



The Research-Led University: reflections from New Zealand

Te Whare Wananga O Te Rapunga Korero: Nga Hurihuringa O Aotearoa

Dr John Hood
BE, PhD (Auckland), MPhil (Oxford)

Vice-Chancellor, University of Auckland

11 October 2001 Menzies Oration on Higher Education

E nga rau rangatira ma tena koutou.
Greetings to you all.

Tena koutou nga kai arahi ki runga o te Waananga i Melbourne.
Greetings to the leaders and forgers of thought at the University of Melbourne.

He mihi tenei ki te Whare Wananga o Tamakimakaurau ki a koutou.
Greetings from The University of Auckland.

Mauria mai nga to mohiotanga i runga i a koutou.
In greeting you I also acknowledge the uniqueness of each of you.

My colleague, the historian Professor Jamie Belich, recently observed: British and Polynesian expansions are two of the greatest explosions in history. Their intersection is New Zealand.¹ Britain's desertion to Europe in the early 1970s, three troubled centuries after her intrepid explorers first sighted Aotearoa's shores, fortuitously sparked a new phase for the people of New Zealand. Belich labels it decolonisation, the emergence of cultural maturity and a more confident nationalism. The 1840 treaty signed by the British Crown and many rangatira (chiefs) representing Maori tribes is the map, a Westminster parliamentary democracy and a robust legal system the support. This is the context for both the *mihi*, or greeting, with which I commenced this address and for the proverbs sprinkled throughout it.

Ma tini, ma mano, ka rapa te whai.
By many, by thousands, the object is attained.

Life's journey is a mystery unfolding. When I completed my doctoral studies and set off for the University of Oxford on what I assumed would be the final stage of my university education, I had only the faintest hint about the possibility of my current role. My decision to seek scholarship support for another postgraduate degree in a new discipline had moved the then Vice-Chancellor Colin (later Sir Colin) Maiden quietly to observe: the only job you will be fitted for is a vice-chancellor. Such post-PhD academic progressions as I had planned are far more common today. Sir Colin had been awarded a D Phil in Engineering by Oxford. Before returning to his role at Auckland, he had pursued a

¹ Belich, J. (2001) *Presenting a Past*, a paper given at the Catching the Knowledge Wave Conference, Auckland, 1-3 August 2001.

successful career with General Motors. That I now have the privilege of serving in that same university role after 20 years in industry says much for his successful precedent and for the courage of my new colleagues. With their decision, my university education commenced what is proving to be its most rigorous and demanding phase.

Research-led universities present an intriguing leadership challenge. The environment in which they exist is both complex and demanding. They are at the core of the knowledge society debate. There is extraordinary pressure to match the performance and metrics of wealthier models in other jurisdictions. This is necessary if the playing field for talent, both staff and students, is to be levelled and national benefits maximised. These institutions are charged with educating and training among the most intellectually talented of our citizens. New technologies, digitally literate students and new pedagogies are combining to redefine conventional approaches to teaching and research, to extend reach, to lower costs and potentially to create entirely new institutional forms.

Research sparks the innovation cycle as well as feeding it. Innovation is important for economic growth and social advancement. Intellectual property developed within once hallowed halls constantly begs to be capitalised. Universities are sponsors and nurturers of new enterprises. The number and value of these has become another marque of distinction. Distinguished scholars suddenly find themselves juggling lives as professors, chief scientific officers and major shareholders in enterprises of their own creation. Universities are forging new interactions with each other, as they are with businesses and with other agencies. This is often in response to new research and learning opportunities, or to the potential afforded by new technologies. The pressure is intense to diversify funding streams in order to fund appropriately the core activities that are so important for enduring competitiveness. As enterprising clusters form around them, these universities find they are at the heart of the regeneration of cities and regional communities. In these emerging ecologies artists, scientists, engineers and social scientists are interacting in previously unimaginable ways.² Society's notions of universities and universities' notions of themselves are being challenged ever more intensively. These are matters I shall explore in this oration.

This evening is a tribute to the late Sir Robert Menzies. In the course of his second term as Prime Minister, a term spanning 16 years to January 1966, Australia's gross national product increased from \$2.2 billion to \$8 billion:³ an exceptional rate of growth. Although the population grew by over a third to 11.1 million, the impact of its growth on this change of wealth was modest. A remarkable man, who was later to serve five memorable years as Chancellor of this fine university, Sir Robert recognised that internationally reputable, strong universities are an integral and necessary institutional component of robust civil societies.

