asserts that human capital (rather than physical capital) is the key to European well-being and development in the 21st Century. This means that in Europe the stock of human capital must be higher than physical capital. Human capital means a more educated and healthy population, being a pre-requisite to higher productivity. Education is a major component of human capital. Education is crucial to both economic growth as well as the process that supports this growth. It plays a vital role in sustaining economic development in all countries by non market returns and externalities that are also vital for to human welfare.

To be useful such indicators must provide opportunities for analysis and explanations as well provide relevant information that is timely for policy makers and governments who are subject to competing demands of capital investment for physical assets.

ROI on education therefore, must be examined in terms of ‘*production*’ rather than ‘*consumption*’ as it entails estimating the additional benefits over a lifetime for all individuals of investing in more human capital’. International indicators require a comparative examination of projects based on cost effectiveness and cost benefit analysis, being necessary to inform the process of policy formation, reinforce public accountability of educational systems and provide insight into comparable functioning of educational systems. **Cost effectiveness analysis (internal efficiency) is suitable for non market interventions and cost effectiveness (external efficiency) analysis is suitable for interventions with economic outcomes.** The former has influenced World Bank lending practices away from ‘bricks and mortar’ to software inputs e.g. textbooks. The latter involves the estimation of ROI or present net value of the project

The accepted methodology is the increased productivity of graduates against a control group of graduates with less education. The graduates productivity by measuring their salaries in the competitive sector.

Research shows that higher education to basic and general education produces higher rates of returns e.g. less crime, higher employability, innovation, greater social and social participation, improved health, social cohesion, the ‘halo effect’ of knowledge becoming a public good – a notion underpinning the ‘new growth’ theory. In turn, these elements feedback into economic well-being. Human capital can be enhanced or diminished. It is formed through different influences and different settings e.g. family, the school, local community and the workplace. Social capital sets the context in which human capital can be developed.

The report argues the need for specific performance indicators for educational projects, the recent evolution of educational projects and the current demands on them. Such indicators provide government and policy makers with relevant information and efficiency of educational systems. Quality indicators aim at identifying and measuring how schools function and at reflecting the different

ways in which school systems are organised.

McMahon, Walter. 'Externalities, Non Market Effects and Trends in Returns to Educational Investments'. Printed in 'The Appraisal on Investments in Educational Facilities' Published by OECD, Paris (2000)

Asserts that education plays a central role for achieving faster economic growth by means of more effective dissemination of knowledge. Education is also critical for maintaining sustainable development generating non market returns that are vital for human welfare.

Outcomes of education using data from 78 countries:

- **Increments to earning** – contributions to family's income, from higher interest, rent and profits;
- **Better private and public health** - e.g. lowering of child mortality and raising adult mortality;
- **Lower fertility rates** – in poor countries education to 9th grade leads to lower fertility and therefore less poverty and immigration to ghettos in Europe;
- **Democratisation** – leads to higher attainment of political rights;
- **Social benefits of education** – reflected in greater social stability in the long term;
- **Reduction of poverty and inequality** – this had private as well as public benefits (strain on social welfare etc.);
- **Improved environmental quality** – deforestation, less water pollution etc. and spread of new technologies;
- **Lower crime rates** – higher secondary and community college education leads to greater employability and a supervised environment later.

Husen, T. 'What Do Developed Countries Today Demand from Their Educational Systems?' Printed in 'The Appraisal on Investments in Educational Facilities' Published by OECD, Paris (2000)

Secondary schools have not responded to change. Instead of learning about '*adult roles*' in society and the '*world of work*', schools tend to have little contact with the '*adult world*' and schools are 'information rich but action poor'. In short, students are dependant on schools at the expense of participating in learning about 'adult roles' and the 'working world'. Technology and agencies have also eroded the role of schools suggesting a rift between theory and practice. As a result of the overwhelming flow of new information and the need to connect it to the everyday experience of learners a need has been created for life-long upgrading of teacher subject matter through regular in-service training. There is also the problem of achieving balance between pedagogical competence and subject matter, where the former is sometimes sacrificed due to teacher's work pressure etc.

Senior schooling therefore must impart skills that help learners adapt to change and teach skills that enhance the ability to learn new things, the ability to connect a range of disconnected items, as well as provide the intellectual instruments helpful in originating in an expanding knowledge society.

In order to educate a participating citizen in a democratic society, the school should provide cognitive skills and core values to its society:

- Skills for ‘*learning to learn*’ rather than encyclopaedic orientated goals i.e. finding information, discerning what is relevant relating to previously acquired knowledge and putting it into context. In short, familiarity with the potential sources of information;
- Critical reading skills – to catch the main points; and
- Analytical skills – to weigh up the pros and cons. And to structure consistency and logical coherence in a text under scrutiny.

Criticism from employers is often directed at literature, history and science who fail to realise these subjects provide a frame of reference about values.

In concluding, the author questions the role of the school model evolved in the Europe since the middle ages and the application of that model to subsistence and agricultural based societies.

Senge, Peter. ‘Schools that Learn’ Doubleday. New York

The author asks the question: ‘*What if all communities were dedicated, first and foremost, to fostering this connection between living and learning?*’ He envisions a world with no boundaries between ‘school’, ‘work’ and ‘life’. This would require the delivery of resources most likely to shape our development on ‘common ground’ patronised by people of all ages wanting to know how to learn.

Senge argues that schools can be recreated only by developing a culture of learning and continually enhancing and expanding their awareness and capabilities. He argues that five disciplines;

- Personal mastery – articulating a coherent image of your personal vision results you most want to created your life contextualised against reality;
- Shared Vision – mutual purpose to create guiding practices by which to get there;
- Mental Models – reflection and inquiry focussed on developing awareness and attitudes and perceptions of others which can help define reality;
- Team Learning – Group interaction aimed at achieving collective goals through collective thinking and learning;
- Systems thinking – as apart from fragmentation.

A successful school therefore, involves the classroom, the school and the community in a variety of ways and levels.

Learning Classroom:

For Teachers this requires as its core purpose the promotion and development, the care and security of its teachers. Teachers in turns must be committed to the stewardship for all learners and must be life-long learners;

Students must be recognised as co-creators of knowledge and participants in the evolvement of schools.

Parents must be involved in the learning process with their children.

The Learning School:

To provide infrastructural support for classrooms. As a schooling system it also provides a place for learners to go, and source of on going development and training.

The Learning Community:

As a learning environment within which the school operates.

Knowledge and learning are '*living systems*' made up of invisible networks and inter relationships. Children's learning is tied to vision. Yet schools provide a vision not always related to the children's vision. Schools generate stress and trauma in children because conformity is a core value of the industrial age.

