General Knowledge?
The Roles of the New Zealand University
in a
Knowledge Society

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Abstract

This thesis examines the roles of the New Zealand university in a knowledge society. Gaps in the literature of the New Zealand university in a contemporary context mean that the enquiry is informed by European and North American discussions of the educational requirements of a knowledge society. As the notions of the knowledge society and a liberal university education are both problematic and central to this enquiry, they are interrogated, in the second chapter, in some depth.

A second review examines the work, recommendations and subsequent legislative outcomes of the Tertiary Education Advisory Commission (TEAC) policy process of 1999 to 2003. The principles of critical theory and critical policy scholarship inform these interpretative textual analyses.

The two review chapters, which follow the introductory chapter, comprise the first part of the thesis. A description of the methodological framework employed throughout the project and a report of the findings of a survey of stakeholders follow. The discussion chapter comprises the third and final part of the thesis.

The thesis seeks to distinguish the notion of the knowledge society from that of the neo-liberal approach to social and economic management. I argue that the notion of the knowledge society is viable in a range of socio-economic conditions. I suggest that the educational requirements of a knowledge society are better addressed when the scope of a university education is framed by holistic individual, social, and economic determinants, rather than rigid ideological imperatives such as those characteristic of neo-liberalism.

A combination of qualitative and quantitative methodologies is employed. Primary data are gathered by way of a postal questionnaire. The perceptions of three cohorts of stakeholders of the New Zealand university are analysed using both statistical and interpretative tools. Data gathered through a review of the literature of the university in relation to the notion of the knowledge society in New Zealand, North America, and various European contexts are analysed using a combination of critical and interpretive approaches.

The major finding to emerge from the enquiry is that stakeholders of the New Zealand university associate an effective university education with breadth of learning. The notion of a liberal university education, with its attendant beyond-vocation curriculum assumptions, is not considered anachronistic by the majority of stakeholders surveyed during this project. Public and private sector employers and university students strongly associate a liberal university education with effective preparation for participation in a knowledge-intensive environment. Year 13 secondary students are less certain. A secondary finding is that most stakeholders consider that the research activities of the university academic should continue to inform university teaching, but that the teaching role is of growing importance, and therefore worthy of greater emphasis, in the context of a knowledge society.

The project is intended to provoke further discussion around the relationship between the New Zealand university and the knowledge society. To date there has been little academic consideration of this relationship. The contribution of this thesis, relative to this gap, is therefore significant.

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Chapter One: Introduction

The purpose of this thesis is to investigate the roles of the New Zealand university in a knowledge society. This introductory chapter provides an outline of the topics explored throughout the enquiry. The chapter begins with an explanation of the rationale underpinning the project. Contextual factors considered to justify the need for such an enquiry in a contemporary New Zealand setting are outlined. Research questions subsequently drawn up to guide the project follow. The remainder of the chapter comprises a description of the aims and content of each chapter, including an overview of the various approaches used to investigate the topics under consideration.

Rationale

I have an interest in the part played by education in facilitating social change. I was aware of anecdotal evidence that appeared to indicate that recent calls on the part of politicians and business leaders for the development of a 'knowledge society' were not widely endorsed by academics working within the humanities and social sciences. My curiosity aroused, I decided to explore more deeply the relationship between the so-called 'liberal' assumptions underpinning the operation of the contemporary university and the seemingly contradictory notion of the knowledge society. This interest led me to develop a set of research questions that would provide a means of examining the roles of the contemporary university in a specifically New Zealand context.

The New Zealand context of this enquiry

Throughout the latter part of the 1990s, and into the early 2000s, the university sector in New Zealand has been the subject of intense socio-political scrutiny. Interest groups at all points of the political spectrum are appealing to 'externalities' - the indirect benefits of education - in an effort to bolster their respective arguments for change to the way tertiary - and, in particular, university - education is conducted. A variety of business and other 'private' interests are advocating, amongst other things, reduced taxpayer funding of universities (Kerr, 1998), a greater degree of support for Private Training Establishments (PTEs)

(*ibid.;* Bible College of New Zealand, 2000, pp. 3-4; New Zealand Employers' Federation, 2000, p. 4), and a greater separation within the university environment of teaching and research (NZBR, 1997). As enunciated by the New Zealand Business Roundtable, there is 'private' dissatisfaction with what is perceived to be an overly 'public' education system. Indeed, in arguing his 'less-government-equals-more-innovation-and-entrepreneurship' approach to the development of a 'true' knowledge economy, Roger Kerr (1999), Executive Director of the Business Roundtable (NZBR), has claimed that

> If businesses are constrained by the outputs of a mediocre government-dominated education system, a history-driven pattern of scientific research and a tax system that pushes companies and entrepreneurs offshore, how much entrepreneurship can we expect?

Tertiary unions, the Vice Chancellors' Committee (NZVCC), and individual universities, on the other hand, are calling for greatly increased taxpayer funding (AUS, 2001; Clothier, 2001b), 'a defined and differentiated tertiary sector' (NZVCC, 2000, p. 1), 'a buffer body for planning and co-ordination' (TEAC, 2000, p. 38), and, in some instances, a reduced role for PTEs (ASTE, 2000, p. 7). In addition, the role of the university as a key player in the development of a prosperous knowledge society is being actively promoted by university interest groups such as the Association of University Staff of New Zealand (AUS), who were, at the time this project was started, boldly using the slogan, 'universities, foundation of the knowledge society', in their lobbying for the restoration of funding to pre-1990 levels (AUS, 2001, p. 1).

Given the implications of studies that purport to trace a link between the supremacy of the liberal arts university and national economic decline (Porter, 1990, p. 497), and, conversely, a correlation between the dominance of technical education at the highest level with national prosperity (*ibid.*, pp. 368-369), it would seem imperative that the roles of the university in a knowledge society be the subject of intense critical scrutiny. It was hoped that a project that more closely examined the roles of the New Zealand university in a contemporary context would contribute to this ongoing enquiry.

Another significant implication (for the university) of the widespread desire to foster the development of a knowledge society is the possible impact that this would have upon social structure. This is especially relevant given the fact that

many university staff are perceived to be outspoken in their defence of the left-liberal conceptualisation of social justice and egalitarianism (NZBR, 1997), but are also aggressive in their promotion of the university as the key contributor to the building of a knowledge society (AUS, 2001). Some interest groups are sceptical about the way state sponsored institutions respond to free market reforms, with the NZBR making the claim that 'universities in particular have been the source of many socially damaging ideas' (1997, p. 8). Of particular concern to the NZBR in this context is the opposition demonstrated by university staff to neo-liberal economic policies considered by the latter to threaten the allegedly egalitarian socio-economic 'fabric' of New Zealand society. University lobby groups are thus condemned by the equally vocal Business Roundtable lobby on the basis that 'with few exceptions, staff employed by New Zealand universities opposed recent reforms such as tariff reductions despite their overwhelming support in the economic literature' (*ibid.*). It is clear, then, that there is much polarisation of views among those with a vested interest in the structure and performance of the tertiary sector.

In terms of the sociological ramifications of a more all-embracing move towards the principles of the knowledge society, theorists point out that

> the likelihood that the possessor of some special technological knowledge can translate this knowledge into a significant, and even an unequal share, of social resources such as wealth or authority is directly related to the level of economic productivity of a society (Hammond, 1986, p. 45).

In other words, the more successful the knowledge society, the more likely that (a) individuals with knowledge essential to productivity will be advantaged, and (b) that increasing productivity will involve 'increasing complexity of the production system', meaning that more people will need to acquire 'knowledge specialization' (*ibid.*, p. 46). Theoretically speaking, then,

> highly knowledge dependent societies are unlikely to be either extremely egalitarian or monopolistic in terms of the distribution of key social resources such as economic goods and services... knowledge specialists are unlikely to embrace radical egalitarianism... and there is a structural tendency to move away from the distributive extremes of radical equality or inequality (*ibid.*).

In place of both egalitarian and monopolistic social structures, knowledge society theorists argue that the successful knowledge society will be characterised by

hierarchical differentiation based on the amount of essential knowledge held. This being the case,

> the shape of scientific communities comes to have a hierarchical structure symmetrical with the shape of scientific knowledge itself; and equally unsurprising is that more and more groups try to emulate science, such that as social densities increase, we find the attempted and often successful scientification of more and more aspects of our culture (*ibid.*, p. 47).

I found two aspects worthy of note here with regard to the present status of the university in New Zealand. First, it seemed that attempts by other tertiary institutions to be granted university status, and to be able to award degrees, was symptomatic, at least in part, of an evolving, if embryonic, understanding of the needs of a knowledge society. Or was it? I wondered about the extent to which the nature and educational needs of a knowledge society were understood in a New Zealand context. Education academics had very little to say on the subject.

The second aspect worthy of note with regard to the present status of the university sector, and of much more pressing concern to the university, is the potential for institutions that can be seen to make the greatest contribution to the development and reproduction of knowledge essential to the ongoing development of a prosperous knowledge society to be accorded the greatest status, irrespective of their so-called 'traditional' role, in a burgeoning knowledge economy. While it could be argued that this is less likely to occur within New Zealand on account of the small overall size of the tertiary sector, and, relative to comparative overseas institutions, the relative 'technical' strengths of its universities (due to a long association with agricultural science), it is, nevertheless, an area that interested me during my preliminary reading of the literature. As is already alleged to be the case in some knowledge economies such as Germany, 'in some fields, technical colleges are more prestigious than universities' (Porter, 1990, p. 368). Other overseas studies support this view, with one pointing out that

> the functions that society commonly attributes to the university are beginning to be shared with a wide range of institutions in the context of the knowledge-based economies, so that the university is faced with demands that require a strengthening of its ability to create and disseminate knowledge (Conceicao & Heitor, 1999, p. 37).

On the basis of my early reading, then, it became apparent that the liberal-humanitarian aspects of the university's self-prescribed role as repository of

knowledge and critic and conscience of society (Crozier, 2000), and the emerging pragmatic need to manufacture and distribute 'scientific' knowledge essential to the building of both a successful knowledge society (Clothier, 2001a, p. 7) and to the maintenance of the university's traditionally elevated position on a hierarchical societal structure, pose significant dialectical and strategic challenges. I wondered if it was possible that the greatest threat to the increasingly contested 'traditional' liberal-humanitarian role of the university may not come so much from the much maligned 'market forces', *per se*, but from the structural ramifications of the very knowledge society that the university presently seeks to undergird. Was the greatest challenge facing the university how to preserve - and indeed strengthen - the liberal-humanitarian identifiers of the liberal university whilst at the same time adapting to the increasingly technological and utilitarian needs of the knowledge society?

There seemed to be, in the work of some writers, a sense in which failure to achieve this goal could be disastrous for both the university and the knowledge society. Clearly, the university must be seen to be making a significant contribution to socio-economic advancement if it is to survive. Imperatively, it must find a way to convince all sectors of the developing knowledge society that the need is greater than ever for the principles of academic freedom and activist 'critic and conscience' endeavour to be upheld within autonomous tertiary institutions. As articulated by Kelsey (2000),

> It is about moving with and ahead of the times in ways that make a country internationally competitive, and at times a world leader, and empowers its peoples, to play an active part in a rapidly changing, non-linear world. A strong commitment to academic freedom is therefore an investment for the future (pp. 230-231).

I was motivated to test these views against the findings of recent empirical evidence. How did stakeholders of the New Zealand university perceive the part played by a traditional liberal education? Did such an education actually exist? If it did, what was its relationship, if any, with contemporary 'knowledge society' conditions? Or was political and business sector reference to the needs of a knowledge society little more than an attempt to extend the neo-liberal project of the 1990s?

The few New Zealand education academics I could find to have expressed a view of the knowledge society appeared to damn it with very faint praise indeed. The best way to find out more about both the knowledge society, and the place of a liberal university education in contemporary circumstances, I reasoned, was to interrogate the contested notions in some depth, and to ask those most affected; the stakeholders.

Justification

There is a good deal of literature that deals with the topic of the role of the university in New Zealand society since the societal restructuring of the late 1980s (Boston, 1988; Butterworth & Tarling, 1994; Crozier, 2000; Jones, Galvin & Woodhouse, 2000; Patterson, 1996; Peters & Roberts, 1999). Very few analyses, however (e.g. Boston, 1988), examine the topic from the point of view of the perceived relationship between the university and the wider economy. Most commentaries and analyses are also unashamedly framed from an insider's (professional academic's) point of view (e.g. Butterworth and Tarling, 1994; Crozier, 2000; Patterson, 1996).

It is also worth mentioning that prior to the recent tertiary policy review universities do not appear to have taken the concept of the knowledge society particularly seriously. This was brought home to me when I conducted my first search of the University of Waikato library catalogue for publications with a specific focus on either the knowledge society or the knowledge economy. I found two. The results were similar when I searched the online library catalogues of both Massey University and the Victoria University of Wellington. Subsequent searches conducted in the formative stages of this project turned up a further three or four publications – not counting journal articles - that contained either a section or a chapter dedicated to some discussion of the knowledge society/economy. Of the two books originally borrowed, to my considerable amazement I found that the one that deals most thoroughly with the sociological and theoretical ramifications of the knowledge society was published (and presumably acquired) in 1986, and had never been issued. Not once. In July 2001 a text that deals specifically with the relationship between the university and the knowledge

society (Baggen, 1999) appeared on the University of Waikato catalogue under 'acquisitions, on order'. Not willing to wait I purchased a copy online.

Given these startling facts an investigation that has as its focus the implications for the university in a knowledge society would seem both timely and appropriate.

In light of the current worldwide emphasis on the need for nations to develop a so-called 'knowledge economy' (Bohme and Stehr, 1986; Mansell and Wehn, 1998; New Zealand Information Technology Advisory Group, 1999), and to hone their 'competitive advantage' (Porter, 1990), it is clear that there is a growing need for critical analyses of the university sector that consider not only the traditions and internal needs and perspectives of the university as a 'stand alone' institution, but that also attempt to measure and interpret attitudes and trends in wider society in terms of their significance for the emerging university and socio-economy of the early twenty-first century.

This is all the more relevant given the recent work and recommendations of the Tertiary Education Advisory Commission (TEAC). Upon hearing, during the latter part of 1999, that such a Commission was about to be set up, I thought it expedient to seize upon the opportunity to follow the work of the TEAC and to incorporate it into my own study of aspects of a university education in New Zealand. With the timeframe of this policy process in mind, the project focuses, for the most part, on the perceptions of stakeholders and commentators up until the time of the subsequent formation of the Tertiary Education Commission (TEC) in January 2003.

In utilising both qualitative and quantitative research tools, and in attempting to juxtapose the 'measured' perceptions of key stakeholders against the critically evaluated views of a wide range of commentators, analysts and policy makers, this project seeks to contribute to the ongoing debate with regard to the roles of the university in a knowledge society.

Research questions guiding this enquiry

In order to explore this complex environment a series of research questions that were both specific enough to elicit useful information, and broad enough to be

effective within the problematically broad parameters of the topics to be scrutinised, were devised:

Principal research question

- What are the roles of the New Zealand university in relation to the development of a knowledge society?

A further three subsidiary questions underpin this primary focus;

Subsidiary research questions

- What are the perceptions of stakeholders with regard to the relationship between the notion and practice of 'liberal' education at the university level and the educational requirements of a knowledge society?
- What part should be played by the research imperative in a contemporary New Zealand setting?
- What importance, if any, is attached by commentators and stakeholders to the so-called traditional identifiers of the liberal university: academic freedom, institutional autonomy, critic and conscience of society, creator and repository of knowledge, and the partnership between teaching and research?

Organisation of this thesis

The topics central to this enquiry are both complex and interrelated. The thorny and multifaceted nature of the concepts and practices under scrutiny is outlined in some depth in Chapter Two. A comprehensive review of the literature of the university in relation to both the contested notion of a liberal education, and that of the knowledge society, is undertaken. Critical and interpretive modes of textual analysis are used to interrogate a wide range of perspectives. Historical and contextual influences upon the various points of view outlined are analysed. Themes found in the literature to have particular significance in relation to the New Zealand university in the light of the research questions guiding this enquiry are summarised.

Chapter Two: A review of the literature

Introduction

There is a small but expanding body of literature that has as its explicit focus the relationship between the university and the so-called knowledge society. This review outlines the dominant themes found within a number of key texts. Of particular interest is the issue of whether there are differences that can be detected between contributions arising out of a specifically New Zealand context and those emanating from Western European and North American settings.

In addition to those texts that directly address the relationship between the university and the knowledge society, other sources that could be seen to contribute to a broader understanding of the role played by the university in modern Western societies were sought. Historical analyses, along with commentary that has as its focus the rise of the virtual university, were also considered.

Research questions guiding this review

Given the small body of literature available research questions that could be used to compare local commentary and opinion with international contributions were formulated. The principal research question guiding this enquiry is focused on the role(s) of the university in relation to the development of a knowledge society. A further three subsidiary questions underpin this primary focus. These explore (a) the perceptions of stakeholders with regard to the relationship between the notion and practice of 'liberal' education at the university level and the educational requirements of a knowledge society; (b) the part to be played by the research imperative; and (c) the importance attached to the so-called traditional identifiers of the liberal university such as academic freedom, institutional autonomy, critic and conscience of society, creator and repository of knowledge, and the partnership between teaching and research.

Thematic organisation of the review

An opening section outlines a number of circumstances that can be seen to render more problematic the topics under consideration. Working definitions of both a liberal university education and a knowledge society are formulated.

The second section maps out the historical foundations of the liberal university in relation to a number of modern critiques. A range of views that can be considered influential in the framing of contemporary expectations are interrogated against their respective socio-political contexts.

This is followed by a consideration of the problematic relationship between the seemingly incompatible aspirations for learning-for-its-own-sake 'liberality' or 'cultural grooming' on the one hand, and calls on the part of politicians and business lobby groups for the university to more directly contribute in an instrumental manner to the development of a 'knowledge society' on the other.

The fourth section examines the topic of research within the university. Benefits and tensions underpinning the outworking of the post-nineteenth century concept of the twin imperatives – the partnership between teaching and research – are examined alongside more recent calls for a pragmatic separation of the two. The nature and importance of this 'traditional' model of research as a primary identifier of the university is considered in relation to what some commentators claim could be a distinctly different range of futures.

Next is an exploration of the concept of academic freedom in the context of the contemporary university.

A concluding section summarises the key findings of this review and provides a thematic link to subsequent chapters.

Part One: Definitions, embedded tensions, and ideological conflicts

Two broad concepts provide the central focus for this enquiry. These are the notions of (a) a 'liberal' university education and (b) a 'knowledge' society. As this thesis will demonstrate, neither concept is ideationally straightforward or functionally unproblematic. For the purposes of this analysis, then, how might these problematic and contested concepts be initially defined?

Three varieties of liberal education: Holism, individualism, conformism

The concept and practice of a liberal university education is most closely associated with the Enlightenment project of modernity (Delanty, 2001; Norris, 1994). Increasingly, in a supposedly post-modern and post-Enlightenment age, the

once taken-for-granted association between the pursuit of universalistic 'truth' and 'reason', and the progressivist construction of a more civilised and educated world, is coming under attack from critics advocating a more 'deconstructed', differentiated, and relativistic account of social relations (e.g., Derrida, 1982; Foucault, 1970 & 1989; Lyotard, 1984). But before the post-modern challenge to the *raison d'être* of the traditional liberal university can be examined, a précised outline of what it is that could be said to constitute a liberal university education is required.

Rothblatt (1998) explores various historical varieties of liberal education, pointing out that the term 'liberal'

> carr[ies] with [it] extraordinary historical baggage and contradictions…. [and that it is] imprecise, and that very imprecision is partly the cause of a large literature of interpretation, exhortation, definition and ideal types (in Max Weber's use of the phrase) (p. 31).

Rothblatt describes the hermeneutic difficulties that arise as a result of the welter of nuance associated with the various languages and cultures of the ancient and modern world. He alludes to the perpetual tension between public and private good policy aspirations. He then attempts to account for the perennial fascination with liberal aspects of a public education by stating that 'precisely because both public and private ends are very often in conflict, bringing both forms of the "good" together through an appropriate educational system has been a nearly desperate desire of idealists and reformers' (*ibid.*). Rothblatt outlines three broad historiographical understandings of the notion and practice of a liberal education.

Liberal education and the 'whole' or 'rounded' person

The first, and most ancient, he attributes to the Greek desire to produce 'the whole or rounded person whose education, liberal, is contrasted with another called "servile"' (*ibid.*, p. 32). Liberal education in this sense and context, then, was designed to produce citizens with the attributes necessary to provide leadership to the 'servile' classes. It is worth noting that this lower echelon included many of the occupational groupings we would now consider 'the professions', and which have come to be highly regarded in contemporary Western societies.

Public good, in this context, would have been defined in terms of the effective and efficient perpetuation of the master/servant class differentiation,

with all its attendant macro-socioeconomic implications. Or, put another way, public policy, to whatever extent it was consciously deliberated upon as such, would have been structured so as to facilitate the reproduction of cultural (i.e., social, political, economic, and intellectual) values considered by the ruling elite to be the defining *raison d'être* of their civilization. From the neo-Marxist perspective favoured by many late-twentieth century sociologists, liberal education was then, as it has appeared to be ever since, essentially a matter of hegemony.

Liberal education and the 'autonomous' individual

Rothblatt defines 'a second species of liberal education [in terms of] 19th-century beliefs in the autonomy of the individual' (*ibid.*). This individual autonomy, or personal liberty, he explains, 'is properly speaking an Enlightenment assumption… [that] carries with it certain intellectual presuppositions regarding the limited power of the State and the importance of environment in forming character' (*ibid.*). In this model,

> liberal education [is seen] as a personally uplifting experience…. [that] always carries within itself the seeds of defiance. The individual is engaged in a continual rivalry against "society" and its representatives in order to fulfil a personal mandate to be "creative" (*ibid.*, p. 33).

Adaptations of this model have been influential throughout the twentieth century, and particularly so with regard to the various 'liberatory' movements so characteristic of its latter decades. Everything from Freire's development of the notions of 'emergence' and 'conscientization', through to the strident anti 'nanny state' right wing libertarianism of the 1990s, has its antecedents in the individualisationism of nineteenth century liberalism. Freire (1993) argued that

> The important thing, from the point of view of libertarian education, is for people to come to feel like masters of their thinking by discussing the thinking and views of the world explicitly or implicitly manifest in their own suggestions and those of their comrades (p. 105).

The free-market, privatisation, and individual choice ideological imperatives underpinning New Zealand's recent neo-liberal 'revolution' can also be traced directly to this phenomenon.

Delanty (2002) agrees with Rothblatt in arguing that this model of liberal education is most closely associated with modernity. According to him it was at

its zenith in the eighteenth and nineteenth century Humboldtian university, and was characterised by (a) an understanding of knowledge as universal, (b) the inseparable unity of teaching and research, (c) academic freedom, and (d) cultural nationalism (p. 33). Another to adopt this line of thinking is Miyoshi (2002), who discusses how the post-modern rejection of these values has contributed to the widespread acceptance of what he describes as indiscriminate and uncritical multiculturalism. This he claims is a convenient substitute for informed individuality, and is associated with the rise of global capitalism (pp. 71-75). These accusations are considered in depth shortly.

Liberal education and the 'conforming' citizen

As for the third variety of liberal education, Rothblatt describes this in terms of the Germanic 'idea [that] stresses the harmony of the person in relation to a set of cultural values' (*ibid.*, p. 34). In this model, the individual 'aims at a wholeness or completeness' that is associated with 'internalizing the best and highest features of that culture' (*ibid.*). Aspects of this idea are also present, to a greater ('high' culture) or lesser ('low' culture) extent, throughout the various histories of the modern university. As will be seen shortly, many of those commentators who are critical of the imposition upon the contemporary university of the free-market principles of neo-liberalism make a direct appeal to the importance of the university as the key creator, protector, and transmitter of 'culture'. They make this appeal in order to justify their rejection of what they consider the purely utilitarian and instrumental values of neo-liberalism.

Liberal education: a working definition

Broadly speaking then, a liberal education, at the university level, might be tentatively defined as an essentially 'public' means by which citizens might (a) acquire and refine those skills and attributes considered necessary to take on competence- or 'desert'-based leadership roles within society; (b) develop a greater sense of personal liberty and autonomy, including the ability to critically evaluate their own circumstances and those of the world around them; and (c) develop a discerning respect for the culture that has spawned them, and to defend and reproduce that culture. This syncretic working definition is destabilized by a

number of problematic considerations in relation to the present post-modern era, however.

Problematic underpinnings of the liberal university

Liberal education, so defined, is a predominately Western concept. It is the ongoing legacy of an intellectual heritage founded upon a study of ancient Greek civilisation, medieval scholarship, and Enlightenment and Reformation principles of individual responsibility and autonomy. As such, it does not easily lend itself to appropriation by traditional cultures (Kaplan, 2000). The latter tend to value an 'uncritical' acceptance of received wisdom based on collective spiritual, emblematic, and mythological values. In contrast, Western liberalism in effect represents the 'culmination' of an emancipatory intellectual journey that has, over several centuries, moved its adherents away from these values.

In a contemporary New Zealand context, then, it can be seen that reconciling the basic values of an increasingly problematic 'liberal' university education with the quest for the development of productive social, economic and political partnerships between Māori and European stakeholders, with their vastly different cultural and intellectual heritages, constitutes a significant challenge. While a consideration of Māori educational aspirations is beyond the scope of this project, it is worth mentioning that the high regard accorded the partnership principles of the Treaty of Waitangi is contributing to a further questioning of the adequacy of a universally Western or 'liberal' approach to higher education. Post-structural challenges notwithstanding, one of the most revered values of the Western university is, after all, the unencumbered pursuit of 'truth' by the intellectually 'emancipated' individual. This 'pursuit' is not valued in traditional cultures. But as argued by Delanty (2002), 'this, then, is the chance for the university to evolve a new identity in the global age' (p. 46). Robins and Webster (2002) further sum up the hopes of many with respect to the post-Enlightenment university when they ask 'is this not a time when we might try to re-energize the cosmopolitan values that are also part of our intellectual legacy?' (p. 319).

The rise of post-structuralist analysis

Much of the intellectual ethos underpinning the rise of post-modernist academic thought has to do with how

> best [to] do justice to those marginalized 'others' of Western (ethnocentric or phallocratic) culture by bringing them all under the rubric of a generalized textuality (or economy of difference) that somehow constitutes a challenge to existing forms of hegemonic discourse (Norris, 1994, pp. 45-46).

Indeed, interest in 'non-judgmental' relativism has found widespread favour amongst Western academics. Coupled with a rapidly evolving epistemology of an increasingly fragmented and specialised information age, this focus on the pre-eminence of local knowledge has resulted in both a re-evaluation of 'classic' (universalistic) Western liberal values, and a preoccupation with 'factionalism and fractionalization' within the Western university (Miyoshi, 2002, p. 75).

It might be claimed that there is cruel irony in the fact that many of those academics who have recently expressed alarm at the erosion of the 'traditional' values, privileges and functions of the liberal university, especially in the New Zealand context, are themselves engaged in post-modern and post-structuralist thought. Olssen (2001), for example, draws on the work of Foucault (1979) in order to provide a theoretical foundation to his argument that neo-liberalism, in effect, has provided a means of 'introducing new forms of control and of reorganising and systematically dismantling the protected spaces of classical liberalism' (Olssen, 2001, p. 53). As pointed out by Kelsey (2000), key intellectual and social developments emerge 'out of the social tensions and politics of the time', and are made possible through 'the principles of university autonomy, academic freedom and universities' pretentious-sounding "critic and conscience" role' (p. 227). But there is little hint of post-modernist irony in Olssen's argument. In other words, the possibility that the radical relativistic and anti-Enlightenment ethos that pervades the work of post-modernists such as Foucault has almost certainly assisted in paving the way for the dismantling of the liberal university – an Enlightenment, universalistic, and essentially 'Eurocentric' state institution if ever there was one – is not considered. Opponents of post-structuralism might argue, therefore, that within the multiple and largely disconnected micro-contexts that characterise post-structuralist enquiry there exist reflexive shortcomings.

Indeed, the very values of open-mindedness, tolerance and respect for diversity that many observers axiomatically associate with a modern liberal education, could, in fact, be argued to be contributing to the decline of the modern university as an identifiably 'liberal' institution. Post-modern and post-structuralist enquiry, with its anti-Enlightenment ethos and pro-'otherness' aversion to ethnocentricity, would not be possible were it not for the economic, cultural and political foundation provided by a 'universal' network of Western universities. It is anachronistic to attempt to account for the rise of post-modernism without acknowledgement of the substantive ongoing foundation provided for it by the lingering achievements of modernity. Likewise, given that the conditions of modernity are desired but not yet attainable in many non-Western nations, it is equally problematic to imagine that the precepts of post-modernist and post-structuralist thought will be embraced outside the world of Western academia (Mojab, 2000; Rahman, 2000). Norris (1994) contends that the post-structuralist argument is essentially circular, self-defeating and illusionary, 'for it is precisely by relativizing issues of knowledge and truth – counting them internal to this or that "history" or "culture" – that ethnocentrism first gets a hold' (p. 65).

At the very least, then, it could be argued that there are far-reaching ideological tensions underpinning any evaluation of the possibility - and desirability - of a 'liberal' university education in a post-modern age. But these tensions are not new. The university has long nourished a diverse and contradictory range of ideational paradigms. One philosophical debate that has been central to the evolution of liberal education within a modernist context is the so-called 'clash of the two cultures'.

Clash of the 'two cultures'

Writing in 1959, the novelist C.P. Snow made the observation that

> Far-sighted men [*sic*] were beginning to see, before the middle of the nineteenth century, that in order to go on producing wealth, the country [Great Britain] needed to train some of its bright minds in science, particularly applied science. No one listened. The traditional culture didn't listen at all: and the pure scientists, such as there were, didn't listen very eagerly (1959, p. 22).

Indeed, a classic difficulty confronting the worlds of academia and industry has been the seemingly timeless and perpetual clash of the 'two cultures', as Snow

(1959) would term them. He means, of course, the very different worlds of the arts and sciences. Snow elaborates:

> The non-scientists have a rooted impression that the scientists are shallowly optimistic, unaware of man's [sic] condition. On the other hand, the scientists believe that the literary intellectuals are totally lacking in foresight, peculiarly unconcerned with their brother men, in a deep sense anti-intellectual, anxious to restrict both art and thought to the existential moment (p. 5).

One feature to emerge out of the debate on liberal education in relation to the post-modern age is that there is, in reality, much less of a gap between the so-called 'cultures' than has previously been thought to be the case. Certainly the increasing scientization of many disciplines has made any clear delineation more difficult to detect. Where there are tangible distinctions, these are often more to do with what is abstractly considered the actual purpose of (or philosophy behind) a particular discipline, rather than its everyday mode of operation. So-called 'qualitative' approaches to academic and other forms of research inquiry are increasingly articulated in a highly methodical and in some cases rigidly regimented manner, with strict (and often narrow) theory-based guidelines laid down for practitioners to abide by. Of course, this does not necessarily mean that the impressionistic and participant-centred ethos of qualitative inquiry is negated. What it does do, however, is point to a contemporary demand for processes involving the gathering and processing of knowledge to be conducted in a 'disciplined' (i.e., predetermined, pre-categorised, and meticulously systematic) and economically efficient manner. Delanty (2001) traces this predilection to the late-twentieth century separation of what he terms 'the liberal or neohumanist ideal and the modern ideal' (p. 38). In earlier times, he argues, the two paradigms existed alongside one-another in relative harmony. The liberal model, he contends, 'was rooted in the predominately German neohumanist idea of academic freedom and the pursuit of truth or knowledge as an end in itself' (*ibid.*). The 'modern ideal' he attributes to France. This model, in contrast, 'placed an emphasis on science but incorporated the idea of a liberal education' (*ibid.*).

Dichotomous academic cultures in a contemporary setting

There are at least two notable contemporary exemplars of this classic epistemological dichotomy. One is the obvious quarrel between those who prefer a generalist - or liberal - approach to university education, especially at the

undergraduate level, and those who advocate a more specialised approach. Delanty (2001) accounts for the genesis of this fundamental twentieth century dispute in terms of 'a new "epistemic regime"… under which a new cognitive and institutional system of knowledge emerged with the professional and specialized scientist replacing the broad-ranging generalist' (p. 39 [paraphrasing Wittrock, 1993, p. 316]). The second, and currently more contentious outworking of this classic dichotomy, is the subsequent subdivision of research specialists along the lines of (a) those who favour a more universalistic (modernist) epistemological framework, and (b) those who prefer to locate themselves within a relativistic post-modern or post-structuralist paradigm.

Some writers are concerned that the increasing popularity of the latter, with its 'multiplicity of perspectives, specializations, and qualification' (Miyoshi, 2002, p. 75), is further contributing, at the expense of more 'universalistic', 'external' or 'objective' pursuits, to an environment wherein 'faculty would rather do the things that might [better] promote their professional careers' (*ibid.*, p. 76). Is it possible then, that this alleged introversion is undermining the contemporary university's ability to maintain its previously sacrosanct position as the key creator and disseminator of new knowledge?

The 'failure' of the humanities

The rise of interdisciplinary degree structures, coupled with a more widespread acceptance of the need for direct instrumental outcomes, has led some commentators to argue that the humanities have lost much of their former prestige and influence. Non-vocational studies traditionally associated with the humanities are often perceived to best represent the true essence of a liberal university education (Rothblatt, 1998). Miyoshi (2002) attempts to account for 'the failure of the humanities as an agency of criticism and intervention' (p. 68). He makes the observation that 'administrators seem eager to write off the humanities – as an instrument to control minorities, or else merely as a managerial training programme in metropolitan manners, style, and fashion, set aside for the socially "elite" institutions' (p. 77).

Delanty (2002) traces change within the university to four 'academic revolutions' (p. 32). He lists these in sequence in terms of (a) 'the German… liberal, humanistic university of the nineteenth century'; (b) 'the American… twentieth-century… "civic university" – based on disciplinary organized knowledge and the accreditation of professionals'; (c) 'the mass [democratic] university… of the second half of the twentieth century'; and (d) 'the coming global revolution of the twenty-first century – the postmodern era… when the university dissolves disciplinarity, institutionalizes market values and enters the post-industrial information age' (*ibid.*). Technocratic approaches are now considered to be systematically encroaching upon the 'liberal' (humanist) foundations of the modern university (Smith, 2003).

These days academic 'cultures' are less frequently associated with the traditional 'arts', 'science', and 'social science' paradigms previously outlined by Snow. Increasingly, critics of the university's liberal 'decline' are evaluating its intellectual integrity and contribution to society in terms of the degree to which it can be seen to produce 'experts who have learned to consider their specialist knowledge in a wider historical and social context and to reflect collectively on its philosophical and ethical implications' (Weijers, 1998, p. 73). The advocacy of this model of 'post-liberal' university education involving the development of the reflexive expert is considered in relation to the complex multiple needs of an evolving knowledge society shortly. Before this critical discussion can be broadened to that extent, however, a brief examination of the cultures of the university in relation to the notion of the knowledge society is required.

The knowledge society: a working definition

Recent policy documents published in New Zealand suggest that the term 'knowledge society' may be applied to 'a society which emphasises the knowledge content of goods and services' (TEAC, July 2000, p. 8). In its ideal form it is much more than this though. The same policy document goes on to define the knowledge society as

> a society which emphasises the importance of critical reflection and debate about knowledge and its use. Knowledge is vitally important both socially and economically…. it is not a limited resource and can be used to generate new knowledge. This highlights the centrality of research and learning, which enable

> the creation and the critical application of knowledge, including the development of solutions to business, social and environmental problems (*ibid.*).

The concept of the knowledge society is deeply problematic and keenly contested however, and is usually associated by its critics with a neo-liberal economic agenda (Levidow, 2002, Peters, 1997; Peters & Roberts, 1999). For the purposes of this working definition, though, it might be simplistically described as a macro socio-cultural environment where the principal driving force behind economic and social development is the creation, dissemination and consumption of knowledge (cf. Bohme & Stehr, 1986).

As such, a knowledge society is characterised by a high demand for specialised information across a broad range of activities. In terms of the labour market, this demand for information means that workers with up-to-date knowledge creation, processing or implementation skills are the most rewarded and the most in demand. In a mature knowledge society 'tradition' and 'culture' are subject to uninterrupted change. A result of this perpetual discontinuity is that processes and institutions of enculturation, stabilisation and production such as schooling, government agencies and commerce and industry are of most value when the knowledge they create, utilise or disseminate is 'leading edge'. These conditions are considered to contrast with a more predictable Fordist environment where production takes place on a large scale, the market is stable, and large numbers of semi- and unskilled labourers are employed. In a 'post-Fordist' knowledge environment change is continuous and failure to obtain and utilise the most recent knowledge equates with obsolescence and decline. Those who produce and consume knowledge often do so in separated, highly specialised contexts (Bohme & Stehr, 1986; Norris, 1994; Scott, 1998).

The context of resistance to the concept of the 'knowledge society'

Academic analyses of the knowledge society, especially those based within the arts and humanities faculties of New Zealand universities, tend to associate the notion of the knowledge society with neo-liberal values (Olssen, 2002; Peters & Roberts, 1999; Roberts & Chambers, 2001). Indeed, these analyses tend to consider the very term 'knowledge society' a semantic indicator of an underpinning neo-liberal agenda (e.g., Peters & Roberts, 1999, pp. 57-80). This

association is considered axiomatic. It is also portrayed in an exclusively pejorative light.

The absence of New Zealand academic critique that seeks to separate, for the purposes of analysis, the concept of the knowledge society from an essentially pejorative treatment of neo-liberalism makes it difficult to explore the possible roles that the New Zealand university might play in the development of a so-called knowledge society. Clearly, one must first 'unpack' one concept from the other if further progress is to be made. This project seeks to achieve this goal.

A brief consideration of socio-political circumstances impacting upon the academic community in recent times may clarify the context of this resistance to the concept of the knowledge society.

During the 1980s and 1990s, when neo-liberalism was at its height in New Zealand, left-liberal academics found themselves increasingly on the outer in comparison with their previous role as valued, if indirect, contributors to the development of social policy. Consequently, it could be argued that cynicism with respect to governmental processes has increased to the point where many academics no longer expect their contributions to be taken into consideration. Given this sense of marginalisation, these same academics may be inclined to automatically associate new government initiatives with an ongoing neo-liberal quest to further redeploy public assets in keeping with an underpinning strategy of cost-cutting and a further centralisation of decision-making. On the basis of this generic linking of the knowledge society with unpopular neo-liberal policy prerogatives, and in the absence of evidence or argument to the contrary, it seems reasonable to assume that resistance to the concept of the knowledge society is closely associated with these developments.

The last quarter of the twentieth century has been characterised, after all, by numerous and rapid changes on a wide variety of global fronts. Not every innovation has lived up to expectation during this period. It could be claimed, for example, with considerable evidential justification, that New Zealand's market reforms of the 1980s and '90s have proved to be, at best, a qualified success. Severe ongoing difficulties have been encountered in a number of key sectors including health, education, transport, communications, and electricity supply.

Opposition to the neo-liberal philosophy underpinning the free market approach has been vociferous.

Emerging in the midst of all this debate and rancour has been 'Third Way' politics, and an accompanying emphasis on the needs of the so-called knowledge economy. Both terms sound like mantras in the making. Indeed, many in the academic community have been reluctant to pay much credence to 'trendy expressions such as "knowledge society" or "knowledge intensive society"…. [on the grounds that] they easily turn into slogans, used and abused by policy-makers… to justify their own idiosyncratic policies' (Adriaansens, 1998, p. 123). Adriaansens' complaint, shared by so many commentators today, is that the focus on the requirements of an emerging knowledge society 'has turned into a political programme for redirecting public funds from the humanities and social sciences to science and technology' (*ibid.*). Furthermore, and especially in the context of what some commentators consider the increasingly technocratic MBA programmes that continue to proliferate throughout the Westernised world, there are very real fears that the academic and professional inequalities resulting from the university's prioritisation of these programmes

> are eroding the fundamental values of liberal education, the values of free and impartial inquiry, of pastoral care for students, of collegiate relations among academics and researchers, and of education as a force towards enlightenment, emancipation, and social progress (Gabriel & Sturdy, 2002, p. 165).