While at that time (and still today) the concept of universities presented a threat to many in government because of their autonomy of governance, their jealous protection of scholastic freedom, their cost of operation and perceptions of elitism that were inevitably associated with them, Sir Robert was not to be deflected. During his last 10 years in office, his government funded an increase in university student numbers from 31,000 to 83,000. In this same period the geographic solitude of The University of Melbourne in Melbourne was challenged by one new arrival, while another was planned. A new momentum was emerging.

The post-Menzies years have been characterised by rapid increases in participation rates, improvements to equity of access and a multiplication of the number of institutions that are university accredited. These trends, mirrored throughout the developed world, have posed difficult challenges for public policy and for the scholarly

² Seely Brown, J. (2001) *How to Make New Mistakes*, a talk given at the Catching the Knowledge Wave Conference, Auckland, 1-3 August 2001.

³ Hazelhurst, C. (1979) *Menzies Observed*, George Allen & Unwin, Australia, pp 379-382.

communities of universities, particularly research intensive universities. This has been a period of rapid development and change for such universities: change forced and spontaneous in response to political, social, business and economic pressures; change because of the explosion of new knowledge. However, in Australia and even more obviously in New Zealand, the blunt policy instruments designed to incentivise participation have not been particularly sensitive to institutional differences among universities, or between universities and other tertiary providers. They have frustrated the aspirations of those universities that are research intensive.

University research and education, conducted to the highest international standards, have a high value to societies. Much new knowledge emanates from the work of scholars in research led universities. It is efficiently disseminated through publications, conferences, patents and research based teaching. Through a multitude of visible and invisible mechanisms, new knowledge from this source and others fertilises the development of our societies. For much of the 20th century, factor costs and the abundance of natural resources determined the rate of development of nations and their international competitiveness. Today, the creative talents of citizens and innovation, sparked by new knowledge and novel combinations and applications of existing knowledge, are collectively more important as determinants of national competitiveness. Competitiveness here is a proxy for new wealth creation, rising standards of living, and enhanced investment in social development in the interests of improved social outcomes.

The quest for improved national competitiveness was at the core of the Knowledge Nation initiatives announced by your Prime Minister earlier this year. The Australian Labor Party's response, meatballs, spaghetti and all, was another manifestation. The University of Auckland, deeply concerned about the serious lack of a similar debate in New Zealand, recently hosted with government a conference involving sectoral leaders and international experts. The purpose of that event was to raise awareness about the need to adapt the national agenda around these same issues, particularly in the light of New Zealand's recent low rates of economic growth and its vaunted aspiration to return to the top half of the OECD. Over the four decades to the late 1990s, the New Zealand economy expanded by a meagre 60 per cent. The average expansion of OECD economies was around 150 per cent.⁴ On current projections New Zealand's 1.7 per cent trend rate of per capita growth needs to double if the nation's OECD target position is to be realised within a decade. Research and development investment levels are interesting in this regard. The 1999 World Competitiveness Yearbook lists New Zealand as investing 1.136% of GDP in R&D and ranking 23rd among nations. (Australia invested 1.528% and ranked 19th.)

Both of the Australian policy initiatives and the Catching the Knowledge Wave Conference in New Zealand affirmed the crucial role that research-led universities must play in the development of human capital and the improvement of national welfare. While the research underpinning they provide to their respective national innovation systems was not challenged, the proportionately low level of investment in them and in their research activities certainly was questioned. So too was the poor design of funding incentives. The international evidence in support of a more carefully differentiated, better funded university sector is overwhelming.

*Ki te kore te putake e makukungia
E kore te rakau e tupu.*

If the roots of the tree are not watered
The tree will never grow.

⁴ Perry, M. (2000) Building Business Co-operation in New Zealand, *University of Auckland Business Review* 2:2, pp 52-64.

The ways in which research-led universities engage with business and their broader communities in the interests of national innovation and capacity building were also challenged. The implication was that more effective modes of interaction are possible. However, questions of interaction and engagement, specifically with business and industry, serve to raise antennae in scholarly communities. There are good reasons for this: especially those relating to the risks that potentially are posed to institutional autonomy and academic freedom. Both of these values are fundamental and precious to the integrity of universities. They are to be protected at all costs.