Constraints to innovation in schools include:

- Schools as we know them today are recent developments which evolved through the machine age, whereas business originated much earlier and have continually adapted to change;
- Schools have embedded themselves into '*social systems*' and are subject to political change. Businesses are not concerned with issues such as parents, delivery and quality of product;
- Schools condition people at a very early into machine age thinking and assumptions. But schools do have potential to develop a '*learning culture*'.

Learning is also an innately activity and involves not just the brain, but the whole body – as it is one thing to know something, it is something else to do something with that learning. It is predicated on relationships with the world.

He proposes an alternative model to the machine age schools, which based on the paradigm of living systems that '*continually grow and evolve, form new relationships, and have innate goals to exist and recreate themselves*'.

- The learning centred learning rather than teacher centred;
- Encouraging variety not homogeneity - embracing multiple intelligences and diverse learning styles; and
- Understanding the world of interdependency and change rather than memorizing facts and striving for the right answers.

The point of difference in treating school like living systems instead of machines:

- Constantly exploring the theories in use of all involved in the education process; and
- Re-integrating education within webs of social relationships that link friends families and communities.

Hattie, John. 'New Zealand Education Snapshot' Paper presented to the Knowledge Wave 2003 – The Leadership Forum (February 2003)

The key underlying theme of the paper is the relationship between the quality of education provision of

Years 1-13 and the nation's capacity to:

- Attract skilled immigrants into New Zealand
- Attract expatriates to return to New Zealand
- Improve the quality of life for all New Zealanders
- Project a New Zealand 'brand' worldwide that is synonymous with quality

While the author acknowledges that 80% of New Zealand students are competitive and performing well by world standards, he notes that 20% are systematically falling behind. He identifies statistics which reveal an immense gap between 'achievers' and 'non achievers', where the latter being less mobile will eventually become school leavers and social problems demonstrated by:

- Third of the unemployed lack qualifications and of these one third are Maori and another 10% are PI.
- Third of our students leave school at or before the minimum leaving age with no school qualifications,
- In a 1996 study, 42% scored below the minimum literacy rate, meaning they could not cope with the level of reading encountered in the workplace.

In respect to Maori, Hattie points to cultural relationships (i.e. relationships between teachers and Maori students) as immensely significant in learning and concludes that '*we have not engaged Maori and Pacific students in schooling, not belonging to the school climate and we have not encouraged them to gain a reputation as learners within our school system – regardless of socio-economic background*'

He identifies the significance of external influences on student learning the greatest of which is 'teachers', supporting the view that, the onus is not on students from different cultures, but on supporting teachers to engage with all students and '*to assist parents to appreciate that their children can learn to high standards*'

This calls for a re-definition of the purpose of schooling, where the student is valued and world class standards are attained. Hattie believes that all this is necessarily attract and retain excellent teachers as well as the technologies of practice, based on effort and not intelligence or family. In short, every student can learn and none will be left behind.

Swann, J & Pratt, J. (Editors) 'Improving Education – Realist Approaches to Method and Research'. Cassell (1999)

In the book a number of academics with backgrounds in education and educational research discuss philosophical and practical issues involved in improving education against an analysis / evaluation of empiricism, postmodernism, fallibilism and realism. A central theme throughout the book is the assertion by philosopher Karl Popper that '*learning and growth of knowledge necessarily involves the discovery of error and inadequacy in existing theories or explanations*'. Constructive criticism therefore, is essential to any endeavour to develop knowledge and improve practice. In other words,

learning and the growth of knowledge must involve the discovery, error and inadequacies in existing theories or explanations. Inherent in this process is a realistic approach to research, and the need to recognise outcomes both intended and unintended. A realistic approach *'emphasises rigour in the analysis of physical, social or education phenomena which includes the logic and validity employed and with the development of a rationale basis for preferring one some knowledge statements to others'*. In other words, all knowledge should reflect external reality as much as possible and be presented in a form which allows for rigorous criticism.

This discourse has implications for educational research, where research is viewed as a creative activity and requires diversity in terms of people, opportunities, approaches, funding etc in order to generate new ideas. The book claims that formal education in the UK is based on ideas which have not been rigorously tested. It further claims there is an obligation for researchers to be free to engage in constructive criticism of the status quo and orthodox knowledge. The corollary is that corroboration doesn't produce new knowledge which in turn requires empowering policies. In other words, learning is an open ended activity in which new ideas are generated and requires us to work with uncertainty and value systems which are open ended rather than closed.

Therefore, researchers should be encouraged to formulate theories in such a way as they can be tested and devise situations where they can be put to the test, including where counter evidence is conceivable and sought, as well as where educational practice fails. In respect to policy designed to solve problems, a realistic approach must be concerned with outcomes intended or not, and from which we can learn what policy works and what does not eventually leading to improvement. In short, researchers must learn why policies for instance fail as well as succeed.

In conclusion, Popper's discourse provides a critical tool for researchers in improving education.

Henton. D, Melville. J, Walesh, K. 'Grassroot Leaders for the New Economy' Published by Jossey-Bass. (1997)

The purpose of the book is to *'describe and explain the nature of leadership necessary to compete in the 21st century, based on observations of effective civic entrepreneurs'*. The book represents a sharing of collected experiences of civic entrepreneurs and provides insights into their motivation, purpose, lessons learned, and advice. In doing so, they draw upon the experiences of corporate and community leaders, as to what they consider to be secrets to a particular regions success.

The book is written against the context of globalisation and its transformative effects on industry, government and diversity. In doing so, the authors profile four US communities: Austin, Texas; Cleveland, Ohio; Wichita, Kansas and Silicon Valley, California, as well as two US States namely, Arizona and Florida. In spite of the diversity of culture, politics, economics and geography of these regions, their underlying economic success is attributed to *'a collaborative model for regional resilience lead by a new civic leader, namely the economic entrepreneur'*. The authors claim all of these regions represent a new economic model i.e. *'an economic community'*, defined as a place characterised by *'strong, responsive relationships between the economy and community, that provide companies and communities with sustained advantage and resiliency'*. Economic communities integrate the economy (*the world of work*) and the community (*the world of living*), thereby providing for effective collaboration among business, government, education and community leaders, aimed at addressing new

challenges and opportunities. Here, economic communities take responsibility for their future and use their own resources not those of government. This paradigm has given rise to new leadership to help US regions to become strong economic communities.

Whereas regions previously viewed globalisation as a threat, leading regions view it as a huge opportunity i.e. to participate as critical regional contributors to value adding global industries. In the 'new' globalisation scenario, healthy local roots are essential for global reach, with key drivers being, access to local markets, workforce, technology and suppliers. This involves creating specialised habitats that can grow high value business, and can be achieved by effective people and places policies. Sustainability will be achieved by policies that are supportive of;

- Education and training policies for workers;
- Research;
- Modern infrastructure; and
- Development of institutions that facilitate collaboration with business, government and independent sector.