The 'learning-for-life' and 'learning-for-work' continuum

Some academics argue that the very 'future of universities will be determined by the outcome of struggles to reconcile the conflicting demands of learning-for-life and learning-for-work' (MacFarlane, 1999, p. 141). The over-riding question is now, as it always has been, one of

> how to serve society's immediate needs and not neglect the more profound obligation that every institution of learning owes to civilization to renew its culture, interpret its past, and expand our understanding of the human condition? (Bok, 1990, p. 104).

The problems posed by this dilemma are potentially immense. Writing in 1959, Snow observed that

> the young scientists now feel that they are part of a culture on the rise while the other is in retreat. It is also, to be brutal, that the young scientists know that with an indifferent degree they'll get a comfortable job, while their contemporaries and

> counterparts in English and History will be lucky to earn 60 per cent as much (1964, pp. 17-18).

It is indeed ironic that a further four decades on many New Zealand science graduates are having difficulty finding jobs, whereas those entering the job market from a background in management and law find themselves more in demand. There is a perception that the sciences are in decline and that tertiary students are choosing business and law instead (Edlin, 2003).

In addition to its obvious managerial/technocratic implications, this state of affairs would appear to call into question the 'reality' that the needs of the knowledge society are best served by a stronger focus, by the universities, on scientific and technological development. Moreover, the liberal/technocratic binary is hindering deeper analysis. As elaborated by Robins and Webster (2002),

> we have the terms of the contemporary 'debate' on higher education: a debate between those who continue to advocate the principles of liberal education and those who claim to stand for progress and the future. It is, we think, a false debate. What it constructs is an unproductive divide between those who take the position of conservatives and pessimists, on the one hand, and those others who regard themselves as progressivists and optimists, on the other. We suggest that it is a debate between what are, in fact, two equally problematical and undesirable alternatives. And a debate, moreover, that fails to put before us the real issues, as well as some of the real options that we may now have (pp. 318-319).

It is with the innately problematic nature of these deeply vexing and polarising issues in mind, then, that I will shortly attempt to more fully explore the relationship, imaginary or otherwise, between the 'liberal' university and the knowledge society. A synopsis of the ontology of the liberal university precedes this discussion.

Part Two: Liberal education through the ages

Ancient and medieval origins of the modern liberal university

A considerable body of literature has as its focus the ancient and medieval origins of the university. Some texts provide a systematic chronological overview of the 'rise of the universities' (e.g, Boyd & King, 1995, pp. 125-158). The essentially ecclesiastical purposes of the medieval universities are usually described, as are the pragmatic secular circumstances that combined to facilitate the constitutional development of the organized 'university':

> The "universities" in the original meaning of the word were simply societies (or gilds) of masters and students, formed for the purpose of mutual help and protection, after the manner of the gilds of craftsmen which were rising into prominence with the great impulse to corporate life which made itself felt throughout Europe in the Twelfth Century. In the Middle Ages a man [sic] lived in a foreign country at his own risk. He had no claim of any kind on the country into which he ventured, and his best chance of security lay in associating himself with his fellow-countrymen in that country. It was for this reason that in the seats of learning the various groups of foreign scholars banded themselves together into a number of separate "universities" (Boyd and King, 1995, pp. 138-139).

Others to focus on the pre-Reformation period include Dunbabin (1999), who concentrates on the period between c.1150 and c.1350, and Patterson (1989), who also extends her scope to include both an examination of 'Higher Education in Antiquity' (p. 7), and the so-called 'modern' university of the nineteenth and twentieth centuries. Patterson alludes to the ancient Hindu, Chinese, and Egyptian and Babylonian practices of structured adult education (*ibid.*). She stresses the point that

> although the label "university" may have been used only from the fifteenth century, and the modern university as a permanent organisation of higher education can trace its descent directly from the two universities which developed in the twelfth century at Paris and Bologna, the real origins of the university go back many more centuries (*ibid.*).

This point is disputed by Delanty (2001) however, who argues that the true genesis of the modern university is to be found in nineteenth century industrialisation.

Patterson (1989) and Dunbabin (1999) both affirm the largely *ad hoc* nature of the early development of the university, with the latter stating that while 'Newman [may have] provided a blueprint for the Catholic University of Ireland… no such thinking lay behind the emergence of the medieval universities. They simply evolved' (p. 30).

Cardinal Newman's modern 'archetype' of a liberal university education

As can be seen in the work of numerous commentators any examination of the role of the university would be incomplete without reference to Cardinal Newman's (1966 [1858]) classic *The Idea of a University*. Set in the context of the growing secularism of nineteenth century Great Britain (Svaglic, 1966, p. viii), Newman's examination of the role and purpose of the university is an eloquent apologetic both for equal educational access for those of the less

politically favoured Catholic faith, and for a continuation of so-called 'Christian' influence within processes of higher education in general. But the lasting value of Newman's contribution is to be found in his discussion of the notion of what it is that he considers constitutes a 'liberal education'.

Newman deals in some depth with what he terms 'the business of a University':

> This process of training, by which the intellect, instead of being formed or sacrificed to some particular or accidental purpose, some specific trade or profession, or study or science, is disciplined for its own sake, for the perception of its own proper object, and for its own highest culture, is called Liberal Education (p. 115).

Newman discusses the 'utility' of education in both religious and secular contexts before concluding that utility in education is essential, but that the 'Liberal' aspects of a university education must take precedence. Summarising the role of the university in the context of his time, Newman contends that

> a University training is the great ordinary means to a great but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at supplying true principles to popular enthusiasm and fixed aims to popular aspiration, at giving enlargement and sobriety to the ideas of the age, at facilitating the exercise of political power, and refining the intercourse of private life (*ibid.*, p. 134).

It is this archetypical model of 'cultural' education that most Western academics have in mind when they use the term 'liberal' to refer to processes of higher learning.

Responses to the Newman archetype

A number of twentieth century commentators argue that Newman's tenets have little contemporary relevance. Notable among Newman's critics is Kerr (1968), who relegates Newman's idealised university to an irretrievable past. Kerr is also critical of another champion of the cultural mission of the liberal university, Abraham Flexner (1968 [1930]). Writing in the early part of the twentieth century, Flexner is scathing in his criticism of the American system (pp. 39-218). Fuelled by his admiration for the late nineteenth century achievements of the then infant Johns Hopkins University, Flexner pours scorn on American universities' early twentieth century pursuit of 'vocational' and *ad hoc* 'correspondence' expansion. Instead of remaining true to its founding liberal vision, he complains,

> Neither Columbia, nor Harvard, nor Johns Hopkins, nor Chicago, nor Wisconsin is really a university, for none of them possesses unity of purpose or homogeneity of constitution. Their centres are the treasurer's office, into which income flows, out of which expenditures issue, and the office of the registrar who keeps the roll (p. 179).

In response, Kerr confidently states that

> Flexner thought he was describing the ideal modern university – an institution whose outlines he had glimpsed at Johns Hopkins and Berlin and whose realization throughout America, England, and Germany awaited only certain reforms which he enumerated. Instead, as the passage of history has revealed, he was writing a valedictory to a university form which was already passing – already evolving to a new stage. In so doing, he preserved for us, in perhaps its purest and most completely reasoned form, the "idea of a modern university" at a crucial stage of its development, just as Cardinal Newman, seventy-five years before, had so eloquently preserved the "idea of a University" at an earlier, equally important, and equally passing stage (1968, p, xii).

As more recently articulated by some commentators (e.g., Olssen, 1987, pp. 21-23), every generation of scholars operates within a definable set of ideological assumptions. And as argued by Gasset (1946), when criticising the universities of his day for their alleged lack of attention to 'the teaching or transmission of culture' (p. 44),

> A man [sic] belongs to a generation; he is of one substance with it. And each generation takes its place not in some chance location, but directly and squarely upon the preceding one. This comes to mean that man lives, perforce, at *the level of his time*, and more particularly, at *the level of the ideas of his time*…. Culture is the *vital* system of ideas of a period [original emphasis] (*ibid.*).

To what extent, then, could the related notions of cultural reproduction and the pursuit of knowledge for its own sake, argued by Newman, Flexner and Gasset to be *the* core elements of a liberal education, be seen to have relevance in contemporary Western societies?

Pelikan (1992) articulates the view that the pursuit of knowledge for its own sake should continue to be an imperative of universities everywhere (pp. 32-43). He also argues that 'the impact of technology, and above all of the computer… [in relation to] university research and teaching' have rendered the 'ideals of "universal knowledge" and "knowledge as its own end"… more realistic rather than less realistic since Newman' (*ibid.*, p. 41). Pelikan does not find favour with Readings (1996), who accuses the former of losing touch with reality in the sense that the 'ideal' of liberal education Pelikan articulates Readings considers to be already in its 'twilight' (p. 7). The ideals of universities past and present are

investigated by Cabal (1993), Allington and O'Shaughnessy (1992), and Stephens and Roderick (1975). Each takes an internationalist approach, choosing to examine the university in a variety of national settings. The day-to-day operations of the university are critically examined in an attempt to offer remedies for what are argued are the numerous shortcomings implicit within recent developments increasingly characteristic of modern university life. The most damaging of these developments to impact upon the liberal university, as also discussed by Smith (2003) and Robins and Webster (2002), is considered to be the way that instrumental knowledge

> has come to dominate [with the consequence that] it is the humanities that have to make the self-apology and struggle to find their place in institutions of which the managers, borrowing the dominant political discourse of the day, constantly question every course for its utility, for its contribution to the economy and "the creation of jobs" (Smith, 2003).

Both Flexner (1968) and Kerr (1968) would also, no doubt, be intensely interested in Readings' (1996) criticism of the modern university, and, in particular, his comments on the part played by processes of 'Americanization' in what he argues is *The University in Ruins*.

Readings renders problematic the notion of 'excellence', arguing that

> The United States has the dubious honor of having, since at least the foundation of Johns Hopkins, technologized the German model to the point of developing the idea of excellence. The tension of this process has been apparent in the Anglophone world from the fact that the debate on culture is governed above all by the question posed to culture by technology (1996, p. 61).

The relationship between technology and the role of the university concerned even Newman, who feared that educational processes would become 'superficial', should the means of learning depend upon the mere passive absorption of information (Ker, 1999, p. 23). The assumption that the use of technological means of knowledge transmission is axiomatically associated with 'superficial' learning is challenged in a later section of this review.

But before we go on to examine the relationship between recent technological development and the roles of the university in a knowledge society in greater detail, it is worth briefly outlining the development of the modern liberal university in a New Zealand context.

The 'liberal' university in New Zealand

In its developmental stages university education in New Zealand was characterised by a comparatively large proportion of part time and external students, small size and scope, and limited resources. Beaglehole (1937) and Parton (1979) each provide an historical analysis of the University of New Zealand and its constituent colleges from the time of its legislative inception in 1870 through to its operation *circa* 1936 (Beaglehole), and its eventual disestablishment in 1961 (Parton).

Parton goes on to describe the early development of the newly autonomous regional universities. The uniqueness of the New Zealand university environment is assessed in terms of the relationship between the New Zealand model and its contrasting British and American antecedents. Both writers seek to contextualise attempts to construct an adequately rigorous university system within a New Zealand educational environment defined by the pressing vocational needs of a young and rapidly developing island nation. These vocational requirements, along with their impact on the design and operation of university education in New Zealand in the middle part of the twentieth century, are further outlined by Alcorn (1999) in her examination of the part played by educational administrator Clarence Beeby in the development of 'beyond schooling' education and training in this country (pp. 209-225).

In summing up a speech given by the Chancellor, Sir David Smith, at the last University of New Zealand Senate meeting held in August 1961, Parton encapsulates two of the issues central to this enquiry:

> Looking to the future, the Chancellor spoke of the need for the [newly autonomous] universities to find and to educate in a liberal way all the country's young people who have scientific ability; [and] of the need to meet a world of dynamic change by maintaining university institutions as independent centres with time for the kind of education which is characteristic of their tradition (1979, p. 250).

Unfortunately, none of the major historical surveys of the New Zealand university explore this 'dynamic' challenge with any degree of sustained intensity.

Specific aspects of the evolution of the New Zealand university system, along with characteristics particular to individual institutions, are examined by a number of commentators (Beaglehole, 1949; Campbell, 1943; Currie & Kedgley, 1959; Gould, 1988; Sinclair, 1983; Tindall, 1994). Various interest group

publications and speeches also contain information relevant to this study. The Association of University Teachers of New Zealand (now the Association of University Staff), for example, has long been active in putting forward its collectively held views (e.g., AUTNZ, 1959; Seminar on Aspects of Tertiary Education, 1968). Commenting on the role of technical institutions in New Zealand, for example, Lee (1968) expresses the view that 'To the extent that the university accepts a training function, that is preparation for professional practice, it may also have to accept a measure of control over its programme by one or more external agencies' (p. 113).

Writing shortly before the disestablishment of the University of New Zealand in 1961, Beeby (1959) outlines a number of issues and dilemmas he considered critical to the future of university education in New Zealand at that time. He discusses the responsibilities of the University's then monopoly status in terms of its relationship with government, employers and the wider community, and argues for continued full autonomy for the University, irrespective of where the institution's funding may originate (pp. 5-7). He traces the impact of European roots and American influences upon the still centralised institution and the society it serves. In particular, Beeby examines the differences between the European model, wherein 'the intellectually *élite* are educated by the *élite*', and the more open-entry American model (p. 8). He relates these antecedents to the role of the university in New Zealand society where a high regard for egalitarianism and self-improvement exerts a constant mitigatory influence upon policy makers (pp. 8-11). The problematic nature of supply and demand within rapid growth sectors such as science and technology and teacher training are considered, as is market pressure to allow for a more seamless interaction between technical training and professional recognition (p. 14).

What must be kept in mind with regard to the development of 'liberal' university education in New Zealand is the reality that, unlike the more class-bound situation in 'the mother country', the driving force behind the expansion of higher education in this country has always been of an instrumental rather than a 'knowledge-for-its-own-sake' nature. Earlier (pre-1990s) critiques of university education in New Zealand generally attempted to balance the aspiration for liberal breadth with this problematic marketplace reality (e.g., Beaglehole, 1937; Parton,

1979; Sinclair, 1983). More recent criticism, however, has tended to focus on the shortcomings of neo-liberalism as an instrument of social change. Broader-ranging considerations of socio-cultural factors rendered increasingly problematic in the context of a rapidly changing world have been 'trumped' by this more overt political focus.

It is clear from their writings that a number of contemporary academic stakeholders believe that the New Zealand university has been fundamentally 'liberal' throughout its history, but that this liberal *raison d'être* is now under threat (e.g., Kelsey, 2000; Olssen, 2002). This perception is further interrogated in the context of contemporary developments in Chapter Six.

The next section lays a platform for this interrogation through an examination of factors that can be seen to underpin the tension between instrumental and cultural views of a university education.

Part Three: University education in a post-modern era

The New Zealand university in the neo-liberal period

Reforms within the New Zealand tertiary sector since the Hawke policy process of the late 1980s have meant that there has been a flurry of activity on the part of stakeholders seeking to influence policy outcomes (e.g., Association of University Teachers of New Zealand, 1988; Jones, Galvin, and Woodhouse, 2000; New Zealand University Students' Association/Aotearoa Polytechnic Students' Union, 1996; New Zealand Vice-Chancellors' Committee, 1991; Report of the Universities Review Committee, 1987; University of Waikato, 1988). In keeping with the neo-liberal focus prevalent at the time of its publication, the Hawke Report (*The Report on Post-Compulsory Education and Training in New Zealand*) advanced a number of 'market' orientated proposals that were seen by many academics as a direct attack on institutional autonomy, academic freedom, and the traditional critic and conscience roles of the liberal university. Competition between institutions for students was advocated alongside a more commercial rationale for the sector as a whole (Olssen, 2001, pp. 26-28).

The New Zealand Business Roundtable revealed an interest in the design and role of universities. Amongst other things, it advocated reduced government

funding, increased private ownership, and 'the removal of preferential treatment for any state entities that are retained and the introduction of governance arrangements which would facilitate more effective decision making and improve their performance substantially' (Kerr, 1998a, p. 3). Kerr also notes that private ownership of universities is not unusual internationally (1998b).

The Hawke and post-Hawke tertiary reforms are examined in a wider socio-political context by Patterson (1996), who seeks to background the policy initiatives of the Fourth Labour Government against the international trend towards free market economics. She also points to the frustration felt by those within the university system at the seeming pointlessness of much of the 'accountability' and 'efficiency' based rationale underpinning these 'reforms'. She argues that

> by international standards New Zealand's universities of the early 1980s were extremely cost-effective operations, they had always accounted properly for their use of public funds, they produced top-quality graduates, and they operated probably the most open entry university system in the world (Patterson, 1996, p. 236).

In terms of the impact of the reform process upon university 'outputs', Patterson describes how the newly instituted student loan scheme is punitive by international standards, and that '[s]tudents are also undertaking long hours of paid employment in order to survive, to the detriment of their studies' (*ibid.*, p. 239; cf., Pool, 2002).

In their in-depth insider analysis *A Shakeup Anyway*, Butterworth and Tarling (1994) describe the nature, role, and political (mis)fortunes of the university in New Zealand. While their major focus is on the 1980s reform process, their critique is contextualised within the historic and wider purposes of tertiary educational provision in New Zealand. Butterworth and Tarling seek to evaluate the economic 'necessity' of reform within the tertiary sector against the core values of 'liberality' and 'openness' (p. 251). The authors are critical of what they argue is the neo-liberal 'fantasy' underpinning the reforms of the 1980s. They conclude that attempts by governments to 'homogenise' tertiary education in New Zealand are intrinsically flawed. Butterworth and Tarling contrast the ideological underpinnings of the neo-liberal reform process with the 'thinking' role of the university. They suggest that if the universities of the future are to be

effective, they will need to be 'reformed' in a well thought-out manner and not just according to some ill-considered fashion borrowed from another age, another ethos, or another sector (pp. 251-252).

Boston (1988) provides an explorative response to the Watts Report of 1987, which was commissioned by the New Zealand Vice-Chancellors' Committee, and to the Treasury report *Government Management*, of the same year. The Watts Report (*New Zealand's Universities: Partners in National Development*) sought to advance solutions to the problematic issue of the funding of universities in the light of perceived public and private benefits. It acknowledged the need for some degree of 'user pays' cost allocation, but stopped short of a full neo-liberal free market rationale on the grounds that it was not possible to quantify the public and private benefits of a university education.

The Future of New Zealand Universities, Boston's response to the Watts Report, is a detailed, critical, and informative analysis of the socio-economic role and rationale of the modern university. Boston's contribution is particularly valuable as, unlike most analyses of the tertiary sector, it draws heavily and lucidly on economic theory and argument to substantiate its thesis. Boston provides a compelling argument for the continued public funding of universities.

Peters and Roberts (1999) trace the gestation and nurture of semantic and policy preferences that they contend are key indicators of free marketism through to what they also argue are their logical real-world conclusions (pp. 163-232). They unequivocally associate notions such as 'globalisation', 'futurology' and 'knowledge economy' (pp. 57-80), 'managerialism', 'excellence', and 'performance indicators' (pp. 81-94), 'commodification' (pp. 95-112), and 'privatisation' (pp. 113-142) with neo-liberal policy imperatives. Like other commentaries produced by New Zealand academics in recent times (e.g., Roberts & Chambers, 2001), Olssen (2002) also draws a direct link between neo-liberalism and the notion of the knowledge society. Disapproval of the one, therefore, means disapproval of the other. This is something of a feature of recent New Zealand commentary. In spite of the many valuable and clear-headed points nevertheless proffered, the 'bundling' of the notion of a knowledge society with neo-liberalism could be seen to create another barrier that must be overcome

before the concept of the knowledge society can be subjected to effective interrogation in its own right (cf., Delanty, 2001).

Massification and the knowledge society

Since the early 1990s there has been a huge increase in the numbers of students participating in tertiary education. The 1992 Further and Higher Education Act in Great Britain opened the way for polytechnics to award degrees, adopt the title of 'university', and benefit from a revised funding system (Booth, 1999). A structural and procedural consequence of this deregulation is that partnerships between institutions are on the increase. Sayer (1999) uses a case study approach to describe how

> each partner has to resolve the relationships of teaching and research, research and development, university and government, teachers and learners, university and manpower policy, university and schools, and for some, university and church (p. 77).

This pattern of massification was replicated in Australia, where colleges of advanced education underwent a similar transformation. Coupled, then, with the ongoing operation of the Open University in Great Britain, which had been enrolling students on a more egalitarian basis since 1971, this dramatic 'throwing open of the gates' of the university meant that a whole raft of previously unexplored consequences have impacted upon the late twentieth century university (Booth, 1999; Smith and Langslow, 1999). These are similar consequences to those vilified in an early twentieth century American context by Flexner (1968). Academic morale has been eroded, standards are said to be on the decline, and the willingness of the state to fund institutions at a per capita level similar to that enjoyed by the pre-massification era university has been buried under a deluge of fiscal imperatives.

Several commentators point to the demonstrated ability of academics to adapt to their changing circumstances of employment (Harman, 2000; Kyvik, 2000; Tight, 2000). A recent survey of Australian academics found that 'many academics themselves are deeply involved in more commercial-type activities' (Harman, 2000, p. 113).

One British commentator claims that the same historical snobbery that existed prior to the reforms of 1992 continues to this day. Marks (2001) condemns

the ongoing disparagement of vocational training by what he terms the 'more well-off' and relatively 'idle' students and staff of 'traditional' universities (pp. 275-276). In place of a system that continues to distinguish between the elite and the useful, Marks argues, a lesson should be learned from the old Soviet approach to higher education. At their height, Marks reasons, Soviet universities were at least characterised by an efficient and effective combining of vocational, research, dissemination, and advanced education and training imperatives (p. 276). Marks advocates a reversal of the trend towards the 'universitisation' of polytechnics. The resultant flourishing of 'polytechnism' - in a more united, egalitarian, and much less 'aloof, insular, [and] self-serving' British higher education sector - would lead to the emergence of universities that were both more socio-economically productive, and that provided genuine equality of opportunity in a climate that was much less 'withdrawn from reality' (pp. 275-277).

In counterbalance to Marks' argument, however, it must also be remembered that the Soviet system did not extend the broadness of the pre-revolution Humboldtian model into the study of the humanities (Kirpotin, 1999, p. 415). The narrower, more utilitarian system favoured by the Soviets has therefore produced, according to a UNESCO investigation cited by Kirpotin (1999), universities that are strong on imparting raw knowledge to their students, but weak when it comes to enabling these same students to 'apply this knowledge to life' (*ibid.*). In the context of this investigation then, this weakness must be seen as particularly severe and debilitating in the context of the heavily 'interactive' and reflective demands of a knowledge society.

In her examination of effective educational technology, Laurillard (1993) focuses on the 'chalk-face' ramifications of massification. She is galvanised by the challenges posed by a quest to maintain a teaching environment characterised by continuous improvement, and is mindful of the 'need to rebuild the infrastructure that will find the fit between the academic values we wish to preserve and the new conditions of educating larger numbers' (p. 4). Her underpinning rationale is similar to that of Cuban (1999), in that she aspires to raise the standard, influence and prestige of university teaching: 'The idea is to find an infrastructure that enables university teachers to be as professional in their teaching as they try to be in their research' (p. 5).

The re-casting of the academic's professional identity and *raison d'être* is a recurring theme within a number of recent insider analyses (e.g., Carrotte, 1999; Jenkins, 1999; MacDonald, 2001; Nixon *et al.*, 1998; Rowland, 1998). Some of these contributors also seek to re-position the university academic in specific relation to the increasingly 'in-focus' teaching imperative - as do, in a different context, Ramsden *et al.* (1995) - and to re-conceptualise 'the [increasingly contested] nature of academic freedom' (Nixon *et al.*, 1998, p. 277).

Marginson and Considine (2000) describe the development of what they term 'the enterprise university' in an Australian setting. Tracing many of the challenges facing the contemporary university to the impact of globalisation, the authors argue that good governance is the key to successful adaptation to contemporary demands. Basing their recommendations on the findings of a case study observation of a number of Australian universities, they suggest that

> the answer lies not in displacing academic-leader managers *per se* but [in] establishing equality of respect between academic leaders and general staff leaders, and [in] a negotiated division of labour (p. 251).

They also make the observation that a 'return to higher levels of public funding could make a great difference, enabling universities to grasp many more of the immense opportunities that the global environment provides' (*ibid.*).

Other Australian academics are less optimistic. Rooney and Hearn (2000) suggest that 'neoliberal ideology is… [essentially] anti-knowledge and [that] its tendency to encourage [the] substitut[ion of] technology for people mitigates the essentials of a knowledge environment' (p. 102). They in effect summarise the concerns of many tertiary observers with regard to the role of the 'massified' university in a knowledge society:

> The future of the university can only be planned for if we are in possession of a realistic view of how a knowledge economy works and what kinds of behaviors we need to encourage. First, we need to understand the need for openness about, and disclosure of, knowledge; cooperative modes of knowledge production and diffusion; learning relationships based on trust; knowledge investment based on appropriate acceptance of risk; conversation; diversity; and democratic values in relation to the creation and diffusion of knowledge (*ibid.*)

Having outlined these desired parameters, Rooney and Hearn (2000) then scoff at what they consider overly simplistic neo-liberal conceptualisations of technocised knowledge creation:

> utopian visions of easy market mechanisms piping commodified packets of information and knowledge through vast networks of computers do not equate with the complex interrelationships and the many other social realities of the environment we inhabit (*ibid.*).

Indeed, concern over a lack of appreciation of the wider social complexities framing the rise of the technology-intensive knowledge society is a recurrent theme in the literature.

Social justice, massification and the market

A principal concern of critics of market-oriented policy making is the relationship between globalisation and issues of social justice. Taylor, Rizvi, Lingard and Henry (1997), for example, examine 'a major political struggle between those who see it [education policy] only for its instrumental outcomes and those who see its potential for human emancipation' (*ibid.*, p. i). Contributors to Taylor *et al.* express concern that key 'emancipatory' characteristics of the liberal university, such as individual choice and the pursuit of knowledge for its own sake, are becoming less viable in an environment tightly bounded by economistic justifications. In spite of the egalitarian benefits of massification, the additional cost involved in opening up tertiary education has meant that governments have sought to become more directly involved in determining the conditions within which institutions must operate. Institutions, including universities, are increasingly expected to be 'on target' in relation to instrumental outcomes prescribed for them by government. In a New Zealand context, the TEAC policy process outlined in Chapter Three could be seen, at least in part, to epitomise this struggle between emancipatory and instrumental educational aspirations.

In an international context, specific concerns expressed by those with an interest in this struggle include: (a) the varieties of knowledge that may count as important in an increasingly sophisticated technological global community; (b) the types of student likely to gain access to the university of the future; and (c) the extent to which issues of individual and institutional autonomy are likely to be increasingly decided by either the market or by the state (Brennan, Fedrowitz, Huber, and Shah, 1999). An overall hypothesis put forward by Brennan *et al.* is that there is going to be a greater degree of collaboration between industry and academia in both teaching and research. There is also the suggestion, articulated

by other commentators reviewed in this chapter, that an ever-more diverse university sector will draw its primary developmental cues from its immediate socio-political and economic surroundings rather than from any sense of collective or genre-wide history and tradition.

Escobar, Fernandez, Guevara-Niebla, and Freire (1994) explore the Freirean concept of transformational and liberatory education within a tertiary educational environment that could, they suggest, be concerned not so much 'with adapting individuals to a world of oppressive social relations but [which could be] dedicated to transforming the very conditions that promote such conditions' (1994, p. xxxii). They argue that the 'consumerist ethos of flexible specialization' must be rejected in favour of the creation of 'new forms of sociality' (p. xxxiii). They explore the role of power relations in a higher educational setting, and suggest that the key to a genuinely liberatory educational experience is to be found in conscientizing dialogue that embraces the principles of socio-political emancipation and empowerment. As such, they could be said to be advancing a kind of 'counter-liberal' brand of education that aspires to remove the 'conforming' elements of liberal education and replace them with an entirely 'rebellious', explorative rationale. It is an emancipatory ideal that has the potential to find adapted expression in the 'freedom for others' model of academic freedom outlined in the fifth section of this chapter.

Massification and the 'Great Books' debate

The Western university has undergone a fundamental transformation since the student uprisings of 1968. Indeed, some commentators link what they perceive to be an undermining of the 'liberal' mandate to the post-1960s massification, fragmentation, and diversification of the university sector (Bloom, 1987; Readings, 1996). As is the case with the earlier work of Gasset (1946), Bloom (1987) identifies most closely with the 'cultural' mission of the university. He bemoans the (alleged) loss of academic rigour associated with the departure from a pre-determined 'Great Books' curriculum, and contests the intellectual validity of any multiple truths/diverse cultures approach to university education.

Similarly, Kaplan (2000) questions the efficacy of Western university education that is not linked to an appreciation of literature. He draws a straight

line between what he terms 'a lack of imagination' in modern 'bourgeois societies' and the abandonment of literature as the centrepiece of higher education (pp. 157-159). The political and humanitarian crises endemic throughout the non-Western, non-democratic world, Kaplan argues, can decreasingly be 'solved' by Western policymakers because 'our elites *just don't get it*' (p. 158 [original emphasis]). He claims that 'policy makers [are] ignorant of the very books that explain places like Haiti and Somalia' (*ibid.*).

It can be seen that the arguments put forward by 'cultural' liberalists such as Kaplan, Readings, Bloom and Gasset question post-modern assumptions about the nature and utility of knowledge. They also challenge some contemporary expectations of a university education in relation to the development of a social economy that is best able to respond in a reflexive manner to global change.

The contemporary university and socio-economic progress

Porter (1990) claims that a clear understanding of 'determinants of national competitive advantage' is of paramount importance in contemporary society (pp. 69-130). Critical among these determinants, Porter argues, is a nation's 'knowledge resources' (p. 75). These he describes in terms of a 'nation's stock of scientific, technical, and market knowledge bearing on goods and services' (ibid.). His overall thesis stresses the importance of technical education at the highest level, and points to the advantage to be gained when resources are deployed most effectively (cf., Broatch, 2002).

Mansell and Wehn (1998) consider the gathering, storage, extraction, and utilisation of information resources to be of critical importance in a knowledge society. An appreciation of changes in the labour market (OECD, 1996) and social relations (Bohme & Stehr, 1986) are also linked to effective economic development in the context of a knowledge economy. But any narrow technicist analysis of the knowledge *economy* at the expense of a fuller exploration of the conditions of a comprehensive knowledge *society* is criticised by Delanty (2001). Bohme and Stehr attempt

> to set the agenda for the possibility of transcending the apparent neglect of what is ultimately the crucial question for a theory of the emerging knowledge society, namely, why and how scientific and technical knowledge comes to acquire its enormous societal relevance and force (1986, p. 5).

Contributors to the collection of articles edited by Bohme and Stehr seek to account for the way that 'men [*sic*] of knowledge' - intellectuals, academics and scientists - may be inclined to re-interpret 'demarcations' between different types and areas of knowledge (pp. 57-122). In addition, 'processes of scientification' in a knowledge society are investigated (pp. 129-202). A conclusion that is congruent with other contributions reviewed in this chapter is that the various micro- and macro-structures that together make up both the institutional and wider social infrastructures of the knowledge society will be significantly different from those that could be said to have characterised the industrial age.

Each of these analyses is useful as they help to detail both the necessity and the complexity of a close working relationship between knowledge production in a university context and the socio-economic and political ramifications of the knowledge society.

Like Boston (1988, p. 49), Conceicao and Heitor (1999) point out that '[t]he scarcity of empirical data on intangible economic factors makes it extremely difficult to demonstrate the growing importance of knowledge' (p. 38). They also argue that economic transactions in developed countries require an ever-increasing utilisation of 'codified knowledge' (p. 39), and that 'the creation and dissemination of knowledge are fundamental factors for the promotion of economic growth' (p. 40). Essential to economic growth, they contend, is the provision, especially to the service sector, of more people with professional qualifications. The writers suggest that 'a new vision for the university' is implied within their argument, one that will involve a

> radical change from formal teaching to participatory learning, which is directly associated with continuous (lifelong) training and the need for the university to deal effectively with multiple demands and a multi-faceted public (*ibid.*).

Conceicao and Heitor also point to deficiencies inherent within the application of free market principles to the generation of ideas. They suggest (a) 'that there is scope in the knowledge-based economy for institutional arrangements and public policies that go beyond the logic of the market' (*ibid.*), and (b) that the nurturing and expansion of university research, in all its various forms, is a key to future prosperity (pp. 49-50). This last point is examined in a later section of this chapter.

Perhaps in anticipation of the unique challenges posed by the information age, Bok (1990) also correlates the 'eminence' of the university with the dependence of nations 'on new discoveries, expert knowledge, and highly trained personnel' (p. 103). He alludes to one of the major quandaries framing this inquiry when he cites a fellow Harvardian's observation that

> a troubled universe can no longer afford the luxury of pursuits confined to an ivory tower so… scholarship has to prove its worth not on its own terms, but by service to the nation and the world (Bailyn et al., 1986, p. 131, cited in Bok, 1990, p. 103).

Scott (1998), an English academic and administrator with first-hand experience of the university on both sides of the Atlantic, can foresee the death of the university. While not welcoming its demise, he argues that should there be a widespread development of 'learning organisations', it is entirely feasible that 'in a society that is suffused with "knowledge", the need for special-purpose "knowledge" institutions may actually diminish' (p. 14). Scott renders problematic the very existence of the university in a knowledge society. He describes the challenges raised by the current emphasis on 'lifelong learning' (cf., Conceicao & Heitor, 1999), paying particular attention to the reality that in order to be successful, this phenomenon 'requires the breaking-down, certainly the transcendence, of traditional institutional boundaries' (*ibid.*, p. 16). It is this alleged 'decay' of institutions in the post-modern era that Scott focuses on as he seeks to shed light on the question of whether or not twenty-first century universities will be the objects of 'decline or transformation' (*ibid.*). He argues that the university is not well prepared for the emergence of the knowledge society. Not because the university as an institution in its own right is ill-equipped for the new demands being placed upon it, but because *all* institutions are 'less well adapted to the discordances of this new kind of society' (*ibid.*, p. 25). Scott's contribution is particularly valuable in the context of this enquiry as it examines the relationship between the university and the knowledge society in some detail.

An area of agreement amongst writers who investigate this problematic relationship is the acknowledgement that changes in contemporary Western economies are creating an environment that requires different competencies of its university graduates than has been the norm in the past (Bohme & Stehr, 1986; Bok, 1990; Broatch, 2002; Conceicao & Heitor, 1999; Delanty, 2001; Mansell & Wehn, 1998; Porter, 1990; Scott, 1998). Indeed, the weight of evidence presented

by these commentators would appear to indicate that the set of socio-economic conditions referred to as the 'knowledge society', might, in fact, be more than mere rhetoric. In order for the question of what the roles of the university should be in relation to socio-economic progress and the development of a knowledge society then, educational models considered appropriate to such conditions must be considered.

The university in a knowledge society: new models of higher learning

As is repeatedly illustrated throughout this review, the university of the modernist period was characterised by a successful, if oftentimes tense, amalgamation of instrumental and 'liberal' functions. In an age when monolithic cultural imperatives were unapologetically championed, a singular and relatively unchanging curriculum, or 'canon', made perfect sense. Times have changed. There remains, however, the very real possibility that foundational principles, once extrapolated from their original imperialist contexts, might still hold true.

Spies (2000) describes five enduring traditions first developed by the Greek Sophists around 400BC. These he describes in terms of

> [a] a search for welfare (the professions and development); [b] a search for truth (inquiry and research); [c] a search for order and freedom (leadership); [d] a search for what is good (ethics and the development of a moral imperative); and [e] a search for beauty (the promotion of aesthetics in human enterprise) (p. 20).

Spies closely equates these five traditions with the nineteenth and twentieth century mission of the liberal university. Like Scott (1998), he questions the efficacy of the modern university. In advocating a return to the 'holism' of Greek education, Spies suggests a combination of (a) in-depth disciplinary study, which provides detailed information about a particular area; (b) multidisciplinary study, which enables the student to apply specialist knowledge to complex interactive problems; and (c) transdisciplinary studies, by which he means 'the development of appropriate values and thinking skills…. [where] the aim is to develop understanding, rather than to gain particular kinds of knowledge' (pp. 27-28). By these means, Spies argues, the twenty-first century university will be better able to retain its relevance.

Scott (1998) offers two hypothetical models of a post-liberal university. The first is a thriving and 'dynamic cutting-edge institution' (*ibid.*, p. 27). In this

scenario, Scott surmises, the university will continue to develop as 'a primary provider of the scientific and technical knowledge and professional skills on which advanced economies will depend to generate wealth and to improve the quality of social and individual life' (*ibid.*). Upon its contribution will be built 'national esteem and global competitiveness' (*ibid.*). An inevitable consequence of this conspicuous success, according to Scott, will be the university's considerably augmented 'social significance' (*ibid.*).

But Scott also outlines a second possible scenario, one in which the university takes on a very different role. In this instance, given the hypothetical predominance of alternative knowledge institutions, the university assumes the role of

> an institution of stabilization…. acting as a mediator, and interpreter, between the "expert" systems that will litter the global (and, increasingly, globalized) economy on the one hand and on the other the intensifying individualization of life-chances and life-styles (1998, p. 28).

In an attempt to facilitate some degree of reconciliation between such dichotomous possibilities however, Scott offers a third compromise scenario. He concedes the point that the vagaries of the knowledge society make it an unlikely environment in which any clearly defined 'dialectical relationship will develop' (p. 30). Scott nevertheless theorises that in 'the absence of [any] such clear-cut demarcations... a kind of sinuous synergy will prevail, with the university sometimes an agent of radical and rapid "movement" and at other times a powerful source of stabilization, stability, even stasis' (*ibid.*).

'Bildung' and the knowledge society: A European retro-vision

One European academic claims that specific threats and opportunities inherent within the move toward knowledge/information rich economies have less to do with the amount of knowledge needed, and more to do with the type or quality of knowledge required (Adriaansens, 1998). Changes in the mode of economic production, Adriaansens argues, mean that the modern labour market will be increasingly dependent on workers who are able to process a variety of information in a reflective and critical manner. He is critical of the Dutch university system on the basis that

> Administrators and professors have had no idea… that changes in economic production are increasing the demand for well-educated generalists or academies

> [sic]…. Approximately 80 percent of the positions of university graduates are nowadays of a more general nature, demanding very articulate academic qualities rather than advanced knowledge of a specific area (Adriaansens, 1998, p. 126).

Adriaansens advocates a university education that has a greater emphasis on the development of 'constructive and synthetic abilities' (*ibid.*, p. 127). These abilities, he argues, need to be founded on a broad but incisive general knowledge, or '*Bildung*', that can be used by the educated individual to 'put domain-specific knowledge in its proper place, to have it "make sense"' (*ibid.*). Undergraduate learning would be of a general nature. This would be followed by a 'second stage of university education [which] would consist of two types of (graduate) schools, viz. research schools and professional schools' (*ibid.*, p. 128). This two-stage programme would address, according to its advocate, the problem of graduating students entering the knowledge-intensive labour market with insufficient transferable intellectual and academic skills.

Adriaansens' idealised version of the American two-stage model is a European response to what its advocate describes as the contrasting effects of massification upon European as opposed to American universities. Most American commentators simply assume that the two-stage model broadly delineated by Adriaansens is (or at least used to be) the 'norm' (e.g., Bloom, 1987; Bok, 1990; Cuban, 1999; Flexner, 1968; Pelikan, 1992; Readings, 1996). Indeed, it is perhaps pertinent, at this time, to recall the criticisms levelled at the American university by Abraham Flexner (1968). He too assumed that the undergraduate college would focus on '*Bildung*', hence his opposition to specialised (undergraduate) vocational studies. Other cultural liberalists mourn the alleged loss of moral direction that followed the popular revolution of the 1960s (Bloom, 1987; Bok, 1990; Readings, 1996). Bok cites the Carnegie Commission on Higher Education's finding 'that "general education for citizenship" was clearly the least successful of the several principal purposes of American higher education' (1990, p. 71). A *laissez faire* reliance on the trickle down effects of unguided study within the humanities, he argues, had 'failed to reveal any deep and lasting imprint on the moral development of undergraduates' (*ibid.*). Bok also associates the 'education for citizenship' aspects of liberal

education in twentieth century American universities with 'efforts to strengthen undergraduate education as a bulwark against totalitarian attacks' (*ibid.*).