In New Zealand though, their sanctity presents something of a paradox. For empirically, it is the public sector, not the private sector that has presented the more real threat. The primacy of these values was recognised in statute in 1990. The law charges ministers, officials, councils and vice-chancellors to do all in their control to uphold and enhance freedom and autonomy. Notwithstanding this, formative public policy, supporting a declining state share of institutional budgets and a preoccupation with state sector risk, too regularly proposes greater control and influence of the affairs of universities. Ritualistic battle with officials and politicians is thus, reluctantly but necessarily, enjoined by universities. I regret to report that these battles have been a consistent component of my portfolio.

The fact that scholarly antennae are often more sensitive to business interactions than public sector prescriptions has something to do with a natural caution about commercial predators who may seek to control and influence for their own gain. In some cases, there may be an instinctive discomfort with organisations that are seen to be operating in managerial mode. The sensitivity also has something to do with the deeply engrained, unresolved and haunting arguments about what constitutes the legitimate activity of a university: arguments that linger from the 19th century.

Today's civic, research-led universities find their conceptual foundations in Baron von Humboldt's early 19th century model for the University of Berlin. This model made research an explicit function, linked research and teaching and affirmed the freedom of scholars in both domains.⁵ It was the precursor for the development later in that century of the civic universities in England and the land grant universities in the United States. Here was industrial society recreating the university in its own image⁶ as applied and professional disciplines asserted their academic legitimacy. There can be little doubting that post-industrial and knowledge societies have continued the tradition.

In that same century, Cardinal Newman, in contrast, held the university to be a place for the teaching of universal knowledge.⁷ For the Oxford don and his 20th century disciple Flexner, learning was for its own sake. Scholarship and teaching, certainly not research, should have primacy of purpose. Disciplinary purity should not be contaminated. This Newman-von Humboldt tension continues to provide a constructive, institutional pluralism as research-led universities, strong in the humanities, physical and mathematical sciences, applied disciplines and the professions, evolve their responses to the complex needs and demands of their knowledge societies. In these circumstances, the immediate challenge for vice-chancellors and their colleagues might conceptually be thought of as protecting and nourishing the Newman core, traditional values and all, while creatively developing the von Humboldt surrounds. Such an environment imposes on university leadership a serious responsibility to nurture the humanities, bastion of individual scholarship and soul of the Newman core, yet ever susceptible to the whims of student choice.

⁵ Blakeman, J. (1999) *Accountability and Autonomy of New Zealand Universities*, Master of Public Policy Thesis, Victoria University of Wellington, pp 1-10.

⁶ Blakeman, J. (1999) *op cit.*, p7.

⁷ Blakeman, J. (1999) *op cit.*, p8.

Kaore a te rakau whakaro Kei te tohunga te whakaro.

The insight is not in the wood (the carving), it is in the artist

I wish to move on and examine in a little more detail some of the major issues that define the current strategic agenda of research-led universities. Competition is the first of these. Wherever we care to look, universities are ranked. Ranking systems are implicit (often involving notions of brand, age and status), or explicit (various combinations of input, output and surveyed measures). Inevitably there are flaws in these systems. Irrespective, the most research-intensive universities dominate. As we know, these universities compete nationally and internationally for the best staff and the best students, for superior results in research funding allocations, for alumni engagement and bequests, and for corporate recognition where this is important for research backing or other largesse. All these characteristics are linked: ranking is a common factor.

On the whole, this competition for national and international primacy is healthy. The infusion of new staff constantly regenerates collegial units; competition drives standards higher and enhances institutional and individual creativity. However ranking also confirms differentiation. When the differentiation among ostensibly leading universities in different countries becomes too sharp, the implications are potentially grave for those countries whose leading universities are relatively lower ranked, and for the institutions themselves. This is the position we are all seeking to avoid. Once there, it becomes very difficult to attract superior staff; a negative cycle follows.

In Australasia, this is a constant threat to our leading universities. The funding comparisons your G8 group of universities makes with Canada, the United Kingdom or the United States are as stark for you as the comparisons The University of Auckland makes with the G8 are for us. This situation constantly plays on the national commitment and institutional empathy of talented staff. Too much is being left to serendipity: the loyal national who feels compelled to stay or those whose sentiment steers them home from abroad; the occasional wandering star who falls in love with the clean and the green, or the surf and the sun. Without the best staff, the best students will be (and are being) tempted away and their replacements, especially in the postgraduate and post-doctoral ranks, even more difficult to find. With inadequate research funding, a primary cause of the lower ranking initially, the research potential of scholars is compromised. With inadequate base funding, the learning environment suffers, as does the aspiration for the highest international standards. One might well ask: whither the knowledge society?