Secondly, Information Technology, characterised by decentralisation simultaneously highlights the importance of relationships. This has encouraged autonomy and enabled small companies overcome the main advantages of large companies. In short, decentralisation and specialisation (by way of outsourcing non core activities) has given rise to the networked economy.

Three features of a Economic Community:

Engaged clusters of Specialisation: concentrations of firms that create wealth in regions through export and are engaged by their communities to meet mutual needs;

Connected Community Competencies: the community assets and processes that creates the foundations for competitive clusters and sustains a high quality of life. Here, economic communities develop a set of competencies that are responsive to business needs and

Civic Entrepreneurs: economic community leaders that connect economic clusters and community competencies to promote economic vitality and community quality of life, where '*relationships are the glue of strong economic communities*' (p28), and economic strategy is underpinned by relationship building.

Through observations of high performance economic communities, the authors claim that social capital is generated (p30), by the catalyst role of a 'civic entrepreneur', who creates opportunities for people to work together on specific projects to advance economic community.

De Porter, B. and Hernaki, M. 'Quantum Learning – Unleash the Genius Within You'. Published by Piakus (1992).

The book is a guide and designed to describe what learning is about and empower the reader, who wants to improve his / her learning potential. Quantum learning is described by the author '*as a body of*

learning methods and philosophies that have proven to be effective in school and in business...for all types of people, and for all ages'. It has its roots in the work of Dr Georgi Lozanov, a Bulgarian educator who experimented with what is described as 'suggestology' or 'suggestopedia'. Quantum Learning incorporates suggestology, accelerated learning and neurolinguistic programming (NLP) with our own theories, beliefs and methods. Teachers trained in NLP know how to use positive languaging to promote positive actions - an important factor for stimulating the most effective brain functioning. In doing so, they can identify each individual's best learning style and create anchors out successful, confident moments.

Quantum Learning includes some key concepts such as;

- Right / left brain theory;
- The triune brain theory;
- Morality preference (visual, auditory, kinaesthetic);
- Theory of multiple intelligence's;
- Holistic education;
- Experiential learning;
- Metaphoric learning;
- Simulation / gaming.

Quantum Learning itself builds on the applied practice of Burklyn Business School (1970's) and Supercamp (1980's). The author asserts that the underlying principle of both successful learning forums was *fun*, and involved a combination of '*academic skills, physical achievements and life skills*'.

Myers, K. (Editor). 'School Improvement in Practice' The Falmer Press (1996)

The book analyses the performance of Hammersmith and Fulham education providers established for the primary purpose of raising educational standards as part of a strategy called '*Schools Make a Difference*' (SMAD). Both providers administer schools located in socially turbulent communities. SMAD encouraged schools in its districts to look outside their immediate district and, based on their own individual needs, plan and implement strategies to lay the foundations for raising student levels of attainment, achievement and morale.

SMAD is based on research from four fields:

- School effectiveness;
- School improvement;
- Managing change;
- Action research.

School Effectiveness – while research reveals that schools can make a difference to the quality of the educational experience and educational outcomes for students, there is little research as to why some schools are more effective than others. An effective school here is defined as one that '*adds extra value to its students*' and will not always be effective with all their students. However, the literature claims that schools can make a significant difference to student outcomes even when background factors such as age, sex and social class are taken into account.

The characteristics of effective schools are identified as (p8);

- Professional leadership;
- Shared vision and goals;
- A learning environment;
- Concentration on teaching and learning;
- Purposeful teaching;
- High expectations;
- Positive reinforcement;
- Monitoring progress;
- Pupil rights and responsibilities;
- Home school partnership;
- A learning organisation.

A key outcome of SMAD is the need for research based practice for teachers, or teachers as researchers as it leads to high quality curriculum development and improved professional practice. A feature of such action research is that it is both emancipatory and participatory, The author however, makes it clear SMAD is not intended to be replicated in other contexts.

Outcomes of SMAD include:

- Need for sound resourcing for research projects;
- Smaller projects are easier to support;
- A project shouldn't be too short in duration as time for evaluation of longer term results is necessary;
- There can't be a single strategy for all schools;
- Local cultures and conditions must be acknowledged; and
- Aspects of the project cannot be applied elsewhere.

Stoll. L and Myers. K. (Editors) 'No Quick Fixes' Falmer Press (1998)

The book responds to a growing interest in '*failing schools*' and raises the question; *What is a school in difficulty? Why and how did it get that way? What roles do the head teacher, the LEA, the governing body, 'critical friends' and government policy initiatives play in turning such schools around?* The book, edited by Stoll and Myers draws upon a range of viewpoints collected from head teachers to policy experts and in doing so, challenges assumptions about causes and available remedies.

The editors open the discussion by theorising schooling success, which is predicated on *effectiveness*, to conclude that the term is problematic as there is no common understanding of the word even amongst educators, parents, students, community and agencies. The problem of language is extended to schools confronted with difficulties, where blame is attributed resulting in divisiveness, rather than encouraging a joint acceptance a problem exists and collaborative problem-solving. Education they say is about cooperation not confrontation.

The editors list the following points collated from the contributing authors in the book, which are listed below;

- To clarify definitions;
- To consider the implications of the language in current usage;
- To broaden our understanding of ineffectiveness through searching beyond the confines of

education;

- To pay attention to the capacity of different schools to improve and avoid simplistic ‘one size fits all’ solutions;

- To recognise the importance of leadership remember the centrality of teaching and learning;

and

- To take into account that schools exist within a larger context that can enhance or inhibit their effectiveness.

The book concludes – there are no quick fixes to schools confronted by difficulty.

COMMUNITY INVOLVEMENT (INCLUDING HEALTH PROMOTING SCHOOLS)

Ife, Jim. 'Community Development–Creating Community Alternatives-Vision, Analysis and Practice'. Longman

The author is Head of the School of Social Work and Social Administration at the University of Western Australia. He begins by pointing out that despite the immense achievements of Western society it has failed to address the most basic pre-requisites of civilisation namely; the need for human beings to live in harmony with each other and their environment. In fact both Western society and all societies have proven they cannot cope with world instability characterised ecological, economic, political, social or cultural dysfunction.

Moreover, the institutions charged with providing solutions to these problems have tended to worsen the situation. This has given rise for the need to identify alternative ways of doing things of which he concludes community based responses are both effective and sustainable. Known as ‘*community development*’, this approach ‘*represents a vision of how things might be differently organised, so that genuine ecological sustainability and social justice, which seems unachievable at global or national levels, can be realised in the experience of human community*’.

The author goes to clarify key terminology as well as examining their underlying ideologies e.g. ‘*autonomy*’, ‘*decentralisation*’, ‘*community control*’, ‘*structural disadvantage*’ and ‘*self-reliance*’. He identifies some twenty two principles of community development that help support a holistic based

approach based on connections, which differs from the linear one dimension society associated Newtonian / Cartesian worldview, which many social justice and ecological problems of the world emanate. Ife, concludes by offering ways as to how these principles can be applied. In short, 'community development' is empowering to the individual enabling the development of autonomous and self-reliant communities, as part of a participatory process that is conscious raising and democratic.