Further conspiring against the two-stage model favoured by Adriaansens are (at the very least) two related problems. One is the perennial

> tendency to associate liberal education with subjects deemed humanities… [which has historically] produced a backlash in the form of accusations that a "traditional" liberal education was really only ornamental knowledge, superficial, useless, class-ridden, suitable only for snobs (Rothblatt, 1998, p. 39).

The second is the contemporary view that

> as knowledge is infinite and ever-increasing, all that can ever truly be taught in higher education is how to acquire information, analyze data and ask relevant questions of sources. Method is therefore "liberal" because what is being taught are the general rules governing knowledge acquisition (*ibid.*, p. 41).

But, as further argued by Rothblatt (1998), 'the difficulty is [in] teasing the meaning of life and human relationships out of information' (*ibid.*). With this conundrum in mind, then, we move on to consider the possibility that some elements of a 'traditional' liberal university education might not be totally out of place alongside what many perceive, perhaps superficially, to be the increasingly instrumental and utilitarian needs of the knowledge society.

'Liberal' knowledge: Anachronism or blueprint for (reflexive) change?

Rothblatt (1998) highlights the ambiguity involved in using the term 'liberal' to describe any form of contemporary education, especially that offered in the United States of America, as the increasingly heterogeneous nature of modern Western societies means that the enculturation element implicit within the traditional liberal approach is of questionable ongoing relevance. Others link the trend toward heterogeneity in all facets of university life with 'decentralisation and marketisation – which together are seen as causing a shift away from an academic oligarchy and towards *both* more market and more state control' (Tight, 2000, p. 2 [original emphasis]). Weijers (1998) calls into question both the adequacy of any narrow 'specialist' approach to university education, and the growing campaign for a 'return' to *the* liberal model. Indeed, Weijers also dismisses the possibility of any single or unified liberal model, and, in the absence of any viable liberal historical precedent or paradigm, argues instead for 'a deepening and broadening of specialist education itself' (p. 73). He advocates the

formation of the 'reflexive expert' as the role of the contemporary university. He claims that 'what we need is the formation of a large number of experts who feel themselves responsible for the consequences of their knowledge' (*ibid.*). Like Delanty (2001), Weijers promotes 'the notion of reflexivity… [as being] crucial for the idea of the responsible expert' (1998, p. 72). In order to be able to reflect on one's expertise in relation to any given socio-political and economic context, Weijers contends, the graduate has to first be educated in a way that develops a social, technical, and intellectual broadmindedness. He does not subscribe to what he terms 'the past ideas of *Bildung*, self-fulfillment or character formation and to a kind of philosophical training' (*ibid.*). Weijers considers both Bloom's 'gentleman's model of liberal education', and Martha Nussbaum's (1997) 'world citizen model of liberal education', to be both undesirable and untenable within the habitus of the knowledge society (*ibid.*, p. 65ff). Weijers also disagrees with the 'general', 'liberal', or '*Bildung*'-first undergraduate approach advocated by Adriaansens (1998).

It could be argued, of course, that a truly reflexive education is the very thing that many university departments are already seeking to provide. The English model, based as it is on a narrow in-depth examination of a single or very few disciplines, has the potential to fit some of Weijers' expectations. Certainly within teacher training, social work and some health sciences students are encouraged to develop the skills necessary to become 'reflective practitioners' (Matthews & Jessel, 1998). But it must also be conceded, overall, that even the practice of including a 'history of' and a 'philosophy of' component is far more common in humanities and social sciences courses than it is for 'pure' science, technology, and professional courses. One justification for this, as discussed by Hand (1999), is that 'encouraging undergraduates to "waste time on philosophical matters" does not lend itself to producing future researchers who will work *within science as it stands*' (p. 123 [emphasis added]). This failure to be 'critical of one's true love', as Warnick (2001) conceptualises it, could be seen as the antithesis of most historical ideals (if not practices) of a liberal education. The apparent absence of reflection, or indeed, of any desire for reflection, is directly correlated with both the uncritical narrowing of the curriculum within the respective discipline itself, and with the absence of 'balancing' (heterogeneous) topics of

study. Hand describes how, for example, in his discipline of engineering materials, philosophical inquiry is avoided, and indeed discouraged, on the grounds that 'it is taken for granted that the foundations are sound and do not need questioning' (1999, p. 122). Needless to say, the pursuit of 'balance' is both expensive and time consuming, and can, in Warnick's experience, result in the undergraduate student becoming 'more liberal, more tolerant, and more skeptical', all of which may not be entirely compatible, in a narrow economic sense at least, with the instrumental aspects of a knowledge economy (2001, p. 5). It can also have the effect of leading students (and graduates) to 'consider the darker side of familiar social institutions' (*ibid.*). Stakeholders whose main concern is the building of a technicist knowledge *economy* may not welcome this effect. They might see it as an inefficient deployment of resources.

Herein lies one of the great paradoxes of the knowledge society. On the one hand, as already argued by Wildman (2000), 'in the knowledge economy, where data and information are the raw material, value-adding will require higher order thinking skills' (p. 106). This educated capacity to critically assess a swarming mass of oftentimes incoherent and contradictory information will require a breadth of social and technical knowledge many would consider best developed through an extended (and expensive) university education. The rapid turn-around requirements of a knowledge-intensive economy, especially when coupled with government efforts to further reduce expenditure on university education, may mean that employers, policy makers and students alike could be reluctant to invest time and money in an educational process that appears to offer little *short-term* reward. Should this prove to be the case, a correlation may be seen to develop between the reluctance to invest in an appropriate university education and the failure to build a successful knowledge society. This possibility is explored in Chapter Six. The attitudes of employers and students to a university education in relation to the development of a knowledge society are empirically investigated in Chapter Five. Recent New Zealand tertiary education policy making processes that can be seen to relate to this dilemma are critiqued in Chapter Three. Also of interest is the rise of the virtual university.

Faculty, the knowledge society, and the virtual university

Skolnik (2000) explores the likely response of the professoriate to what he argues will be the increasing dominance of the virtual university. He is aware of the threat posed by 'automation' to traditional academic working conditions:

> The changes posited here [by the virtual university] involve a reduction in the number of full-time faculty positions, elimination of job security for faculty, increased monitoring of faculty activity and performance, and most significantly, the breaking down of the traditional role of faculty into various specialised component roles (p. 64).

Skolnik argues that extensive resort to technology in the academic workplace is only to be expected, as 'it is not apparent why [faculty] would have any stronger moral justification [for exemption] than did workers in any of the other trades, crafts, and occupations whose work has been drastically changed or eliminated by automation over the past two centuries' (*ibid.*). A few 'quality' and consumer-response reservations notwithstanding, Skolnik considers that students will most likely both drive demand for and benefit most from the virtual university.

In response to the problem of maintaining 'traditional' interaction between teachers and students in the face of rising costs, Manicas (2000) puts forward recently developed 'computer-mediated technologies… [as] a highly cost-effective way to increase access and to respond to the demands for new kinds of skills and knowledge' (*ibid.*). He describes how 'technology has both a light side and a dark side' (p. 38). We are presently seeing the dark side, he argues, exemplified through lazy recourse to 'taped lectures, canned Web courses, automated correspondence courses, and more generally, the minimizing of high-cost active instruction for low-cost automation' (*ibid.*). The light side, which he contends we are yet to see, would consist of 'improved discussion, equality of discussion among all members, collaborative and active learning, [and] the instructor as expert and facilitator' (*ibid.*).

In dealing with the problems and opportunities inherent within the inexorable move toward knowledge media technologies, Daniel (1996), a former Vice Chancellor of the Open University, adopts a pragmatic approach in his 'strategic' analysis of what he argues will be the essentially 'distance-based' university of the future. His overall thesis is that the intelligent utilisation of knowledge technology is the key to the university's successful renewal of the 'academic ideal in a new millennium' (p. 1). In a New Zealand context, a similar,

if more topically heterogeneous approach, is adopted in a collection of keynote papers edited by Peters and Roberts (1998). The collection reports, broadly speaking, the main theoretical and philosophical themes explored at a 1997 conference convened with the express purpose of stimulating proactive debate over the implementation of communication and information technology in the New Zealand university sector (Crozier, 1998, p. 9). Concern about the potential for over-zealous adoption of IT to impinge upon the core teaching and research functions of the university is discussed in the context of various disciplinary settings. Desirable strategies and positive consequences of realistic implementation are also considered.

Criticism of the virtual university usually centres on the prospect of a further de-personalisation of the student/teacher relationship, the consequent lack of any significant *Bildung* context, and the application of 'automation and modern-day scientific management to higher education' (Skolnik, 2000, p. 60). Skolnik speculates that contemporary familiarity with information technology is a significant factor in its favour, whereas, conversely, student 'concerns about status and standards' might undermine the widespread acceptance of the virtual university (p. 61). The latter observation is backed up by a New Zealand study which found that 'some [teacher training] students still appear to make a tacit assumption that in some way a different form of delivery must mean that the programme will be of lesser quality' (Hall, 1998, p. 12). Some recurring reservations about quality notwithstanding, there is nevertheless evidence of a growing enthusiasm for and acceptance of online teaching at the university level (*ibid.*; Campbell, 1998; McGee & Yates, 2000; Taylor & Biddulph, 2000).

Comparatively recent initiatives set in place by New Zealand university teacher groups, such as the Association of University Staff, have also placed a concerted focus on 'the need for computer aids in the areas of teaching, research and library resources' (Crozier, 1998, p. 9). These initiatives have understandably stopped short of any wholesale endorsement of an extensive use of the Internet for teaching purposes (*ibid.*). Distance education at the university level is well established in New Zealand however, with comparatively recent developments in online communications technology further advancing the extent to which quality educational outcomes can be achieved, especially if adequate training and support

structures are put in place (Campbell, Yates & McGee, 1998; Taylor & Biddulph, 2000). These qualified endorsements are of particular value as they reflect the views of practitioners currently active in online teaching.

A strong practical argument in favour of online teaching is that 'the Internet removes all constraint on time and space – as well as many other legal, financial, physical, and social constraints' (Skolnik, 2000, p. 57). Echoing the sentiments previously expressed regarding both student-centred learning and the role of the teacher, Skolnik surmises that as a result of greater use of electronic courseware, 'there could be a significant shift from transmitter of information toward mentor or facilitator of learning' (p. 60). He speculates that 'a fundamental change in the idea of education' could be imminent (p. 57). The problem of inadequate teacher/student interaction will just have to be solved, Skolnik argues, in the same way that faculty resistance, 'the most difficult [barrier] to overcome' (p. 63), will be dismantled as 'professors [and other faculty]… learn new pedagogical models and ways of interacting with students' (McClure, 1997, cited in Skolnik, 2000, p. 63). Elsewhere, Abeles (2000) reports the comments of 'an academic dean at a major research university [who] said that he could not start to build change in his organization until he got faculty to understand that the institution did not exist for them' (p. 83). Dator (2000) argues that resistance on the part of academia - including the previous mentioned arguments centred around the loss of the liberal mandate, academic freedom, and an overall reduction of standards – is largely futile given the irresistible forces of consumer demand (pp. 70-74).

Consumer demand may mean that the university of the future, with its strong virtual component, will be characterised by a lessening of 'the pressure to publish for promotion and tenure', and more 'strategic liaisons among academic institutions at all levels and more creative arrangements between the Academy and the public and private sector institutions, globally' (Abeles, 2000, p. 89). It will, according to Abeles, also involve a greater separation between teaching and research. Changes in the way that research may be conducted are investigated in the next section.

Part Four: The research imperative and the knowledge society

This section provides a brief exploration of the relationship between the university and the research imperative in the context of the knowledge society. Calls for a greater separation between research and teaching are interrogated against expressions of concern with respect to a possible breaking down of the core critical and explorative functions of the liberal university.

The pivotal role of research in industrialised societies

As stated by Aitkin (1991), with reference to the developed world at least,

> We have come to see problems as inherently capable of solution, and to regard research as the mechanism through which important problems are solved. It is hard to imagine a virtuous world of the future in which research was not an essential activity of human society (p. 239).

Universities have been regarded as key sites of such research. However, with an increasing degree of sophistication and investment now required in order to 'keep up' the logistical and other demands of technology-based research will also correspondingly mean that '[o]nly a few universities will be able to continue research at the highest international level' (MacFarlane, 1999, p. 144). Aitkin (1991) points out that a handful of countries that made an early decision to prioritise the varieties of research and development at which they could excel experienced rapid economic growth as a consequence. He also states that 'in these three countries [Sweden, Japan and Korea] basic research, the kind favoured by academics, was not ranked especially high' (p. 243). Of course, as previously mentioned, and as also pointed out by Smith (1999),

> It is only with the vast expansion in research activity beginning in the last century that the widespread view has developed that an institution cannot be called a university unless it also undertakes significant research (p. 165).

The literature reveals major differences of opinion with regard to the part played by research in modern universities, and the degree to which this research identifier might distinguish universities as 'liberal' in either function or intent. There can be no doubt, however, about the increasingly widespread belief that

> Research plays a vital role in tackling national problems requiring cross-disciplinary solutions…. [and that] the conventional academic valuing of research as the advancement of knowledge within a particular discipline is expanding to acknowledge that basic research is a strategic investment by the community in realising national goals (Sara, 2000, online).

Since the nineteenth century universities have been seen as the key providers of basic research, but have also been under pressure to demonstrate greater affinity with the wider developmental aspirations of industry and of government. Of central concern to most critics of marketisation is the fear that joint ventures will undermine the intellectual independence of universities. It is also thought that the traditional practice of students receiving instruction from academic researchers will become less viable as the needs of industry take precedence over tuition (Blumenstyk, 2001). Coupled with these concerns, however, is the view that universities still have a key role to play during times of social transformation (Robins & Webster, 2002b; Delanty, 2001). Indeed, at the same time that a less autonomous university is becoming more directly involved in economic development, it is also envisaged that it

> may play no less an important role in helping to build new institutions of civil society, in encouraging and facilitating new cultural values, and in training and socialising members of new social elites (Brennan & Bjarnason, 2001, p. 6).

As has been discussed earlier in this chapter, this socialisation function has previously been associated with the liberal university of modernity, with its close working partnership between the teaching and research imperatives. What impact, then, would a more complete separation of these core activities of the university have on the future of the institution?

Liberal education under threat? Uncoupling the twin imperatives

The ongoing tension between teaching (especially at the undergraduate level) and research (by faculty and graduate students) is perhaps the most obvious and pressing problem facing the 'liberal' university today. As Cuban (1999) points out, there is a 'prevailing, often-expressed belief… that each [teaching and research] strengthens the other' (p. 180). This view is widely held by academics throughout the Western world and is mandated in New Zealand through the Education Act of 1990. In a study carried out in Norway in 1992 it was found that 'university faculty believe there is an interaction between research and teaching…. [and that] most faculty recommend combining these tasks' (Smeby, 1998, p. 17). In Great Britain, a 'colloquium' involving academics from various higher educational disciplines generated similar sentiments (Rowland *et al*., 1998; Carrotte, 1999). Widespread faculty resistance to tertiary teaching training for

university academics has been shown to be based on a misunderstanding of the rationale underpinning efforts to improve the standard of university teaching: 'moves to accredit university teaching is seen negatively both to focus on skills and to undermine academic's [sic] roles as researchers' (Jenkins, 1999, p. 282).

In contrast with the usual conservatism of university academics with regard to the relationship between the twin imperatives, Aitkin (1991) provides a provocative departure from the prevailing orthodoxy: 'I will be frank: the notion that all academics are good at research (and should therefore be funded to do it) is bunkum' (1991, p. 244). He further challenges the modern university's most sacred cow by arguing that 'the notion that without a solid and continuing performance in research an academic simply cannot be an effective university teacher at any level is likewise bunkum' (*ibid.*). Also of interest as an aside to Aitkin's comments on the teaching/research dichotomy is the long-term practice in Sweden, although now apparently under review, of 'the relative sharp distinction between research positions and teaching-only staff' (Enders, 2000, p. 23). The partnership between teaching and research has long been considered 'the unifying idea' of the modern university (Delanty, 2002, p. 36). As such, its increasingly vocational function, coupled with a proliferation of fragmented specialisations, has 'meant a decline in the critical function of the university' (*ibid.*, p. 38).

A wider demand for doctoral degrees (and higher qualifications in general) can be traced, Middleton (2001) argues, to 'the statutory requirement that those teaching in degree courses be active researchers' (p. 10). Aitkin (1991) calls into question the pedagogic value of this correlation. He argues that 'it is not obvious that the needs of undergraduate education should be driven by Ph.D. training' (p. 244). In the New Zealand context, it has been claimed that the development of professional (as opposed to research-only) doctorates is part of a neo-liberal project involving the transformation of the theoretical underpinnings of the (now more vocationally-focussed) purpose of academic theory itself (Olssen, 2001, p. 44).

Cuban (1999) argues that the teaching-research partnership is an ideal not easily attained in practice. In spite of the official 'mutual reinforcement' rhetoric

of the University, in his case study examination of history and medicine at Stanford Cuban found that

> newly hired and tenured professors learned to live with the angst-ridden contradiction that flowed from the university-college: They were hired to do research but paid to teach; then they were retained or fired on the basis of publications (1999, p. 182).

As further pointed out by Cuban, this problematic Humboldtian ideal has reigned supreme in American (and many other Western) universities since the nineteenth century (*ibid.*). A question raised by this enquiry, however, concerns the suitability of this model within a knowledge-intensive society where 'efficiency' is thought to be increasingly critical to sustained progress. The taken-for-granted tenets of the twentieth century Western university (e.g., that it is essential that teachers also be active researchers etc.), are coming under increasing pressure not only on philosophical grounds, as witnessed throughout the late twentieth century neo-liberal era, but also on the basis of the technologically driven and essentially pragmatic 'need for speed'. An argument that is likely to be heard increasingly as the twenty-first century unfolds is that a teacher who only teaches, and, most particularly, a researcher who only researches, is more likely to consistently achieve at a high level within that one domain than is one who must divide his or her time between two demanding and oftentimes divergent pastimes. Quite apart from the argument, explored by Cuban (1999), 'that teaching and research are essentially incompatible because each activity demands very different capabilities, dispositions, and skills' (p. 183), some might also argue that there are compelling practical reasons, including many external to the university, that may invoke a twenty-first century separation of the teaching and research imperatives.

Ramsden, Margetson, Martin and Clarke (1995), having conducted an empirical study of academics' attitudes towards university teaching in various Australian settings, conclude that 'there is a notable discrepancy between academics' perceptions of how much teaching *is valued* and how much teaching *should be valued* by the organisations in which they work' (p. 84 [original emphasis]). They go on to observe that 'the academic staff who are in the strongest positions to transform the culture of Australian universities in order to give more weight to teaching in the reward system see the least need to do so' (*ibid.*, p. 85). Ramsden *et al.* (1995) also point out, however, that 'the Australian

university [is seen by all academics] as an institution devoted to teaching', and as such could be expected to eventually embrace such changes as might be found necessary to better reward good teaching (p. 85).

Already in Australia, according to McInnis (2000), and in spite of the expressed preference of the majority of academics to be involved in both research and teaching (in that order of priority), 'the growth in teaching only staff has been considerable' (p. 142). Cuban's (1999) overarching thesis, that the teaching imperative has throughout the modern history of the university been effectively over-ridden or 'trumped' by the research imperative, lays out an eloquent if problematic invitation for a new phase of 'strategic incrementalism' in university reform (p. 206). With teaching restored to its rightful (coequal) place alongside research, Cuban speculates, 'universities could finally step beyond cultivating cherished myths and indulgent rhetoric to realize fully their ideals' (*ibid.*).

Aitkin (1991) largely reinforces the same thematic journey undertaken by Cuban. Both seek to address the problematic nature of the largely generic societal, institutional and professional/collegial circumstances that they argue contribute in a somewhat unhelpful fashion to the shaping of the normative academic career. They also, if at times more by inference, seek to link this exasperating difficulty to the increasingly ambiguous role of the university in contemporary society. Aitkin is more inclined toward allowing a separation, where justified by a clear lack of aptitude on the part of any given academic, between the teaching and research functions. Cuban, on the other hand, is more inclined to manipulate the system to the extent that the teaching role can receive greater attention, and, as a consequence, greater recognition. In Chapter Six I explore the question of whether or not teaching and research need to be further separated if the full benefits of a knowledge society are to be attained.

Reflexive research

The edited collection *Being Reflexive in Critical Educational and Social Research* (1998) pays a great deal of attention to the context and ramifications of the reflexive process as advocated by Weijers (1998). Grace (1998) in particular seeks to encapsulate a working definition of the theory and practice of reflexivity within the contemporary university research environment, and, helpfully, provides

a topical New Zealand case study in support of his argument (pp. 207-210). His descriptive analysis of his own involvement within the developmental stages of the field of critical policy scholarship is used to illustrate how it is that

> reflexivity implies a making visible of the suppressed culture of research activity as opposed to the making visible of only its formal public face…. [this includes] the struggles over project selection and formation, difficulties with access to the field, problems of methodology and analysis [etc.] (1998, p. 204).

His summarising argument that 'reflexivity [therefore] implies a process of critical self-reflection upon the natural history of the research project in its conception, execution and dissemination' is pertinent to the whole notion of a holistic university education. And especially so to the extent that it invokes the Socratic tenet of 'know thyself' and the Enlightenment ethos of intellectual 'independence' (*ibid.*). The university is then, for Grace at least, a site of critical reflexivity, and, consequently, a means by which awareness of one's part in the 'wider scheme of things' might be stimulated. As similarly expressed by Delanty (2001), 'seeing the university as the site of reflexively constituted knowledge allows us to appreciate its role in contemporary society' (p. 155). It is possible, of course, that 'vocational' disciplines such as engineering may attach less importance to these somewhat esoteric values. One of the purposes of the research questions underpinning this enquiry is to detect differences across this so-called 'liberal-vocational' divide. In order to gather data that might be used for this purpose an empirical survey of stakeholder perceptions was conducted. The findings are reported in Chapter Five.

Grace goes on to describe how, in the context of 'New Zealand's radical education reforms in the period 1987-1990', the intellectual freedom of the university-based researcher can be limited by external socio-political factors (pp. 207-210). It is also interesting to note, however, the number of times that an apparent *lack* of reflexivity is associated, by some commentators, with university academics' attitude toward their changing employment circumstances (Esland, 1998; Manicas 2000; Smyth, 1995; Trowler, 1998). Smyth (1995) attaches considerable significance to this phenomenon:

> that we devote so little time to analysing what it is we do, and how others are increasingly coming to shape that work, must be one of the great unexplained educational issues of our times (p. 1).

It could be argued, of course, that the point that Smyth seeks to raise is largely moot, given the reality that all occupations are to a considerable extent 'shaped by others'.

This reality, of course, leads us to the topic of academic freedom. In the next section I examine the changing face of academic freedom in the context of both the neo-liberal assault on institutional and individual autonomy, and the evolving conditions of the knowledge society.

Part Five: Academic freedom and the knowledge society

One of the research questions framing this enquiry seeks to establish the degree of importance attached by stakeholders to 'traditional' identifiers of the liberal university such as academic freedom and institutional autonomy in the context of a knowledge society. This brief examination of the notion and practice of academic freedom is restricted to a consideration of a few key elements of what is, throughout the Western world, a keenly contested aspect of academic endeavour. One recent publication of major importance in the context of the New Zealand university is critiqued. Overseas contributions that can be seen to offer alternative perspectives to that offered by to this standout New Zealand text are then examined.

A definition of academic freedom

The notion of academic freedom can be understood in a number of ways. In its broadest sense the concept might be traced to fourteenth and fifteenth century humanist 'revolt[s] against the cramping narrowness of medievalism and a vague but none the less insistent demand for a larger and fuller individual life' (Boyd & King, 1995, p. 159). As such, the quest for a socio-political and economic environment in which intellectual exploration, discovery and disclosure might be conducted without fear of persecution or censure can be seen to have been a long-term aspiration of academics and scholars. In modern times, the concept has, in a New Zealand context, become legislatively defined and is usually understood in an institutional setting.

The New Zealand Education Act provides statutory protection of academic freedom in this country. While there have been a number of amendments to the

1989 Act the statutory definition of academic freedom has remained constant. It covers three areas of endeavour. First, there is 'the freedom of academic staff and students, within the law, to question and test received wisdom, to put forward new ideas and to state controversial or unpopular opinions' (Statutes of New Zealand, 2003). Second, the legislation guarantees 'the freedom of academic staff and students to engage in research' (*ibid.*). The third area relates to institutional autonomy. Clauses c, d, and e of sub section two of section 161 of the Act are concerned with the 'freedom of the institution and its staff' to determine subject matter, to independently 'teach and assess students', and to 'appoint its own staff' (*ibid.*).

Put simply, the concept of academic freedom as enshrined in the New Zealand legislation incorporates the notion of evidentially substantiated free speech, the right to conduct research without unreasonable compulsion or prohibition, and the independence of the institution to govern, operate and staff itself according to its own criteria.

One purpose of this enquiry is to test the viability of this understanding of academic freedom in the context of the knowledge society. Criticisms of the damaging effects of neo-liberalism upon all three aspects of academic freedom are considered in relation to whether or not these concerns can be seen to also hold true in the context of a knowledge society.

Academic freedom under threat

In the late 1990s the New Zealand Association of University Staff commissioned Canadian academic consultant Dr Donald Savage to investigate 'the state of academic freedom in New Zealand's universities' (Crozier, 2000, p. 13). His findings, along with articles by two academics and an Appeal Court Judge, were subsequently published under the title '*Troubled Times: Academic Freedom in New Zealand'*. The text examines the implications for the 'traditional' notion of academic freedom of the tertiary reform process of the 1980s and 1990s. As such, it predates the TEAC reform process of 1999-2003, but can be seen as an attempt on the part of university interest groups to influence future policy outcomes (cf. Jones *et al.*, 2000).

The collection is written from a perspective that presupposes that the university is or should be a liberal institution, independent of government and commercial control, and fully in control of its own destiny. As is the case in much recent left-liberal academic commentary, the tenets and functional tentacles of neo-liberalism are identified as the direct and ultimate enemy of such an institution. Indeed, the catchy title of the text, *Troubled Times*, evocative as it is of Dickens' enduring anti-utilitarian classic *Hard Times*, provides a concise indicator of the anti-neoliberal perspectives adopted by its contributors. Savage (2000) makes two telling remarks in this regard in the space of a single sentence when, in his introductory comments, he expresses the view that

> The bitter quarrels between the state and the universities of the past dozen years will, I hope, be *replaced by the search for a middle way* which eschews both the ideology of the past decade as well as *nostalgia for a past that will never be recreated and perhaps never really existed in the ideal form sometimes suggested* (pp. 14-15 [emphasis added]).

Troubled Times enunciates what it is that a great many in the university community would consider constitutes academic freedom in a modern industrialised society.

Savage (2000) compares statutory provision with recent interpretation and practice, and investigates the extent to which behaviours associated with neo-conservativism and the marketisation of tertiary education might be seen to have impinged on the academic freedom of individual academics and their host institutions. The scope of his investigation includes the freedom of the informed academic to speak publicly on issues of concern, the impact of market policies on the ability of the university to maintain an independent and authoritative reputation and voice, and the implications of external research partnerships and internal audit and quality control initiatives.

Savage makes a number of recommendations. His primary concern is that the university, through the independent and well-resourced endeavours of its academic staff, should be able to continue to serve society through its traditional strengths. Savage identifies compromises associated with the impact upon the university of neo-liberal free-market imperatives as having an undermining effect on institutional and intellectual autonomy. He sees benefits for both the university and for society in co-operative ventures with business and industry that respect

the autonomy of the university. He argues, nevertheless, that the university must be protected from any encroachment that undermines its ability to (a) conduct a broad range of high quality and intellectually independent research, (b) teach students (in a liberal way) to think critically, and (c) maintain its autonomy as a self-governed and self-administrated institution. Savage provides detailed international and local evidence on a broad range of topics in order to substantiate his argument.

Kelsey (2000) argues that the traditional principles of academic freedom are 'needed now more than ever' (pp. 227-245). Like Savage, she is particularly concerned about the spoiling effects of neo-liberalism on the traditional independence of the university and its academic staff. She criticises managerialism, marketisation, and the general commodification of tertiary education and argues that 'new intellectual challenges require an ability to transcend the partial hegemony of the market established in recent years' (p. 244).

The contributors to *Troubled Times* do not specifically address the notion of the knowledge society. An occasional reference (e.g., Treasury, 1987, p. 178, cited in Kelsey, p. 229) can be seen to associate 'the information age' with neo-liberal policy prerogatives. Indeed, while this collection provides an exhaustive and authoritative examination of academic freedom in a New Zealand context characterised by the dominance of neo-liberal imperatives, it does not specifically attempt to extrapolate such a model of the academically free university into the realm of the technology-intensive and cyber-interactive knowledge society.

A rationale implicit within the research questions guiding this enquiry relates to the possibility that the concept of the knowledge society might have validity in its own right and should therefore be considered separately, even antithetically, to that of neo-liberalism. Keith (2000) observes that 'in my law reform and judicial roles I have looked for, and not found in academic work, the final paragraph, or part, or chapter *which points the way forward*' (p. 257 [emphasis added]). In the context of this enquiry into the roles of the university in a knowledge society it might be observed that *Troubled Times*, as the most thorough and representative text on the topic of academic freedom in New Zealand, does not countenance any form of social economy apart from *either* social democracy *or* neo-liberalism. *Troubled Times* therefore lacks a 'way

forward' chapter. Given the rise of political and business sector interest in the merits of a knowledge society, the notion and practice of academic freedom within a knowledge society *must* be examined. This project seeks to address this gap in the literature.

Another criticism that might be levelled at *Troubled Times* concerns the absence of any real acknowledgement of the long history of compromise associated with the rise of systematically funded research in the industrialised West, particularly with regard to the ubiquitous struggle between government control and intellectual autonomy (cf., Aitkin, 1991, p. 238). According to Aitkin, this compromised reality has its genesis in the establishment of the National Science Foundation in the USA in 1950, and is considered *de rigueur* by many of the national funding and research organisations in operation throughout the Western world today. The freedom of the academic to engage at will with any given social, political or intellectual concern, is considered by others to have long been sublimated within pragmatic concerns for 'professional autonomy and collegial self-governance' (Nixon *et al.*, 1998, p. 278). Irwin (2000) describes how the unique interests and identity of the individual academic can be subsumed within the needs of the institution. A point also alluded to by both Kelsey (2000) and Savage (2000).

Before moving on, it is worth restating, in the context of the freedom of the university academic to engage in research of his or her choosing, that a fundamental characteristic of the modern development of systematic, discipline-based research is that 'its origins and setting lay in industry, not academe' (Aitkin, 1991, p. 236). It remains true, nevertheless, that the utilitarian needs of industry in a free market environment are considered by many commentators to pose a genuine threat to academic freedom and to the research imperative so characteristic of the 'modern' liberal university (e.g., Blumenstyk, 2001).

Academic 'freedom for others'

Nixon *et al.* (1998) put forward the argument that in order for the notion of academic freedom to survive at all, a new conceptualisation (and practice) of 'academic professionalism' is required (p. 278). This proactive restructuring of

the traditional 'ivory tower' (outsider) perception of academia, Nixon further argues, should involve

> A new academic professionalism based upon a more generous and expansive notion of academic freedom as *freedom for others*: the responsibility of academics to ensure that others have the responsibility to speak their own minds, to learn in accordance with their own interests, and to enjoy a secure framework within which to learn (1998, p. 278 [original emphasis]).

As is clearly implied by way of the strong student focus advocated by Nixon, under such a reconfiguration, the consequent re-elevation of the teaching imperative could well become correlated with institution-based academia's twenty-first century longevity. There is also the implication, in the literature, that with the possible breaking down of academic freedom in its traditional institution-only setting, there could well arise, remuneration difficulties notwithstanding, a 'new', 'back-to-the-future' generation of freelance academics whose professional affiliation and locus of operation would be centred somewhere other than the university. In this setting, academic freedom would be once again more closely aligned with the liberal democratic tenets of free association and freedom of speech. Irvine (1988) hints at this possibility.

Summary

The literature indicates that the neo-liberal environment of the late twentieth century has placed the traditional practices of academic freedom under increasing strain. Fewer university academics are speaking publicly on matters of socio-political and intellectual concern (Savage, 2000). The freedom of the individual to initiate and manage research projects of his or her choosing has been diminished (*ibid.*). Institutions are struggling to retain autonomous control of their own affairs in the face of external pressures for the implementation of business models of governance, performance, and quality control (*ibid.*). Some overseas commentators are exploring the implications of these trends in the context of the knowledge society, and are putting forward alternative models for discussion. In the New Zealand context, no attempt has been made to unpack the notion of the knowledge society from the conditions of neo-liberalism. It is therefore not yet possible to consider the relationship between the knowledge society and academic freedom in an adequately informed manner.

As a consequence of this gap in the literature, and the absence of empirical research that provides a specific focus on this relationship, aspects of this project were designed to help fill these gaps. Chapter Three provides an examination of recent tertiary education reform in New Zealand that includes a consideration of the notion and practice of academic freedom in a local context. An empirical survey of university stakeholders that included questions about the relevance of academic freedom is described in Chapter Four. Chapter Five comprises a report of the findings of this survey. The final chapter of this thesis draws these various components together in a critical discussion that attempts to provide an alternative way forward for the contemporary university.

Part Six: Thematic summary of this review

This review of the literature of the university in relation to the notion and praxis of the knowledge society has thrown up a number of vexing issues. Whilst the majority of these issues can be seen to be both complex and interrelated, a brief summary of factors most problematic to a clear determination of the role of the university in the twenty-first century is now provided. The summary concludes with an outline of those topics that will subsequently form the central focus of the discussion section of this thesis.

An absence of analysis of the knowledge society

It is worth remembering that the university is a notoriously conservative institution. Even though its inhabitants might like to periodically shout angrily from the safety of its lofty buttresses (especially when those buttresses are perceived to be eroding somewhat), it can be persuasively argued, perhaps a little unkindly, that 'vested interests are entrenched' (Spies, 2000, p. 26). Some claim that when it comes to putting forward alternative futures for the university 'faculty have focused on maintaining their jobs and not on the larger debate' (Inayatullah & Gidley, 2000, p. 7).

It would appear that those few New Zealand educationists who are active in producing material related to the topic of the knowledge society are vehement in their opposition to the notion. This antagonism can be traced to the tendency on the part of left-liberal academics to auto-associate the terms 'knowledge society'

and ‘knowledge economy’ with a continuation of the all-encompassing neo-liberal hegemonic project of the last two decades. As a consequence of this semantic and ideological ‘bundling’, there is virtually no commentary, research or analysis available *in situ* in New Zealand that attempts to ‘futuristically’ examine the twenty-first century relationship between the university and the ideas associated with the evolving requirements of a knowledge-based social economy. This enormous and disturbing gap in the literature invites the attention of educationists with an imaginative and informed social conscience who are prepared to confront long-cherished institutional and professional values in that spirit of open-mindedness and curiosity traditionally (if oftentimes anecdotally and romantically) associated with ‘liberal’ educational enquiry.

The need for a ‘new’ model of liberal education

Associated with the core issues elaborated in the preceding discussion is the widely held view that the values and practices of liberal education are at risk of being lost beneath a tidal wave of consumerism, instrumentalism, and the virtualisation of educational delivery. As previously indicated, it is clear, therefore, that the undermining of liberal educational values is associated by many, in a cause and effect format, with a parallel rise of neo-liberalism. As a thoughtful consideration of the fuller range of social policy literature would tend to indicate, however, this is by far a much too simplistic interpretation of the challenges facing higher education in an environment of post-modernity (Boston, Martin, Pallot & Walsh, 1996; Cheyne, O’Brien & Belgrave, 1997). While a number of overseas contributors offer up a range of strategies for a so-called ‘liberal renaissance’, the weight of literature would tend to point to the notion of a liberal education, as affectionately and retrospectively appealed to by many educationists under siege today, as being rather less tangible and evident in history than might sometimes be hoped or imagined. What is evident, however, is that the previously unquestioned right of academics to occupy a position of considerable professional autonomy and privilege is coming under the same socio-political ‘review’ as has been the norm for most sectors of society in recent decades. Indeed, in much of the literature, whether by deliberate exposition, or by veiled but not necessarily intentional inference, ‘traditional’ liberality is most

frequently associated with hegemonic projects conducted under the auspices of dominant sectarian interests. It is hardly surprising that in a rapidly changing technological world new power blocs will emerge. The challenges posed to 'traditional' institution-based models of liberal education (including the notion and practice of academic freedom) are both real and immediate.

Some observers advance more sophisticated extrapolations of the related notions of 'reflection' and 'reflexivity' as potential successors to the traditional 'liberal' practice of providing a broad general (and 'cultural') foundation upon which specialist vocational expertise might subsequently be built. In spite of their endorsement by academics of the left as well as the right, others reject the educational efficacy of these notions on the basis that they are thought to offer no more than an insubstantial and largely subjective neo-liberal substitute for something very much more comprehensive and *magnifique*.

Closely associated with the reflexivity 'solution' however, and of considerable relevance in light of the research questions guiding this project, is the possibility that a university-educated capacity for 'day-by-day' socio-vocational reflexivity may hold the promise of a 'liberal' revival for both the university and the educated individual. This 'post-liberal' visage, should it prove viable, would be configured around a more student-centred and 'freedom for others' academic focus. It may involve (a) a greater emphasis on teaching, (b) a shift away from the 'publish or perish' motivator for academic research, (c) more collaborative research involving external partners, and (d) extensive use of technology and cyber-tools to simultaneously bring the world of the university into widely dispersed lecture theatres, homes and workplaces, sometimes on a genuinely global basis.

The weight of evidence considered in this review would tend to indicate that the emergence of a genuine knowledge *society* - as opposed to a shallowly technicist knowledge *economy* - may require more of Newman's 'intellectual education' than has hitherto been the case. Indeed, those conditions considered ideal in this respect would appear to demand a broad-based explorative environment rather than a narrowed utilitarian focus. On balance, an educative environment that nurtures initiative, cherishes innovation, and promotes creativity through a broadly informed curiosity could be said to best encapsulate, in

summary terms, the ideal visage of a thriving and self-perpetuating knowledge society. Implicit within this paradigm shift is an increased use of cyber-technology to enhance, rather than to reduce, meaningful interaction between faculty and students.

Student-centred pedagogy

The overwhelming majority of (non-New Zealand) commentators who choose to examine, with any degree of depth, the relationship, both actual and potential, between the university and the knowledge society present a united voice on one salient topic: the need for the university of the twenty-first century to be characterised by an unequivocal student-centred focus. By this they mean an even more deliberate focus by faculty on the development, within students, of the skills, qualities and attributes considered necessary for success in a knowledge intensive environment. This clarion call is rendered deeply problematic by the associated perception that to place oftentimes naïve and inexperienced undergraduate students at the centre of such a complex and many-faceted educational enterprise is to surrender academic leadership to the unintelligent whims of random consumerism, and, thereby, to effectively depart from the liberal mandate. Further adding to the complexity of the issue is the demonstrable obsolescence of the traditional, if highly esoteric and contested, notion and practice of liberal education at the higher echelons of the education system as a principal means by which desired cultural and other qualities might be inculcated in the citizen-leaders of the future.

A variety of remedial/innovative strategies are put forward, for the most part by North American and Western European academics, with New Zealand commentators choosing to focus their attentions on what they consider to be the damage inflicted upon present-day higher education by the adoption of the imperatives of the neo-liberal free-market. Any further move to student-centeredness is perceived by academics in this country, therefore, as inherently problematic.

Greater autonomy for both the teaching and research imperatives

Associated with both the rise of a more student-centred *raison d'être* and the call for greater economic connectivity is the increasingly pragmatic challenge to the historical partnership between the teaching and research imperatives. The advantages and disadvantages of a continued juggling, by each individual academic, of the tensions between these two key functions is a principal focus of many commentators. This tension is seen to be becoming increasingly untenable as the pressures of economic accountability previously kept external to the university take hold within its walls. Associated with an expanding resort to teacher- and researcher-only positions is the view that this degree of specialisation may pose a further threat to academic freedom. Individual academics employed as specialists on a full- or part-time basis may find it difficult to access the time and resources necessary to develop, test and propagate their own ideas.