Responses from universities are many. In the public arena familiar arguments are advanced for better international benchmarking of tertiary and research investment levels. In parallel, and as previously observed, the research-led universities in both countries legitimately claim that redressing unacceptable participation levels has been accomplished at the expense of internationally comparable levels of investment in their higher cost activities. They then cite the persuasive empirical evidence that increases in investment in their activities, allocated using well designed, quality based incentives, is a sine qua non for better knowledge society outcomes. While the knowledge society debate is undoubtedly assisting these claims gain public traction, supportive policy responses remain patchy. In New Zealand a Commission has been mandated to examine and recommend on these issues. Early indications are that it will recommend that resources are shifted to favour both equity of access to tertiary education and research quality, rather than simply student numbers, as at present.

At the institutional level, research-led universities' strategic responses to funding privations have been creatively to design alternative, new revenue streams to support their traditional activities. Your university has been an innovative leader. So too are universities like Cambridge and Oxford, once home to Newman. Remarkable as it may seem, Oxford won an award this year as the United Kingdom's most entrepreneurial

university. Obvious targets in these quests include engagements with industry and business, alumni, and the innovative leveraging of traditional scholastic and research strengths to exploit new markets. These entrepreneurial strategic responses have intriguingly come at a time when business and government agencies are themselves seeking novel ways to engage with the research and teaching activities of universities. There are obvious mutual benefits. The two-decade-old US Bayh-Dohl legislation and its impacts have truly resonated world-wide. There the Act sparked an increase of over 8 per cent per annum in US industry funding of university research which had reached US\$1.9 billion by 1997; university generated patents rose from 250 to 4,800 per annum.

There is a growing appreciation that research is not necessarily or exclusively a linear activity: sponsor to university or sponsor to other established research provider. In many countries, public funding authorities are deliberately designing their funding streams to bring industry, public research institutes and universities closer together. Your cooperative research centres are one good example. Universities themselves are looking for and establishing their own innovative research collaborations. At Auckland for example, we have done this with Oxford, Johns Hopkins and Massachusetts Institute of Technology (MIT) for bio-medical engineering research. The fledgling Cambridge-MIT and Oxford-Princeton relationships and the potential offered by Universitas 21 are other examples. And universities themselves are generating increasing amounts of valuable intellectual property, a catalyst for their frequent excursions into the once foreign terrain of business and capital markets.

All of these forces are rendering more malleable the institutions' von Humboldt surrounds. Colleagues, mindful of this evolutionary momentum, are being forced to think carefully about the manner in which they protect their conventional values, their Newman core. There are two further institutional implications of these developments: risk and complexity. Both are requiring more sophisticated institutional governance and management processes and policies. They have also led to the implementation of new structures such as quasi-independent companies to manage contract research and intellectual property: new interactions that permeate both the surrounds and the core.

Inevitably these activities contrast conceptually and in practice with the collegial models underpinning conventional university activities. Not unnaturally internal tensions are generated. If they are dealt with in an open, transparent manner more robust responses are possible. But risk and complexity in this dynamic environment have by definition other consequences. There is a higher probability that some initiatives will not succeed as planned. At times this can be painful and expensive. However, where planning has been rigorous, the onus must be to learn, adjust and progress, not to condemn and withdraw.

Business and industry interactions at The University of Auckland, New Zealand's leading research-led university, provide some interesting insights. Public research funding levels have been inimical to the university's mission and, we would argue, to our nation's better interests. By international comparison, there is far too little public investment in basic research. This could have serious consequences for the utilisation of the university's research capacity and the institution's attractiveness to staff. In partial response a decade ago, the university formed UniServices Limited, its contract research and intellectual property management agency. The company has an independent chair and a board equally split between business and academic members. Structured independence is as important for the integrity of the university's operations as it is for professional relationships with the purchasers of research.