Cary. L.J. (Editor) 'Community Development as a Process'. University of Missouri Press (1970)

This book is a collaboration of authorities on community development each of who have taken responsibility for writing a specific chapter. The editor provides a definition of community development, 'the deliberate attempt by community people to work together to guide the future of their communities and the development of a corresponding set of techniques for assisting community people in such a process' and identifies in the literature elements shared in all definitions namely;

- Community as a unit of action;
- Community initiative leadership and resources;
- Use of both internal and external resources;
- Inclusive participation;
- An organised comprehensive approach that attempts to involve the entire community; and
- Democratic, rational task development.

Here the underlying theme is process or 'stages through which economies and societies' progress 'in order to achieve desired goals'. Inherent in community development is the need to define what is a community, which is described as 'any grouping of people with shared interests who live in a delimited area', as well as other related terminology. In the modern context community development refers to the 'long standing urge to act collectively to improve the group's lot'

However the author makes the point that community development has 'not fully emerged as a professional process' and comes with its own implications and dilemmas including;

political implications of the community development process, and more specifically the inclusion of marginal groups and what this means for decision making bodies. The enhanced broad participation of people in the decisionmaking process may challenge if not threaten existing institutions, who will be required to share authority and community;

The possibility of a socio-political process operating outside but parallel to the existing structure;

The 'Great Change' suggests the need for an increasing amount of resources and increasing number of decisions affecting the community from outside thereby demanding increased linkages to resources and power lying outside the community. To address this it is suggested that community development programmes ought to be a 'flexible fit'.

In explaining what community development is, Cary lists the following in order to define its various dimensions:

- **Community Development Process:** where community development is viewed as process

involving the progression from one state to another. Inherent in this approach is the involvement of a few people leading to mass participation over time. Such an approach is scientific and associated with specialists from outside of the community. The overall process centres on awareness in a community through education to identify issues, planning, organising eventually leading to the implementation of that plan. Critical to this approach is democratic participation;

- **Community Development as a Method:** refers to the implementation of the 'process' and is end focussed. In this sense it is a function of government, agencies etc and maybe effect certain forms of social organisation, recreation etc and is associated with a set of procedures;
- **Community Development as a Programme:** is a programme that community development affects people. The focus is on a set of activities which can be quantified and reported on;
- **Community Development as a Movement:** is a biased phenomena and operates from a philosophical rather than scientific base adhering to certain values and goals under varying social and political systems.

Inherent in community development is its 'emerging status' which he believes can be remedied by professional education. As a 'fully' recognised process, community development practitioners will need to reconcile some major issues or at least understand them such as:

- Political process - the inclusion of marginalised groups in the process requiring new forms of involvement (democratic participation), use of power and its implications on the political system;
- Reality of major decisions being made outside of the community - an increasing amount of resorces and decisions are made externally. An important consideration here is the need for a 'flexible fit' of programmes to match community needs.
- Frequent bind on part of community developers in reconciling employer demands with community wants - this requires research into practice based on empirical theory;
- Process of continuity - this requires broad based support, recognition of alternative organisational styles and ways of involving people;
- Professional education - is crucial as the future if the profession rests on education.

Mercer, David. 'Future Revolutions – Unravelling the Uncertainties of Life and Work in the 21st Century'. Orion Business Books (1998)

The author identifies three major revolutions which are having immense impact on society namely: communications and 'post materialism'. The first, concerns the growing power of the individual, the second revolution relates to a shift from the acquisition of physical goods to 'internal' non material / spiritual development, and the third revolution relates to human capital – where the individual becomes the investment especially in terms of the education and training they have received, and the flexible use of the same.

A central theme of the book concerns the right and duty of people to positively shape their future and hinges on the following assumptions:

- The future of humanity is, in general is no longer constrained by any significant shortage of resources;

- The future will be determined by social decisions not limited to a handful of individuals but millions, if not billions of people; and
- Long term decisions will be taken based on our expectations of the future.

Accordingly, the ‘new’ individual will need a community, or more to the point a number of communities, to meet a diverse range of personal and provide various social services previously vandalised by government restructuring. This he claims is because the market is not equipped to supply such services. Mercer goes on to claim that in tandem with the growth of globalisation and the supranational groupings of political entities, is an equally powerful trend, where regions often tribal or ethnically based are demanding a greater say in their affairs. However, it is the ever growing power of women, driven by the Information Revolution which will have the greatest impact on society, accompanied by the predominance of values orientated to women, such as cooperation rather than competition.

Henton, D, Melville, J, Walesh, K. ‘Grassroot Leaders for the New Economy’ Published by Jossey-Bass

In the preface the authors state that the purpose of the book as to *‘describe and explain the nature of leadership necessary to compete in the 21st century, based on observation of effective civic entrepreneurs’*. The authors share the collected experiences of civic entrepreneurs that provide insights into their motivation, purpose, lessons learned, and advice. In doing so, they attempt to identify from personal experience, as well as the experience of corporate and community leaders what they consider to be secrets to their regions success.

The book is written against the context of globalisation and its transformative effects on industry, government and diversity. In doing so, the authors profile four US communities: Austin, Texas; Cleveland, Ohio; Wichita, Kansas and Silicon Valley, California, as well as two US States namely, Arizona and Florida. In spite of the diversity of culture, politics, economics and geography of these regions their underlying success is attributed to a collaborative model for regional resilience lead buy a new civic leader. The authors claim all of these regions are creating a new economic model – an economic community. They define an economic community as place characterised by *‘strong, responsive relationships between the economy and community that provide companies and communities with sustained advantage and resiliency’*. *Economic communities integrate the economy (the world of work) and the community (the world of living)*, thereby providing for effective collaboration among business, government, education and community leaders aimed at addressing new challenges and opportunities. Economic communities take responsibility for their future and turn to their own resources rather than those of government. This paradigm has given rise to new leadership to help US regions to become strong economic communities.

Whereas regions previously viewed globalisation as a threat, leading regions are seeing it as a huge opportunity i.e. to participate as critical regional contributors to value adding global industries. In the globalisation scenario, healthy local roots are essential for global reach, with key drivers being, access to local markets, workforce, technology and suppliers. This involves creating specialised habitats that can grow high value business, and can be achieved by effective people and places policies. Sustainability will be achieved by policies that are supportive of;

- Education and training policies for workers
- Research

■ Modern infrastructure

■ Development of institutions that facilitate collaboration with business, government and independent sector

Secondly, Information Technology – has a decentralising power while highlighting the importance of relationships. In doing so, encourages autonomy and enables small companies overcome the main advantages of large companies while enabling them to become specialist, as well as outsource non core activities. In short, decentralisation and specialisation has given rise to the networked economy. And whereas globalisation has given rise to the search for distinct value adding habitats, new globalisation is based on decentralisation and specialisation in regions.