An alternative model of academic freedom that concentrates its focus on the facilitative creation of knowledge by 'others' is put forward. The importance of a more collaborative style of pedagogy, which also has the potential to more directly advance the critical and evaluative skills of students, is foremost in a number of commentators' thinking. In consequence, the need to raise both the standard and prestige of university teaching is considered to be in direct correlation with an increasingly student-centred *raison d'être*.

The threat to culture

Of considerable concern to liberal traditionalists, who attach great importance to the university as the leading institution of socialisation through the 'educated' perpetuation of desired cultural values, is the threat to culture posed by heterogenisation. As already stated, the relative complexity and economic urgency of the knowledge-based society may well continue to throw up new power cliques that have little respect for the traditions of the university. This being the case, the relative homogeneity of the former *uni*versity is under threat from the heterogeneity of the new *multi*- and *poly*versities. Since national culture can decreasingly be considered a singular entity, especially in the Western world, and as a 'general' education as a monolithic programme of enculturation is already stretched beyond viability, the 'cultural' role of the university, personified

through its (alleged) unity of purpose and adherence to an overall society-building rationale, is rapidly becoming a thing of the past. Many commentators, irrespective of whether or not they support the trend, point out that in the absence of adequately funded alternatives consumerist logic could well dominate the mission statements of the multiversities of the future.

Topics central to the remainder of this enquiry

Given the findings of this literature review, the following salient aspects of the relationship between the 'liberal' university and the knowledge society form the central focus of the remainder of this enquiry:

1) The viability of a proactive development - as opposed to any further diminution - throughout the university sector, of an ethos of broad-based explorative education that feeds the interactive and discriminatory cognitive requirements of the knowledge-based society through the nurture of curiosity, innovation, and creativity;
2) The possibility that greater autonomy - including varying degrees of separation - for both the teaching and research imperatives might be required if a viable knowledge-based social economy is to be built; and
3) The related implications of the trend towards a more overt student centred *raison d'être* for the university of the early twenty-first century.

When considered in relation to the recent tertiary reform process outlined in Chapter Three, and the findings of the stakeholder surveys reported in Chapter Five, a critical examination of these standout topics provides the thematic framework for the remainder of this enquiry.

Strengths and weaknesses of this project

A key strength of this project is its examination of pressing contemporary issues that have up until now remained largely unexplored in a New Zealand context. The use of both textual analysis and empirical data-gathering methods to interrogate assumptions underpinning the contested functions of the contemporary university has added to the relevance and usefulness of this enquiry. The project seeks to interrogate the notion of the knowledge society in a non-ideological, open-minded manner. It therefore resists the temptation to simply write-off the

'knowledge society' as a trendy euphemism for a continuing neo-conservative reallocation of public resources.

The extensive scope of this enquiry has meant that a broad range of academic and political literature has been examined. On reflection, the research questions guiding this enquiry have been found to be too broad. It would have been more efficient to restrict the scope of this enquiry to a focused examination of one aspect of the 'liberal' university in the context of the knowledge society. In that way the subsidiary questions pertaining to research, academic freedom, and the other identifiers of the liberal university could have been addressed only when they arose contextually. As it is, these secondary aspects have not been investigated with the same intensity as has been accorded the primary focus.

Gaps to be addressed by this enquiry

This review has found significant gaps in the literature of the New Zealand university. There is an almost total absence of analysis of the relationship between the university and the knowledge society outside a pejorative association with the tenets of neo-liberalism. Similarly, this pre-emptive ideological 'bundling' of the knowledge society with neo-liberal imperatives has resulted in a marked reluctance on the part of researchers to investigate the future of the New Zealand university beyond the ideational confines of a self-imposed liberal-modernist paradigm. This project seeks to explore the possibility that the best aspects of a liberal university education might not be as incompatible with the notion and practice of a knowledge society as might appear to be the case when the latter is considered inseparable from a neo-conservative policy agenda.

Contribution of this project

In seeking to address these gaps in the literature this project makes a timely contribution to current debates about the role of the university in contemporary New Zealand society. The aim is to draw attention to the possibility that there may indeed be an alternative 'way ahead' for the New Zealand university, but that it is one that requires a more thorough rethinking of both neo-conservative and left-liberal policy assumptions. It is hoped that this study might in some way

contribute to future discussions of the notions of liberal university education and the knowledge society being of a less ideological nature.

As the views of employers and students were not well represented in the material reviewed in this chapter, a survey of these university 'consumers' was conducted. The findings of this empirical study are reported in Chapter Five. The next chapter establishes the context of this survey by examining recent attempts on the part of policy makers to reconcile calls for higher education to more directly contribute to economic development with the aspirations of an increasingly diverse and demanding citizenry.

Chapter Three: Recent Tertiary Reform in New Zealand

Introduction

The previous chapter reviewed the literature of the 'liberal' university in relation to the concept of the knowledge society. It was found that there was virtually no New Zealand material with a sustained focus on this topic. The purpose of this chapter is to locate the wider discussion of the university in relation to the development of a knowledge society in a specifically New Zealand context.

Policy makers in this country have recently considered the notion of the knowledge society in terms of the role that the tertiary education sector as a whole might play in its development. This chapter comprises an exploration of those aspects of the purpose, work and immediate legislative aftermath of the New Zealand Tertiary Education Advisory Commission (TEAC) that can be seen to relate directly to the roles of the university in the development of a knowledge society. A brief overview of socio-political circumstances leading up to the formation of TEAC in 1999/2000 by the incoming Labour-led Government is presented. Consideration is then given to the way that traditional identifiers of the liberal university such as the partnership between teaching and research and the protection of academic freedom are related by policy makers to the building of a knowledge society. The chapter concludes with an evaluative summary and an introduction to the empirical phase of the project.

Economic reforms of the 1980s and 1990s

Sweeping neo-liberal reforms initiated by finance minister Roger Douglas followed the Labour Party's success at the 1984 general election. The National Party continued these reforms when it returned to office in late 1990. The fourth Labour Government of 1984-1990 had inherited an economy teetering on the brink of disaster. This was a legacy of both the authoritarian and interventionist approach of National Party administrations led by prime minister Robert Muldoon, who also held the finance portfolio, and of rapidly evolving international circumstances that had seen a swing towards economic liberalism since the global oil crisis of the 1970s.

Douglas's enthusiasm for liberalising the economy was supported by lobbyists within the business community (Peters, 1997). A restructuring of the public sector was soon begun (Scott, 2001). Initial public reaction was cautiously supportive, but while there was widespread agreement that decisive change was necessary, over time there was also concern that the reform process was proceeding at a breakneck pace. It was perceived that government cared little for democratic consultation or for the wider social consequences of its actions (Kelsey, 1997; NZCTU, 1994; Vowles, 1993). This public disquiet ultimately led, in 1990, to a change of government. It did not, however, significantly slow the pace of economic reform.

The National Governments of 1990 to 1999 continued the neo-liberal programme of free marketisation, liberalisation, and privatisation. Opposition to the neo-liberal programme soon became more widespread and vociferous. Those university academics who chose to voice their concerns did so through their teaching, publications, and involvement in various public sector organisations such as the tertiary teacher unions. The wider trade union movement, significantly reduced in political power and social influence by the introduction of the Employment Contracts Act in 1991, began to re-emerge as a more streamlined and centrist political force. Over time, sympathetic interest in issues of social equality and justice again began to re-assert itself.

By 1999 a mood of dissatisfaction with the performance of government, and especially the National-New Zealand First coalition of 1996-1999, paved the way for the election of a government which had campaigned on the promise of a much moderated or 'Third Way' model of socio-economic management. An assortment of 'no-surprises' middle-ground social and economic policy prerogatives was put forward in an effort to assuage the most damaging effects of the economic rationalism of the 1980s and 1990s. Reconciliatory initiatives promptly actioned by the incoming centre-left administration included an investigation into the role, performance and management of the tertiary education sector. The context of this investigation was defined by both dissatisfaction with what was seen by many university academics as the 'anti-liberal' effects of marketisation (Butterworth, & Tarling, 1994; Crozier, 2000; Kelsey, 2000), and by calls from the business sector for further market-based adjustments and greater

'utility' within the tertiary education sector in general (NZBR, 1997; NZEF, 2000). As the roles of the university in relation to desired socio-economic development constitutes the central focus of this enquiry, a closer examination of the impact upon tertiary education of neo-liberal reform is now provided.

Impact of neo-liberalism on the tertiary education sector

Like all facets of New Zealand public life, the tertiary education sector had been significantly affected by the reform activities of the 1980s and 1990s. Predicated on the belief that education was to a large extent a private good, changes within the tertiary sector during this period reflected the neo-liberal preference for a user-pays, business model of operation (Stephens, 1997). Government-sourced policy papers and reports produced in the late 1980s and throughout the 1990s showed a marked preference for an increasingly commodified tertiary education sector. As described by Olssen (2002),

> The Hawke Report [of 1988] had recommended that universities be more commercial and generate funds; that universities, not government, should set student fee levels; that research and teaching should be separated; that councils should be smaller; that councils should appoint the CEOs who should be appointed on fixed-term contracts; that accountability should be of a contractual form; and that there should be more extensive use of charters, audit procedures, and performance appraisals to regulate universities and to tighten controls…. [and] that the proportion of private funding should be higher (pp. 26-27).

Changes actually implemented within the tertiary sector during this period were not as dramatic or as draconian as many had either hoped or feared, but were nevertheless substantial. The University Grants Committee (UGC) was replaced with a system of bulk funding administered by a revamped Ministry of Education. Funding was directly linked to student enrolment and involved more stringent financial controls. This increased level of central government influence on 'devolved' Tertiary Education Institutions (TEI) was then, and continues now, to be seen by many commentators as a direct attack upon the 'liberal' foundation and function of the independent university. Proponents of reform appeared to have little regard for the 'traditional' roles and characteristics of the university. The threat to academic freedom and institutional autonomy was consequently perceived to be both real and immediate (Crozier, 2000). The ethos of the independent academic quietly pursuing knowledge for its own sake came under increasing challenge as the related notions of 'excellence', 'efficiency' and

'accountability' gained currency in an economistic and productivist rather than an intellectual or professional light.

Fiscal pressures brought to bear on the universities as a result of the government's reluctance to increase funding in proportion with increased enrolments meant that direct charges to students grew to 25% of the full cost of tuition (Stephens, 1997). During its second term the fourth Labour Government had considered extending the user pays philosophy through the introduction of a student loan scheme. This idea met with early resistance but was eventually implemented by the new National Government in 1992. Participation in tertiary education has increased dramatically since the introduction of the Student Loans Scheme (Peters, 1997). However, a discriminatory impact upon female, Māori and Pacific, and students from lower socio-economic backgrounds, along with a dissuading influence on further educational choices made by secondary school leavers, have been noted in a number of studies and evaluations (Boston, 1992; Butterworth & Tarling, 1994; NZUSA & APSU, 1996; Patterson, 1991; Parr, 1995; Peters, Peters, & Freeman-Moir, 1992; Stephens, 1997; Tobias, 1991).

In terms of the consequences of this resort to user charges in relation to the research questions underpinning this enquiry, there is some evidence to suggest that student choice has been increasingly guided by instrumental rather than 'learning-for-its-own-sake' justifications (Marshall, 1997). As outlined by Alcorn (1995) and Alcorn, McGee and Bishop (2001) in the context of teacher training, a particularly unsatisfactory consequence of the neo-liberal assault on the ethos of tertiary education in New Zealand has been the increased incidence of 'technicist' justifications and measurements of tertiary learning. The need for a greater number of technically skilled graduates notwithstanding (ITAG, 1999), academics have continued to raise concerns about the extent to which the reduction of tertiary education to the mere teaching of instrumental skills will result in the production of graduates unable to 'critique social and systemic… issues [let alone] their own… practice' (Alcorn *et al.*, 2001, p. 17).

The move to student-centred funding, coupled with changes to the legislation regulating the tertiary sector, consequently resulted in a rush on the part of other TEIs, polytechnics in particular, to seek degree-granting status. The neo-liberal tenet of competition encouraged TEIs to duplicate services in an effort

to lure students away from other institutions. In theory, areas of university endeavour that could not pay their own way would be assimilated into other more economically viable departments or closed down altogether. It was claimed that the 'survival of the fittest' logic of the free market would bring about a desirable reduction in 'inefficient' providers, and a consequent emergence of 'efficient', high quality institutions (Douglas, 1993; Peters, 1997). Most affected were branches of the humanities that were (a) perceived by some to be too far removed from the cut and thrust of economic and other valued areas of development, and (b) those disciplines which by nature of their relative obscurity tended as a matter of course to attract insufficient enrolments to cover their own costs of operation. Student choice, as always, was influenced by perceptions of social prestige and employment opportunities. At the same time moves to ensure wider access for New Zealanders to an increasingly instrumental tertiary education resulted in exponential growth in the number of students enrolling in tertiary institutions. Balancing this whole sector growth, however, have been recent indications that more students are opting out of university education in order to undertake shorter, less expensive courses that involve less 'time out of the workforce' (Rosenberg cited in Xtramsn news, 2003).

As a consequence of these neo-liberal strategies student/staff ratios, staff dissatisfaction, and tensions between universities, students, staff and government have intensified (Butterworth & Tarling, 1994; Roberts, 1997). The legacy of resentment created by the neo-liberal reform environment, which had included attempts on the part of policy makers and administrators to address shortages within the fields of science and technology by prioritising funding and recruitment within those areas at the perceived expense of less utilitarian disciplines within the humanities, has meant that discussion about the role and structure of the tertiary education sector has become increasingly problematic.

Furthermore, these unpopular initiatives have also come to be associated, in many observers' minds, with a parallel rise of the enigmatic notion of the knowledge society. The National Coalition Government of 1996-1999 was active in assessing the extent to which the future economic viability of New Zealand could be linked to the development of an effective knowledge economy. Advice they had received centred on the need to substantially increase IT education

throughout the New Zealand education system, especially at the tertiary level, and to foster more productive free market partnerships between business and education (ITAG, 1999). The implications for the university sector, and in particular, with regard to the likely impact of the new 'knowledge' imperatives on the traditional autonomy of the liberal university, thus loomed large in the minds of many academics already demoralised by a decade and a half of neo-liberal intrusion. It was in the midst of this contentious policy environment that the Labour Party developed its Election 2000 education manifesto, and formed the genesis of the 1999-2003 TEAC policy process.

The remainder of this chapter deals, in sequence, with (a) the relationship between TEAC and the notion of the knowledge society; (b) a brief summary of the actual TEAC process; and (c) a description of those key findings, recommendations and policy/legislative outcomes that can thus far be seen to directly relate to the core questions underpinning this enquiry.

TEAC, Labour, and the notion of the knowledge society

The notion of the knowledge society was at the very heart of TEAC's *raison d'être*. Even a casual examination of the Commission's terms of reference and initial report leave the reader with little doubt as to the future envisioned for New Zealanders by policy makers aligned with the present Labour-led government. The key assumption underpinning the TEAC policy process was that 'as knowledge becomes central to creating wealth and improving the quality of life, the ability to acquire, develop and use knowledge effectively becomes essential for individuals and societies' (TEAC, 2000, pp. 8-9). Acceptance of this premise lies at the heart of making sense of the Clark administration's enthusiasm for upskilling New Zealand's citizenry.

As early as November 1998, a full year before taking over the treasury benches, Labour declared a broad determination to invest in 'quality, accessible life long education…. which will provide New Zealanders with the skills and knowledge they need to take charge of their own lives and to contribute to the economy, their families and the wider community' (Maharey, 1998, p. 2). Aided by its rejection of the neo-liberal tenet of 'the commercialisation of education [on the grounds that] it will destroy the ability of our institutions to equip all New

Zealanders for the next century' (*ibid.*), a rejuvenated Labour Party released a series of detailed policy documents (i.e., *Industry Training*, 2000; *Nation Building*, September 1999; and *Tertiary Education and the Knowledge Society*, 2000). Indeed, having learned from the excesses of the late 1980s, the New Zealand Labour Party had re-branded itself, in the late 1990s, as a genuine centrist party. In seizing the middle ground from a deeply shaken and divided National Party, the Helen Clark-led Labour Party set out to offer New Zealanders the opportunity to build on the best aspects of a free market economy, whilst reinstating, albeit in a much more 'market-friendly' form, critical social democratic values that had been consigned to the margins of public policy deliberation at the height of the neo-liberal period.

Of ongoing concern to many observers at this point was the disharmonious state of the tertiary education sector. In order to achieve its aspirations on a wider socio-economic front, the incoming government needed to not only placate the many critics of neo-liberalism, a good number of the most vocal of whom were resident within the universities, but to also forge workable policies that could be seen to address the wider constellation of social, economic and political problems confronting a small nation struggling to establish itself in an increasingly ruthless global economy.

Labour followed up on its election pledge by drawing up terms of reference and appointing 'eight [soon to be nine] strategic thinkers selected for their vision, expertise and credibility' (New Zealand Tertiary Education Advisory Commission, 2000, p. 34). Care was taken to ensure that each segment of the tertiary sector was represented. A large number of Private Training Establishments (PTEs), themselves a product of the deregulated neo-liberal reform period of the 1990s, were by now in existence, and were keenly aware of the potential threat posed to their ongoing viability by a centre left government intent on revisiting the legislative boundaries of the tertiary education sector. The expansionist-minded polytechnics also had much at stake, as did the largest and most budget-sapping group of institutions within the sector, the universities.

All too aware of divisions within the wider community, TEAC, from the outset, prescribed for itself the broadest possible definitions of those key areas it was about to investigate. In the Commission's initial report, *Shaping a Shared*

Vision, the notion of the knowledge society was defined in inclusive terms that specifically addressed key concerns already expressed by critics of the concept:

> In some debates concerning the concept of the knowledge society or economy the focus has been on the importance of information and communications technology, the sciences and engineering. However, the Commission's view is that all forms of knowledge, including culture and identity, the arts and design, have a vital role to play in the development of a knowledge society. This might be particularly so for small nations without large industrial or technological economies, such as New Zealand (2000, p. 8).

Furthermore, the extent to which the notion of the knowledge society had the potential to further divide and antagonise by virtue of its narrow association with either purely utilitarian business applications, narrow information technology projects, or hegemonic interventions aimed at diminishing the importance and resourcing of the humanities, was also anticipated:

> The concept of a knowledge society has been characterised by many as a shift from an industrial society with a focus on the physical content of goods and services to a society which emphasises the knowledge content of goods and services. It is also a society which emphasises the importance of critical reflection and debate about knowledge and its use. Knowledge is vitally important both socially and economically. Unlike other economic inputs it is not a limited resource and can be used to generate new knowledge. This highlights the centrality of research and learning, which enable the creation and the critical application of knowledge, including the development of solutions to business, social and environmental problems…. This broader view of the role of knowledge in society means that no easy distinctions can be drawn between the value of domains of knowledge. Rather, it suggests that all fields of learning and knowledge, whether they be in the arts and the humanities or the natural and physical sciences, are of value and can contribute to individual well-being and social progress (*ibid.*).

Other core values considered central to the ongoing work of the Commission included: (a) a broad definition of the scope of tertiary education (p. 10); (b) a recognition that 'the needs of learners should be recognised as central to the design of the tertiary education system' (*ibid.*); (c) an embracing of key multiple functions of the tertiary education system including the development of individual potential, the creation and dissemination of knowledge both for its own and utility's sake, and the nurturing and promotion of issues of social justice (pp. 10-11); and (d), the promotion of effective modes of lifelong learning within a rapidly changing knowledge society. This latter aspiration, TEAC concluded,

'may require new ways of organising, delivering and recognising tertiary education and learning' (p. 12).

Such, in summary terms, was the over-arching relationship between Labour, TEAC, and the notion of the knowledge society. Through an acknowledgement that the extremes of either left or right were no longer likely to be tolerated for long, especially in a small island democracy where cooperation and goodwill between sectors is of critical economic importance, the adoption of a tenable middle position had become the essence of *realpolitik*. In this context therefore, life long learning that is fundamentally critical, reflexive, and able to be applied in a rapid and efficient manner to a broad range of social and vocational wealth creating opportunities, was widely perceived to be the lifeblood of New Zealand's future prosperity. In embracing the Third Way notion of a compassionate free market, the Clark administration had seemingly found a way to work constructively with business whilst simultaneously promoting the interests of its traditional lower socio-economic and left-liberal support bases. The concept and practice of the knowledge society, therefore, with its focus on broadness, inclusiveness, and the blending of antithetical interests into a common if compromised good, while still haunted by inherent tensions and contradictions, could in this context be seen to be entirely consistent with the pursuit of core social democratic aspirations.

The TEAC policy process: A brief overview

As intimated in the previous section, the more narrow utilitarian interpretation of the concept of the knowledge *economy*, as exemplified in the National Government's Minister for Information Technology's IT Advisory Group (ITAG) 1999 submission, was superseded in the TEAC terms of reference by a broadened definition of the knowledge *society*, which took greater account of social as well as economic aspirations. Once these terms of reference had been devised and distributed, the public work of the Commission and its secretariat began in earnest.

Public consultation

Soon after its formation in April 2000, TEAC, through its first Chair, Dr Norman Kingsbury, invited 'organisations and individuals with an interest in the tertiary education sector to provide it with a written submission which addresses the issues set out in the Commission's Terms of Reference, as well as any other issues of particular concern' (TEAC, May 2000). During June 2000 the Commission received a total of 86 submissions. As was the case with submissions subsequently received with regard to three further reports published between February and November 2001, the Commission's secretariat compiled an analysis of responses. Submissions were grouped according to theme, and general trends noted.

The Commission's first report, *Shaping a Shared Vision*, was produced in July 2000. It comprised a conceptual overview of the government's vision for the tertiary sector, and was notable for its unambiguous endorsement of the view that there was a clear causal relationship between the proactive adoption of the principles of the knowledge society, processes of higher education, and economic development. The Minister's response to the first report was to affirm that 'the Government accepted the overarching conclusion that it needed to engage as an active partner with institutions to give *clear strategic leadership*' (Maharey, 7 November 2001 [emphasis added]). From the outset, then, it was clear that the government was serious about replacing the free market model with a more interventionist steering mechanism.

Between July and December 2000, interested parties were invited to make submissions with regard to the 'shape' of the tertiary system. While the timetable and format of public meetings allowed for little meaningful interaction, a series of 'roadshows', or public consultation meetings, was also held at ten regional locations between 9-31 March 2001. Six of these public consultation meetings were attended by the Associate Minister of Education (Tertiary) Steve Maharey, with various members of TEAC also present to field questions and respond to submissions from the floor as and when required.

Similar procedures were followed for the final two reports produced by TEAC. *Shaping the Strategy* was released on 31 July 2001, and *Shaping the*

Funding Framework was first made available for public scrutiny on 7 November 2001.

The recommendations of TEAC

A significant proportion of the material published by TEAC in its four reports was focused on areas other than the university. TEAC employed the terms 'top' and 'bottom' to describe the postgraduate and undergraduate (especially bridging/remedial and vocational/industrial) 'ends' of the tertiary sector respectively. While the universities have the largest number of students of any sector within the wider tertiary spectrum, most recommendations put forward by TEAC relate to the non-university sectors. These 'bottom end' recommendations relating to the desire to facilitate even greater access to tertiary education are outside the scope of this investigation and are not discussed further. The conclusions and recommendations put forward by TEAC that have particular relevance to the top end of the tertiary education sector, however, and can therefore be seen to directly inform this enquiry into the role of the university in relation to the development of a knowledge society, may be summarised as follows.

Report One: Shaping a Shared Vision

First, in keeping with the moderate left-liberal assumptions underpinning the political framing of the TEAC policy process described earlier, the Commission, in its initial report, came out in strong support, in broad theoretical terms at least, of the continued nurture of an essentially 'liberal' university sector. This is best exemplified by the Commission's endorsement of existing understandings of the notion and practice of academic freedom, the critic and conscience role of the university, and the key part played by autonomous tertiary institutions in both creating and being a repository of valued socio-cultural and economic knowledge. Subsequent reports produced by the Commission which advocated stronger strategic intervention on the part of central government, and the separation of funding for tuition and research in universities, could be argued, however, to have the intrinsic potential to substantially undermine these traditional 'liberal' values. The importance of the development of the individual was nevertheless stressed, as was the enjoyment of learning for its own sake and the role played by tertiary

education in the facilitation of democratic freedom and the pursuit of social justice.

Adjustments to the way in which tertiary institutions were to relate to each other, as well as to Government and to a broad range of stakeholders, were clearly signalled in this initial report. Of particular interest was the categorical if inherently problematic and contestable assertion, often restated throughout the TEAC policy process, that 'the needs of learners should be recognised as central to the design of the tertiary education system' (TEAC, 2000, p. 4). As noted in an early submission from the University of Auckland (2000), stakeholder groups hoped that the barriers to participation perpetuated by prohibitive entry and after-study costs would be addressed by those responsible for the framing of tertiary education policy so that escalating inequities could be satisfactorily addressed.

But, overall, and as enunciated by the University of Canterbury in its initial response to TEAC's terms of reference,

> It would be almost impossible to quarrel with the overall direction of the Vision statement, which says in effect 'we want a good tertiary education sector'. Characteristics such as commitment to excellence, commitment to the nation's future, wide participation, a sense of partnership with interested parties, and recognition of the Treaty of Waitangi are hardly a matter for debate. The only point here which might provoke discussion is the endorsement of cooperation and collaboration in contrast to competition, a point with which the University agrees. Let us stipulate, then, that the points given in the Vision statement are self-evidently desirable (Burrows, 2000, p.1).

Report Two: Shaping the System

In its second report, *Shaping the System*, TEAC elaborated its key recommendation that an intermediary body (the Tertiary Education Commission, or TEC) be set up to administer the entire tertiary education system. A 'system of functional classifications of tertiary education activities' designed to 'enable greater differentiation, specialisation, and clarity of roles for providers' through 'strengthened charters [which] would enable the recognition of the particular distinctive character and responsibilities of individual providers' was outlined (TEAC, February 2001b, p. 5). The Government's overall desire to reduce competition between institutions and to bring about greater efficiency through a clearer role focus and discipline specialisation on the part of providers was signalled through the promotion of institutional profiles designed to 'enable the

steering of funding in a manner that reflects both national and local priorities and demands' (*ibid.*). In an effort to raise the overall standard of research 'centres and networks of research excellence' were proposed. Ideally, these would have strong links with the international research community, and would be set up so as to 'promote and sustain world-class research capacity and capability…. [and to] be instrumental in disseminating new knowledge to the community and training the research workforce of the future' (TEAC, February 2001b, p. 15).

At first glance it could be assumed that a differentiated yet cooperative and collaborative tertiary sector would significantly protect universities from further encroachment by other tertiary providers upon the university's traditional 'market share', especially at the undergraduate level. An examination of further detail as subsequently laid out in the Commission's fourth report, *Shaping the Funding Framework*, however, quickly clarifies this misapprehension. Indeed, proposals to separate both tuition and research, and undergraduate and graduate education, are considered shortly.

A number of respondents to the second report (e.g., CPIT, 2001; Dobbs, 2001; VUWAA, 2001) expressed concern about the potential for the proposed body to provide such tightly defined administrative oversight of the newly streamlined tertiary sector (TEC) to become 'overly centralised and bureaucratic' (TEAC, 2001, p. 2). An anxiety underpinning this concern was the fear that such control 'would have severe implications for institutional autonomy and responsiveness' (*ibid.*). An associated proposal put forward in the second report that was also roundly criticised by stakeholders was that of the adoption of 'functional classifications'. It was thought that the process of clarifying the functional behaviours of institutions would ultimately result in less duplication across the entire sector, and a more efficient means by which government might discriminate, in a funding sense, between providers. Providers saw functional classifications as much too limiting. It was feared that this sort of embedded restriction would negatively impact on the ability of TEIs to respond to rapidly changing stakeholder needs. There was, however, within the Commission's first two reports, an implicit acknowledgement that free market competition within the small New Zealand tertiary sector had been counter-productive in relation to such

a small nation's wider socio-economic aspirations. This implication was to be rendered significantly more explicit in the Commission's third report.

Report Three: Shaping the Strategy

As its title implied, *Shaping the Strategy* was a wide-ranging strategic document that sought to connect the Government's long-term socio-economic vision to the capacity building role of the tertiary education sector. As outlined by the Minister in his introductory comments, 'the focus of the tertiary education system will now be to produce the skills, knowledge and innovation that New Zealand needs to transform our economy, promote social and cultural development, and meet the rapidly changing requirements of national and international labour markets' (Maharey, July 2001, p. 1). There were a number of issues of particular relevance to the role of the university in a knowledge society in this report.

First, there was the overt linking of the role of teaching and research with national economic goals. While the report now made clear 'the need to respect institutional autonomy [and to] protect academic freedom' (TEAC, July 2001, p. 11), there was an unambiguous ambition to recognise and reward activities that most closely reflected and enhanced the aspirations of central government. Terms such as 'desirability test', 'sufficient net benefit', and 'discretionary funding' were rearticulated in the context of the development of strategies that might best lend themselves to the achievement of goals external to the day-to-day workings of the TEIs themselves.

Second, there was the promotion of models of research funding and assessment that could be said to cut sharply into some traditional understandings of the role and practice of basic research at the university level. Recommendations seven and eight of the third report centred on the establishment of accountability structures external to the university. Amongst other things, these 'mechanisms' were put forward as a means to (a) 'demonstrate' the adequacy of research training; (b) ensure that 'a critical mass of researchers [are deployed] in areas of priority'; (c) provide 'greater rewards for and tighter assessment of research performance'; (d) introduce 'greater accountability for the use of research funding'; and (e) provide 'discretionary funding to support new developments and innovations' (TEAC, July 2001, p. 9). The belief that the production of 'excellent'

research (i.e., that which more closely correlated with and significantly contributed to macro economic goals) was closely linked with the development of an effective knowledge society was evident throughout the TEAC policy process, and was consequently given a high profile in this strategic document.

In addition to a further elaboration of the social equity concerns that were evident in all four reports published by the Commission, a third feature of *Shaping the Strategy* with implications for the university sector was also outlined. The third report made clear the specific desire on the part of government to link attributes and behaviours such as 'creativity, critical thinking, competence with technology, and multidisciplinary or transdisciplinary thinking, learning and research' with the overarching desire to 'develop the competencies and attributes and the environment for a distinctive knowledge society' (TEAC, July 2001, p. 6). It can be seen that the creation of a knowledge *society*, as opposed to a merely technicist knowledge *economy*, was the real goal that TEAC had in mind. This distinction is crucial *vis-à-vis* the 'liberal' focus of this enquiry.

As was suspected by a number of stakeholders when submitting their qualified responses to *Shaping the System*, however, the full picture of the reshaped tertiary education environment, as visualised by TEAC, would not come into full public focus until the fourth report outlining the proposed funding framework was released.

Report Four: Shaping the Funding Framework

In the context of the traditional operation of the New Zealand university sector *Shaping the Funding Framework* was a radical document. First of all, there was the already mentioned conclusion that 'the quality of research in universities will be enhanced by the separation of much of the funding of tuition and research' (TEAC, November 2001a, p. 20). While the literature review chapter of this thesis alludes to a number of arguments that support this position, it is, nevertheless, in the context of the New Zealand university environment, a radical departure from what is considered, from within the sector, a desirable norm. The University of Canterbury, for example, in its response to the Commission's terms of reference,

> urges TEAC to reinforce the Education Act requirement that those who are engaged in degree-level teaching should be actively involved in research. Research which creates new knowledge is distinct from scholarship and private

> study to keep up to date. Degree-based teaching outside the universities may be based on the assumption that scholarship and private study count as research for the purposes of the requirement. The University understands the requirement to refer to knowledge-creating research. Experience in the United Kingdom and Australia has shown that converting polytechnics, TAFEs and so on into universities does not necessarily produce a solid research culture in such institutions (Burrows, 2000, p. 6).

Other universities expressed similar concerns. The University of Waikato in essence argued for a continuation of the present integrated system of teaching and research. Included in Waikato's submission, however, was the proviso that existing funding provisions be augmented through the 'creation of national facilities to which all credible researchers and groups could have access', and the extension and better resourcing of the contestable research funds (2000, p. 6). It put forward these arguments on the grounds that wide-ranging intra-, inter-, and extra-institutional benefits could accrue from a research environment that maintained close contact with student development through teaching, mentoring and training (University of Waikato, 2000). Similarly, Victoria University chose to advance what seemed a reasoned précis of the pre-Hawke (non-competitive) integrated view:

> As high quality teaching programmes depend directly upon high quality research programmes and their output, it is essential for the Universities in New Zealand to agree on their areas of strength, particularly in regard to individual disciplines, professional schools and strategic collaborations with public and private sector organisations. Similarly they need to ensure the continuation and development of teaching programmes which provide not only a general undergraduate education in the areas of humanities and social sciences, science and technology, commerce and law, but also for specialist postgraduate education in areas of excellence (Victoria University of Wellington, 2000).

Subsequent recommendations put forward at the conclusion of Victoria University's submission however, especially one specifying 'that rationalisation of teaching and research between universities be explored to ensure that the education delivered to New Zealanders is of an internationally respectable quality', would appear to leave the door open, however unintentionally, for a greater demarcation between tuition and research (*ibid.*). Victoria's intention was, no doubt, that if savings needed to be made then subject duplication between

universities should be discouraged in order to better concentrate resources and so maintain standards.

By and large, the universities, in their initial submissions, expressed an overarching desire to maintain their research capacity. They suggested modifications to the EFTS system that would enable research capability to be less dependant on student enrolments, and expressed a willingness to work within any new regime that ring fenced that core function.

TEAC chose to advocate separate provision of teaching and research, including the far-reaching recommendation that the twin imperatives be uncoupled in the relevant governing legislation. It also advanced the view that, where practicable, the way be made clear for undergraduate and graduate study to be undertaken at entirely separate institutions. The possibility that some polytechnics might be credentialed to provide teaching-only undergraduate degrees, whilst some universities be divested of their undergraduate responsibilities in order to concentrate entirely on graduate and post-graduate programmes is a scenario, as discussed in a submission tendered by the University of Waikato (2000), that raises as many dilemmas as it appears to resolve. However, the likelihood that this type of dichotomous approach would seriously undermine the viability of most institutions was not further addressed by TEAC.

Another feature of *Shaping the Funding Framework* that could be said to involve a dramatic departure from current practice is that of 'the [recommended] introduction of a standardised regime of merit entry into undergraduate degrees with a higher standard than currently exists' (Marshall, 2001). It could be argued that the move toward higher merit entry signalled a desire on the part of the Commission to restore elements of the more elite 'liberal' model of university education in vogue prior to the massification of the sector during the last two decades of the twentieth century. While it might appear to conflict with the social equity aspirations previously expressed by TEAC and the government, it is balanced to a certain extent by a strengthened focus on the targeting of funding at the 'two ends' of tertiary education alluded to earlier. It is also consistent with the rationalising aspects of the Commission's Single Funding Formula rationale whereby all TEIs are assessed on an equal footing - with built-in allowances for client characteristics - and might be seen to have the potential to appease much of

the disquiet among university academics with regard to the alleged lowering of standards that is said to have accompanied massification. The fact that higher merit entry was advocated for mature students as well as for school leavers does indeed indicate, as the Commission so cryptically states, that 'the setting of a higher threshold would send an important signal about excellence to learners and degree providers' (TEAC, November 2001a, p. 17).

A third feature of *Shaping the Funding Framework* that has particular relevance to this project is the degree to which the Commission's preference for a Single Funding Formula (SFF) could be seen to incrementally increase the operational role of central government in the steering of the tertiary education system in general, and the universities in particular. The Government and TEAC were unabashed in their fundamental desire to further steer tertiary education towards 'a primary focus on achieving national strategic goals' (TEAC, November 2001a, p. 12). While there was no cause to read any Machiavellian subtext into this aspiration, there was, nevertheless, within the longitudinal out-workings of 'desirability tests', 'discipline priorities', and more stringent systems of accountability and the like, the very real threat of central political control. Both the Commission and the Minister, understandably, were at pains to downplay this threat. The second Chair of TEAC, however, while possibly doing little more than displaying a penchant for qualifiers that leave the way open for further negotiation, indicated that

> this Government process should not impinge *unduly* upon the autonomy of providers and learners…. [and that] the flexibility and responsiveness enabled by this formula [SFF] would be further enhanced by preserving the autonomy of tertiary education providers *as much as is practicable* (Marshall, 2001 [emphasis added]).

An examination of the line taken in the legislation resulting from TEAC's deliberations will serve to shed further light on the extent to which these radical proposals subsequently gained traction within government and wider stakeholder circles.

Government response to TEAC: The Tertiary Education Strategy 2002/07

The Draft Tertiary Education Strategy 2002/07

In December 2001 the government produced its policy response document *Draft Tertiary Education Strategy 2002/07*. The document outlined six strategies considered by the government to be of vital importance to the future development of the tertiary sector. Strategy one focused on the fostering of generic skills and knowledge thought necessary for the development of a viable knowledge society. The second, third, and fourth strategies were concerned with issues of access and equity, and laid particular emphasis on the raising of foundational skills and the promotion of Māori and Pacific interests. Strategy five outlined a desire on the part of government to improve the standard, relevance and connectivity of research across the entire tertiary education sector. The sixth strategy focused on issues of governance, efficiency and leadership.

Responses to the draft strategy were mixed. Representatives of the polytechnics and private training providers were for the most part enthusiastic about the general direction outlined in the draft strategy. Unlike the universities, they were unequivocal in their endorsement of the promotion of stronger links with industry. The universities expressed concern over the way that the needs of industry and commerce could take precedence over 'pure' academic research. Of equal concern to the universities was the potential for liberal arts subjects to be further reduced in importance as a result of the preferential promotion of the supposedly more economically relevant science and technology disciplines. Indeed, the likelihood that the development of generic critical thinking and evaluative skills would be further neglected under such an arrangement was put forward by the universities as an argument against closer linkages with business and industry. The universities also submitted that a further loss of academic and institutional autonomy was likely to be precipitated by the adoption of more stringent mechanisms of central control. While the bulk of the strategies outlined in the draft document were concerned with addressing 'bottom end' issues such as equity and bridging/access, and were therefore not primarily focused on the university sector as such, the universities nevertheless expressed some concern over the ambiguity of the document's intentions with regard to which institutions would be responsible for bringing under-achieving students up to a satisfactory

university standard (Ministry of Education, December 2001; Ministry of Education, May 2002).

The Tertiary Education Strategy 2002/07

A total of 121 submissions on the contents of the *Draft* were considered prior to the release of the *Tertiary Education Strategy* in May 2002. The final document outlined the government's slightly amended intentions for the reform of the tertiary education sector over a five-year period.

In general terms, the overall direction outlined in the amended *Strategy* was welcomed by the university sector, albeit with some misgivings about both the trend towards more centralised control and the level of funding likely to accompany the implementation of the 'reformed' regime. Dr Grant Duncan, National President of the Association of University Staff, for example, summed up the fears of many within the sector when he picked up on the Minister's comment that the Government 'would like to invest a little more in the [tertiary education] system' (Maharey cited in AUS, May 2002). Duncan stated that 'a little more would not be enough to achieve Government's ambitious goals…. [and that] without significant increases in public investment, the Strategy will be no more than colourful rhetoric on glossy paper' (Duncan cited in AUS, May 2002). The promise of improved quality in teaching and research, the provision of a clearer strategic vision, and enhanced institutional capacity was nevertheless conditionally welcomed by the universities (*ibid.*). It was with a mixture of hope and scepticism, then, that those working within the university sector awaited the legislative outcome of the TEAC policy process.

The legislative aftermath: The Tertiary Education Reform Bill and Act 2002

The second reading of the Tertiary Education Reform Bill was completed just prior to the early election of July 2002. Parliamentary time constraints meant that the legislation could not be passed before the election. Originally planned to come into being on 1 July 2002, the Tertiary Education Commission (TEC) was set up in a transitional format until the legislation governing its existence could be passed through the House. In this section the Tertiary Education Reform Bill is examined in light of the previously described recommendations of TEAC.

Following this the legislation as actually passed through the house in the form of the Education (Tertiary Reform) Amendment Act 2002 is considered alongside the research questions underpinning this enquiry.