Today, contract research accounts for 50 per cent of all external research revenues. This is in marked contrast to a ratio of 9.3 per cent for all US research universities, 21 per cent at University of British Columbia (UBC), 10.2 per cent at MIT and 4.5 per cent at Johns Hopkins, the leading research university in the US with \$1010 million of externally

funded research revenues in 1999.⁸ The number of new patents, new licences and new companies created, expressed as a proportion of total externally procured research dollars, is also very much higher at Auckland. Most of these are the product of publicly funded basic research, in spite of its paucity; UniServices has developed a unique capability to identify and commercialise intellectual property. It is also interesting that the fastest growing contract research segment in the university is the social sciences. Their contract research revenues now readily exceed those of engineering.

Because there was until recently an immature local venture capital market, UniServices and the university launched the country's first early stage venture fund. Private investors were the major subscribers, not the university. This fund is mandated to invest in intellectual property owned by any New Zealand university or crown research institute. A US based firm manages the fund and its investments. Governance is also independent of the university. It now provides the possibility of a cornerstone shareholder when intellectual property is capitalised. Further, the firms created can be based in New Zealand, making their ongoing research investment in the university's research centres and institutes when this is commercially logical. Another benefit to the university is the retention of the scholars who were responsible for the creation of the intellectual property in the first place. The university is becoming a recipient of new research opportunities as a vibrant research based commercial community starts to establish itself in the university precinct. This will provide an exciting impetus to the university and to the regional economy.

Until recently, New Zealand policy makers had not contemplated using public funding to encourage fertile cooperative research ventures among industry, universities and government research institutions. Without this benefit, our university, recognising that such ventures represent a further opportunity to leverage its research capabilities, formed its own entity (UADL) to promote them. This is generating novel research programmes, assisting the creation of research critical mass, and attracting new funding streams. Along with The University of Auckland Business School, UADL has been the founder of an International Centre for Entrepreneurship, an innovative venture linking the university and eight leading international firms including the likes of Microsoft, Deloitte, Boston Consulting Group, National Australia Bank, and Compaq. Its purpose is to use the combined talents of the partners to promote research and research informed teaching in the area of entrepreneurship. In addition, it operates a high impact incubator for new firms that are created using the innovative ideas of students, staff and members of the wider community.

These interactions between universities and other organisations do have profound and at times troubling implications. This happened at the University of Toronto in the case of Nancy Olivieri, who initially lost her academic position because she published in defiance of the protective provisions of a commercial research contract.⁹ As this example amply demonstrated, clear and transparent guidelines are essential if fears about the external manipulation of academic freedom and institutional autonomy are to be adequately addressed. Some of these may be better covered by legislation, as the United Kingdom determined when it passed the Public Interest Disclosure Act in 1999. In other instances, I believe universities should themselves address the issues using the best possible insights from international practice and experience. Here, I refer in particular to guidelines for the practice and conduct of research, and codes and policies for: contracts of employment, conflicts of interest, and intellectual property rights.

The impetus to diversify and enhance revenue streams, while at the same time building options against future technological blind-siding, are the reasons why The University of

⁸ Kernohan, J. (2001) Auckland UniServices Limited presentation to the New Zealand Science and Innovation Commission, 12 September 2001.

⁹ Holmes, D. (2001) *Some Ethical Issues*, a paper presented at The 13th International Meeting of University Administrators, Helsinki, 22 August 2001.

Auckland resolved to participate in Universitas 21's e-learning venture with Thomson Corporation. Technology is manifestly changing pedagogical approaches. The evidence is that those growing up in the digital, web-enhanced world think differently, just as those operating in it are approaching their work differently. Dr Seely Brown, former Chief Scientist at Xerox Corporation, talks about the transition from deductive reasoning to bricolage and judgement; from *don't know won't try* to *don't know, link, lurk and try*.¹⁰

Add to this the fact that electronic learning platforms are subtly, but relentlessly changing the cost structure and productivities in our institutions. Arguments about student-staff ratios and the nature of support skills required by academic colleagues are becoming commensurately more complex. In these contexts, my colleagues and I would strongly agree with Professor Gilbert when he cogently argues that degree certification is about brand and that technology today is both a threat to the primacy of existing brands and, wisely adapted, a powerful enabler of brand enhancement.

There is another reason why Auckland is a strong supporter of the concept of Universitas 21. That relates to the extraordinary potential of communications technologies, the rapid specialisation of knowledge and the impossibility of any institution remaining to the fore across all disciplinary specialisations. An alliance network has unique power when its members are able wisely to use the specialisations of other members to raise the performance of all. The library of teaching units mooted by UNSW could provide one such tool. There are many others including streaming direct telecasts of advanced lectures to other members of the network and innovative research interactions among members. Technology, economics, and the insatiable demand for new knowledge will continue to inspire exciting, beneficial, new forms of inter-relationship between and among universities with strong mutual respect.