‘The first leg creates market capital, the second leg creates public capital , and the third leg creates social capital’

Three features of the economic community:

Engaged clusters of specialisation: concentrations of firms that create wealth in regions through export and are engaged by their communities to meet mutual needs

Connected community competencies: the community assets and p [recess that creates the foundations for competitive clusters and sustains a high quality of life

Civic entrepreneurs knitting economy and community: leaders that connect economic clusters and community competencies to promote economic vitality and community quality of life. *‘These relationships are the glue of strong economic communities’ (p28)*. The art of friendship building as an underpinning of economic strategy’

Thereby providing the capacity to respond to negative external shocks and to work proactively on opportunities.

Economic communities develop a set of competencies that are responsive to business needs.

‘Social capital is coming to be seen as a vital ingredient in economic development around the world’ (Putnam, *The American Prospect*, 1993. p38).

‘Social capital is critical to prosperity and to what has come to be called competitiveness’ (Fukuyama, 1995, p355)

Through observations of high performance economic communities, the authors claim that social capital can in fact be generated (p30), with a catalyst i.e. civic entrepreneur by creating opportunities for people to work together on specific projects to advance economic community.

‘Health Promoting Schools: In Northern Region: Overview of Evaluation Findings of Pilot Project’.
Phoenix Research(2000)

The report covers the experiences and outcomes of the North Region Health Promoting Pilot, being one of three pilots which started in 1997. The Pilot was run over a three year period and the Report offers some helpful insights for future initiatives based on what proved successful and what did not.

The Pilot itself operated in accordance with the World Health Organisation's Healthy Schools model which uses the Ottawa Charter as a framework, as well as the Treaty of Waitangi. The broad aims of Health Promoting Schools are identified as follows:

- To develop and implement school policy to promote health and the well being of students and staff;
- To create healthy school environments that promote the health and well being of students and staff;
- To develop an effective partnership between school and community; and
- To co-ordinate school health activities, including health and disability support services, which promote the health and well being of students and staff.

As a Pilot, Health Promoting Schools was structured in such a way as to be evaluated in order to determine its effectiveness in respect to its client communities. Among the general observations included:

- That Maori Health Promotion practitioners have special needs derived from their preferred styles of professional practice underpinned by Maori cultural values and behaviours and these need to be addressed;
- Maori needed to be represented at all levels of decision making in Health Promotion Schools service delivery e.g. strategic planning, management and front-line positions;
- Future Health Promotions Schools initiatives must embrace a community development model, that is inclusive, participatory and empowering;
- All staff be provided with training both in terms of acquiring new professional skills, the ability to work with schools, understanding how schools work and information and skills necessary to promote Health Promotion Schools to school principals and BOT's etc; and
- Memorandum of Understandings be signed between schools and Health Promoting Schools service providers.

Key Recommendations of relevance to Mataariki:

- That Health Promoting Schools (Northern Region) be supported financially because of the benefits derived for young people;⁵
- Schools be encouraged to give more focus to policy development as part of Health Promoting Schools;⁶

'The Health Promoting School–Policy, Programmes and Practice in Australia'. Edited by

5 Page 81

6 Page 82

Colquhoun, Derek; Goltz, Karen and Sheehan, Margaret. Published by Harcourt Brace & Co. (1997), NSW

Health promoting schools is an internationally accepted concept, where schools are recognised as **complex social systems** and the health of pupils is both promoted through the curriculum, while at the same time are recognised as centres of the *'whole school environment'*. In other words, education and health are inseparable – *'both are about the futures of young people in the care of schools'*. This in turn requires a change in attitude, policies and practices that are cooperative, collaborative, promote the development of community and are democratic to ensure schools create, maintain and protect health. However, the point of difference is that **education is for health rather than about health**.

The evaluation and monitoring of this approach is a critical part of the process which must necessarily involve staff, students and the community.

In the Australian context health promoting schools is supported through a number of major reports the key elements of which are:

- Comprehensive school health education curriculum for all children;
- Comprehensive pre-service preparation and in-service teacher training for health;
- Increased community participation;
- Close parent cooperation and support;
- Focus on the schools physical environment;
- Increased student participation in decision making and policies;
- The development of the school as a caring community;
- Integration of the physical, social mental and environmental aspects of health;
- Empowering children to think critically and analytically about social and health issues.

At the same time, these reports identify the following key components needed to strengthen schools as potential sites for health promotion:

- The legitimacy conferred on schools as places for health advancement;
- The presence of a skilled and caring work force;
- Capacity of schools to develop health enhancing policies;
- Close relationships with parents;
- Student involvement on school councils;
- Compulsory attendance;
- Links with health agencies; and
- The existence of a comprehensive curriculum guidelines and resources.

'Healthy School Communities–From Dreams to Schemes'. 4th National Health Promoting Schools

Conference, Brisbane, Queensland 1998. Published by Australian Health Promotion Schools Association, University of Sydney

Good health supports learning and successful learning supports health. Education and health are inseparable. Children are our most precious resource and schools are an extremely important part of the development of that resource. Schools are places where children spend a great deal of time and where education and health programmes have their greatest impact.

In order for children to fully participate in educational activities and achieve their potential they must be healthy, attentive and secure, emotionally and physically. Of particular significance is an environment where students form relationships with peers. In this safe environment, good relationships provide a critical backdrop to student learning which are ultimately based on **collaboration and cooperation** between the school, parents, key agencies and other stakeholders.

'Priorities for Research into Health Promoting Schools in Australia'. Background Briefing Report No 4. For the National Health Promoting Schools Initiative. Published by Australian Health Promoting Schools Association. Authors; Don Nutbeam and Lawry St Leger.

Research findings from both the health and education sectors provide strong reasons why the health sector should be supporting the education sector in its quest to improve educational outcomes for students. Educational research indicates that literacy has a crucial role in educational achievement. Health sector research indicates that the association between poor educational attainment and the adoption of health compromising behaviours is a strong and persistent one. Greater effort needs to be to monitor those mental and physical health problems that affect attendance, attentiveness and other factors related to literacy, communications skills, and academic outcomes generally.

The health promoting school concept offers the promise – the potential of which still needs to be demonstrated of helping students to learn crucial 'life' skills. This may happen both through what is taught in class, but also through what is said and done **modelled in the school as an organisation and a community**.

The extent to which health promoting school achieves its promise is largely dependant on the willingness of classroom teachers, to embrace the philosophy which focuses on a greater emphasis on the importance of the whole school health to teacher well being and continuing school improvement.