The Tertiary Education Reform Bill

The bill was notable for the sidelining of TEAC's most radical recommendations with regard to the university sector. In essence, the legislation as originally proposed played out the government's desire to provide itself with more easily manipulated central steering mechanisms through which it might in future more closely align the sector with its own evolving strategic direction. Given TEAC's preference for a systemic and legislative redefinition of both the teaching and research imperatives and the institutional sites of undergraduate and postgraduate study, the bill's 'status quo' treatment of the key identifiers of the 'liberal' university may be construed as a sweeping rejection of TEAC's core recommendations with regard to the structure and purpose of the university. TEAC saw its role as providing a plethora of strategic, structural, systemic, and philosophical recommendations into how the university (and all other) sub-sector(s) might be subjected to fundamental reform so as to redefine core functions and attributes in relation to other providers and institutions. A provision within the Tertiary Education Reform Bill granting the Minister powers to set an upper limit on the fees charged by institutions to students was strongly opposed by the Vice-Chancellor's Committee on the grounds that it would have the effect of further restricting the amount of funding available to universities (NZVCC, 2002; NZVCC, 2003).

In effect, the bill merely put forward a clarification of functional nomenclature and repositioned (and tightened) a few funding screws. A single steering and governing agency, the Tertiary Education Commission (TEC), was brought into being. A system of charters and profiles designed to improve efficiency and reduce expensive duplication of services was spelled out, and the methods by which the Minister might provide strategic leadership to the sector so as to better facilitate the linking of national goals with sector performance, including the attainment of 'research excellence', was outlined.

All in all then, with regard to the university sector, the bill did little more than formalise a raft of incremental changes already recognised by many stakeholders and commentators, for better or for worse, as being characteristic of the evolving nature and role of the contemporary university in New Zealand. The bill appeared to adopt a 'neither confirm nor deny' approach to what many commentators had complained was the creeping threat posed to academic freedom and institutional autonomy by an increased emphasis on market relevance and more centralised mechanisms of governance and funding. In effect, both TEAC and the legislators rubber-stamped these increasingly problematic status quo arrangements (as already enshrined in the 1990 Education Amendment Act) without acknowledging the likely impact of such (in)action.

A last minute flurry of government-sponsored amendment activity was deeply resented by those opposition members who served on the Education and Science Committee that considered submissions prior to the bill's second reading (New Zealand Parliamentary Debates, 2002). Included in these amendments was a new introductory clause (4B) put forward in Supplementary Order Paper No 26 on 15 October 2002. This spelled out in suitably broad and ambiguous terms an application of the 'traditional' or 'liberal' socio-cultural and economic roles of the university to the entire tertiary sector (see Appendix 1). Neither TEAC nor the bill elaborated on how these 'liberal' conditions, already argued by many commentators to be under ruinous siege, were to be protected from further encroachment under the adjusted regime. The Act, with its various clarifications and compromises, was passed five months after the July 2002 election.

The Education (Tertiary Reform) Amendment Act 2002

The Education (Tertiary Reform) Amendment Act was passed by Parliament on 5 December 2002. Last minute amendments to the legislation may be viewed as an attempt to either keep everybody happy, or, more cynically, to circumvent criticism, but do little to hide the fact that the university is, in effect, being asked to continue to be all things to all people, but without the level of resourcing necessary to achieve such an ambitious and unlikely goal. The need to appease coalition partners and placate a recalcitrant Green Party had certainly been in evidence throughout the mid-year election process (Haines, 2002; Laugesen,

2002; News in Brief, 2002). The Green, Alliance and Progressive Coalition Parties had campaigned on a platform of increased financial support for tertiary students. After its unexpected success at the election the United Future Party decided to oppose the legislation on the grounds that it 'believed it would give the minister too much power and put private training establishments out of business' (Mold, 2002). By the time the Act was passed in December 2002 it had lost most of its reformational sting.

The Act incorporated a number of minor revisions. These had as their major focus (a) a broadening and clarification of the object of the legislation (as put forward in Supplementary Order Paper No 26); (b) a diminishing of the powers of the Minister to act in a unilateral fashion with regard to the appointment and performance of members of the Tertiary Education Commission; (c) general restrictions and conditions in relation to the Minister's ability to intervene in the day-to-day operations of TEC; (d) a number of minor clarifications of definitions and adjustments of wording and regulations, especially with regard to 'domestic' and 'overseas' students; and (e) the division of the Tertiary Reform and Industrial Training components of the bill into two separate Acts so as to more easily stagger implementation (1 January 2003 and 1 July 2003 respectively).

Summary

The rationale underpinning the tertiary education reforms of 1999-2003 included a desire to adjust the university sector so that it could (a) more closely align itself with 'important national goals', (b) forge 'stronger links [with] industry, enterprises and the community', and (c) develop programmes of 'world class, excellent research' that could be seen to economically advantage New Zealand in a fiercely competitive global economy (Ministry of Education, 2002, pp. 2 & 16). As outlined in the report of the Education and Science Committee, subsequent to their hearing and consideration of submissions on the bill, 'the primary purpose of the reforms is to make more strategic use of resources through a co-operative and collaborative tertiary education sector' (Education and Science Committee, 2002, p. 2).

The TEAC policy and ensuing legislative process was all about eliminating overt competition and duplication within the system, and the establishment of a more direct central control mechanism that might be found, by the Minister, to respond more quickly, harmoniously, and cost effectively to future adjustments in government policy. Under these arrangements the role, condition, and relationship of the university with regard to its wider social responsibilities remained largely unexplored. This omission is of critical importance in the context of this enquiry. The research questions underpinning this project are focused on the role of the 'liberal' university in the development of a knowledge society. While the provisions of the 1990 Education Amendment Act pertaining to the protection of academic freedom and the university's role as critic and conscience of society remained in place, the possibility that these functions may be under threat from incremental socio-economic change was not substantively addressed throughout the legislative process.

Within the framework of this enquiry then, the relationship between the TEAC policy process and the ongoing efficacy of the traditional identifiers of the liberal university, including the teaching-research nexus, academic freedom, and the pursuit of knowledge for its own sake, remains problematic. The findings of the literature review and this examination of the TEAC policy process have revealed that the research questions guiding this enquiry have ongoing relevance to the operation of the university in New Zealand. Significant gaps in the literature of the New Zealand university have been identified. It has been found that the TEAC policy process did not examine the roles of the university in relation to the development of a knowledge society in a way that took detailed account of stakeholder perceptions and expectations. A notable shortcoming of both the literature and the TEAC process was the absence of detailed consideration of how the contested 'liberal' functions of the university might specifically relate to the building of a knowledge society. This relationship comprises a central focus of this enquiry.

In an attempt to address these shortcomings a survey of 'consumer' stakeholders was conducted. This empirical study was designed to test the relevance of the 'liberal' educational values and assumptions underpinning the research questions guiding this enquiry. Details of the methods used are outlined

in the next chapter, as are the theoretical frameworks and paradigmatic assumptions underpinning the project as a whole. The findings of the survey of university stakeholders are presented in Chapter Five.

Chapter Four: Methodology

Introduction

A key objective shaping the design of this project was the desire to gain an insight into the perceptions of stakeholders and commentators representing a range of viewpoints on the issues raised by the research questions. This chapter outlines the methodological approaches adopted in order to achieve this objective. The primary research question guiding the enquiry focuses on the role of the New Zealand university in a contemporary 'knowledge society'. Secondary research questions sharpen this focus. These are concerned with specific aspects of university endeavour such as the relationship between teaching and research and the notions of academic freedom and a 'liberal' university education. Of particular importance is an examination of the meanings commentators and stakeholders attach to various interpretations and representations of the two key concepts at the centre of this investigation. Working definitions of a 'liberal' university education and a 'knowledge society' are developed in the early part of Chapter Two.

The literature review interrogated the views of academics and other commentators with an interest in the role of the university in Western societies. A particular emphasis of that chapter was the exploration of the ways that academics and commentators conceptualise the notion of a liberal university education in relation to processes of socialisation and the vocational preparation of students. To supplement this information the views of employers and university and secondary school students were sought. This would provide data from 'consumer' stakeholders that reflected recent developments in a specifically New Zealand context.

The project therefore utilises a mixed method approach. The reasoning behind this strategy is outlined in the early part of this chapter. An examination of the literature revealed that most New Zealand commentary associated the notion of the knowledge society with neo-liberal imperatives. In an effort to gain further insight into the likely relationship(s) between the university and emerging social and economic conditions this study seeks to unpack the notion of the knowledge society from that of neo-liberalism. In order to achieve this, and in an attempt to broaden the enquiry beyond the limitations of a polemic ideological stance, an

eclectic approach not confined to the conceptual boundaries of a single ideational or theoretical framework was adopted.

The first part of the chapter, then, comprises a consideration of the paradigmatic and theoretical underpinnings of the project. The blending of a predominately qualitative methodology with the quantitative assumptions underpinning the utilisation and statistical analysis of a postal questionnaire are discussed. An outline of the critical/interpretive stance adopted in the main discussion section of the thesis is included. The second part of the chapter provides a description of the tools used to gather and analyse primary data. The chapter concludes with a consideration of issues of validity and reliability in the context of the mixed method approach adopted.

Paradigmatic and theoretical underpinnings of the project

Conception and rationale

In setting out to determine what contribution the New Zealand university should make to the development of a knowledge society a number of contentious propositions needed to be explored. I saw the baseline definitions of the two concepts at the heart of this enquiry as enigmatic and contested. Indeed, my preliminary reading indicated that the notions of a 'liberal' university education and a 'knowledge society' elicited a wide range of oftentimes passionate and intractable responses. I wanted my research to be sensitive to the diverse and discrepant nature of the debate.

With this in mind I decided upon a predominately qualitative approach. This would permit a broad and flexible exploration of the literature through interpretive analysis of historical and contemporary texts that had as their central focus either the liberal university or the knowledge society. In seeking to understand the meanings writers attached to various aspects of their topic within the context of their time and circumstances, I would be able to consider the implications of these observations and arguments in relation to the role of the university in New Zealand today. Gaining an understanding of the meaning writers attached to the nature and function of a liberal university education and a

knowledge society would provide me with a conceptual and thematic platform upon which I could then construct a more systematic and focused exploration of the situation in New Zealand at a time of significant debate and policy movement.

It occurred to me that if I could identify key themes in my interpretive analysis of the literature, I could then develop a primary data-gathering instrument with which to survey the views of consumer stakeholders. A method that permitted a quantitative measurement of stakeholder endorsement or rejection of specified aspects of these key themes appealed as a means of more thoroughly investigating my topic. The use of a postal questionnaire offered the advantage of giving me access to a larger sample than would be possible using a more time-consuming interview approach. Given the quantitative/positivistic methodological underpinnings of the tool it would also enhance the validity of the research through a process of data and perspective triangulation (Flick, 1998).

As I began this project the New Zealand Tertiary Education Advisory Commission (TEAC) was launched. By critiquing the reform process and the policy and legislative documents that ensued I reasoned that I would be able to make direct comparisons between the findings of my literature review, the survey of consumer stakeholders, and an analysis of contemporary policy developments in a New Zealand setting.

I wanted to do more than interpret and find meaning within this policy process, however. I wanted to interrogate policy developments in a way that would expose the motivations of participants, the political nature of the reform process, and reveal structural and policy contradictions that might prove problematic to the attainment of stakeholder aspirations (Fay, 1975, 1987, & 1996). A more overtly critical approach seemed appropriate. I decided to employ a policy scholarship approach similar to that advocated by Grace (1995 & 1998). The principles of this approach and the critical social science paradigm informing the discussion section of the thesis are outlined in the next section.

The research paradigms framing this enquiry

Aspects of all three major paradigms argued by researchers (e.g., Bailey, 1994; Fay, 1987; Sarantakos, 1993) to characterise contemporary social research are utilised in this project. An interpretive quest for understanding and meaning is

supplemented in the primary data-gathering phase of the project by the use of a quantitative tool; indeed, researchers often associate the survey method with a positivistic approach (Bailey, 1994, p. 10). This process of measurement, and the testing for correlation between variables, is often considered by researchers (e.g., Sarantakos, 1993, pp. 39-40) to be philosophically incompatible with both qualitative interpretive research and the critical approaches adopted in the analysis of the TEAC policy process (Chapter Three) and the framing the main discussion section of the thesis (Chapter Six).

In undertaking this research project, however, I have chosen to draw on a broader frame of reference than that espoused by those researchers who see quantitative and qualitative research methodologies in oppositional terms. Indeed, problems associated with the tendency of some researchers to adopt a polemic stance with regard to research philosophy and methodology are discussed by a number of writers (Bouma, 1996, p. 173; Burns, 1997, p. 14; Flick, 1998, pp. 24-25; Sarantakos, 1993, pp. 40 & 52-56). In the next section I consider aspects of this debate that have a particular bearing on this research project.

Qualitative and quantitative research: assumptions and implications

Implicit within advocacy of *either* a qualitative *or* a quantitative approach to social research is the view that the respective methodologies harbour ontological contradictions that render compromise untenable (Bailey, 1994; Burns, 1997; Sarantakos, 1993). As argued by these and other writers, however, such an uncompromising view fails to take account of the ways that qualitative and quantitative research can be synergetic (Bouma, 1996; Flick, 1998).

Quantitative research is generally considered an attempt to objectively observe, measure and describe social reality 'as it appears'. The positivist ethos informing quantitative methodology maintains that human agents are 'acted upon' by 'natural' social conditions that are inherently stable. Social change is incremental and is brought about by determining the 'natural' causes of phenomena, and, where possible, modifying conditions in order to effect different outcomes. Qualitative approaches, on the other hand, seek to adopt the viewpoint of participants in an attempt to understand and bring meaning to their perceptions of social reality. Human agents are thought to be active in shaping the world

around them. Social change results from human intervention and can be hastened by the research process. This is especially true for research constructed within a critical framework. According to Sarantakos (1993) 'critical researchers see in qualitative research a critical appraisal of reality, with the purpose of emancipating and liberating respondents' (p. 299). It is commonly claimed that quantitative research is characterised by aspirations of scientific objectivity, whereas qualitative enquiry lays aside the 'illusion' of objective truth in a bid to gain access to multiple subjective realities. Quantitative research is considered to have the aim of discovering and measuring reality in an effort to predict its future manifestations; whereas qualitative approaches include the assumption that as human agents are the autonomous creators of social reality intervention is both possible and desirable (Bailey, 1994; Bouma, 1996; Burns, 1997; Flick, 1998; Sarantakos, 1993).

Dewey (1938) observes that different types of epistemological theory tend to evolve out of a perception that a particular approach has shortcomings that render it unsuitable in a given context. He contends that each 'new' development borrows from rejected models in a way that lends the new model 'plausibility and appeal', but that can also render it invalid due to the 'arbitrary isolation of the elements selected from the inquiry-context in which they function' (p. 514). His principal argument is that

> each type [of epistemological theory] represents a selective extraction of some conditions and some factors…. [that] are so one-sided as to ignore and thereby virtually deny other conditions which give those that are selected their cognitive force and which also prescribe the limits under which the selected elements validly apply (*ibid.*).

The Hegelian notion of the dialectic, expanded upon in Marxist theory, is of use in this regard as it makes possible 'higher-order comments upon its various thought-positions, stating relations that carry us far beyond their obvious content' (Findlay, 1977, p. vi). By embracing rather than rejecting contradiction, research that is based on dialectic ontological and epistemological engagement offers the possibility that insight that might otherwise be blocked from view by a singular and potentially unsympathetic research paradigm or methodology might suggest itself (Flick, 1998, p. 25).

In this project I have deliberately incorporated both qualitative and quantitative assumptions. I agree with Bouma (1996) that 'often the best and most innovative research uses both qualitative and quantitative approaches' (p. 172). In terms of the quantitative (and essentially positivistic) claim to scientific objectivity, and the qualitative, critical and interpretive repudiation of such claims, I see no problem in embracing both; *in an appropriate context*.

The research instrument used to obtain data from consumer stakeholders, for example, was developed and implemented in keeping with normal quantitative research criteria, as were the statistical analyses of data so gathered. In keeping with aspects of the critical/Marxist theory informing this project, 'every social unit is a dialectic unit with quantitative and qualitative aspects; therefore, both methods [and assumptions] are acceptable' (Sarantakos, 1993, p. 56).

As further argued by Bouma,

> Well-executed qualitative research is often essential preparation for worthwhile quantitative research, and vice versa…. The development of quantitative measures that have a high degree of validity usually requires either a piece of qualitative research or implies that it has been done, since before it is possible to measure the quantity of something, it is necessary to know that it exists and in what ranges or types it is found to exist (1996, p. 172).

In this project I have used a qualitative and predominately interpretive approach to analyse textual material relating to the nature and purpose of the 'liberal' university. Aspects of critical 'unmasking' analysis also feature in the review and TEAC policy chapters. I describe the theoretical underpinnings of these approaches shortly. For the most part an understanding of the views of academics and commentators, and the meanings they attach to them, has been sought through an interpretive consideration of their opinions as expressed in published material.

This project aspires to do more than merely identify and 'understand' the key themes found within the existing literature, however. It also seeks to measure the extent to which various consumer stakeholder groups differentially identify with these themes, and to challenge the authenticity of views that might be shown to be attributable to ideational and socio-political misapprehensions. Bouma (1996) explains: 'having discovered the range of issues confronting certain people, it is often highly desirable to find out how these themes or issues are distributed among those people, demonstrating the symbiotic relationship that exists between quantitative and qualitative research techniques' (p. 172).

It is in this sense that this project is multi-perspectival. It is concerned with understanding and finding meaning within the subjectively held views of stakeholders and participants, isolating and 'quantifying' aspects of these views with the specific goal of measuring their strength and frequency of occurrence, and critiquing them for evidence of delusory conception or 'false consciousness'. By arranging my survey data in sets and categories that permit quantitative analysis, I am, *for the purposes of that exercise*, also bringing into play aspects of the positivist view that 'scientifically' obtained quantitative data can be used to explain the present and predict the future. I attempt to do this in Chapter Six. Indeed, the purpose of the discussion chapter is to develop the findings of the three modes of enquiry described in this chapter into a coherent multi-faceted theory of the *future* role of the university in a knowledge society.

However, researchers express the view that 'qualitative research is usually less interested in generalization to large populations than in understanding what is going on in specific settings' (Bouma, 1996, p. 176). This project aspires to both understand the particularity of specified settings, such as the impact of the knowledge society upon the normative career path of a 'typical' university-based academic, to cite but one example, and to frame some generalisations with regard to the wider social, economic and political implications of a knowledge society.

Chapter Six draws on principles characteristic of the interpretive and critical paradigms. The findings of the literature review, the survey of consumer stakeholders, and the critical evaluation of recent policy processes are interrogated alongside one another in an attempt to bring socio-political meaning to the views expressed. But in seeking to address the question of what the role of the New Zealand university should be in the development of a knowledge society, especially from the point of view of key stakeholders, the enquiry broadens in the discussion chapter to include a critical consideration of the likely impact of this relationship *upon these stakeholders*. In order to achieve this I draw on the principles of critical social science as outlined by Fay (1975, 1987 & 1996). The theoretical underpinnings of this and other perspectives adopted in this enquiry are outlined in the next section.

Theoretical underpinnings of this enquiry

As already stated the project is, for the most part, located within a qualitative interpretive paradigm. The principles of interpretive research guide the interrogation of literature and the quest to understand and interpret the meanings stakeholders attach to the key themes identified in Chapter Two. As outlined in the previous section, however, various critical approaches have also been employed. In this section I briefly outline the core attributes of critical theory as developed by Jurgen Habermas and the Frankfurt School. The Marxist notion of 'false consciousness' is central to this school of thought. This general overview is followed by descriptions of the policy scholarship approach informing my analysis of the TEAC reform process in Chapter Three, and the critical social science approach adopted in Chapter Six.

Critical Theory: a general overview

Implicit within the development of critical theory was the desire to arrive at an understanding of 'truth' and 'reality' that was less deterministic than that advanced during the formative stages of industrialisation. 'Objective' or scientific truth, as outlined by Karl Marx, Auguste Comte and others in the context of an 'Enlightenment' shift from the religious and superstitious thinking characteristic of the monarchical/feudal era, was, in the first instance, an attempt to liberate individuals - or social classes - from ignorance and oppression. In time, of course, industrialisation and the age of modernity progressed to the point where the founding principles of positivism in turn came to be seen as limiting and oppressive. Critical theory, then, was developed in conjunction with an increasing concern that the more rigid guiding principles of positivism were inadequate in the context of rapid twentieth century technological, social, and political progress. Exponential technological and socio-political developments in the late-twentieth century have been accompanied by a fresh cycle of social criticism. Central among these more recent criticisms have been those 'post-modern' critiques aimed at destabilising meaning in an increasingly heterogeneous, complex, and differentiated world (Abercrombie *et al.*, 1994; Sarantakos, 1993).

Aspects of critical theory as developed by the German philosopher Jurgen Habermas and associated with the Frankfurt School offer a flexible approach that

is sensitive to the complexities of a post-modern environment. While Habermas (1988) is critical of post-modernism, his promotion of open dialogue that recognises truth as a problematic concept intrinsic within what are essentially politicised forms of communication is an advance on the more rigid structuralist paradigms. His associated argument that there can be no such thing as apolitical science is less convincing, however, as his assertion that it is not possible to separate facts and values outside a politically charged ideational environment could be seen, in many instances, to over-estimate the political nature of communication. The broad principles of critical theory do, nevertheless, provide a tangible means by which ideas and assumptions underpinning the (re)structuring of a tertiary education system might be subjected to critical analysis. Neo-Marxist theories such as those developed by the Frankfurt School also have the advantage of encouraging eclecticism and a thoughtful consideration of culture as important elements in social analysis. Clearly, these values have considerable relevance in a post-modern environment increasingly characterised by differentiation and complexity (Abercrombie *et al.*, 1994, pp. 173, 192, 251-255, & 325-328; Habermas, 1988 & 1973).

Of particular importance within the context of this enquiry, values implicit within critical theory also provide a middle ground upon which to construct an account of social relations that is able to draw on the best aspects of a range of ontological positions. Sarantakos (1993), for example, contrasts critical theorists' conception of reality with those views characteristic of the other major paradigms:

> While positivists give reality an objective structure and interpretive scientists give it a subjective nature, critical theorists stand somewhere in between and believe that although subjective meanings are relevant and important, objective relations cannot be denied. The interest of the critical theorists is to uncover these myths and illusions, to expose real structures and present reality as it is (p. 35).

This ontological flexibility is particularly apparent when it is considered that both post-structuralists, with their renunciation of Enlightenment values such as an 'objective' or universal conceptualisation of 'truth' and 'reality', and neo-Marxists, with their interest in exposing the 'real' nature of social relations obscured beneath hegemonic 'illusions', find in critical theory an equally robust ideational foundation.

Critical theory, as utilised in this enquiry, includes both positive and negative elements. In addition to the exercise of criticism - or negative judgement - on the adequacy of 'texts' outlining various arguments, tenets, or beliefs, this thesis also attempts to exercise a positive judgement in identifying assumptions and subjecting them to 'unmasking' analysis. In this way that which is in plain view, as well as that which is 'hidden', is subjected to interrogation. I am mindful of the tendency of all protagonists, if at times unwittingly, to present their arguments in a way that biases a particular point of view. Should this favoured point of view harbour assumptions that cannot be justified in the context of contested and evolving circumstances, a resort to the 'unmasking' principles of critical theory can be used to better explain the relationship(s) between the various agents and elements of any given situation. Implicit within this approach is the Marxist notion of false consciousness. This condition is said to take hold when agents fail to comprehend the true nature of their class or interest group relationship within a given social structure, thereby unconsciously disadvantaging themselves through the adoption of views that are incompatible with their own best interests (Abercrombie, Hill & Turner, 1994; Fay, 1987 & 1998; Hegel, 1956; Marx & Engels, 1845). This enquiry investigates this possibility in relation to those most affected by the university's role in the development of a knowledge society.

Critical policy scholarship

In Chapter Three I conduct a critical analysis of the New Zealand tertiary education reform process of 1999-2003. The approach taken has both interpretive and critical elements. For the most part, however, it approximates the critical scholarship approach developed by English academic Gerald Grace (1995 & 1998).

Grace conceived the notion of critical policy scholarship in response to what he saw as the threats posed to independent academic enquiry by the rise to prominence of neo-liberal socio-political values in 1980s Great Britain (1998, p. 207). Seeing that the 'critical' approach to academic enquiry

> was being recontextualized as 'ideologically biased'… when counterposed to 'scholarship'…. it seemed to me that this ideological distortion could be overcome

> by uniting these apparent polarities and by establishing the legitimate credentials of an approach to be called 'critical scholarship' (*ibid.*).

An aspiration of critical policy scholarship is to broaden critical enquiry to include engagement with a range of disciplines and perspectives traditionally considered beyond the scope of policy science (*ibid.*). In seeking to unite the unmasking and consciousness-raising elements of critical enquiry with central characteristics of scholarship such as 'careful delineation of evidence and argument [and the] balanced and judicious conclusions' (*ibid.*), Grace has provided a more comprehensive and theoretically diverse means of interrogating policy processes in the context of an increasingly complex and heterogeneous world.

Grace based his conceptualisation of critical scholarship on the more narrowly scientific critical social science model advocated by American academic Brian Fay (1975). This latter model of social enquiry informs the discussion chapter of this thesis. It sits alongside the interpretive approach underpinning the project as a whole, and serves the methodological purpose of linking the overtly quantitative aspects of primary data gathering and analysis with the qualitative ethos informing the interrogation of textual data sources.

Critical social science

Critical social science is closely compatible with interpretive research. It shares the interpretive ethos underpinning the search for meaning within the beliefs, actions, and social relations of agents. Unlike those post-structuralist approaches to social enquiry which also comprise an interpretive and critical element, however, critical social science is overtly 'a child of the Enlightenment' (Fay, 1987, p. 66). It is concerned with discovering the 'true' nature of social relations. Having done so, it then seeks to alert its audience to the 'reality' that through 'uncritical' acceptance of social conditions imposed on them by others, they are living their lives in a way that demonstrates that they 'have a false consciousness in the sense that they systematically misunderstand themselves and their role in society' (*ibid.*, p. 70). According to Fay (1987), the very notion of Enlightenment 'is marked by the emergence of a disposition which is intent on subjecting social

arrangements to rational inspection, and which is bent on breaking with the done thing when examination shows it to be unwarranted' (p. 67).

However, critical theory, as broadly defined earlier in this section, is sometimes associated with post-structural approaches that seek to contest the normative 'structural' or 'Enlightenment' approaches characteristic of modernity. In their heyday these latter approaches took the form of either a narrow adherence to a predetermined 'canon' of recognised truth, or a broader pursuit of 'liberal' knowledge that was nevertheless grounded within 'universal' values. In simple terms, post-structural enquiry categorically rejects the possibility of objective or universal truth. Instead, post-structural enquiry sets out to better understand the internal conditions of a bounded context. In its purest form, the method employed is the analysis of language or texts. Similarities and differences found between various contexts can be analysed in a comparative manner, but as no universal values are countenanced, no external or 'objective' value judgements are put forward (Abercrombie *et al.*, 1994; Norris, 1994 & 1997).

Given these core attributes, it is clear that a post-structural approach would prove deeply problematic in the context of this project. A central focus of this enquiry is, after all, the notion of a liberal university education, with all its associated modernist and Enlightenment values. Post-structuralism draws its very *raison d'être* from an aggressive rejection of Enlightenment values. In order to examine the notion of a liberal university education without adopting a polemic stance, then, I have attempted to critique the logic and applicability of the various points of view considered in direct relation to my research questions. In this way I have attempted to avoid difficulties associated with the post-structuralist view that 'values such as "truth", "reason" and "reality" can have no further role in any discourse that aspires to play by the current rules of the [academic/intellectual] game' (Norris, 1997, pp. 4-5).

This enquiry recognises the philosophic difficulties associated with a rapidly evolving post-modern context. Nevertheless, it attempts to concentrate its critical focus on an evaluation of the ways that a changing 'liberal' university might contribute in a tangible manner to the development of a knowledge society within that wider, complex, and highly differentiated context. The perspective adopted in the latter stages of this enquiry is overtly critical in the sense that I

seek to identify, 'expose' and challenge underpinning 'realities'. Where appropriate I also seek to explain social events and relationships in more concrete terms that may allow for the existence of 'universal' values and justifications (Sarantakos, 1993).

Fay (1987) outlines what he terms 'the basic scheme' of critical social science enquiry (p. 31). According to Fay, the aspiration of the critical researcher is to provide a 'social scientific theory which tries to be scientific, critical, practical, and non-idealistic' (*ibid.*). If successful, elaboration of this inter-connected 'complex of theories' comprises four 'primary' and ten 'sub-theories' (*ibid.*, p. 32). Under Fay's schema the task of the critical social scientist is to provide (a) an elaboration of the origins and characteristics of, and alternatives to, a type of false consciousness shown to problematically exist within the sphere of enquiry; (b) an outline of a form of social crisis attributable to a particular set of social arrangements that is unable to be resolved should those conditions remain unchanged; (c) a theory of education that offers the type of enlightenment needed to provide a way forward; and (d) a plan of 'transformative action' designed to target affected persons in order to contribute to the resolution of the specified social crisis (Fay, 1987, pp. 31-33).

In specific terms, then, the critical social science approach I adopt in Chapter Six examines the expressed 'desires, beliefs, and values' (Fay, 1987, p. 66) of policy makers, academics, employers and students with a view to interrogate the nature of their respective socio-political identities in relation to the role of the university in a knowledge society. I question the extent to which these stakeholders' 'social arrangements promote their [various] true interests and ideals' (*ibid.*). In so doing I invoke the underpinning purpose of critical social science which, according to Fay, 'wishes its audience to reflect on the nature of its life, and to change those practices and policies which cannot be justified on the basis of that reflection' (*ibid.*).

Summary

The arguments developed in the discussion chapter of this thesis draw on (a) interpretive textual analyses conducted in Chapter Two; (b) a critical policy scholarship analysis of policy making processes provided in Chapter Three; and

(c) an exploration of the implications of the findings of a survey of selected university stakeholders reported in Chapter Five. These analyses and data gathering components have as their principal focus the role of the university in relation to the notion of a liberal education and the development of a knowledge society. Given the complex and interconnected nature of the data informing the discussion chapter, the material is arranged into three broad categories. These categories are constructed around the dominant themes found to emerge during the data gathering stages of the project.

Building on the findings of a mixed method approach the perspective adopted in Chapter Six draws on the principles of critical social science and Marxist-Leninist assumptions that regard 'every social unit [as] a dialectic unit with quantitative and qualitative aspects' (Sarantakos, 1993, p. 56). It makes reference to the interpretive, critical, and statistical approaches employed in the review, policy, and survey findings chapters to interrogate 'social arrangements' that may or may not 'promote the true interests and ideals' (Fay, 1987, p. 66) of stakeholders; in this instance academics, policy makers, senior public and private sector employers, and post-graduate university and Year 13 secondary school students.

In seeking to avoid becoming fixed within the theoretical boundaries of a single perspective I have endeavoured to gain a deeper insight into the thinking of others, and to locate developments within the tertiary education sector of New Zealand at the beginning of the twenty-first century in as wide a philosophical context as possible.

The second part of this chapter provides an outline of the survey method used to gather primary data from contemporary consumer stakeholders. This phase of the project was designed to address gaps in the textual data.

A survey of stakeholders

A survey of four cohorts with a stake in the evolving role of the university in New Zealand was conducted.

Rationale and Justification

A larger scale questionnaire was chosen in preference to the conducting of face-to-face interviews. I did not have the resources needed to conduct a large number of interviews. I wanted to gather primary data that could be used to identify overall trends. It was envisaged that a 50 per cent response rate from each of three samples of approximately 100 persons representing different stakeholder interests would provide a relatively unambiguous means of measuring both strength and direction of opinion. While in-depth or semi-structured interviews would have allowed a more thorough and flexible exploration of the topics under consideration, the research design prioritised the gathering of data that could be seen to scope the views of stakeholders with regard to the changing role of the university in a knowledge society. It was anticipated that aggregated data would best lend itself to comparative analysis alongside the findings of the literature review and the critical analysis of policy making processes outlined in Chapter Three. Through this process of triangulation it was envisaged that the subsequent use of both qualitative and quantitative data analysis, alongside textual analyses, would lend greater credibility to the research and make it possible 'to get a fix on a phenomenon by approaching it from more than one independently based route' (Scriven, cited in Cant, 1997, p. 33). Of particular interest was the identification of areas of agreement and disagreement that might be found to exist between stakeholder cohorts. The gathering and cross-analysis of this type and quantity of information would not have been practicable using a more time-consuming interview approach.

The pilot studies

The substantive part of the survey was conducted in three stages between March and August 2002. A two-stage pilot study preceded this major data-gathering phase. An informal testing of the research instruments preceded the formal pilot.

The informal pilot

A small group of stakeholders personally known to the researcher was approached and asked for their comments on the questionnaires' structure and suitability. Most attention was paid to the Year 13 secondary student questionnaire as it was

envisaged that the outcome of the Y13 survey would be most adversely affected by shortcomings in the research instrument. One of the three secondary teachers approached distributed copies of the Year 13 questionnaire to a small selection of students. They were asked to complete the questionnaire, note the time it took them to do so, and to record any comments or criticisms. The other teachers were asked to critique the questionnaire themselves, paying particular attention to areas that they felt may be misunderstood by their Year 13 students. Drafts of the university student and employer questionnaires were distributed to a small number of individuals with university and management experience. They were also asked to record the time it took them to complete the questionnaire and to critique its structure, language, and general suitability. Feedback from this informal pilot exercise was used to modify the three versions of the research instrument in preparation for the formal pilot stage.

The formal pilot

The formal pilot was carried out during August and September 2001. Ethical approval was first obtained from the University of Waikato School of Education Ethics Committee. Difficulty in overcoming privacy issues associated with obtaining access to a small random sample of university students meant that it was decided to confine the pilot study to the Year 13 and employer cohorts. As the employer and university student questionnaires were very similar, it was decided that this would not prove problematic, as the main purpose of the pilot phase was to test the questionnaires for clarity and validity. It was felt that a good response from the two cohorts able to be approached at this stage would provide all the data needed to assess the suitability of the research instruments. This proved to be the case. Feedback from this phase of instrument testing, along with an assessment of information subsequently obtained from statistical and other analyses of the formal pilot study, helped shape the final construction of the three slightly differing versions of the research instrument.

A number of changes were made in response to the findings of the pilot study. The number of Likert scale items was reduced from 30 to 26. Several items were rewritten in an effort to make them easier to understand. A few items were deleted. Statistical analyses had revealed that these items lacked validity and

contributed little to a better understanding of the theme under scrutiny. Some items representing themes found to be inadequately canvassed in the pilot studies were added. Demographic questions were numbered and standardised across the three slightly differing questionnaires to facilitate more efficient between-cohort criterion analysis. Two more age categories were added to the employer version. Likert scale item layout was altered so that the 'strongly agree' option appeared on the right rather than the left. The goal of this change was to reduce the likelihood that respondents would too readily express agreement with statements. Items were also rearranged in a more random sequence in an effort to reduce the thematic bunching of questions. In order to encourage a more considered response, the statements which comprised the 26 Likert scale items were reworded so that half of all items were worded negatively and half positively. This did create one or two difficulties with regard to item clarity, but was considered an improvement overall in the sense that respondents were required to think more carefully about their responses. It was hoped that the extra deliberation would elicit more decisive (and less compliant) responses. The instructions inviting respondents to rank five stated priorities or preferences were clarified so that each of the numbers 1-5 was less likely to be used more than once. This clarification proved effective. The statistical tests used to assess the research instrument are described in a later section of this chapter.

The survey of stakeholders

Once modifications to the research instruments were complete and ethical approval for the full survey obtained, the primary data gathering phase of the project was begun. The aim of the survey was to test a number of 'traditional' and emerging assumptions about the nature and role of a university education against the various views of liberal education and the knowledge society interrogated in the literature review section of this thesis. I was not aware of any New Zealand research of an empirical nature that had been conducted in examination of this topic. With this gap in the literature and primary data gathering in mind, the survey was designed to gauge the degree of empathy (or otherwise) towards the traditional ('liberal') mandate of the twentieth century university. Also of interest

was the extent to which the early indicators of the needs of a knowledge society were gaining traction in the thinking of selected university stakeholders.

Sample, method and response

Once the process and findings of the pilot studies had been evaluated, a larger random sample from each of the stakeholder groups was then selected. The method of approach was different for each of the cohorts surveyed. In contrast to the formal pilot study, where participation was first sought through an introductory letter and follow-up phone call, during the main stage of the project a copy of the questionnaire was included with the approach letter. The different methods employed, along with an outline of the rationale underpinning them, are briefly described under each of the cohort headings below. Varying methods of approach were necessary in order to comply with the differing ethical and privacy requirements of each sample.

The university student cohort

Irresolvable privacy issues and a lack of response to recruitment posters during the formal pilot stage meant that an initial attempt to gain access to a sampling frame of experienced university students at one institution had to be abandoned. An approach was made to the privacy officer of a second university with a request for access to a database of 'experienced' students enrolled at that institution (Appendix 2). An arrangement was subsequently arrived at whereby a random sample of 100 graduate students was generated from a confidential database. This included all students at that time falling within the defined population parameters. I then provided the university with stamped envelopes containing the survey materials, including the approach letter (Appendix 3 & 4), to which computer generated address labels were fixed. These pre-loaded envelopes were then posted by the university without the identities of the addressees being disclosed to the researcher. This arrangement was found to be both straightforward and effective. A response rate of 41 per cent was attained.

A total of 73 per cent of university student respondents indicated that their reason for undertaking university study was directly career related. The remaining 27 per cent identified non-vocational considerations as their reason for attending

university. The average level of qualification attainment for the cohort was just above honours level. The gender distribution was 82 per cent female and 18 per cent male. The age distribution of the cohort is reported in Table 1.

Table 1: Age distribution of university student cohort (%)

Under 25	25-35	36-45	46-55	56-65	66+
38.4	15.4	18	23	2.6	2.6

The Year 13 secondary student cohort

Following the development of a successful relationship with the principals of three secondary schools of varying size, location and decile rating during the formal pilot stage, the same schools were invited to participate in the main data-gathering phase of the project (see Appendix 5). The decile rating of schools refers to the socio-economic status (SES) of pupils, where 1 represents particularly low family income and associated social status, and 10 very high.

School one was located in a medium size provincial town and had a decile five rating. At the time of the survey school one had a role of 798 and an ethnic composition of 75 per cent European, 17 per cent Māori, 5 per cent Asian and 3 per cent Pacific students. School two was located in a small rural service town and had a decile rating of two. It had a roll of 301 with an ethnic composition of 67 per cent European and 33 per cent Māori. School three was in a city/suburban location and had a roll of 660. It had an ethnic makeup of 61 per cent European, 29 per cent Māori, 8 per cent Pacific, and 2 per cent Asian. Its decile rating at the time of the study was 3.

A number of other schools approached during the pilot stage indicated that they were unwilling to participate due to various internal pressures. Neither of the two high decile schools approached was able to take part.

It was therefore decided that the desired sample size of approximately 100 participants could most easily be obtained by surveying the combined Year 13 populations of the three co-operative schools. Consequently the Year 13 sample was substantially larger (194) than it was for the employer (114) and university student (100) surveys. With this in mind, and in an effort to create as little work for school staff as possible, the simple random sample technique utilised during

the pilot stage was abandoned in favour of a distribution of survey materials to the entire Year 13 populations of the three participating schools. In each case pre-packaged survey materials were distributed by a form teacher. Each Year 13 student was given a sealed envelope containing an introductory letter (Appendix 6) and a copy of the Year 13 student questionnaire (Appendix 7). Students were assured that participation was voluntary and that they could withdraw at any time. Each of the schools returned a number of declined survey packs. As with the other cohorts, a stamped and addressed return envelope was included with the materials supplied to each prospective participant.

The response rate was 38 per cent. The gender distribution of Year 13 respondents was 51 per cent female and 49 per cent male. A total of 80 per cent indicated that they intended to undertake university study, while 18 per cent signalled their intention to study at a polytechnic. In addition, 19 per cent of Y13 respondents expressed an intention to study by distance.