Ka pu te ruha, ka hou te rangitahi.

The old net is cast aside, the new net goes fishing.

I have attempted to outline some of the forces that are moulding the form and composition of our research-led universities. These forces also have fascinating ramifications for the universities' organisation and structure. Faculty models have been reasonably resilient. But within and between faculties we are seeing the emergence of more fluid departmental and school boundaries, more cross-disciplinary research centres and institutes, and the demand for more cross-disciplinary content in degree programmes. I am not clear that the current organisational model has the inherent flexibility to respond easily to many of these new challenges. Nor do I believe we yet have the resource allocation templates that incentivise and reward fairly such responses. Addressing these weaknesses at Auckland is one imminent priority. Another is continuing to improve equity of access to the university. Creating the support structures that enable all those with the proven talent to participate equitably remains a vexing and unfulfilled obligation to our communities.

Today universities are undoubtedly more complex organisms than 30 years ago when Sir Robert Menzies was the Chancellor. We should not be surprised. Their international standing requires numerous and diverse responses to the demands their local and international communities are making of them. The quality of these responses has major implications for that standing and for national competitiveness. Vice-chancellors and their colleagues find themselves straddling an overt institutional pluralism that requires of them the delicate balancing of the organic and the deliberate, the collegial and the managerial, the pure and the commercial, teaching, scholarship and research – basic and applied, while at all times protecting the academic freedom of members and the

¹⁰ Seely Brown, J. (2001) *op cit*.

autonomy of the institution. In my case, a commercial background, while not ideal, is not altogether unhelpful.

He iti tangata e tupu He iti toki e iti tonu iho.
A little child will grow; a small axe will always remain small.

No reira, tena koutou, tena koutou, tena tatou katoa.
Once again, greetings to you all.

About the orator

Dr John Hood is Vice-Chancellor of The University of Auckland, New Zealand.

He was born in New Zealand almost 50 years ago. After being awarded a Bachelor of Engineering and a PhD in Civil Engineering by The University of Auckland, he won a Rhodes Scholarship and studied for a Master of Philosophy in Management Studies at the University of Oxford.

In 1979, following a brief period spent teaching at his alma mater, Dr Hood joined Fletcher Holdings Limited, later to become Fletcher Challenge Limited, a New Zealand based, international and diversified industrial company. After a 19-year career, in the course of which he headed sequentially the international construction, building industries and pulp and paper operations, he retired in pursuit of a quieter, less peripatetic existence. In this period he was engaged in a range of local and international business interests as a director, advisor and mentor.

During his years in business, he had retained a strong interest in university affairs through teaching commitments and industry-university research projects. In the late 1990s he served on the Council of The University of Auckland. This led to his curiosity about the prospect of his current role. He commenced these duties in February 1999.

Dr Hood has a life long interest in sport. He chaired the major strategic, governance and operational review of New Zealand Cricket in 1995. In 1996 he chaired the Prime Minister's High Performance Sport Transition Committee and in 1998-99 The America's Cup Task Force. He most recently chaired the College responsible for appointing the board of New Zealand's new national sport, recreation and leisure organisation. He served as a governor and director of its high performance sport predecessor, The New Zealand Sports Foundation.

He retains some business interests serving as a director of ASB Bank Limited (The Commonwealth Bank of Australia's New Zealand financial services business) and of Fonterra Cooperative Group, the global dairy group being created by the merger of New Zealand's two major dairy cooperatives with The New Zealand Dairy Board. He is also chairman of specialised international engineering consultancy Tonkin and Taylor Limited and a trustee of the Asia 2000 Foundation, a business-government venture responsible

for enhancing New Zealand's interactions with the Asian region. Dr Hood is New Zealand Secretary for the Rhodes Trust.

Most recently he chaired the organising committee for the Catching the Knowledge Wave Conference and co-chaired the conference itself. This multi-partisan event, which involved international thinkers and leaders along with 450 New Zealand leaders, was designed to raise national consciousness about the opportunities and challenges presented by the idea of a knowledge society.

Dr Hood's other interests include music and other performing arts, the visual arts and literature.