Key questions:

- What school programmes, policies and practices will be most efficacious in optimising the conditions for health in young people in any individual school?
- How can we ensure that as many children as possible enjoy the benefits of a school that promotes health?

TEACHER TRAINING AND DEVELOPMENT

Penetito, Wally. 'He Koingo Mo Te Pumahara' printed in 'He Paepae Korero—Research Perspectives in Maori Education'. New Zealand Council for Educational Research. (1996)

Penetito draws upon research of Maori and Indigenous researchers to identify some key propositions in respect to Indigenous teacher education.

He profiles a Maori teacher of the future as:

- Knowing what it means to be a Maori;
- Having an understand that to be a 'good teacher' means being dedicated to the profession of teaching;
- To be constantly engaged in intellectual work; and
- Able to identify such phenomena as the 'hidden curriculum' and institutional racism.

Maori teachers of the future will need to be nurtured separately if they are to escape the homogenising affects of 'inclusive' policies that are inherently assimilative, integrationist and mainstream. The differences Maori bring to the profession must be recognised and supported.

The major themes of Indigenous teacher education are:

- Making explicit links with the tangata whenua;
- Tangata whenua control;

- Teacher education as a coherent whole; and
- Need for standards and high quality.

Teacher Educational Theory derived from the ‘North American Indian Experience’ could be helpful to Maori :

- Spiritual concerns are an important part of Indian education;
- There are distinctive Indian styles of thought and communication with educational implications;
- For most Indians, education has a dual purpose of promoting Indian cultures, as well as providing skills and information relevant to non Indian society;
- Indian education cannot be understood apart from historical analysis;
- Indian education takes place in a cultural atmosphere that is permeated with strong group bonds and great individual freedom; and
- Indian education is service orientated.

On Theory & Practice in Aotearoa

There is a need for an absolutely clear picture about what is happening for Maori within teacher education at our respective colleges of education;

The reasons behind teacher education should be clear;

Teacher education for Maori has limited significance if it not linked meaningfully to iwi Maori. These links need to be deliberately strengthened;

Teacher education needs to be consumer motivated. In Maori education the demand is for teachers who can speak Maori, who are knowledgeable in the Maori world, who are trained and who are highly educated about the world around them;

No one has a monopoly on the wisdom about what to do in Maori teacher education. Formal links must be established with teacher providers in New Zealand and overseas.

Carpenter.V, Dixon.H, Rata. E and Rawlinson. ‘Theory in Practice for Educators’ . Dunmore Press, 2001

Teachers are seen to hold the solutions for the nation's problems, while at the same time they are often blamed for society's ills. Teachers therefore, need to understand and articulate what it means to be a teacher, what it means to teach, why choices are made regarding teaching content, knowledge of child development and psychology, the historical, political and sociological influences on education, what makes an organisation effective and how children learn.

Teaching is a complex and learned profession and teachers must therefore develop ways in which they think about their work. Daily, they are faced with addressing practical dilemmas as well as moral and ethical problems, the solutions of which are neither simple or straight forward. Many issues tend to be multi-faceted and require teachers to unravel complex situations and make informed choices. It also raises numerous questions.

Teaching is an intellectual activity – as teaching cannot be considered a profession unless its practitioners have acquired an extensive body of theoretical knowledge that helps them to understand, explain, defend, justify and where necessary modify their pedagogy. Theory on the other hand cannot exist in isolation to morality, as *‘teaching is a moral activity’* and is part of the overall purpose of education. It provides the link between theory and action. Theory and practice are two sides of the same coin and guides and modifies practice.

Finally, psychology, sociology and history provide an array of complementary and competing theoretical tools for education. In doing so, they provide teachers with powerful intellectual tools for to enable the examination of teaching and learning within a range of social cultural political economic and ideological contexts.

Shor, I and Freire, P. ‘Pedagogy for Liberation’. Bergin & Harvey (1998)

Both authors enter into a series of dialogues as to; the role of teachers in becoming liberating educators, teachers teaching for transformation, the need for structure and rigour in liberating education, the need for critical pedagogy and student participation.

The key underlying theme in the book relates to the need to challenge the underpinning theories and assumptions of traditional education of the dominant classes which have traditionally marginalised others. This can be achieved by introducing a critical pedagogy that is ‘student centred’ and dialogic in nature, where a climate of questioning and problem posing is required. The only alternative is authoritarian education, being the traditional model, where students and teachers are directed to teach a curriculum set by people, who have no knowledge nor are accountable to the local community, and is designed to serve the interests of the dominant classes such as politicians and major corporates.

The traditional system or the ‘transfer curriculum’ represents a mechanistic way of teaching and organising a teaching programme. It suggests a lack of confidence in the creativity of students and ability of teachers. A liberatory education requires creativity and a dialogic relationship between teacher and student, where knowledge is questioned and remade. A curriculum imposed from outside precludes the development of a dialogic relationship.

Darling–Hammond. ‘The Right to Learn–A Blue Print For Creating Schools That Work’. Jossey – Bass Publishers

The Right to Learn as a new paradigm for educational policy is integral to a democracy, but has never been reflected in fact. The challenge of the 21st Century is to create schools, where all students in all communities are ensured of this right. This requires:

- **To teach understanding** – to understand ideas deeply and perform proficiently; and
- **To teach for diversity** – to help different kinds of learners and help different paths to knowledge, so they can live constructively together.

The new task requires the policy maker to make a paradigm shift - from **‘designing controls to developing capacity’** among schools and teachers, to be responsible for student learning and to be responsive to student, community needs and concerns. This means:

- Redesigning schools so they focus on learning, foster close relationships and support in-depth intellectual work;
- Creating a profession of teaching to ensure all teachers have the knowledge and commitments they need to teach diverse learners well; and
- Funding schools equitably so they can invest in the front lines of teaching and learning rather than in side offices of systems and bureaucracies.

Highly successful schools are small and organised around internally developed common goals with the aim of building a core curriculum linked to community concerns, as well as to student interests and development needs.

The most successful schools are those where teaching is experiential and inquiry orientated, and governance systems most democratic.

The major obstacle to educational reform (often through adaptation) is the **lack of skills** on part of teachers needed to teach both subjects and students well. The education system is designed to manage teaching simply and efficiently by setting up impersonal relationships, superficial curricular and ‘routinized’ teaching overwhelming any desire for democratic teaching.

Students need to be guaranteed quality learning. Experience shows that professional development is directed at building capacity of teachers and principles are key to improving schools. Teacher preparation must be related to how students learn.