The employer cohorts

In order to compare the views of private and public sector employers two separate sample frames were constructed. A comprehensive list of public sector organisations was collated from government sources on the Internet. Unique numbers were then attached to the 297 organisations so listed, and a sample of 55 selected using the table of random numbers technique.

The process was more complex for the private sector. Given the raft of potential sub-sectors, it was decided to concentrate on five divisions of industrial and professional endeavour that might be considered likely to have a strong interest in the calibre of current university graduates. A series of lists of mostly medium to large firms currently operating in the fields of (a) law, (b) finance, accounting and commerce/banking, (c) construction and engineering, (d) medicine and pharmaceuticals, and (e) computers and information technology was then compiled. The table of random numbers technique was applied on a pro rata basis with the result that 59 potential participants were then selected.

As a strategic view of employer attitudes to the university education of employees was sought, the highest ranked leader/manager of each organisation,

usually the CEO, managing director, general manager or senior partner, was identified from organisational websites and other media and advertising material. This person was approached by way of a posted survey pack containing an introductory letter (Appendix 8), a hard copy version of the employer questionnaire (Appendix 9), and a stamped return envelope. Participants were given the option of contacting the researcher's email address to request an electronic version of the questionnaire by return email if they preferred. A small number chose this option, especially at the follow-up stage. In contrast with the two student cohorts, where, for privacy reasons, no follow-up by the researcher was possible, non-responses were followed up with a reminder email 10 days to two weeks after the packs were sent out.

This process proved particularly effective as high responses rates were elicited from both the public (78%) and private (61%) sectors. A combined employer response rate of 69 per cent was attained. The gender distribution of employer respondents was 22 per cent female and 78 per cent male. A small proportion of employer questionnaires (15 per cent) were completed by a delegated representative of the person initially approached. This was usually the (female) HR manager of the company or organisation concerned. Respondents had, on average, completed a tertiary education to the graduate diploma level. Age distribution and decade of graduation from the most recent tertiary programme undertaken are shown in Tables 2a and 2b.

Table 2a: Age distribution of employer cohort (%)

Under 25	25-35	36-45	46-55	56-65	66+
0	6.4	28.2	46.1	16.7	2.8

Table 2b: Decade of graduation of employer cohort (%)

Graduation	1960s	1970s	1980s	1990s	2000s
	14.5	18.8	29	34.8	2.9

The questionnaire

The questionnaire was designed as a measure of strength of opinion. A first section comprising 26 five-point Likert scale items presented a range of statements about the 'traditional' or 'topical' activities of the university. Items were variously worded in a negative or in a positive sense, to which participants were invited to respond on a scale of 'strongly disagree' to 'strongly agree'. Respondents were also given the option of making a brief open-ended qualifying or explanatory comment after each item. In all, 37 per cent of respondents offered an open-ended response to one or more item. Year 13 students were the least inclined (15%) to add open-ended comments to their Likert scale responses. University students were the most inclined (69%), while twice as many public sector (54%) as compared with private sector (27%) employers added open-ended comments to their answers.

A second section of the questionnaire, comprising two five-point ranking questions, invited the respondent to prioritise (a) functions of the university and (b) attributes of the graduate jobseeker.

The third section, also comprising two questions, asked respondents to rate their experience of university (employer graduates), or to estimate the extent to which they expected to be shaped by a university education (Year 13 and university students), on two topically related five-point scales.

A concluding demographic section sought to gather information about the intended (Year 13 student), current (university student), or the past extent (employer) of exposure to a university environment.

A definition of a 'traditional' liberal university education

The questionnaire presented items related to aspects of the so-called 'traditional' rationale underpinning the operation of the twentieth century 'liberal' university. A working definition of a liberal university education was developed after careful consideration of the findings of the literature review. The wording of some items was designed to express agreement with this 'traditional' ethos, while the sentiments expressed in other items were intended to constitute a clear challenge to these traditional values.

Rationale

While this definition is tentative, the weight of evidence presented in Chapter Two can be seen to point to a series of common themes associated by historians, academics and commentators with a 'traditional' or 'liberal' university education. It is clear, of course, that such characteristics vary from place to place and are subject to change over time. Nevertheless, the fact that there are so many calls for the university to adapt to its present socio-political and economic surroundings would seem to suggest that there exists an established model or ideal of university education that is considered by some to be outmoded. By seeking to identify characteristics common to a variety of traditional Western models of liberal university education I have sought to provide a means of comparing the ideals and practices of the past with those of the present. Given the variation among Western universities of the same era, of course, any attempt to provide a unitary definition is fraught. Nevertheless, this definition of a traditional or liberal university education is based on themes, ideals, and features found in various forms and to various degrees to characterise the Western university of the twentieth century.

A definition of a 'traditional' or 'liberal' university education

The findings of the literature review suggest that within a twentieth century context a liberal university education was associated with an elitist, unique, and largely uncontested social position for the university. In the absence of competition from other institutions, and in consequence of post-war efforts to bolster innovation and productivity and to improve social harmony against the threat of totalitarianism, the publicly funded university in many Western countries enjoyed a high degree of prestige and autonomy. The university enjoyed an associated role as the key creator and repository of knowledge. It evolved as a major critic and conscience of society, and held a monopoly as the supplier of 'top end' human capital to the labour market.

Another characteristic of a traditional liberal education at the university level was an ethos of character development through extended exposure to a (sometimes broad) curriculum designed to develop analytical qualities associated with critical thinking and discriminatory decision making, and involving various degrees of non-instrumental exploration. This intellectual freedom extended to

full autonomy in terms of institutional governance and the design and conduct of academic endeavour.

Although there was, in New Zealand at least, provision for adult entry, meritocratic entry selection of school leaver students was considered essential if standards were to be maintained and the socialisation and leadership development function of the university were to be maintained. There was a distanced or indirect association with commerce and industry. Students were prepared by the university to take up their places as future leaders of industry and society but academic independence and objectivity, especially in relation to staff research, was considered to be of paramount importance. The normative career path of the academic was primarily research oriented. The conducting of research and publication of findings came to be seen as the first priority of the university academic. After its early twentieth century pre-eminence, with the possible exception of the elite Oxbridge system where 'tutorage' has long been the revered norm, the on-site teaching of students came to be seen as a necessary though less prestigious adjunct to the all-encompassing research function.

Of course, many of these characteristics are still in evidence in contemporary Western universities. They are especially relevant in a New Zealand context. I have described them in the past tense here in order to underline their 'traditional' importance. A key purpose of this enquiry is to interrogate these traditional characteristics and functions of the liberal university against the evolving demands of a knowledge society. The item content of the questionnaire was designed with this central purpose in mind. The definition of a traditional liberal university education, along with themes found in the literature (Chapter Two) and policy critique (Chapter Three) to be evident in more contemporary challenges to the traditional functions and values of the liberal university, were used to determine the content of questions put to selected consumer stakeholders in the empirical phase of the project.

In keeping with these criteria then, the first 26 items of the questionnaire were concerned with the importance attached by stakeholders to (a) the development of critical thinking skills, (b) the relationship between and relative importance of research and teaching, (c) the university's critic and conscience role, (d) broad and exploratory learning and learning for its own sake in relation

to vocational development, (e) meritocratic selection and student performance, (f) the university's role in the development of new technology, (g) government direction, the profit motive, and private ownership of universities, and (h) elitism, functional differentiation, and the ongoing relevance of the humanities.

I was aware that respondents would bring their own understandings and preconceptions to the completion of the questionnaire. In addition, the use of a postal research instrument meant that I could not respond to spontaneous enquiries or provide clarification of item meanings. Nevertheless, the generality of the themes presented in the questionnaire was derived from an extensive survey of the literature and I was confident that content validity would not be compromised. Wording of items was based on an understanding of themes that I had found in the literature to be widely utilised. The statements presented in the Likert scale section of the questionnaire closely represented these themes. Respondents might have interpreted an item differently to what was intended, but improvements incorporated in response to the findings of the pilot studies, coupled with the inclusion of more than one item for each theme, helped to ensure that the overall results would have good validity. I was confident, therefore, that the empirical survey of stakeholder perceptions of a liberal university education in relation to the development of a knowledge society would prove valid, reliable and instructive (Burns, 1997). In order to check for validity and reliability the same statistical tests used during the pilot studies were applied to the main research instrument. These are described in more detail shortly.

Measuring support for a 'liberal' university education

On the basis of the defining criteria outlined above items 1-26 were numerically coded in order to reveal strength of support for a hypothetical general liberal position (GLP). Cohort-wide levels of support, represented as a percentage of total (100%) endorsement of the general liberal position, were determined through a calculation of the overall mean scores returned across all 26 items by all respondents within each cohort. Burns (1997) points out that a disadvantage associated with the use of Likert scales to measure overall support for a given position arises out of the reality that 'the total score of an individual has little clear meaning, since many patterns of response to the various items may produce

the same score' (p. 462). This difficulty is not avoided through an aggregation of individual scores. As the degree of support varied greatly from item to item, and this first 'general' measure was based on an averaging of these widely varying scores, analysis of individual items was also conducted in order to measure the level of support for particular aspects of liberal education. On a second level then, analysis of individual items simply involved a determination of either agreement or disagreement with regard to a particular statement. Both measures were reported for comparative purposes.

Specification of criteria for the 'traditional' and 'topical' dichotomy

In an attempt to gain further insight into the impact of context on stakeholders' views of a 'liberal' education, the 26 Likert items were also divided according to theme. Again drawing on the thematic findings of the literature review alluded to in the previous section, 13 items were categorised 'traditional' and 13 'topical'. The 'traditional' items were considered to contain references to concepts and practices for the most part characteristic of the 'liberal' Western university of the late nineteenth and twentieth centuries. The 'topical' items were thought to put forward ideas most closely associated with the reformist ethos impinging upon the New Zealand university sector during the late 1990s and early 2000s. This division according to theme is further described in Chapter Five. The Likert scale items featuring under each category are also listed there.

My review of the literature and critique of recent policy processes found that there is a close, but not identical, conceptual association between the 'traditional' categorisation and liberal socio-political precepts characteristic of late nineteenth and twentieth century New Zealand. There is also, generally speaking, an association between the 'topical' specification and neo-liberal attitudes prevalent throughout the closing decades of the twentieth century. In other words, in a New Zealand context at least, the idea of private ownership of universities, a profit motive for running them, and close government involvement in issues of curriculum and governance, for example, is of recent neo-liberal origin. On the other hand, concepts such as institutional autonomy, academic freedom, and the partnership between research and teaching can be seen to have

enjoyed widespread endorsement throughout the liberal era of social democracy in this country.

Challenges to these 'norms' and 'traditions', however, are also associated with a 'topical' questioning of the suitability of past models of social and economic development in relation to recent global trends, themselves most closely identified with the rise in influence of monetarism over the last two decades of the twentieth century. In an attempt to grapple with the implications for the New Zealand university of these developments I found it necessary to develop a means, however tentative, whereby a clearer insight into the changing ethos of university education might be obtained. The 'traditional' and 'topical' specification of items was arrived at after a thorough consideration of the dominant themes communicated in each item. As already explained, individual items draw their validity from a careful correlation with those overall themes found to emerge from the review of the literature and the critique of recent policy processes. The designation of the 'traditional' and 'topical' categories is an extension of this thematic approach.

As can be imagined, this specification of items according to theme is difficult to justify in a non-arbitrary manner. Instead, it should be seen as an aid to understanding the contested and oftentimes contradictory world of the 'liberal' university. Liberal university education is not a topic that easily lends itself to definitive categorisation.

Data analysis

Statistical analysis at the formal pilot stage was concentrated on testing the adequacy of the research instruments. A small sample size meant that no attempt was made to use statistical analyses to interpret findings beyond a preliminary indication of instrument suitability. While I recognise that many researchers would regard Likert scale data as essentially 'ordinal' in nature, in an effort to gain an early statistical insight into the overall adequacy of the research instrument data were treated on an 'interval' basis. Given that the measure of the distance between each category chosen by respondents was both important and possible, and that data were continuous in the sense that mean and median computations were sensitive to fractional degrees of agreement and disagreement,

I considered the employment of a full range of parametric tests appropriate in this preliminary context (Bailey, 1994; Burns, 1997).

A different approach was taken to the statistical analysis of data gathered during the full survey of stakeholders. Various tests were again used to measure instrument validity, reliability, robustness and sensitivity, but the main emphasis was shifted to the statistical analysis of findings. These processes are described in detail in the next two sections.

The formal pilot

Data were divided into three subgroups. The substantive Likert scale section of the research instrument was assessed for reliability, validity, robustness and sensitivity through the examination of calculated individual item means and standard deviations, item-total correlations, normality of distribution and range of item scores. The two ranking questions were subjected to analyses of variance (*t*-test), whilst the criterion questions at the conclusion of the questionnaire were tested for validity by comparing actual and expected frequencies, and by calculating chi-square statistics for selected demographic orientations.

The small size of the samples, coupled with some unanticipated responses to the ranking items, meant that limited value was obtained from the statistical analyses of these latter items. Nevertheless, every effort was made to ensure that the questionnaire comprised items that were consistent with the research questions underpinning the enquiry, and that responses to these items would provide an accurate reflection of participants' views in relation to the dominant themes identified in the review of the literature.

As a result of these tests the Likert scale section of the questionnaire was shortened from 30 to 26 items, and the wording and structure of a number of items modified. A few new items were added, and several deleted altogether as item-total correlations (biserial correlation and *t*-test) indicated that they did not reliably measure the attitude concepts under scrutiny. Similar statistical tests were carried out during the main stage of data analysis. Once the instruments had been adjusted in readiness for the main stage of data gathering however, the central focus shifted from instrument and item testing to the analysis and reporting of findings.

The survey of stakeholders

In addition to the instrument-testing processes applied at the pilot stage, I decided that the statistical test most appropriate in the analysis of my Likert scale data was the use of the chi-square in a 2 x 2 contingency table format. The main stage of data gathering involved much larger samples than those used during the pilot study. By dividing the responses of participants into nominal 'agree' or 'disagree' categories, I was able to process data as frequencies and test for independence or association in relation to each of my 26 positing statements. In effect, this amounted to an indication of support for or opposition to individual aspects of the concept of a liberal university education and the 'traditional' or 'topical' positions described earlier.

It is not considered appropriate to use percentages in chi-square analysis (Burns, 1997). Frequency data was used in all X^2 tests. A drawback of the X^2 test is that it 'is sensitive to difference but not direction of difference' (Burns, 1997, p. 194). In order to overcome this difficulty I calculated percentages separately and used these to determine the direction of difference (see Appendix 14). As 2 x 2 contingency tables require 'two variables each divided into two categories' (Burns, 1997, p. 192), this format most closely matched my desire to conduct between-variable tests that would reveal associations between any two cohorts in relation to the degree of support for and rejection of themes presented in the Likert scale items.

A key advantage of the use of chi-square is its relative simplicity. Given the amount of data generated by the questionnaire, it was important that I be able to process my findings in a way that maintained a focus on the key questions underpinning the enquiry as a whole. The use of X^2 to test for significance in relation to the degree of agreement or disagreement with a number of statements referring to various aspects of the notion of a liberal university education enabled me to interrogate my data with more precision. Complex issues could be examined in a manner that at least permitted a degree of certainty with respect to which aspects of my overall topic were perceived by respondents to be most closely associated with or antithetical to an effective university education.

Limitations to the use of X^2 in this context included an inability to process some data due to a low number of responses within some categories or cells of the 2 x 2 contingency tables. This was not a widespread problem in this study. It did, nevertheless, prevent analysis of some between-variable categories. Associated with this limitation is the inadequacy of chi-square analysis when frequencies are comprised of multiple responses from a single respondent. While it was tempting to combine some categories in order to obtain a number large enough for X^2 analysis, there was nothing to be gained from this, as any significance that might be revealed would most likely be the result of an inflated N and so be misleading in the context of the wider study (Burns, 1997). In the few instances where sound X^2 analysis could not be carried out due to low frequency of occurrence within a given category, percentages were reported but tests for significance were not conducted (see Appendices 15-22).

Where chi-square was not appropriate raw percentages or correlation coefficients were calculated. The relationship between various demographic criteria and support for the general liberal position, for example, was tested using *r*. Because the calculation of cohort-wide support for the GLP and the traditional and topical categories involved adding frequencies together in a single cell, it was not appropriate to perform the X^2 test on these data. These results were consequently reported as percentages of a hypothetical total endorsement. Ranking items were not tested for statistical significance. I did not consider that anything would be added to the veracity of the study by conducting statistical tests on these items. They were simply reported in rank order with item means provided so that a closer examination of patterns and strength of endorsement could be carried out (Bailey, 1994; Burns, 1997; McBurney, 1994; Sarantakos, 1993).

Additional issues of validity and reliability in a mixed method context

I faced the possibility that a low response rate to the postal questionnaire may adversely affect the validity of the research as a whole. I sought to mitigate this possibility by making the questionnaire as attractive and as easy to follow as possible. Approach letters were designed to arouse interest and to engender goodwill. Email and telephone follow-up was instituted where practicable. As the

research design required that the samples be representative of each of the three populations targeted care was taken to construct sample frames that allowed for a high degree of within-sample variation.

The employer cohort was divided according to public and private sector participation. A broad range of fields within these sectors was included within the sample frames. Graduate students from all schools and disciplines within a particular university were included in the university student population. A simple random survey method was used in an attempt to eliminate bias during the selection process. Even so, it must be acknowledged that it is not possible to obtain a truly representative sample, especially in a study of this size.

The use of a Likert scale format for most questionnaire items offered the advantage of 'produc[ing] more homogeneous scales and increase[ing] the probability that a unitary attitude [wa]s being measured, and therefore that validity (construct and concurrent) and reliability [we]re reasonably high' (Burns, 1997, p. 461). Every effort was made to test the validity and reliability of the research instruments before final distribution. Two pilot studies were conducted. An informal stage of testing was followed by a small-scale formal pilot study (Bailey, 1994; Bouma, 1996; Burns, 1997; McBurney, 1994; Sarantakos, 1993).

Triangulation

Triangulation, or the process of gaining greater clarity by examining a topic from two or more points of view, is based on the technique used by surveyors to map a building site or geographical feature. The 'lie of the land', so to speak, is able to be more accurately charted, and therefore more thoroughly understood, when it is viewed from a range of perspectives. Social scientists often employ processes of triangulation in an attempt to improve internal validity. The technique comprises the use of different methods of data collection, and can involve the gathering of data from participants likely to represent a range of views. In order to minimise the risk of distortion potentially inherent within a single method of enquiry social researchers may also employ both qualitative and quantitative approaches. It is thought that the greater the variety of methods and perspectives, the more confidence the researcher can have in the validity of the findings (Burns, 1997).

During the course of this project data were gathered from three major sources. Literature with a primary focus on the university in relation to (a) the notion of liberal education and (b) the rise of the knowledge society was subjected to critical review. Second, relevant policy papers, stakeholder submissions, and other documents pertaining to the TEAC tertiary reform process of 1999-2003 were subjected to critical scrutiny. Third, primary data were gathered using a postal survey of four cohorts of university stakeholders. This use of data triangulation in a mixed-method approach can be seen as an attempt to strengthen the validity of the research (Burns, 1997; Patton, 1990). Data from various sources and of various types have been drawn together in order to 'corroborate, elaborate, or illuminate' my findings and arguments (Marshall & Rossman, 1989, p. 146).

An important consideration in the context of the mixed method approach utilised in this project is the extent to which data drawn from various sources might be determined to be true when contradictions and anomalies occur. The perceptions of stakeholders may differ from those of policy makers. The latter may claim that problematic issues have been addressed through a change of policy. Stakeholders, on the other hand, may perceive that the conditions they are experiencing contradict such claims. While both parties may be sincere in their respective beliefs, and even be able to produce evidence to substantiate them, it is only after a careful consideration of both data sets in relation to one another and other sources of information that a less contradictory picture may begin to emerge. At the very least, data triangulation can contribute to a lessening of ambiguity and a depiction of circumstances and conditions that better explain these anomalies. Indeed, the use of a mixed method approach incorporating data triangulation provides a means whereby problems associated with contradictory perceptions and contrasting evidential justifications can be examined in as broad a context as is possible to incorporate into a viable research design (Bailey, 1994; Burns, 1997; McBurney, 1994).

The next chapter presents the findings of the survey of university stakeholders upon which key elements of the final discussion are based.

Chapter Five: A Survey of Stakeholders

Introduction

This chapter reports the findings of a survey of four cohorts with a stake in the evolving role of the university in New Zealand. The aim of the survey was to test a number of 'traditional' and emerging assumptions about the nature and role of a university education against the various conceptualisations of liberal education and the knowledge society interrogated in Chapter Two.

The first section of the chapter reports the results of individual item analyses. Items are grouped according to topic. Relationships between cohort affiliation and support for a hypothetical general liberal position (GLP) are then reported. The third section presents the findings of ranking items. The chapter concludes with a summary of the overall findings of the survey of selected stakeholders.

Results

Data from the Likert scale section of the questionnaire were arranged in two main categories: (a) that which corresponded directly with the level of agreement and disagreement with each of 26 statements; and (b) that which could be interpreted as support for a hypothetical and undisclosed 'general liberal position' (GLP). Cohort-wide support for the GLP was calculated by collating the results of items 1-26. Responses to these items were numerically coded according to the extent to which they might be seen to either endorse or reject the broadly 'liberal' ethos of university education discussed in Chapter Two. The full rationale and definitions underpinning this specification of data are outlined in Chapter Four.

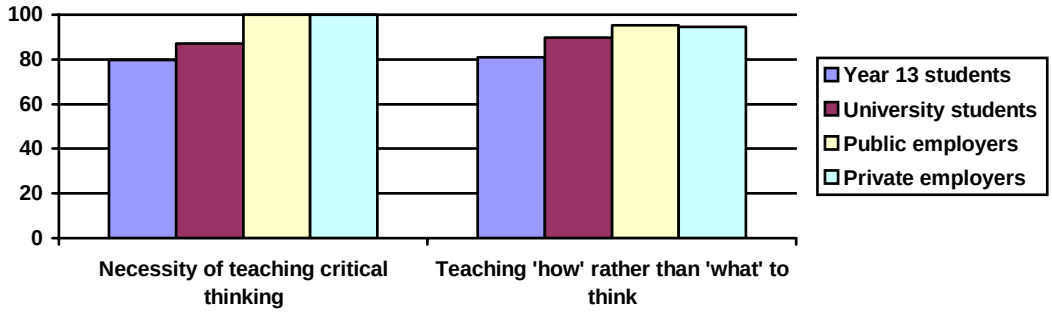
Individual item analysis

Critical thinking

There was strong support for the development of critical thinking skills as a core function of the university (items 6 & 23). As charted in Figure 1 and presented in full in Appendix 11, 79.7 per cent of Year 13 students indicated that teaching critical thinking skills was a necessary part of a good university education. Similarly, 81 per cent of the same cohort agreed with the statement that 'the first

priority of the university should be to teach its students *how* – rather than *what* – to think'. The university student cohort indicated an even stronger endorsement, with 87.2 per cent supporting the necessity of teaching critical thinking skills, and 89.7 per cent either agreeing or strongly agreeing with the 'how' rather than 'what' proposition. This endorsement on the part of university students of the fostering of critical thinking as the first priority of the university was significantly more emphatic than that returned by the Year 13 cohort (X^2 = 7.42, df = 1, p<0.01).

Figure 1: Support for the teaching of critical thinking skills (% of respondents)



The most emphatic endorsement of the university's role in developing critical thinkers, however, came from employers. One hundred per cent of both employer cohorts indicated support for the necessity of teaching critical thinking, while 95.3 per cent of public sector and 94.4 per cent of private sector employers supported the proposition that teaching students 'how' to think must take precedence over teaching them 'what' to think.

Respondents added a few open-ended comments in relation to this topic, with most focused on the development of individuality and the perceived necessity of critical thinking skills throughout the schooling process:

> I believe "forcing" ideas on to people is a breech of individuality, and teaching people how to think, rather than what is a great priority (Y13H1)
>
> I'd like to think that "how to think" would be taught at school (U23)
>
> Otherwise how do you hold a critical robust position (U23)
>
> Necessary part of school education (EPRI36)

At least one public sector employer was not convinced that the university was effective in its development of critical thinking skills:

> Pity it doesn't happen more often! Pity they don't do more of this (EPUB28)

Research

Conversely, there was a rejection of any close correlation between student research and immediate economic applicability (item 2). Respondents were asked whether or not they agreed with the statement that 'not all research by university students should have an economic purpose'. University students were significantly more opposed to an economic rationale than were Year 13 students ($X^2 = 4.84$, $df = 1$, $p<0.05$). While only 9.5 per cent of Year 13 students indicated that there should be an economic purpose to student research, proportionally half as many university students (5 per cent) and public sector (4.7 per cent) employers, and a mere 2.8 per cent of private sector employers expressed support for direct economic connectivity. The lack of enthusiasm for a direct economic rationale for student research was reflected in the comment of one university student respondent:

> Money seems to be more important than people now – why? (U9)

Employers, on the other hand, were more inclined to qualify their rejection of the proposition with a dose of realism:

> But it should always be preparing students for a working life (EPUB 28)

> There are economic issues in most things, but to say that all research must have a direct economic purpose goes too far (PEPUB1)

Another aspect of the research activities of the university to be examined was the proposition that research and teaching should be in some way separated. Item 8 put forward the proposition that 'if university staff were divided into those who do research and those who teach, both the standard of research and the standard of teaching would be raised'. Nearly 42 per cent of Year 13 students expressed some form of agreement with this statement, whereas the numbers of university students (19.2%) indicating support for this type of division of labour

was much lower. Separated according to sector, employers returned some interesting differences and similarities with respect to this item. There was a significant association (X^2 = 5.05, df = 1, p<0.05) between the degree to which private sector employers supported the proposition (41.7 per cent in favour, 22.2 per cent opposed) and the degree to which their public sector colleagues rejected it (13.9% in favour, 53.5% opposed). In addition, a similar pattern of significance (X^2 = 5.57, df = 1, p<0.02) emerges from an analysis of university student opposition and Year 13 student support for an economic purpose to student research. Indeed, Year 13 students and private sector employers expressed very similar views in relation to this item (X^2 = 8.53, df = 1, p<0.01).

Also of interest was the unusually high degree of uncertainty expressed by employers (32.6% & 36.1% for public and private sector respondents respectively) with regard to this proposition. Judging by the qualifying comments offered by some respondents there was an awareness of the complexity of issues surrounding the problematic teaching-research nexus, and an unwillingness to categorically commit to a position that was perceived as being fluid and in need of constant revision:

> I am inclined to think that it is a "horses for courses" issue. Some researchers are truly awful teachers; some brilliant teachers are poor at research; a select few are good at both. Rather than take a specific position, the aim should be to find who is good at what and use them accordingly – which I realise would be quite a change in the way universities manage and promote staff! (PEPUB1)

> My first thought is that research would strengthen a lecturer's insights and depth of knowledge; but maybe these are different skill sets (EPUB38).

> Then the teacher's research skills would drop and the researcher's teaching skills would drop (Y13H15).

> Would put a greater focus on an area but times change and teachers need to keep informed of what's new, best that they do their own research (U32).

> Logically the more one specialises the better the standard, however the nature of uni teachers is such that both appeal to some extent & researching techniques need to be passed on (U9).

Others were more categorical in their advocacy of a continued coupling of the twin imperatives:

> Teaching and research are integral to each other (explanation and articulation) (EPUB21).

> Staff that carry out research-only are depriving students of "first hand experience" teachings (U11).

One or two were mindful of the inadequacy of some university teaching:

> Some lecturers have no interest in conveying or teaching knowledge & information (U5).

Item 15 suggested a division of research and teaching between specialist institutions. There was little support for this proposition with only 22.3 per cent of Year 13 students, 15.4 per cent of university students, 13.9 and 8.3 per cent of employers agreeing with the notion of separate research and teaching universities. A pattern of lesser opposition on the part of Year 13 students to 'topical/neo-liberal' themes - when compared with the views of university students - again showed statistical significance ($X^2 = 6.62$, $df = 1$, $p<0.02$).

Additional comments provided by respondents typically revealed (a) an awareness of issues of economy of scale, (b) a wariness of any tendency to undermine the 'traditional' holistic/qualitative *raison d'être* of the university, and (c) a consequent desire for a continuation of the largely 'liberal' status quo:

> In general terms, the wider the research activity net is cast, the greater the chance of having competition between ideas – which is how humanity makes progress. Having said that, there are issues of critical mass in a small country, so that there may be areas in NZ that cannot be undertaken at every university. At this stage, I would see links with Australia or North America becoming important (PEPUB1).

> However "centres of excellence" with sufficient "critical mass" are needed. Each university can expect specializations & centres of excellence (PEPRI3).

> Might be a good idea but who would fund them? Tax payers? Who benefits? (U32).

> Universities are meant to be communities of learning, not intellectual factories (EPUB42).

> But with cross over effects – you can't really have 1 without the other (U20).

> Universities surely need a blend of both to be successful (EPUB38).

A further research-focused item (item 12) put forward the idea that 'teaching students how to do research is not an essential task of the university today'. All four cohorts expressed support for the teaching of research skills to university students. The strongest support came from the predominately post-

graduate university student cohort (89.7%), followed by public and private sector employers (76.7% & 75%) and Year 13 students (58.1%). However, on closer examination public sector employers were found to be more in favour of and less opposed to the teaching of research skills than were private sector employers (X^2 = 8.49, *df* = 1, p<0.01). Private sector employers in turn were more strongly in agreement than Y13 students (X^2 = 7.10, *df* = 1, p<0.01), and university students significantly more agreeable to the teaching of research skills than private sector employers (X^2 = 6.63, *df* = 1, p<0.02). Female employers were more favourably disposed than were their male colleagues (X^2 = 7.36, *df* = 1, p<0.01). These results are charted in Figures 2a and 2b.

Figure 2a: Support for economic purpose and teaching of research skills (%)

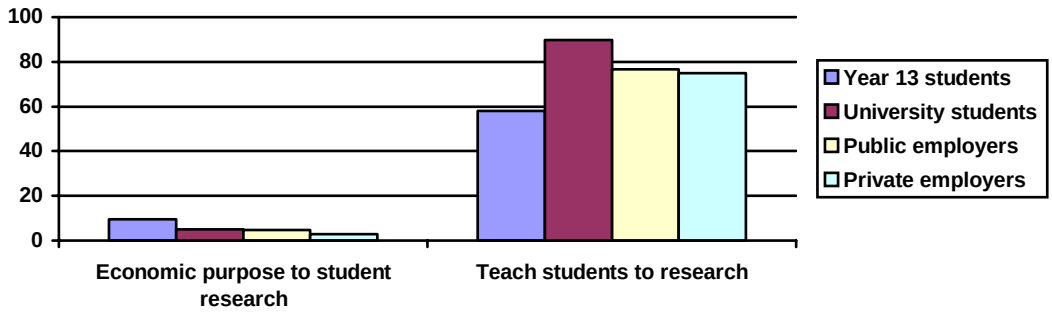
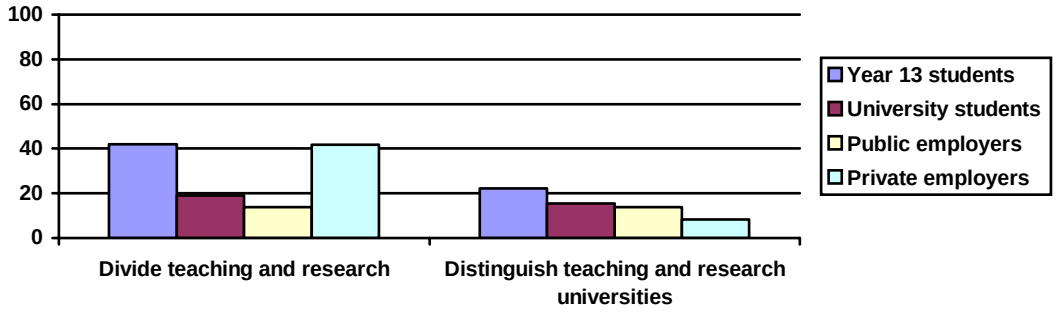


Figure 2b: Support for a separation of research and teaching (%)



Open-ended responses to item 12 tended to further underscore the importance attached by respondents to the learning of research skills whilst studying at university:

> How else can they learn to think? (EPRI16).

> All needs of society need to be reflected in the university training (EPRI33).
>
> Learning from the past & gathering useful information are important skills in employment (U9).
>
> In many industries, research is an integral part of operations, if students don't know how to conduct research, then industrial operations will suffer (U11).
>
> If universities don't who will? (U23).

Critic and conscience of society

The critic and conscience role of the university (item 1) was strongly endorsed by both employer cohorts (93% & 88.9%), with the university student (64%) and Year 13 student (62.2%) cohorts approximately 30 percentage points less certain. The only between-sector analysis to return any statistically significant association, interestingly enough, was that between public sector employers and university students. Public sector employers were shown to be significantly more supportive of the social conscience role of the university than were graduate university students ($X^2 = 9.56$, $df = 1$, $p<0.01$).

Comments ranged from 'he who pays the piper' sentiments:

> University standing reflects on our country & should align with govt. opinions to an extent. Yet there should be the freedom of independence. But if students expect help from the govt. fees-wise they should expect some input from the govt (U9)
>
> To achieve this independence from govt funding is ultimately essential (PEPRI3)
>
> Answer depends on who pays. Ideally, university should be private trusts or similar and not be govt funded or directed (EPUB35);

through to concerns over the extent to which the university presently functions as a truly independent institution:

> Getting them to that point might be difficult (EPUB35)
>
> It is a pity that they don't do much of this now! (PEPUB1)
>
> Unrealistic (PEPUB2);

and acknowledgement of political factors that tend to impact on tertiary education:

> Provided the commentary is apolitical (EPUB37)

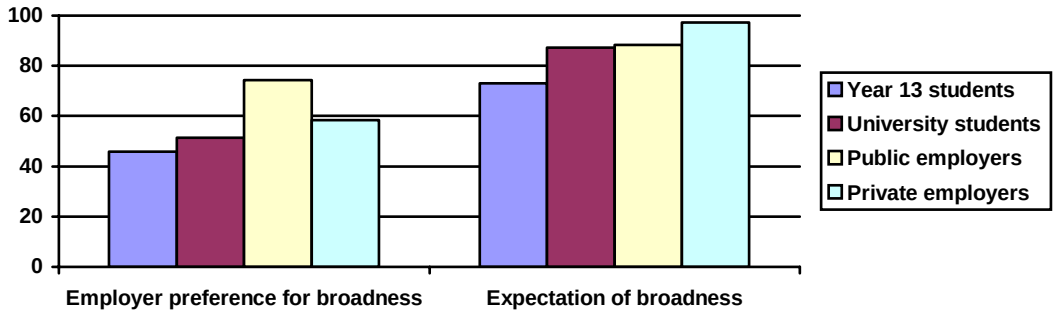
I think there needs to be some control by an outsider, so they are able to step in and resolve certain issues/problems that may arise (U11)

Yes otherwise institution becomes a form of social control (U23)

Breadth, exploration, and the nexus of vocational, professional, and 'liberal' aspirations

Several items were designed to gauge the degree of sympathy for 'classical' liberal identifiers such as 'breadth' (items 9 & 18), the notion of education as personal growth and exploration (items 4 & 17), and the problematic and largely hypothetical separation of 'professional' and 'vocational' preparation from the less utilitarian notion of a broad-based 'liberal' education (items 13 & 26).

Figure 3a: Support for the liberal concept of 'breadth' (%)



As can be seen from an examination of Figure 3a, public sector employers (74.4%) showed more interest in breadth of study than did their private sector (58.3%) colleagues ($X^2 = 4.14$, $df = 1$, $p<0.05$). University students (51.3%) were less certain about the value of breadth than either employer cohort. Year 13 students (45.9%) were even more equivocal about the likelihood that employers would look for broadness of preparation in their prospective employees. In spite of the lesser value accorded to breadth of study by employers engaged within the private as opposed to the public sector, private sector employers nevertheless still returned a significantly stronger endorsement of breath of study than did Year 13 students ($X^2 = 4.31$, $df = 1$, $p<0.05$). Male employers were more likely to endorse breadth than were female employers ($X^2 = 4.22$, $df = 1$, $p<0.05$).

In contrast, the expectation on the part of all four cohorts that a university education should involve the study of topics beyond the basic curricular requirements of any particular profession (item 18) was clearly delineated. Of special interest was the unambiguous preference, especially on the part of employers (88.4% & 97.2%), for the study of beyond-profession topics. The fact that a clear majority of both Year 13 (73%) and university (87.2%) students expressed an expectation of extra-base curricular study, but were much less certain about the expectations of employers in this regard (as seen in the more equivocal results of item 9), may suggest that there is a misconception on the part of students with regard to the 'educational' versus the 'vocational' (training) expectations of employers.

Explanatory comments provided by employer respondents certainly indicate a desire for breadth of learning:

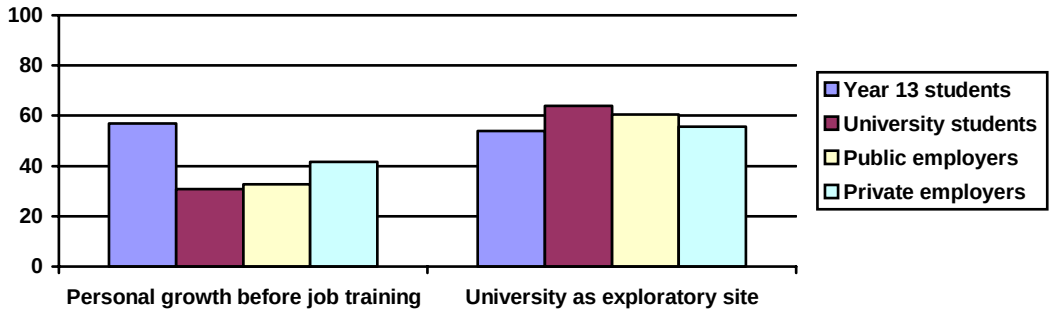
> An "all-rounder" is needed (EPUB5)
>
> Obviously a broader education makes for a broader person, and suggests a lively and enquiring mind (EPUB38)
>
> Too narrow a view – need intellectual capacity more than specific functional competence (EPUB38)
>
> Breadth of thinking is very important (EPRI33)
>
> Such narrow approaches rarely deliver the questioning approach that we look for (PEPUB1)

A degree of down-to-earth utilitarianism was also given expression:

> For a highly specialised position however, especially for a short term contract, we would probably not look much beyond professional qualifications (EPUB37)
>
> Tend to employ engineers, accountants etc & hence look for overseas experience (PEPRI3)
>
> I'd be more confident knowing that the information/courses had relevance to the real world. Don't want to waste money and time (U12).
>
> Depends what the profession is. I want doctor who knows about medicine! (EPUB14).

Support for the so-called 'liberal' identifiers of personal growth and exploration (items 4 & 17) was less clear-cut. Figure 3b reveals a mixed response on the part of the four cohorts with regard to the prioritising of personal growth before job training (56.8, 30.8, 36.7 and 32.6 & 41.7 per cent for the Y13, university and employer cohorts respectively). In a paradoxical twist, given the pattern of results in other sections of these findings, university students were significantly more opposed to a personal growth focus than were private sector employers ($X^2 = 4.23$, $df = 1$, $p<0.05$).

Figure 3b: Support for liberal qualities of personal growth and exploration (%)



The university student and employer cohorts, while less enamoured with the prioritising of personal growth, were nevertheless more supportive of the concept of the university as a site of relatively unencumbered intellectual exploration. While the somewhat ambiguous wording of this item was criticised by a number of respondents, and, in retrospect, should have been further clarified prior to the widespread distribution of the questionnaire, a consistent majority of Year 13 students (54%), university students (64%), and employers (60.5 & 55.6%) nevertheless indicated support for exploratory university study. Both Year 13 students ($X^2 = 7.83$, $df = 1$, $p<0.01$) and university students ($X^2 = 4.98$, $df = 1$, $p<0.05$) were more inclined to support the notion of exploration than were private sector employers. No significant differences were detected between private and public sector employers.