Socio economic changes and work force patterns require not only **Education for Democracy but Education as Democracy**; which gives access to social understanding developed as they actually participate in a pluralistic society, talking together, making decisions and coming to understand multiple views. Schools will need to develop knowledge skills and talents that cannot be fully specified or predicated in advance creating the kinds of conditions in which people can be themselves – *‘so they can act on who they are, what their passions, gifts, talents may be, what they care about, what they care for and how they want make a contribution to each other and the world’*. **Education should nurture the spirit.**

Our very concept of education needs to change. Teachers will need to become more ‘*learner centred*’ and ‘*learning centred*’, where the learning environment provides for a range of opportunities for success. They need professional support.

Key assumptions underpinning modern education:

- That learning is simple and predictable, the use of positive and negative reinforcement, information in small dollops, or mastered in a predetermined way, short response learnt by rote, immediate reinforcement, gradual progression of individual discrete skills, intended to lead to more complex performance. Underpinning these is the paradigm of students as passive raw material being taught by undereducated teachers.
- That the curriculum can be ‘teacher proofed’, suggesting a distrust of teachers. Teacher proofing = student proofing. Students of traditional rote style learning have little idea of how or little capacity in normal circumstances, to use their learning to connect ideas across lessons,

subjects or domains of thought – understanding.

Studies of teaching show it is complex work characterised by *'simultaneity, multi disciplinarianism and unpredictability'* (e.g. competing goals and multiple tasks often happening at break neck pace, trade-offs, obstacles and opportunities in the classroom). This description conflicts with the bureaucratic straight forward view of teaching.

However, non traditional teaching is also risky and high skills are needed to manage relationships to lever motivation and commitment. Successful teachers who could relate and use active teaching strategies that are inquiring, discovery and apply knowledge leading to maximisation of control over student involvement. The focus must be on learning not on procedures.

School reforms fail because policy makers and practitioners do not fully understand what the changes entail, or appreciate what in fact that change will affect other regularities of schooling. For school reform to succeed in the long term there needs to be an understanding as to what meaningful learning is, what it requires and how it can be supported.

What makes an effective school;

- 🎬 Emphasis on authentic performance;
- 🎬 Attention to development;
- 🎬 Appreciation of diversity;
- 🎬 Opportunities for collaborative learning;
- 🎬 Collective perspective across the school;
- 🎬 Structures for caring;
- 🎬 Support for democratic learning;
- 🎬 Connections to family and community.

Schools must provide access to knowledge that enables creative thought and access to social dialogue that enables democratic communication and participation. That both are denied to students in large bureaucratic schools, that segregate students into rigid tracks, consign them to a deadening curriculum, minimize personal relationships among adults and students. Such systems establish a single official knowledge alone for one voice, undermine autonomy and silence diversity and difference preparing them to accept inequality and authoritarianism. **Many classrooms are organised for conformity and compliance rather than democratic thinking.**

Democratic schools on the other hand, seek to create as many shared experiences and as many avenues of discourse for diverse groups of students as possible. Democratic pedagogy supports freedom of expression, inclusion of multiple perspectives, opportunities to evaluate ideas and make choices, and opportunities to take on responsibility and contribute to the greater good. Therefore, democracy must be developed only in inclusive organisations that encourage broad participation in students, parents, teachers and community members.

A shift in mind set is needed – focus on children rather than demands of schedules, course guides,

shift in world views of educators and policy makers alike. This requires more knowledge and skills, more willingness to act collectively, and a greater commitment to a common set of goals rather than traditional demands.

Schools successfully reinventing teaching and learning look quite different. They include a collective set of goals, commitments and practices enacted throughout the school, small continual learning groups, for students throughout the school, small continuo learning groups, for students, and teachers, sheared governance, coupled with teaching teams, time for teachers to collaborate and learn together, and a rich array of learning opportunities for all members of the school community.

Common commitments identified amongst excellent schools:

- School purposes – helping young people to use their minds well;
- High and universal academic standards;
- Interdisciplinary, multicultural curriculum focussed on powerful ideas;
- Small size and personalisation;
- Performance based assessment aimed sat clearly stated competencies;
- Respectful tone and values that emphasise un anxious expectations and decency;
- Family involvement;
- Shared decision making;
- Commitment to diversity amongst students and staff;
- Selection of the school by student choice; and
- administrative and budgets targets featuring a reduced student load and shared planning time for teachers and a budget comparable to that of other schools.

A restructured school operates under waivers from traditional school requirements – they cannot simultaneously meet those requirements and do the teaching that produces student success.

Key areas in respect to policymaking:

- Education policy should develop the capacity of schools and teachers to create practices that reflect what is now known about effective ways to teach and learn. This means policies should emphasise professional learning and peer review of practice to build educators and a collective knowledge base.
- Policy making should set public adopted goals and enact professional standards rather than prescribe more and more details about how schools should be structured, staffed and managed and how teaching should occur.
- Policymaking must be inclusive and involve all stakeholders. Policymakers build participation which in turn builds knowledge and ownership that are essential for serious change.

Areas for reform:

Curriculum – policies must focus on defining core concepts and critical skills. Students need to learn and should avoid covering a long list of items students need to learn only superficially. Teachers enacting the curriculum need guidance, that is integrated with what they know about how children develop, how they learn’, how they vary in cultural backgrounds and personal experiences and that will enable and motivate them to develop their individual talents.

Assessment – policies about assessment must ensure that what is being measured emphasises genuine performance on tasks of true value and assessment results should provide opportunities for educators to identify what is working and what is not as the basis for strengthening school programmes.

The assessment policy - depends greatly on teacher development policies that support better teaching, on removing the disincentives and barriers to good practice and on strategies for collective inquiry, that involve classroom teachers and other educators in assessment of teaching and learning.

Professional teachers – policies must change to address the new mission of teaching. Teaching all children for high levels of understanding requires more intensive teacher training, more meaningful licensing systems and more thoughtful teacher development. Teachers must be helped to acquire the knowledge they need to teach powerfully, this includes conceptual knowledge, knowledge about children’s cognitive social and personal development, understanding of learning and motivation, appreciation for the diversity of children’s experiences etc.

Teacher evaluation – should both support and assess good practice through peer review processes that use vivid professional standards focussed on connections between teaching and learning. These systems should encourage active learning. Teachers need to plan with other teachers using student feedback and assessment to adjust teaching approaches and focus on challenging tasks and content, while developing multiple pathways to knowledge.

hooks, bell. ‘Teaching to Transgress–Education as a Practice of Freedom’ Routledge (1994)

hooks claims that the learning process comes easiest when those who teach, believe that teaching is not merely the sharing of information, but also the sharing of intellectual and spiritual growth of students. Teachers she claims must respect and care for the souls of students if we are to provide the necessary conditions where learning can most deeply and intimately begin.

Education as a practice of freedom means student participation where everyone can ‘claim knowledge as a field in which one labours’. It is also political.

Engaged pedagogy must focus on the wholeness; a union of the mind, body and spirit. It is more demanding and emphasizes well-being. Teachers therefore, must be actively involved in the process of self-actualisation, that promotes their own well-being and personal growth, if they are to teach in a way that empowers students. It also requires students to take responsibility for their learning and values student expression.

Progressive teachers working to transform the curriculum do so to produce a curriculum, that is not reflective of the biases and dominant ideologies of society, but to **take risks and make engaged pedagogy a site of resistance.**

It follows, that transforming the academy cannot be achieved without struggle and sacrifice. Solidarity must be based on a spirit of intellectual openness, which celebrates diversity, welcomes dissent; that rejoices in the collective dedication to truth, passion for justice and love of freedom. Naturally, in order

to become transformative teachers there must be opportunities training and support.

For hooks, theory is critical to healing and personal growth. It must emerge from concrete experiences. The creation of theory enables us to move from our location. It cannot be isolated from practice as it denies critical consciousness and perpetuates the conditions for exploitation and repression.

To engage in dialogue is one of the ways teachers can transverse barriers of colour and class etc. It also recognises students as participants in learning and not empty vessels to be 'filled' with knowledge.

Moreover, if the English language can be used by '*oppressors to shape it as a territory that limits and defines*', and a weapon to humiliate, shame and colonise; then to 'give voice', will counter such attempts to silence, marginalise and censor. To 'give voice' is best expressed by the use of 'the vernacular' which can be used as a counter hegemonic. In the case of Afro Americans the vernacular is broken and grammatically incorrect English.

Education shapes attitudes, values social relations and biases that informed ways of knowledge would be given and received. Often this is implicit e.g. where certain behaviours and attitudes are rewarded).

A learning community therefore, is where everyone's voice can be heard.

Puketapu, B. T. 'He Mata Ngaro: Maori Leadership in Educational Administration'. An unpublished thesis toward a Master in Educational Administration (1993)

Maori leadership in Educational Administration functions in a 'diversity of Maori realities'. Within these contexts exists a number of Maori leadership variables where their significance and relative performance is influenced by the balance of power and control between Maori and Pakeha. These in turn have their origins in history accentuated by a tension between ideological positions of tino rangatiratanga and kawanatanga, which in turn affects Maori educational outcomes. It follows that gaps may exist in teacher training and personal development. These gaps can be addressed with Maori education specific courses which undertake to improve Maori leadership within the diversity of Maori realities.

A key theme identified in the research is the sustained commitment to improve the Maori position although it is recognised Maori Education Administrators generally perform poorly. Likewise, Maori knowledge, skills, cultural integrity, ethical and moral discipline are recognised by informants as not performing well suggesting a rift between Maori educationalists and the Maori community. The assumption that Maori educationalists are committed to improving the Maori education position in accordance to a Maori community agenda is exactly that; an assumption.

This is not helped by the need for Maori Educational Administrators to conform to a government education agenda, which are controlled by a set of rules contrary to those of Maori communities. The Maori Education Administrator must attempt therefore, to reconcile an ideological conflict between local and national demands. This conflict is further revealed when a local community insists that the Maori Education Administrator operate within their local narrative i.e. that of whanau, hapu etc. These tensions exert immense pressures on Maori Education Administrators increasing the likelihood of an error in judgement in their work.

The key points (copied directly from the thesis p164) to emerge from the research are as follows;

■ By default, international Educational Administration Theory Development has significantly

influenced the direction of Maori Education in Aotearoa;

- Within the historical tension between the ideological positions of tino rangatiratanga and kawanatanga, the impact on Maori educational achievement provides evidence of cultural genocide;
- In the light of this, assimilative practices couched in mainstream rhetoric for the nineties will not improve the Maori position according to Maori expectations;
- As a result, a diversity of Maori realities has emerged. They can be described as broad education contexts which represent differing Maori perspectives of the world. This impacts on the dynamics and evolutionary nature of Maori leadership ideas;
- The Pakeha veto continues to interfere with Maori development overall, as a Pakeha majority still finds it difficult to enable Maori peoples with the appropriate cultural resources, competence and Maori leadership potential to assume authority;
- Therefore, Pakeha ideals for Maori remain an imposition. The increasing demand by Maori to control their own education is very obvious as they continue the ideological struggle to have the Maori position imprinted into the New Zealand consciousness;
- Given the research cited here, Maori education requires a leadership that befits the nature of the transformation required;
- The credentials of Maori leadership are being transformed by diverse thinking Maori individuals and groups who are associated with a multiplicity of social institutions both Maori and non Maori. Communicating this diversity to each other should be an integral part of this process;
- Gaps do exist in the education of Maori teachers and administrators. They feature historical, cultural, social economic, demographic, political and geographic complexities which influence the strategic practices used by them to function successfully;
- Maori community expectations are generally about Maori teachers and administrators working primarily for their benefit. However, not all Maori Educationalists have a desire to improve the Maori education position according to the agenda of Maori interests groups. Therefore, incompatibility should be revealed;
- Maori teachers and administrators perceive Maori community expectations to be unreasonable. However, they need to understand the positions of Maori Communities and communicate what they can actually do given the situations they must contend with; and
- Without effective training and personal development programmes that include social observations of useful strategies and regular practice, unreasonable expectations by Maori Communities and education agencies may encourage mediocrity in two realms rather than excellence in one. It is, therefore, important for Maori Communities to question, whether it is still appropriate to approach Maori leadership in this way or consider alternative options.

Connors. A. N, 'If You Don't Feed The Teacher They Eat The Students – Guide to Succeed For Administrators and Teachers' Incentive Publications(2000)

The author makes it clear at the outset her book is based on '*observations, discussions, personal learning experiences, shadowing and good common sense*' rather than a piece of serious in depth academic research. She presents these in an easy to read and fun way interspersed with relevant quotes and anecdotes. The key message of the book is that the business of educating people is serious, where successful schools will only survive if there are successful administrators 'leading the way'. Here, this means providing a climate for 'risk taking' and educational leadership which is reflective. To this end she presents a self assessment form.

For Connors a leader must have:

- the ability to care and be concerned for others
- the desire to be successful
- the ability to handle stress
- a general feeling of good health
- the ability to think logically
- the ability to have fun

In the book the author refers to a survey conducted amongst teachers, which identified an empowering administrator, as the single most important factor in their professional lives. In turn, administrators view teachers as 'extraordinary resources' to achieve corporate aims eg.

- to serve as solution finders
- to provide feedback
- to spread the good word
- to share their talents
- to provide support

She then goes on to list 50 benefits of effective educational leadership including low absentee leadership, visibility and accessibility etc.

In order to ensure a positive working environment, an effective leader must be able to scan the working environment to assure it is safe both physically, emotionally, socially and intellectually; accepts change; and where positive attitudes prevail, the workplace is performance orientated.

In concluding, the author acknowledges that education administration is a difficult business and takes very special people to perform and achieve actions she identifies in the book.