Qualifying comments tended to point to a desire for balance between personal growth, vocational preparation and intellectual exploration:

> But it must be balanced. University is one time when people can take time to learn in a true learning environment (EPRI18)
>
> Personal growth & intellectual development is important & work experience adds to this. Practical experience is as important as theoretical knowledge (U9)
>
> This goes too far – in some areas universities will be training organisations, in others they will have a wider role. The mix is important (PEPUB1)
>
> Depends on vocation. There is a role for "polytech" type universities (EPUB25)
>
> This assumes personal growth and intell development are not part of job training! (EPUB28)

A few respondents expressed reservations:

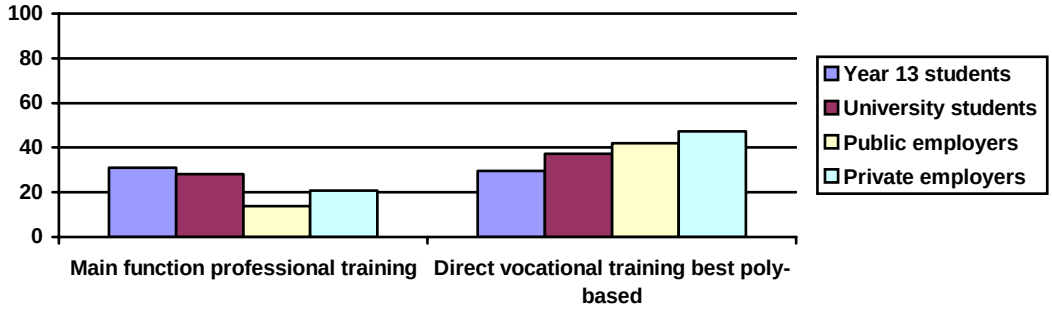
> This is an ideal we should aim for but not attainable I think (EPUB9)
>
> There's enough pressure from whanau to get a job and make money and it would just aggravate the situation (Y13H15)
>
> Universities do not prepare graduates for entering workplaces, which are more diverse than an academic environment (EPUB18)
>
> We all face/faced pressure to get a job. That does not eliminate opportunity to explore etc – that happens throughout life (EPUB25)

Some public sector employers, in particular, expressed unequivocal support for the liberal ethos of 'exploration':

> I do believe that the opportunity is – and should – be a strong benefit of a university education (EPUB38)
>
> A liberal education is at the heart of civil society (EPUB42)

A third pair of items (items 13 & 26) sought to explore perceptions of professional and vocational training in the university environment. As charted in Figure 3c, a minority of Year 13 students (31.1%), university students (28.2%), and, in particular, employers (13.9 & 20.8%), indicated support for the notion that the main function of the university was professional training. Both public (X^2 = 4.03, df = 1, $p<0.05$) and private (X^2 = 5.41, df = 1, $p<0.05$) sector employers were less supportive of the proposition than were university students, with the public sector also more opposed than private sector employers (X^2 = 4.75, df = 1, $p<0.05$).

Figure 3c: Support for professional training and polytechnic location of direct vocational training (%)



None of the four cohorts surveyed delivered an unequivocal response (29.7%, and 37.2% for the Y13 and university student cohorts, and 41.9% and 47.2% for the two employer cohorts respectively) to the statement that 'direct vocational training at the tertiary level is best carried out by polytechnics rather than by universities' (item 26). Additional between-cohort analyses confirmed that both private ($X^2 = 3.92$, $df = 1$, $p<0.05$) and public ($X^2 = 4.44$, $df = 1$, $p<0.05$) sector employers, along with university students ($X^2 = 4.51$, $df = 1$, $p<0.05$), indicated stronger support for polytechnic-based direct vocational training than did Year 13 students.

As can be seen in Appendices 10-13, responses to this item exhibited a more even spread across the 'agree', 'unsure' and 'disagree' options than was the case for most other items in the questionnaire. Some employer respondents took a pragmatic stance in that they were unwilling to concede a clear differentiation between 'professional' and 'vocational' development:

> Do not support concept of a difference between vocational/academic. Doctors and lawyers are vocations? EPUB28)

By and large, respondents viewed professional training as a legitimate function of the university, but as only one function among many:

> This is an important function, just not the main function (EPUB37)

> University is for those who wish to develop a greater area of knowledge in any profession (U32)

> Universities are not upmarket polytechnics. While there are clearly areas where they will teach technical skills, this is not their primary function (PEPUB1)

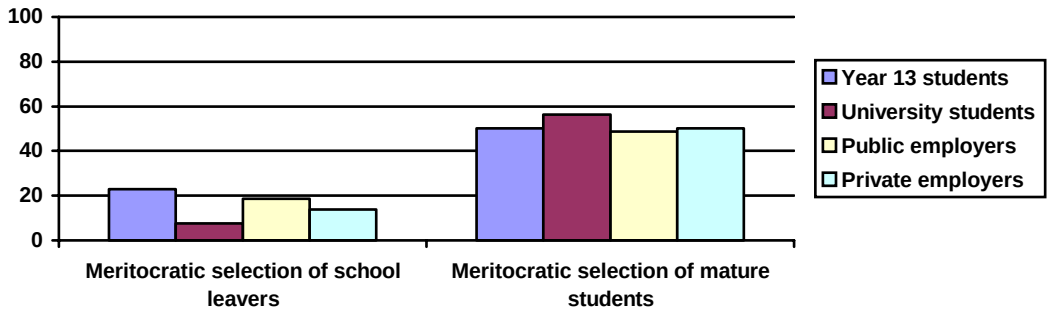
Contingent with this view was a desire for the development of breadth of understanding as an intrinsic component of professional training:

> But they should train all to think broadly (EPUB25)
>
> Also should involve personal growth (Y13H26)
>
> Probably, the university should teach students about "soft" educational matters (e.g. ethics, communication) as well so that they can broaden their way of thinking, and have abilities to perform their future careers effectively (U25)
>
> Thinkers! Reflective practitioners! (U27)

Meritocratic selection

An area of particular interest is the meritocratic selection of students (items 10 & 16). The findings of the literature review suggest that the 'traditional' liberal university should be conceptualised as an elite institution that is particular about the calibre of its school-leaver student intake. In partial counter-balance, a long history of egalitarianism in New Zealand has seen the consolidation of an expectation of open entry for mature students. This expectation has been further reinforced by a recent emphasis on increasing the participation of persons of Māori and Pacific ethnicity, and by a more insistent articulation of social equity policies in general since the Picot policy process of the late 1980s. It is interesting to note then, as charted in Figure 4, different attitudes toward the meritocratic selection of school leavers as compared with mature students. Whereas only 23 per cent of Year 13 students, 7.7 per cent of university students, and 18.6 and 13.9 per cent of the two employer cohorts expressed agreement with the statement that 'a good way to produce better graduates is to restrict university admission to only those students who have already excelled at secondary school', 50 per cent of Year 13 students, 56.4 per cent of university students, and 48.8 and 50 per cent of the two groups of employers endorsed the view that 'adult (mature) students wishing to study at university should have to provide evidence that they are capable of succeeding at the university level'.

Figure 4: Support for meritocratic selection of university students (%)



University student support for mature meritocratic selection was significant when compared with that of Year 13 students (X^2 = 8.93, *df* = 1, p<0.01). Within the employer sample, public sector employers showed less opposition to meritocratic mature student selection than did private sector employers (X^2 = 4.63, *df* = 1, p<0.05). In terms of meritocratic school-leaver selection, it is interesting to note that both university students (X^2 = 5.55, *df* = 1, p<0.02) and public sector employers (X^2 = 4.95, *df* = 1, p<0.05) opposed the proposition more than did Year 13 students. However, the level of support expressed by public sector employers, low though it was, was still higher than that of university students (X^2 = 4.92, *df* = 1, p<0.05).

This result carries with it the twin implications that (a) there is very little support for the tightening of school leaver entry criteria as originally suggested by TEAC, and (b), there is some diffidence with regard to open-entry practices as they currently relate to mature students.

These items also elicited a number of qualifying and explanatory comments. A few university student respondents gave expression to 'quality' concerns often voiced within the university environment:

> It is a strain to be in a first year programme with people who clearly are way out of their depth (U23)

> I think the basic expectations are good at the moment. I think making 'writing for university purposes' compulsory is an excellent idea. To test mature students can scare off those that are able (U9)

Issues of equal opportunity were uppermost in the minds of Year 13 respondents:

> I believe everyone should have an equal opportunity to attend university, no matter their educational background and level (Y13H1)
>
> Anyone who wants to go should have an opportunity (Y13H26)
>
> It would mean the standard would be higher but allowing adult students who don't have the grades to study gives them a second chance – maybe capable (Y13H36)

A number of respondents queried the practicality of assessing mature student applicants:

> What would the "evidence" be? (EPUB2)
>
> But that assessment should not be based on historic academic achievement (EPUB28)
>
> If they have never attended uni level courses, how can they provide any evidence? (U11)

Various potential conditions of entry were advanced by respondents:

> As long as they pay – no problem (EPRI9)
>
> But only for restricted entry papers (EPUB37)
>
> *All* students should be accepted if there is reasonable prospect of success – and *especially* if their study is heavily subsidized (EPUB35)
>
> This evidence would be provided within the first semester (U20)
>
> Everyone should be required to do this. Age is not a factor (U32)

The proposition that 'a good way to produce better graduates is to restrict university admission to only those students who have already excelled at secondary school' (item 16) - largely synonymous with a 'classical' or 'traditional' liberal university education during the first five or six decades of the twentieth century - elicited a large number of mostly opposing comments. Within the combined employer cohort, males more strongly opposed meritocratic secondary selection than did females (X^2 = 5.91, df = 1, p<0.02). Many respondents raised issues of maturation and argued that the level of achievement whilst at secondary school was an unreliable indicator of subsequent tertiary achievement:

> Some students for a variety of reasons are late starters (EPRI34)

> From various pieces of personal experience, I would argue that there should be a mandatory gap between school and university, after which anyone who wants to undertake tertiary study should be allowed to do so. Secondary schools are especially poor at identifying how people change in their attitude to study as they get older (PEPUB1)

> Agh!!! I failed at secondary school and got A's at uni!!! (U26)

Others expressed reservations about the 'narrowness' of academic achievement as an indicator of intelligence or subsequent employment productivity:

> That's what the current system does and we don't get good graduates! (EPUB9)

> Employers are looking for well rounded graduates not just those with excellent academic records at all stages of their lives (EPUB37)

> It is not always the brightest that are the best (EPRI33)

A parallel concern was the elitist nature of the proposition, and its likely impact on society as a whole:

> The universities' enrolment would definitely be reduced drastically if they took this approach. This could be seen as violating human rights (U12)

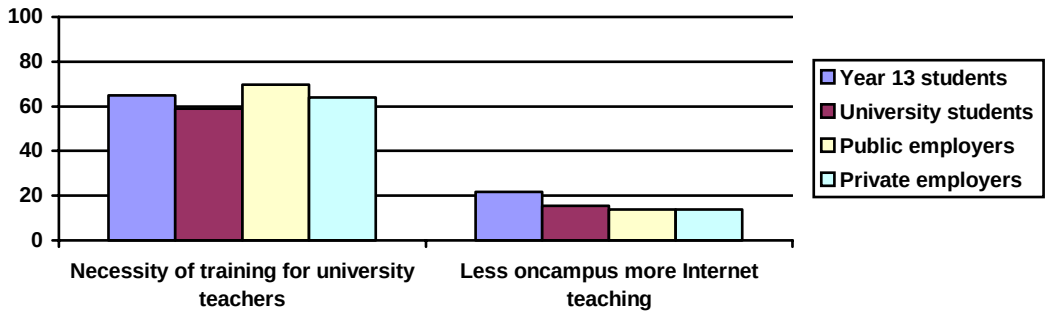
> Oh that's nasty! And elitist! (U20)

> It probably would produce "better" graduates however universities today are elitist enough as it is without further restrictions being placed upon students desiring to attend them (Y13T16)

The teaching imperative

The topic of teaching was the focus of item 7, as it was, in a less direct manner, of item 19. Item 7 invited respondents to indicate whether or not they thought university teachers should be formally trained, while item 19 suggested an increase in off-campus Internet study at the expense of on-campus direct-contact teaching. Figure 5 charts the results of these two items.

Figure 5: Support for teacher training and increased use of the Internet (%)



It can be seen that all four cohorts indicated strong support for the concept of formal training for university teachers (64.9%, 59%, 69.8% & 63.9%). However, each of the employer cohorts (public sector $X^2 = 8.19$, $df = 1$, $p<0.01$; private sector $X^2 = 8.09$, $df = 1$, $p<0.01$), along with Year 13 students ($X^2 = 7.49$, $df = 1$, $p<0.01$), signalled a significantly stronger inclination to favour formal training than did university students. Public sector employers were also measurably more in favour of the proposition than were Year 13 students ($X^2 = 4.27$, $df = 1$, $p<0.05$).

In contrast, there was little enthusiasm for an increase in Internet teaching at the expense of face-to-face contact (21.6%, 15.4%, 13.9% & 13.9%), although an unusually high level of uncertainty on the part of both employer cohorts (37.3% & 25%) with regard to this latter item should also be noted. Whereas the views of Year 13 students and public sector employers were very similar and showed close statistical association ($X^2 = 8.74$, $df = 1$, $p<0.01$), the pattern of opposition expressed by university students was significantly stronger than that exhibited by both private sector employers ($X^2 = 9.30$, $df = 1$, $p<0.01$) and Year 13 students ($X^2 = 6.36$, $df = 1$, $p<0.02$).

Many respondents expressed concern at the standard of university teaching:

> Quality of university education is often compromised by poor teaching skills (EPUB28)

> Just because you know information about a subject doesn't mean you have the ability to teach it to others (Y13H15)

> It would help – I have had some poorly trained lecturers particularly at [.....] University (U23)

> There is some appalling teaching at university and complete ignorance by some of the most basic principles of teaching (U27)

Some form of training or suitable prior or concurrent experience was repeatedly advocated:

> Some good "lecturers" are business people with "real-life" experience (EPUB5)

> They need to be trained educators – not necessarily teachers, as in PPTA (EPUB42)

> Teaching skills can be easily learned & lecturers need to be better at it in most cases. However this doesn't require teachers college type training. A one month course with periodic 2 day training sessions would do the job of producing excellent teaching skills (PEPRI3)

> Not trained as such in 'teaching' but have the knowledge and qualifications to teach what they know (U18)

Alleged systemic shortcomings were alluded to:

> The present university system tends to downgrade those who are good teachers (PEPUB1)

> My biggest problem with university lecturing is that career wise it is seen as an adjunct to research work i.e. poor cousin (EPRI16)

When it came to increasing the amount of Internet instruction *at the expense of* face-to-face teaching, respondents were generally opposed, and tended instead to favour a balance between the two approaches:

> There is a well-established place for face-to-face discussion between tutors and students to promote learning, however extramural study has obvious advantages too. E.g. for those in full time employment (EPUB37)

> Most seem to run a healthy mix of full time courses, distance learning and on-campus sessions (EPUB42)

> Depends on nature of course and students' preferred method of learning. Better for who? Students? – flexibility. Uni? – lower overhead costs. We will end up with a faceless future (U32)

Some respondents advanced perceived developmental and pedagogical advantages as a justification for the primacy of face-to-face contact:

> Working together is a key component of business (EPRI1)

> Much as I hated "group work" getting on with others is an important part of life (U5)

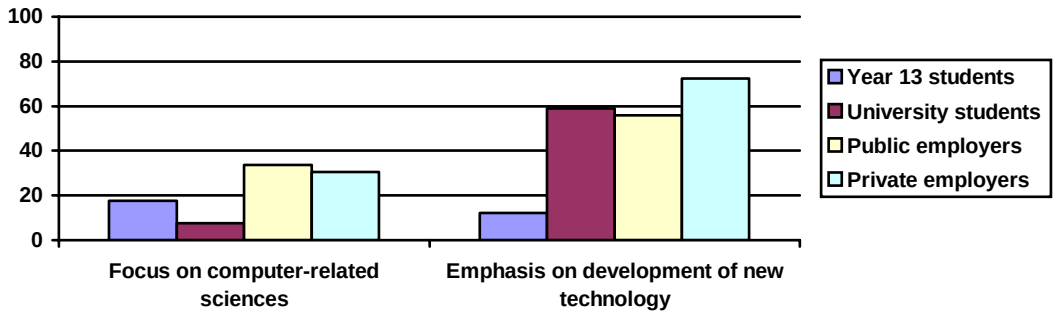
I think the experience of uni is a growth one & can be essential for students growth & development (U9)

With some courses, face to face contact between lecturer and students produces better course grades and student understanding (U11)

The university's role in the development of new technology

The part to be played by the university in the development of new technology was the focus of items 14 and 25. Of the four cohorts, employers returned the highest level of support for the statement that 'universities today should be strongly focused on producing graduates in the computer related technological sciences' (item 14). While nearly twice as many employers (58.1% & 63.9%), on average, expressed disagreement with this statement, their level of support (33.7% & 30.6%) was nevertheless considerably higher than that returned by either the Year 13 (17.6%) or university student (7.7%) cohorts (see Figure 6).

Figure 6: Support for a greater role for the university in the development of new technology (%)



Both Year 13 students (X^2 = 4.77, *df* = 1, p<0.05) and private sector employers (X^2 = 8.03, *df* = 1, p<0.01) were more opposed to the computer technology focus than were public sector employers. Female Year 13 students showed greater opposition than did their male counterparts (X^2 = 8.72, *df* = 1, p<0.01).

The majority of additional comments, both those for and against a strong focus on producing computer science graduates, expressed a desire for balance:

Along with arts, commerce etc! (EPUB9)

> Should be a strong focus but not at the expense of producing graduates in other disciplines (EPUB37)
>
> Breadth is as important as depth – exclusivity has its own problems (U27)

Some respondents showed a preference for the market and/or individuals to decide:

> Whatever students want to study (U32)
>
> Market demand identifies what is wanted (U35)

Others endorsed a holistic approach to technological advancement:

> Innovation is good – technology, not necessarily just computers (EPUB42)
>
> Focus on those areas of the NZ economy where comparative advantage exists (EPRI6)
>
> We need: teachers, doctors, dentists, health professional… (people who *help* people) (U21)
>
> Need to be focused on producing capable students (U34)

The more generally-worded item 25, which posited that 'a high priority for the university at the present time is the further development of courses that teach students how to design, build, or use new technology', elicited considerably more agreement overall. While Year 13 students showed little enthusiasm (12.1% support), both the university student (59%) and employer (55.8% & 72.2%) cohorts returned a clear endorsement of the proposition (see Figure 6). Of the opposition expressed, however, university students were more likely than public sector employers to disagree (X^2 = 8.92, df = 1, p<0.01), while the latter's opposition in turn was contrasted with the tendency on the part of private sector employers to strongly endorse the proposition (X^2 = 4.79, df = 1, p<0.05). Indeed, while public sector employers showed slightly more support for an emphasis on the development of new technology than did Year 13 students, proportionately the level of opposition expressed by them was in fact significantly higher than that of Year 13 students (X^2 = 6.66, df = 1, p<0.01). Male employers were more in favour of a focus on the development of new technology than were their female

colleagues (X^2 = 6.6, *df* = 1, p<0.02). Similarly, male Year 13 students favoured the proposition to a greater extent than did their female counterparts (X^2 = 5.04, *df* = 1, p<0.05).

Some employers expressed an interest in concentrating the development of technology within polytechnics:

> A priority perhaps but not necessarily a high priority (polytechs may have this as a higher priority) (EPUB37)

Others again called for balance:

> Yes a priority and a high one but not to the exclusion of some/many other things (EPUB19)
>
> Even though technology is the flavour of the month – this is not for everyone and no one economy in the world is based solely on technology somewhat shortsighted (EPUB20)
>
> A priority – an educated person needs to know how to take advantage of technology – there needs to be a balance (EPRI34)

Several respondents made reference to the need for an integrated, holistic approach to technological development:

> This is an important issue, but it is not the most important priority – that is and remains how to think! (PEPUB1)
>
> But this shouldn't interfere with other courses and lines of study/research, but should be integrated through all levels and areas (U11)
>
> Not in opposition to "higher" learning but compatible with (U37)

Still others expressed either resignation or opposition:

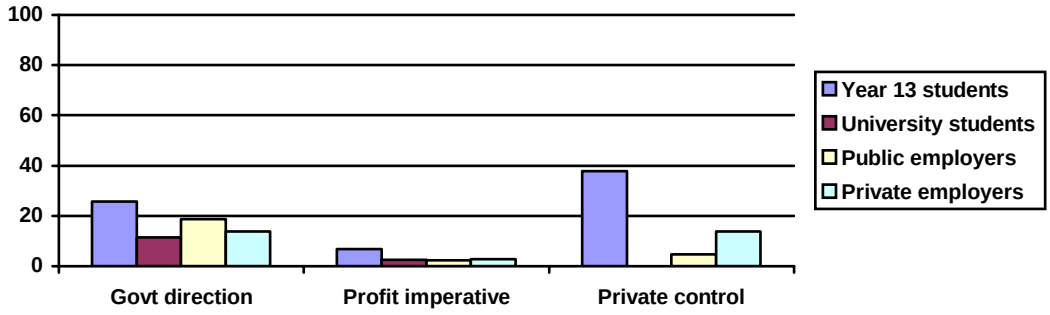
> Sign of the times (U32)
>
> Not at my classes (U20)
>
> How about leaving politics and economics out of learning institutions (U23)

Government direction, the profit imperative, and private control of universities

Several items sought to measure the degree of sympathy for conditions associated with the recent ascendancy of neo-liberalism, and to gauge the extent to which stakeholders thought that it was appropriate for government to provide direction to the university. As can be seen in Figure 7, there was little support for

government direction (item 11 [25.7%, 11.5%, 18.6% & 13.9%]), private control (item 3 [37.8%, 0%, 4.7% & 13.9%]), or the ascendancy of the profit imperative (item 20 [6.75%, 2.6%, 2.3% & 2.8%]). What is worthy of note, however, is the relatively high proportion of the Year 13 cohort who expressed support for both greater government direction of topics studied (25.7%), and for private ownership and operation (37.8%) of universities in general. Female employers more strongly disapproved of government direction than did male employers ($X^2 = 5.67$, $df = 1$, $p<0.02$). It is also noteworthy that when compared with an evenly divided Year 13 cohort, both private ($X^2 = 6.70$, $df = 1$, $p<0.01$) and public ($X^2 = 5.79$, $df = 1$, $p<0.02$) sector employers expressed significant patterns of (stronger) opposition to the concept of private control. In addition, public ($X^2 = 7.57$, $df = 1$, $p<0.01$) and private ($X^2 = 5.53$, $df = 1$, $p<0.02$) sector employers, as well as university students ($X^2 = 7.34$, $df = 1$, $p<0.01$), all expressed greater opposition to the profit imperative than did Year 13 students.

Figure 7: Support for government direction, the profit imperative, and the private control of universities (%)



Both private sector employers ($X^2 = 7.94$, $df = 1$, $p<0.01$) and university students ($X^2 = 4.80$, $df = 1$, $p<0.05$) were more strongly inclined to oppose government direction of universities than were Year 13 students, while both private sector employers ($X^2 = 7.78$, $df = 1$, $p<0.01$) and university students ($X^2 = 4.70$, $df = 1$, $p<0.05$) expressed greater opposition than did public sector employers.

There was widespread interest in the offering of incentives, as opposed to the giving of direction, on the part of government when socio-economic conditions called for strategic intervention:

> In some areas there may be need for incentives but this should involve a mere handful of subjects where there are clear shortages i.e. teaching (EPUB29)
>
> Encourage, not direct (EPUB34)
>
> But some promotion (rather than direction) of courses that address strategic skill gaps would be appropriate (EPUB37)
>
> Could use inducements (scholarships) rather than overt direction (EPRI1)

Some respondents expressed reservations about both the desirability and viability of any government involvement:

> Govt should not pick winners (EPUB5)
>
> The record of governments in directing issues such as this does not give any comfort whatsoever as to their potential rate of success in this area! PEPUB1)
>
> We ain't no extreme wing government here (Y13H35)
>
> Especially if it is the govt who decides what are the needs of society and the economy (EPRI34)

Others thought that 'he who pays the piper' should indeed be entitled to 'call the tune':

> Particularly if major funding is from government (EPUB25)
>
> Answer depends on who pays. Ideally, university should be private trusts or similar and not be govt funded or directed (EPUB35)
>
> For publicly funded education (EPRI6)

While private ownership and operation of universities was not widely endorsed, there was a degree of conditional endorsement of the further development of partnerships between universities and the private sector:

> However business input & support is to be encouraged (PEPRI3)
>
> But not all government either – can be a mix (EPUB2)
> Universities *must* be independent of commercial interests. However, they should not ignore those interests – some degree of cooperation is, at times healthy (EPUB29)
>
> This group is important but should not dominate by ownership what is taught and researched (EPUB33)

The university student cohort was especially unhappy about the notion of private control:

> Corporations should not own the people (U5)
>
> Otherwise the indigenous input would disintegrate totally (U12)
>
> We are a nation made up of many small businesses – micro economic growth is more important than macro because we need all the little voices to be heard not the few loud ones (U32)

Qualifying comments put forward on the topic of the profit imperative ranged from expressions of outright rejection:

> Not everything's about profit (Y13H15)
>
> None of it produces a profit. Taxpayers subsidize most (EPUB25)
>
> This image wouldn't sit very well in communities. This view would cater for the minority few, not the majority (U12)
>
> What would happen to 'thinking' if that occurred? (U23);

through to qualified support:

> However courses that do not attract enough students over time to be sustainable should be dropped (EPUB28)
>
> Ultimately, each area of study has to "work" for a university however that is measured. That may or may not mean "profitable" (EPUB35)
>
> Needs to be some 'public good' contribution (EPUB38)
>
> This approach, while it makes good economic sense – and should not be ruled out where appropriate – eventually leads to a narrow technical training approach, and eliminates research into some of the most fundamental aspects of human thought! (PEPUB1);

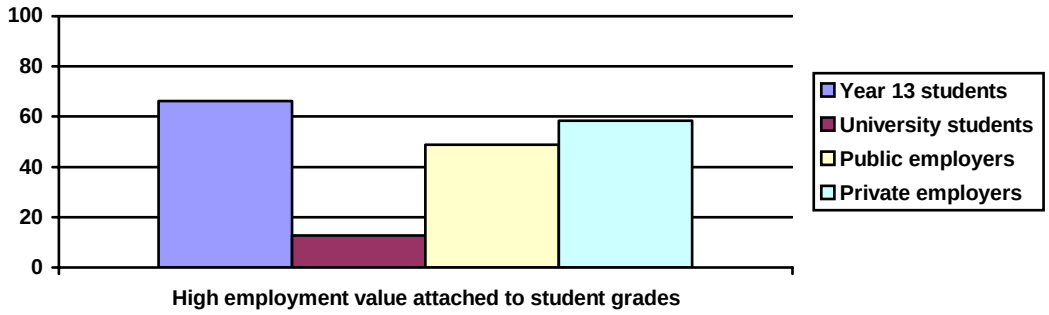
and acceptance, be it equivocal or otherwise:

> Course fees need to be adjusted to ensure each course is profitable (PEPRI3)
>
> Uni is a for profit organisation isn't it? Makes business sense – but have all options been exhausted? (U32)

Student performance

Item 5 sought to measure perceptions surrounding the value, from an employment point of view, of high student performance as indicated by the attainment of high grades. Private sector employers (58.3%) showed a significantly higher inclination towards discriminating on the basis of grades than did those employers working within the public (48.8%) sector ($X^2 = 4.11$, $df = 1$, $p<0.05$). A number of employers suggested that a high grade average was either a helpful indicator of the individual's work ethic, or that it could be used to discriminate between applicants who were equal with respect to other desired attributes. A majority (66.2%) of Year 13 students were of the view that high grades were valued by employers, whilst an incongruously small proportion of university students (12.8%) were of that opinion. These results are charted on Figure 8.

Figure 8: Support for the value to employers of high student grades (%)



The discrepancy between the attitudes of university students and the other three cohorts towards the importance of good grades is not accounted for in the explanatory comments put forward by respondents from within the university student sample:

> They also tend to look at a person's personality and willingness (U11)
>
> Depends which employers (U23)
>
> They look at the end qualification (U27)
>
> They want the right attitude and grades and a willingness to learn (U32)

A common theme amongst employers was that a good grade average was a 'pre-qualification or starting point' (EPUB2) upon which the recruiting process could be based:

> Necessary but not sufficient (EPUB35)
>
> Probably true – but would also look at relevance of courses studied (EPUB38)
>
> But also very interested in their social skills (EPUB41)
>
> It is at least a start when faced with dozens or hundreds of applicants! (PEPUB1)
>
> Not because I view this as evidence of superior intellect, but because I view it as evidence of personal discipline and application – very necessary for work (EPRI1)
>
> Among other qualities (EPRI34)

Indeed, the importance of 'other' experiences and qualities was a recurring theme:

> Area of study of main interest, work experience and then grades (EPUB18)
>
> Also the type of degree and 'other' experience (EPUB9)
>
> Good grades help. Subsequent work experience is probably more important (EPRI16)

One private sector employer provided a detailed description of desired graduate attributes. Good grades in the final two years of an undergraduate degree were prescribed, along with a list of 'must haves'.

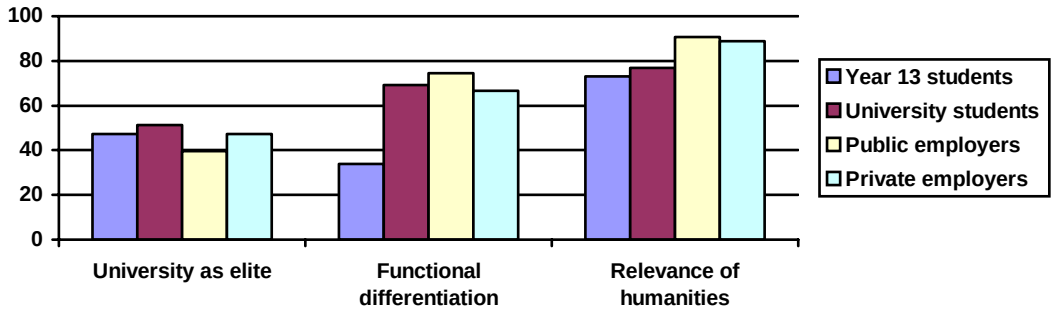
Elitism, functional differentiation, and the continued relevance of the humanities

In an effort to gain a further indication of the extent to which classical liberal values could be said to be under threat from more recent developments within the wider tertiary sector, respondents were asked (a) whether a university education should 'stand apart' from other forms of tertiary education (item 21), (b) whether universities, polytechnics and PTEs should have the same purpose and perform similar roles (item 22), and (c) whether traditional arts degrees like the BA are relevant in today's world (item 24) (see Figure 9).

With respect to an elite positioning for the university, 47.3 per cent of Year 13 students, 51.3 per cent of university students, and 39.5 per cent of public

and 47.2 per cent of private sector employers supported the concept of a 'stand apart' position for the university. Private sector employers tended to support elitism while public sector employers mostly opposed it (X^2 = 6.27, df = 1, p<0.02).

Figure 9: Support for elitism, functional differentiation, and the continued relevance of the humanities (%)



Explanatory comments gave voice to a range of pro-elitist and anti-elitist views:

> In my experience some polytech and industry grads are better equipped and better able to approach research etc than univ grads (EPUB20)
>
> It is different and should be recognised as such. THINKING PROCESSES (EPUB21)
>
> To have a uni degree is really something! (U15)
>
> University promotes a higher standard (Y13H28)
>
> At the moment cause it's more prestigious (Y13H7)

On balance, respondents were in favour of an integrated and co-operative approach to tertiary sector education:

> Should be part of a spectrum, with no barriers between (EPUB28)
>
> Universities should be in continual contact with other educational institutions so they can promote learning over a wide front and so they can keep in touch with developments in science, technology etc. (EPUB37)
>
> It's about achieving the same ends (EPUB42)
>
> Both have a relevant "place" – one meets a need for industry training but lacks research standards validity, one does [attain high research standards] (U35)

> Uni is recognised as theory orientated study. However practical study is just as important. Doctors would not handle without nurses. And everyone would complain if there were no trained mechanics. Every trade is useful in our society (U9)

On the topic of functional differentiation, 33.3 per cent of Year 13 students, 69.3 per cent of university students, and 74.4 and 66.7 per cent of employers agreed with the notion, albeit with some misgivings:

> The research function is one that unis tend to specialise in – however the concept of a vocational/academic difference is a nonsense (EPUB28)

> Labels don't take you very far. Each institution should stand on the quality of its graduates irrespective of what it calls itself or its activities (EPUB35)

> Recognise that polytechs and PTEs will tend to be more vocational but this should not preclude them from having research and academic functions if they feel those are appropriate to their aims/goals (EPUB37)

Significant differences were detected between assenting public sector employers and dissenting Year 13 students (X^2 = 5.77, df = 1, p<0.02), and between pro-differentiation university students and Year 13 students (X^2 = 6.39, df = 1, p<0.02).

Issues of equity and social justice informed the comments of two Year 13 respondents:

> They should be designed to set the learning standard to best benefit the student (Y13H28)

> Everybody has the same chance of education no matter where they live and have the same chances at different jobs (Y13H15)

In terms of the continued relevance of the humanities, 73 per cent of Year 13 students, 76.9 per cent of university students, and 90.7 and 88.9 per cent of employers indicated support. Differing patterns of support found to exist between the two student cohorts pointed to a stronger affirmation of the humanities by university students (X^2 = 5.23, df =1, p<0.05). More female than male Year 13 students also supported the humanities (X^2 = 6.65, df = 1, p<0.05).

The high employer endorsement of the continued relevance of the humanities was also backed up by explanatory comments that tended to

emphasize the value of critical thinking and communication skills gained through the methods of study involved in the pursuit of arts and humanities topics:

> If they teach people how to research and how to think about problems, then no degree is irrelevant. Some people may have direct technical links to a particular area, but it is above all, the principle of thinking that is key (PEPUB1)

> It teaches you to think and provides a solid foundation for further vocational training. I have one!! (EPRI33)

The general liberal position (GLP)

The hypothetical general liberal position was devised as a means of determining the extent to which respondents might be seen to either endorse or reject the overall ethos of a 'traditional' liberal education as discussed and defined in Chapter Two. When the collated scores of all 26 Likert scale items were examined in their cohort groupings all cohorts indicated support for the general liberal position. As seen in Table 3, however, the Year 13 secondary student cohort were the least sure (49.5% endorsement). They also returned the highest level of uncertainty (19.8%).

Table 3: Overall view of general liberal position (GLP) (aggregated %)

Cohort	Degree of support	Unsure	Degree of rejection
Year 13 students (n=74)	49.5	19.8	30.7
University students (n=39)	63.4	13.5	23.1
Public employers (n=43)	60.8	11.7	27.5
Private employers (n=36)	58.6	11.6	29.8

NB The percentages tabled represent the degree to which each entire cohort (on a scale of 1 to 100), their individual scores across all 26 items collated into a 'block' result, in effect supports (or rejects) the general (hypothetical) liberal position. Percentages do not represent the proportion of individual respondents either in favour of or in opposition to the GLP.

The relationship between each cohort's level of support for the general liberal position (GLP) and demographic and other selected variables is explored shortly.

Of the four cohorts surveyed, university students returned the strongest level of support for the GLP (63.4%), whilst public sector employers were not far behind on 60.8 per cent. Year 13 students showed the highest level of disagreement (30.7%), followed by the two employer cohorts (29.8% & 27.5% for

the private and public sectors respectively), with university students returning the relatively low disagreement rating of 23.1 per cent.

As was seen when individual item responses were reported, however, strong support for some aspects of a 'traditional' liberal education such as the development of critical thinking and an expectation of 'broadness' is mitigated by much lower levels of agreement with more 'dated' liberal notions such as meritocratic selection and elitism. Also of interest in this regard is the observation that the employer cohorts, in addition to indicating decisive support for the general liberal position, have returned some particularly categorical endorsements of individual aspects of 'liberality'.

In addition to this measurement of generalised support for traditional aspects of a liberal university education, some indication of whether or not individual cohorts were likely to display different levels of support for the principles of a liberal university education in contrasting ideational contexts was also sought. The 26 Likert scale items in the questionnaire were divided into two groups: (a) those that could be classified as representing the 'traditional' liberal *raison d'être* of the twentieth century university; and (b) those that critics in a New Zealand context have tended to associate with the rise of neo-liberalism. For the purposes of this exercise items 1,4,6,9,13,16,17,18,21,22,23,24,and 26 have been included in the 'traditional' category, whilst items 2,3,5,7,8,10,11,12,14,15,19,20,and 25 have been categorised as 'topical'. A justification for this specification is provided in Chapter Four. Aggregated scores for each group of 13 items were compared within each cohort. Variations between the total scores of the 'traditional' and 'topical' categories were considered to give an indication of the extent to which each cohort may support the general principles of a 'traditional' university education in either an affirming 'liberal' or challenging 'neo-liberal' context.

Support for the GLP in relation to 'Traditional' and 'Topical' themes

An examination of Table 4 reveals that the four cohorts surveyed returned varying levels of support for the concept and practice of liberal education. At least three patterns can be seen to emerge. First, university students were the only cohort to have returned a higher level of support for the general liberal position in the

context of topical themes than they did in the context of traditional themes (+6.3). Second, the level of Year 13 student support for the GLP fell away sharply in a topical context (-7.3). Third, of the two employer cohorts, the public sector appears to be consistently, if narrowly, more supportive of the GLP in both the traditional and the topical contexts.

Table 4: Support for general liberal position in 'traditional' and 'topical' contexts (aggregated %)

Cohort	Degree of support for GLP in context of 'traditional' items	Discrepancy	Degree of support for GLP in context of 'topical' items
***Year 13 students** (n=74)*	53.1	-7.3	45.8
***University students** (n=39)*	60.2	+6.3	66.5
***Public sector employers** (n=43)*	62.1	-2.5	59.6
***Private sector employers** (n=36)*	59.6	-1.9	57.7

NB The percentages tabled represent the degree to which each entire cohort (on a scale of 1 to 100), their individual scores across all 26 items collated into a 'block' result, in effect supports (or rejects) the general (hypothetical) liberal position. Percentages do not represent the proportion of individual respondents either in favour of or in opposition to the GLP.

With the notable exception of university students then, support for the principles of a traditional university education would appear to be weakened when stakeholders are confronted with those neo-liberal themes implicit within contemporary debate on the emerging role of the university in New Zealand society.

Ranking items

The first of two ranking items invited respondents to arrange five selected functions of the twenty-first century university in order of perceived importance (1 being highest). The functions offered for ranking represented five key consequences considered likely, to a varying extent, to result from an effective university education: (a) personal economic advancement; (b) the personal development of the educated individual; (c) the building of a better and more humane society; (d) private sector technological advancement; and (e) the enhancement of a nation's macro-economic competitiveness. The results of this item are reported in Table 5.

Table 5: Prioritised functions of the twenty-first century university (ranked 1-5)

Function	Year 13 students	University students	Public sector employers	Private sector employers
Provide opportunity for personal economic advancement	3 (3.06)*	4 (3.13)	5 (3.90)	4= (3.50)
Advance technological knowledge base of private companies	5 (3.20)	5 (3.69)	4 (3.64)	4= (3.50)
Make NZ more internationally competitive	2 (2.96)	3 (3.1)	3 (2.71)	2 (2.44)
Facilitate the personal development of individuals	1 (2.46)	1 (1.92)	1 (1.88)	1 (1.83)
Contribute to the building of a more humane society	4 (3.15)	2 (2.62)	2 (2.45)	3 (3.42)

* Item mean

All four cohorts ranked the personal development of individuals as the number one priority of the contemporary university. As can be seen from an examination of item means the Year 13 cohort returned a less categorical response than did the other three cohorts. The total discrepancy between their first and fifth rankings was 0.74, compared with 1.77 for university students and 2.02 and 1.67 for the two employer cohorts. In addition, the item ranked first by Year 13 students returned a mean of 2.46 compared with 1.92, 1.88 and 1.83 for the university student and two employer cohorts respectively. However, the discrepancy between first and second ranked items was very similar for all four cohorts.

At the other end of the scale, there was also broad agreement with regard to the (relative) lesser importance of the advancement of private sector technological knowledge and personal economic advancement. The two employer cohorts returned slightly different preferences with regard to their second and third priorities. Whereas employers working within the public sector nominated the building of a more humane society as their second priority after personal development, private sector employers preferred international competitiveness.

The rankings were exactly reversed, with very similar means, with respect to the third ranked function of the university.

The second ranking item invited respondents to prioritise five nominated attributes of a university graduate according to perceived order of importance in terms of a hypothetical employment interview situation. The results are reported in Table 6.

Table 6: Relative importance of graduate attributes (ranked 1-5)

Attribute	Year 13 students	University students	Public sector employers	Private sector employers
Ability to think independently and from various points of view	1 (2.31)*	1 (2.08)	1 (1.23)	1 (1.75)
A thorough theoretical knowledge of the field in question	2 (2.79)	4 (3.13)	5 (3.65)	5 (3.72)
Practical competence in the day to day requirements of the job	3 (2.86)	3 (2.56)	4 (3.58)	3 (3.47)
Evidence of having read and thought beyond the basics	5 (3.79)	5 (4.03)	3 (3.47)	4 (3.50)
An ability to communicate articulately and persuasively	4 (3.36)	2 (2.41)	2 (2.51)	2 (2.06)

*Item mean

The two student cohorts were asked to estimate the relative importance of the attributes listed through the eyes of a prospective employer, whereas the employer cohorts were asked to indicate their own actual preferences. The five attributes provided were designed to represent a range of generalised characteristics with an implicit reference to (a) an educated ability to think critically, (b) comprehensive theoretical knowledge, (c) vocation-specific competence of a practical nature, (d) evidence of breadth, and (e) communication skills respectively.

Critical thinking was the clear preference of all four cohorts. As can be seen through an examination of item means, however, employers returned a more

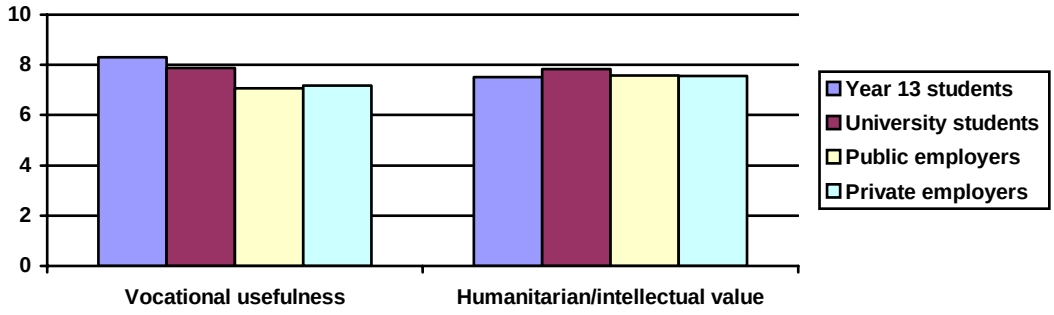
emphatic preference for this attribute than did either of the student cohorts. Public sector employers endorsed this option more strongly than did those working within the private sector. While the relative strength of endorsement of their respective third, fourth and fifth ranked attributes shows little spread overall, there is a wider gap between the first and second choices of public sector employers than there is between the same options chosen by private sector employers (a discrepancy of 1.28 compared with 0.31). In other words, whereas public sector employers may be more likely to rate the importance of critical thinking as being 'out on its own', as it were, employers working within the private sector may be more likely to closely associate it with theoretical knowledge.

Another point of interest is the low ranking of theoretical knowledge by both employers and university students when compared with Year 13 students. Also worthy of note is the lesser importance attached to 'broadness' by the two student cohorts. These results suggest that employers more highly value evaluative, interactive, and discriminatory cognitive ability over either abstract theoretical knowledge or journeyman-like practical competence. In turn, these preferences tend to indicate that qualities characteristic of a classical liberal education, such as 'cultural' literacy and a broadly informed capacity for discriminatory thinking, are still in demand.

The vocational, intellectual and humanitarian usefulness of a university education

Respondents were asked to rate the usefulness of a university education on a scale of one to ten. The first item focused respondents' attentions on vocational preparation. The second invited respondents to consider the impact of a university education on their non-vocational, intellectual and wider socio-humanitarian development. Depending on their stage of life, students were invited to express this value judgement in a futuristic/estimative sense, or, like the employer cohort, to consider the value of a university education from a retrospective point of view. These results are charted in Figure 10.

Figure 10: Vocational, intellectual and humanitarian usefulness of a university education (ratings out of 10)



While it can be seen that there are not wide variations between the scores returned by the four cohorts surveyed, there are nevertheless some notable points of divergence. Of the four cohorts, for instance, Year 13 students returned both the highest rating for vocational usefulness (8.31), and the lowest (albeit by a very small margin) rating for the estimated general intellectual and humanitarian value of a university education (7.51). Employers, on the other hand, attached a lower value to the vocational usefulness of a university education (7.07 & 7.18) than did either of the student cohorts. University students considered the two nominated functions of a university education to be of almost equal value (7.87 & 7.83). Interestingly enough, however, positive correlations were detected between (a) the rating given by employers to the vocational usefulness of a university education and their level of support for the GLP (r = .234, df = 74, $p<0.05$); and (b) the rating given by Year 13 students to the expected humanitarian value of a university education and their level of support for the GLP (r = .287, df = 69, $p<0.05$). In other words, it would appear that whereas the employers participating in this survey, generally speaking, associated an effective liberal education most closely with vocational usefulness, Year 13 student respondents linked it with the more abstract and idealistic aspects of a university education. These and other issues arising out of this survey of selected stakeholders are examined in depth in Chapter Six.

Summary and preliminary conclusions

The survey sought to elicit the views of three stakeholder groups that could be seen to broadly represent 'before', 'during', and 'after' perspectives on the

purpose and value of a university education. Year 13 students may or may not choose to undertake a university education depending on their perceptions of its function and usefulness. Post-graduate university students are in a position to comment on their perceptions and expectations from an up-to-the-minute insider-consumer point of view. Senior managers of public and private sector firms and organisations, on the other hand, are in a position to not only reflect on the usefulness of their own tertiary education, but are also qualified to critically evaluate the part played by the university in the preparation of more recent graduates for the increasingly technical workplace.

The results of this survey tend to point to a lessening of value on the part of the post-Picot generation with regard to some of the key principles and functions of a 'liberal' university education. Institutional autonomy, the sanctity of the teaching/research nexus, and public good financial independence are not well supported by the Year 13 cohort. Core components of the broad-based liberal model, including the development of critical and evaluative cognitive abilities, are nevertheless strongly endorsed. Employers in particular expressed a clear preference for the cultivation of discriminatory qualities that enabled the graduate job seeker to thrive in a demanding interactive environment. On some issues private sector employers tended to adopt a more 'market' view than did public sector employers. Year 13 students had much in common with the private sector in this regard, whereas the opinions of public sector employers and university students tended to more frequently coincide. Female respondents were more in favour of the 'humanities' and meritocratic secondary selection than were their male counterparts, who in turn showed a greater interest in a technological focus. The fuller implications of these findings are considered in the next chapter.

Chapter Six: University Education in a Knowledge Society

Introduction

This enquiry seeks to identify the roles of the New Zealand university in the context of a knowledge society. A review of the literature outlined in Chapter Two revealed an absence of research and analysis in this area. Working definitions of the problematic notions of a 'knowledge' society and a 'liberal' university education were developed during the course of that review. Gaining a greater insight into the conditions suggested by these terms is central to this enquiry. The working definitions developed in Chapter Two are revisited in the next section.

The third chapter of this thesis comprised an analysis of the work, recommendations and immediate legislative aftermath of the Tertiary Education Advisory Commission of 1999-2003. It was found that few of the major recommendations put forward by the TEAC in relation to a proposed restructuring of the university sector were enacted in the Education (Tertiary Reform) Amendment Act 2002.

Following the review chapters was a discussion of the methodologies and theoretical perspectives adopted throughout the project.

Chapter Five presented the findings of a survey of selected university stakeholders. Public and private sector employers, early graduate level university students, and Year 13 secondary students were invited to complete a postal questionnaire. Responses to a number of items designed to ascertain the views of stakeholders in relation to the role of the New Zealand university in a contemporary context were analysed.

The purpose of this final chapter is to discuss the findings of the survey of stakeholders in relation to the literature and policy review chapters and the research questions guiding this enquiry.

In addition to the primary question of what the roles of the New Zealand university should be in the context of a knowledge society, subsidiary research questions focus on 'traditional' aspects of the university. These subsidiary questions examine the relationship between teaching and research and the various notions of academic freedom in relation to the associated concepts of a 'liberal',

general, or broad education, and wider socio-economic, political and philosophical developments, such as political and business sector calls for a greater focus on the needs of a knowledge economy.

Themes found in the literature to be central to conceptualisations of the relationship between the university and the knowledge society are interrogated alongside those identified during the critical analyses of recent policy developments outlined in Chapter Three, and the survey of stakeholders reported in Chapter Five.

Major themes to be discussed

The major theme to emerge from the study was that a significant majority of stakeholders and commentators consider a 'broad' university education essential in a contemporary context. The perceived need for a university education that informs the student with respect to socio-cultural context, and stimulates curiosity, innovation, and creativity in the broadest intellectual sense, is examined in the early part of the chapter. Barriers to the implementation of a model of university education that can be seen to draw heavily on modernist and traditional liberal principles are re-examined in the light of the findings reported in Chapter Five.

This in-depth discussion of the major finding of this enquiry is followed by a brief summation of the perceived relationship between teaching and research in a knowledge-intensive environment. The findings of this enquiry point to a need for a greater focus on the teaching role of the university. It is suggested that staff research should continue to inform teaching, but that the development in students of higher order thinking, social analysis, and research skills may comprise the most valuable contribution the contemporary university can make in a knowledge-intensive environment.

The final part of the chapter comprises a summary of key conclusions that might be drawn from the findings. Implications for the New Zealand university in a knowledge-intensive environment are summarised. A few areas where further research might prove useful are also listed.

Part One: A Broad University Education and the Knowledge Society

The problematic notions of a liberal education and a knowledge society

Central to this enquiry are the contested notions of (a) a liberal university education and (b) a knowledge society. The following sections provide a re-examination of those working definitions developed in Chapter Two.

A liberal university education

Providing a conceptual reference point throughout this enquiry has been the notion of a liberal education. As discussed in Chapter Two, Newman (1966 [1858]) used the term in an increasingly secular mid-nineteenth century context to denote a type of higher education that emphasised the development of intellectual skills and qualities *for their own sake*. He considered vocational training important, but nevertheless secondary to the aspiration that educated individuals might be equipped to engage in an enlightened and constructive manner with the social, economic and intellectual challenges of their time:

> a University training is the great ordinary means to a great but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at supplying true principles to popular enthusiasm and fixed aims to popular aspiration, at giving enlargement and sobriety to the ideas of the age, at facilitating the exercise of political power, and refining the intercourse of private life (p. 134).

Allowing for the reality that Newman, like his twentieth century critics referred to in Chapter Two, was the product of a particular time and place, and was also deeply concerned for the emancipation of the individual, it might be imagined that his somewhat grand turn of phrase was also intended to articulate what we, with the benefit of a socio-political hindsight not available to Newman, would now term critical reflection and the development of reflexive practitioners. Then, as now, the role of the educated individual was to investigate, understand, criticise, participate and perpetuate. In the context of doctrines and social practices that might be found to discourage 'free' - or rational - thinking, a liberal education was

seen as the principal means by which 'best' values, beliefs, techniques and practices might be tested and perpetuated.

Drawing on Newman's iconic ideas, along with those of Rothblatt (1998) and the many other contributions considered in Chapter Two, it is possible to settle on a definition of a liberal university education that facilitates further discussion of the relevance of such an education in the context of a knowledge society.

For the purposes of this discussion, a liberal education, at the university level, might be characterised by at least three overlapping functions. A liberal university education (a) facilitates the acquisition of skills and attributes considered necessary to take on competence- or 'desert'-based leadership roles within society; (b) develops in the educated individual a greater sense of personal liberty and autonomy, including the ability to critically evaluate personal and global circumstances; and (c) develops a discerning respect for the cultures through which the individual has acquired his or her identity and social standing, and an ability and willingness to criticise, defend and reproduce those cultures. As discussed in Chapter Two, a 'liberal' university education, when it occurs, does so in addition to, or very often concurrent with, specialised vocational training.

An underpinning goal of this project is to determine the desirability of such an education in contemporary New Zealand circumstances.

A knowledge society

Earlier analysis in this study has highlighted the extent to which the notion of a knowledge society has been dismissed by New Zealand education academics as an unwelcome extension of the neo-liberal project of the 1990s (Olssen, 2002; Peters & Roberts, 1999). In Chapter Two I questioned the rationale of this blanket rejection. In the course of that discussion I also identified the absence of local research and analysis of this area as a significant gap in the literature of the New Zealand university. This project is designed to go some way towards addressing this gap. The discussion that follows assumes the existence and viability of a knowledge society. The justification for this assumption is grounded within the findings of the literature review (e.g., Baggen, 1998; Bohme & Stehr, 1986; Bok, 1990; Conceicao & Heitor, 1999; Dator, 2000; Delanty, 2001; Robins & Webster,

2002 & 2002b; Scott, 1998), and is tested against the research findings reported in Chapter Five.

For the purposes of this summative discussion then, a knowledge society might be defined as a society in which there is a high demand for specialised information across a broad range of activities. A society is 'knowledge-based' when the principal driving force behind economic and social development is the creation, dissemination and consumption of knowledge (cf. Bohme & Stehr, 1986). It is

> a society which emphasises the knowledge content of goods and services… [and] the importance of critical reflection and debate about knowledge and its use… [along with] the centrality of research and learning, which enable the creation and the critical application of knowledge, including the development of solutions to business, social and environmental problems (TEAC, July 2000, p. 8).

So defined, it can be seen that contemporary New Zealand society can, without resort to hyperbole or slogan, and irrespective of ideological predilection, be considered an emerging 'knowledge' society. The question that remains, then, is what the New Zealand university should be doing to 'best fit' its graduates for the demands of such a knowledge-intensive environment. The remainder of this chapter seeks, without ideological presupposition, to evaluate the findings of this enquiry in an attempt to answer this question.

The desirability of a broad education

Of the several definitions, or aspects, of a liberal university education examined in Chapter Two, those concerned with general intellectual development appear most congruent with the needs of contemporary society as identified by the stakeholders surveyed in this project. Employer respondents, in particular, indicated overwhelming support for a number of 'traditional' hallmarks of a liberal university education as defined by a range of commentators reviewed in Chapter Two (e.g., Adriaansens, 1998; Bok, 1990; Cuban, 1999; Delanty, 2001; Rothblatt, 1998; Weijers, 1998). Breadth of study, non-vocational exploration, the continued relevance of the humanities, and the teaching of critical thinking were all strongly endorsed by both public and private sector employers, as they were, if a little less emphatically, by both student cohorts.

This close correlation between stakeholders' perceptions of the needs of a contemporary, or 'knowledge' society, and the processes and qualities associated with a traditional liberal university education is a major finding of this study, and will be discussed in greater depth shortly. Suffice it to say, at this early point, that the underpinning principles of Newman's (1966 [1858]) argument that a 'Liberal Education' should develop the intellect 'for its own sake, for the perception of its own proper object, and for its own highest culture' (p. 115), has found strong support amongst university stakeholders surveyed during the course of this project. As seen throughout the findings reported in Chapter Five, New Zealand employers have a strong expectation that university graduates will have developed generic thinking skills beyond, and even irrespective of, their vocation-specific training. The university student cohort, and, to a lesser extent, the Year 13 cohort, also indicated support for the liberal imperative.

This liberal aspiration described by Newman is hinted at in the TEAC documents, but is not elaborated upon. The findings of this enquiry suggest that it should be. The fact that both student and both employer cohorts unambiguously ranked the personal development of individuals the number one function of the twenty-first century university would tend to suggest that a way must be found to ensure that university study does not become ever more utilitarian in its quest for 'relevance.' Relevance, according to the stakeholders surveyed in this project, is to be found in a context broader than mere vocational training. Indeed, the weight of evidence considered throughout this project would tend to suggest that the quest, which might be seen as the driving purpose of the entire TEAC policy process, to keep up with the more technocratic and economic demands of society (e.g., Ministry of Education, May 2002, p. 2) is not something that can be achieved in isolation from broader intellectual enquiry. It is in this sense that the TEAC process must be seen as inadequate and incomplete.

While there was in the TEAC process an acknowledgement of the need for what might be termed the more esoteric aspects of intellectual enquiry at the university level, there was little elaboration of how this enquiry might be facilitated in a more 'transparent', 'contested' and 'accountable' environment. The absence of specificity with regard to what the respondents in this enquiry regard as the most important function of the contemporary university is a cause

for concern. The TEAC documents provide an occasional vignette of the underpinning ethos of the liberal imperative (e.g., TEAC, July 2000, p. 8), but they do not articulate that imperative beyond the self imposed boundaries of what some critics might view as a somewhat cynical caveat.

This project seeks to determine the extent to which values associated with a 'traditional' liberal education, such as breadth of learning and non-vocational exploration, are considered relevant in a contemporary setting. Some commentators certainly view the notion as outmoded (e.g., Kerr, 1968). Others misrepresent its nature and intentions through a process of theory-bound over-simplification (e.g., Gilbert, 2005). But while this investigation has highlighted the inherently problematic nature of the various notions and practices of a liberal university education, it has also found them to be closely linked with many stakeholders' and commentators' conceptual understandings and functional expectations of a contemporary university. Each manifestation of the liberal approach has been found to have some contextual relevance or desirability. The findings of the research highlight the extent to which key aspects of the central values, processes, and outcomes once associated with the university of the modernist era are still sought after in a variety of contemporary settings. Indeed, Rothblatt (1998) employs what he terms 'contemporary cliché' to note that 'liberal education advocates breadth of preparation as input and breadth of outlook as output' (p. 36).

Both ends of Rothblatt's educational 'production line' are considered highly desirable by the stakeholders surveyed in this project. All four cohorts considered a broad education most desirable, and ranked graduates' 'ability to think independently and from various points of view' the most important of five relevant graduate attributes. These preferences represent an unequivocal endorsement of the liberal model.

Breadth in a contemporary context

Commentators who examine the relationship between the university and the knowledge society suggest that graduates will require a broad understanding of social, cultural, political, and economic factors impinging on all fields of specialist endeavour if the heterogeneous challenges of a knowledge-intensive age

are to be met (Adriaansens, 1998; Bok, 1990; Cuban, 1999; Delanty, 2001; Scott, 1998). It is widely acknowledged that knowledge is increasingly likely to take precedence over capital as the basis of wealth creation (e.g., Bohme & Stehr, 1986).

The argument for greater breadth of learning, as variously developed by these commentators, may be summarised as follows. The educated ability to consider multiple possibilities in an environment stabilised by few absolutes is considered vital to the success of the knowledge society. The more technical, complex, heterogeneous, and fast-moving society becomes, the more urgent and widespread the need for both medium- and low-skill service sector workers, and workers with broad general knowledge and advanced critical thinking skills (Bohme & Stehr, 1986; West, cited in Laugesen, 2004). Because knowledge society expertise is conceptualised as both more specialised (within field), and more diverse (between fields), well-informed leadership, analytic, and synthesising skills are likely to be in increasing demand. So much so that the development of students' ability to think in a reflexive manner about the wider social, cultural, and economic implications of actions taken in a specialised context is argued by many commentators to be the core task of the university of the twenty-first century (Bohme & Stehr, 1986; Bok, 1990; Rothblatt, 1998; Scott, 1998; Spies, 2000; Weijers, 1998).

The parallels between the divisions of labour characteristic of the industrial age and those of the knowledge society are obvious. As before, relatively unskilled workers will be employed, supervised, and managed by those with a higher education. Indeed, Bohme and Stehr (1986) argue that the most marketable, and therefore most powerful and potentially best rewarded, will be those with up-to-date technological expertise. The social ramifications of this polarised social structure, as further outlined by Bohme and Stehr, include the need to maintain social harmony in an environment where equitable outcomes are unlikely. Inclusive leadership, socio-cultural sensitivity, and political acumen are likely to be in widespread industrial and socio-political demand. As unpopular as it may seem, especially in times when efforts are being made to include the socio-culturally disadvantaged in the 'top end' of higher education, some commentators point out that a streamed and highly differentiated tertiary education system looms

as the most practical means of grooming an efficient knowledge society workforce (*ibid.*). This is the social reality that the TEAC policy documents, with their heavy 'bottom end' emphasis, appear to be targeted towards.

The educational requirements of a knowledge society

For the purposes of this discussion, then, the educational requirements of a knowledge society may be summarised under three broad headings: (a) Technical and specialist expertise; (b) relational skills and socio-cultural awareness; and (c) cognitive skill. Those at the bottom end of the tertiary spectrum may only require a basic level of literacy, and an amount of technical knowledge sufficient to enable them to perform a rudimentary service or labour function. Technicians and tradespersons will continue to be in high demand (West, cited in Laugesen, 2004; Garner, 2004a & 2004b), but will still not need the same breadth of preparation as those at the top end of the tertiary spectrum. Those undertaking university studies as preparation for a professional, managerial, or leadership role, however, are increasingly likely to be required to develop expertise in all three areas.

Employers surveyed in this project agree with this prognosis. Breadth of learning at the university level is associated by employers with 'all-round' ability (EPUB5), an 'enquiring mind' (EPUB38), 'intellectual capacity' (EPUB38), and a much sought after 'questioning approach' (PEPUB1). Stakeholders and commentators identified the development in students of an educated ability to think broadly and critically as a major role of the contemporary university. All four cohorts surveyed in this project considered the development of such abstract conceptual ability of greater importance than all other functions of the university. As already noted in an earlier section of this chapter, the personal development of individuals was ranked ahead of broader economic and social needs.

Corresponding with this emphasis on the abstract intellectual needs of the individual, the consumer stakeholders surveyed in this project do not consider professional training the main function of the university. Indeed, the overall findings of the study of stakeholder perceptions indicate that so-called 'non-vocational' aspects of what has been known as a 'liberal' university education are still considered vital in a contemporary context. This clear endorsement of what one mature student termed 'self-development' (U39) notwithstanding, several

university students nevertheless made reference to the balancing of personal, vocational and financial considerations: 'In the beginning it was to educate myself, but as the loan increased now it's more for the money a job will bring' (U20).

Employer respondents were quick to distance themselves from any attempt to differentiate between the 'academic' and 'vocational' aspects of higher education (e.g., EPUB20; EPUB28; EPUB35; EPUB37). Some commentators, likewise, question the wisdom of 'trying to partition liberal from other forms of education' (Rothblatt, 1998, p. 54). Nevertheless, the perceptions of commentators and employer respondents suggest that the interactive, complex, and rapidly changing nature of contemporary society requires a style of university education that is able to produce 'well-trained' graduates who also have a breadth of general knowledge. It would certainly appear that these stakeholders consider any concentration on 'technical', 'vocational', or 'professional' learning that does not also allow the student opportunity to explore non-utilitarian and non-instrumental interests less than ideal. The proviso in the TEAC documents expressing an acknowledgement of the need for broader contextual study will be discussed shortly.

Expressions of support for the continued relevance of the humanities on the part of all four consumer cohorts (item 24: 90, 89, 77 & 73 per cent endorsement on the part of public and private sector employers, and university and Year 13 student cohorts respectively) could also be construed to mean that these stakeholders expect the university to offer a broad selection of 'exploratory' subjects, irrespective of economic pressures. One private sector employer, for example, explained his support for the continued relevance of the humanities by stating that studying for an arts degree 'teaches you to think and provides a solid foundation for further vocational training' (EPRI33). A university student respondent took issue with the statement that study in the humanities was of waning relevance in contemporary society:

> Not relevant in what way? Because it's hard to get a job with a BA degree? Maybe. But I think the arts are part of our culture and will always be relevant in showing our history, where we are from etc. It's important (U33).

The same 'cultural' and 'repository' theme was expanded upon by another university student: 'Someone needs to preserve that knowledge [as] it may be

needed someday and if no-one studies it, it is lost forever' (U32). During the survey stage of the project the phrase 'traditional arts degree' was deliberately used in isolation from any reference to social science as the review of the literature had pointed to a widespread societal perception that the humanities were associated primarily with non- or beyond-vocation learning.

While there were some within-topic variances between cohorts, stakeholders categorically supported the 'thinking role' of the university. More precisely, they indicated that the most useful graduate is the one who has been taught how, rather than what, to think. As expressed by one private sector employer, 'we don't all wish to be technocrats' (EPRI34). Employers commented that 'some people may have direct technical links to a particular area, but it is above all, the principle of thinking that is key' (PEPUB1).

The findings of the review of the TEAC policy process indicated that government understood the economic and social importance of producing graduates whose specialised expertise was well informed by a broad general knowledge (TEAC, July 2000). In addition, the *Tertiary Education Strategy 2002-2007* specified that all tertiary providers need to provide 'a generic skills component more explicitly in programmes at both degree and sub-degree level' by 2007 (Ministry of Education, May 2002, p. 47). The term 'generic skills' is understood to include a wide range of relational, communication, and cognitive abilities. According to the strategy document, it is an acknowledgement that employers require graduates who 'possess high-level generic and transferable skills' (*ibid.*). The findings of this enquiry support this assertion. Not only did all four cohorts rank independent multifaceted thinking the most important graduate attribute, all but the Year 13 cohort also rated an ability to communicate articulately and persuasively the next most desirable attribute.

The statutory requirement that providers ensure that these components be 'integrated into programmes and qualifications' by 2007 raises a number of issues with regard to the way that the university, in particular, structures its programmes (*ibid.*). Two major questions arise. First, can these 'generic' aspects, as specified in the *Tertiary Education Strategy*, really be 'integrated', or should they be sequenced in some way? The commentators reviewed in Chapter Two were divided on this issue (e.g., Andriaansens, 1998; Rothblatt, 1998). Second, does

this development signal a 'return' to the broadening ethos of a 'liberal' or general education, and can it be concluded that 'breadth' should comprise the core component of all university education? The next sections continue to draw on the findings of this enquiry in an attempt to answer these questions.

Question One: Breadth-within or breadth-beyond?

Many commentators are, for a variety of reasons, concerned about the viability of the university in a rapidly changing world (Aitkin, 1991; Bloom, 1987; Bok, 1990; Blumenstyk, 2001; Cuban, 1999; Dator, 2000; Delanty, 2001; Inayatullah & Gidley, 2000; Kaplan, 2000; Manicas, 2000; Miyoshi, 2002; Readings, 1996; Robins & Webster, 2002b; Rothblatt, 1998; Scott, 1998; Weijers, 1998). They question the type of education provided in terms of its real-world application. A central theme of much of this commentary, as was put before stakeholders in the primary data gathering phase of this project, is the place of broad, general, or beyond vocation learning. Most commentators agree that such study is vital in the context of a knowledge society. How it is implemented, however, is an area of vigorous dispute.

Unlike Adriaansens (1998), who, as was discussed in Chapter Two, favours a distinct two stage liberal-vocational progression, Rothblatt (1998) argues that 'we ought [instead] to consider the means by which liberal, professional and technical education are intermixed' (*ibid.*). Rothblatt's point is that 'no curriculum can guarantee liberal education since any subject can be taught narrowly or broadly' (*ibid.*, pp. 53-54). Recent initiatives in a number of fields are aimed at incorporating breadth of study into 'vocational' disciplines such as law, medicine, and accountancy.

The Faculty of Law at the Victoria University of Wellington, for example, advises prospective students that

> [in order] to keep its law graduates abreast of the accelerating changes in society, its values and technology, Victoria's LLB combines a *general liberal education* with the knowledge and skills necessary for the various careers in law. Arts, commerce or science courses, which you take at the beginning of your LLB programme, provide part of this. Approximately 80 percent of law students complete double degrees such as LLB/BA, LLB/BCA or LLB/BSc ([emphasis added] Victoria University of Wellington, 2004, p. 3).

It should be noted that the Victoria Law Faculty view a 'general liberal education' as something distinct from specialised vocational studies. In addition, they subscribe to aspects of the American two-stage model in facilitating the study of 'liberal' topics as a precursor to specialist professional learning.

It seems most likely then, in keeping with the aims of the *Tertiary Education Strategy*, that the 'generic' skills so sought after by employers will continue to be developed through a combination of integrated and extension learning components. As always, providers will respond to market demand, be it a call for greater vocational specificity, or greater contextual awareness. A good example of this is to be found in teacher training, where the capacity to develop all-round competence is constantly affected by a shifting balance between professional, cognitive, cultural, and economic considerations.

An interesting finding of the survey of stakeholders, however, was the way in which each cohort rated the vocational and humanitarian usefulness of a university education. The two employer cohorts attached a lower value to the vocational usefulness of a university education than did either of the student cohorts. Employers also ranked vocational usefulness below the humanitarian and intellectual value of their university education. This, coupled with a statistically positive correlation between the levels of employer support for vocational usefulness and the general liberal position (GLP) described in Chapter Five, would seem to suggest that employers, in contrast to both secondary and university students, closely associate the liberal and vocational aspects of a university education. This may suggest that the employers surveyed in this project favour an integrated or 'breadth-within' approach. At the very least, it indicates that these employer respondents associate useful vocational preparation with a liberal university education. Qualifying comments reported in the previous chapter would tend to reinforce the implication that employers, for the most part, favour an integrated approach which does not artificially divide the 'liberal' from the 'vocational'.

The relatively low level of support shown by Year 13 students towards the hypothetical general liberal position (GLP) correlates statistically with their lower ranking of the expected humanitarian and intellectual usefulness of a university education. Whereas the university student cohort, generally speaking, responded

to most items in a way that could be said to be supportive of a liberal university education as described by its advocates in Chapter Two, the Year 13 cohort, in contrast, did not appear to attach the same value to the liberal aspects of a university education. In contrast to both employer cohorts, and, to a lesser extent, the university student cohort, Year 13 respondents expressed an unequivocal expectation that a university education would be of considerable vocational usefulness. Of the four cohorts, Year 13 students were also both the least supportive of the GLP across a range of items and the most swayed by 'topical' or utilitarian themes that provided a contemporary or neo-liberal challenge to the more traditional liberal ethos. The comparative readiness of the Year 13 cohort to embrace market values in an educational context is marked. It contrasts sharply with the unambiguous rejection of neo-liberal values by the university student cohort. Indeed, when confronted with topical or neo-liberal themes the university student cohort indicated an even stronger preference for various 'traditional' liberal indicators. They were the only cohort to do so. An area where the Year 13 cohort was noticeably more sympathetic than the other cohorts to neo-liberal imperatives was the private control of universities.

What is of particular interest here is the possibility that should these younger stakeholders maintain these views over time then the snapshot view of the perceived role of the New Zealand university afforded by this research project may change markedly. It would be most informative to follow up this project with one that targeted the Year 13 cohort several years on.

In terms of any incorporation of liberal elements within existing vocational programmes, or, for that matter, the sequencing of liberal and vocational components, it is not possible to analyse the extent to which the Year 13 cohort may be seen to favour one approach over another. They do not appear to clearly endorse either. Statistical analyses of the university student cohort's responses to these items were inconclusive. While it is clear that university students are supportive of the GLP, it is not possible to determine which of the 'breadth-within' or 'breadth-beyond' approaches holds the most appeal. As this project did not put this question to stakeholders in specific terms, the way that liberal or contextual elements are integrated or sequenced is an area where further research may prove useful. Given the findings of this study, the way that a university

education retains or acquires ‘breadth’ most certainly looms large on the ‘to do’ lists of tertiary policy makers and administrators.

Issues of social equity and access

Impacting on this discussion of the ways that generic learning might be incorporated within or added on to existing university programmes, of course, is the question of access. Following on from the Picot policy process of the late 1980s that saw policy makers attempt to address issues of governance and social equity in primary schooling, there has been a renewed focus on facilitating access for social groupings previously less likely to take advantage of the full range of educational opportunities available.

As discussed in Chapter Two, with regard to both New Zealand and the United Kingdom, an ‘opening of the gates’ at the tertiary level has tended to impact on the nature and quality of learning in a university environment. Whereas the university might see in the ‘generic skills’ component a further opportunity to strengthen students’ ability to consider the social, economic, philosophical and historical underpinnings of any given field of study, the learning needs of disadvantaged students may mean that the teaching of ‘generic skills’, in reality, amounts to little more than ‘catch-up’ literacy training. The TEAC anticipated this problem, and suggested that the Commission’s preference for a raising of ‘the merit standard for entry to under-graduate degrees would make it necessary for many learners to undertake foundational-level study before undertaking degree courses’ (TEAC, November 2001a, p. 22).

Given that the bulk of the work of the TEAC was focused on the ‘bottom end’ of the tertiary sector, and, to a large extent, with making it possible for unskilled school-leavers to gain employment, the ‘generic skills’ component has less relevance for the university sector. Nevertheless, in an environment where students from lower socio-economic backgrounds are entering the university system in greater numbers, and universities continue to identify poor literacy skills in first year students (NZPA, 2004), the type of ‘generic’ learning able to be provided by the university will be influenced by the needs and capabilities of students on entry. With this in mind the New Zealand Qualifications Authority has recently announced that ‘new literacy and numeracy standards will be

required before students are accepted for university next year [2005]' (NZPA, 2004).

The survey of stakeholders found little support for the tightening of school leaver entry criteria as originally suggested by the TEAC and recently outlined by the NZQA. Unlike TEAC, stakeholders did not consider meritocratic entry a valid means of 'producing better graduates'. However, all cohorts indicated a much higher level of support for the proposition that 'adult (mature) students wishing to study at university should have to provide evidence that they are capable of succeeding at the university level'. This is in keeping with the TEAC proposition that 'higher merit-based entry would apply to all learners entering under-graduate degrees irrespective of their age' (TEAC, November 2001a, p. 17). It is also significant to the extent that the feasibility of either 'broadening' or extending university study, in terms of a cost-benefit analysis involving both students and employers as consumers (and government as primary funder), may be affected by the number of students undertaking a university education. In other words, should fewer students opt for university study, and correspondingly more school leavers take note of market demand and enter a trade and/or choose to study at a polytechnic, it could be argued that such differentiation may invite a funding regime that more closely recognises the needs of a knowledge economy (West, cited in Laugesen, 2004).

This is in keeping with the original TEAC recommendations and is another area where further research may prove instructive. Research targeted at this area is especially important given recent developments in the United Kingdom. The British Government's plan to 'get half of all school-leavers into higher education by 2010' has been criticised on the grounds that it 'threatens to destroy excellence' (THES, 22 November 2004), and involves 'churning out far too many people whose skillsets are less than brilliant' (Verwaayen cited in *ibid.*). This criticism is set alongside perennial concerns that academic standards are declining as university teachers pass 'students who were not capable of benefiting from degree-level study… and university managers struggle to maintain student numbers and teaching budgets' (THES, 19 November 2004). Should these criticisms have validity in a New Zealand context it would seem unlikely that the type of breadth of learning outlined in this thesis would become viable.

Question Two: A 'return' to a liberal education?

This discussion has already examined the close correlation between stakeholders' perceptions of the needs of a knowledge society and the characteristics of a liberal university education. A major finding of this enquiry is that employer and university student stakeholders strongly support the ethos of a modernist, liberal university education. They equate this broadening ethos with the educational requirements of a knowledge society.

While there is a range of views about how the 'breadth' components of a university education should be incorporated (Andriaansens, 1998; Bloom, 1987; Readings, 1996; Rothblatt, 1998), there is widespread agreement amongst commentators, stakeholders and policy makers with regard to the ongoing value of generic learning (Aitkin, 1991; Andriaansens, 1998; Bloom, 1987; Bok, 1990; Delanty, 2001; Ministry of Education, May 2002; Readings, 1996; Rothblatt, 1998). This is framed against a concern on the part of some academics and commentators about the long-term educational implications of cultural relativism (Bloom, 1987; Kaplan, 2000; Rata, 2004; Readings, 1996).

Given the significance of these findings, and the strength of resistance to the various liberal models described in this study on the part of post-modernist education academics, the following sections revisit my earlier examination of post-modern, and, to a lesser extent, non-Western perspectives on the liberal model of university education begun in Chapter Two. It can be seen that an adequate addressing of these challenges to a possible 'return' to an overtly liberal ethos of university education in New Zealand is essential if further progress is to be made in the context of this study. The discussion is conducted in some depth. I then return to a closer examination of the empirical findings of this project in relation to these and associated topics.

Post-modern and non-Western perspectives and the liberal model

There is a growing concern amongst some conservative thinkers that the benefits of a 'Eurocentric' and 'universalistic' modernist university education may be swept aside, with the result that rational, scientific thought, and democratic participation and debate, may also be at risk (Bloom, 1987; Kaplan, 2000; Readings, 1996; Rata, 2004). The role of the university as a repository of

'Western' culture (knowledge), then, however such culture and knowledge is conceptualised, remains central within the notion of a broad education. Implicit within the notion of a broad or liberal education are, after all, the ancient Greek notions of democratic thought and civic participation, and the Enlightenment and Reformation principles of separation of church and state and rational scientific enquiry. These antecedents and heritages of the contemporary New Zealand university are distinctly Western and European. They have become central to the New Zealand university's everyday operation.

Indeed, as noted in Chapter Two, without these liberal and modernist intellectual conditions post-modern criticism would not be possible. As also noted in Chapter Two, some academic writers in non-Western countries such as Pakistan and the various Islamic states of the Middle East view a hoped-for 'transition to modernity' (Rahman, 2000, p. 135) as the principal means by which personal freedoms might be attained. They view an autonomous 'modern' university as a key means by which this might be achieved (Mojab, 2000; Rahman, 2000). Given the disparagement visited upon modernism by many post-modern or 'antimodern' (Shapiro, 1995, p. 35) Western academics, it is worth further outlining the value attached to modernist conditions by academics with an interest in the role of the university in non-Western nations:

> The biggest changes – those of creating an impersonal bureaucracy, establishing the rule of law, making people respect academic achievement rather than power or saintliness – is not only a change in governance but the completion of the transition to modernity that is taking place. South Asia has been making this transition from the pre-modern, feudal/colonial order to the modern/democratic one since colonial days. When this is completed, a new world view will be born. This world view, contingent as it will be upon individualism and freedom, *will support democracy in the domain of politics and rationalism in that of ideas*. The universities will help to create this world view *as they will be products of it* (Rahman, 2000, p. 135 [emphasis added]).

Clearly, Rahman views the contemporary institution of the university as essentially universalistic in the sense that it epitomises the ideals of individualism, democracy and rationalism, which are in turn characteristic of both modernity and Western systems of political economy in general.

It is also in this sense then – the espousal of universal values associated with freedom of thought, voice and action – that it could be argued that the university is essentially both a modernist and a Western institution. Should a 'university' not

be characterised by an ethos of individualism, democracy and rationalism, then it follows that such an institution should not, by historical and functional definition, be classified as a university at all. Such an institution might, of course, serve a valued instructional purpose within its socio-cultural context. But given that the university has throughout its history evolved to be a site of both intellectual and scientific enquiry, and social critique, the significant curtailing of any of these activities must call into question the use of the term 'university' to describe anything serving a much less emancipatory and progressive role.

Mojab (2000) alludes to the evolutionary nature of societies and the institutions that serve and arise out of them when alluding to the socio-political aspirations of the peoples of the Middle East:

> The desire to change the [fundamentalist/autocratic/militaristic] status quo is strong among the peoples of the Middle East. Contrary to the claims of some Western observers and consultants, the main source of "underdevelopment" must be sought, not in the attitudes of the people, but rather in the institution of the State…. Many social scientists argue that the state can be harnessed through the promotion of civil society. *This is a model based on the experience of democratization of Western societies in the post-Renaissance period* (Mojab, 2000, p. 145 [emphasis added]).

These are conditions, rendered deservedly more problematic in Western settings by insightful critical and post-modernist analysis, that are largely taken for granted in 'advanced' Western democracies such as New Zealand. However, as already noted, postmodernists tend to disparage the Enlightenment ethos of 'modernist' liberal education. They claim that diversity and bi/multiculturalism have rendered it inappropriate, imperialistic, and anachronistic (Derrida, 1982; Focault, 1970 etc.). Others are not so sure (Bloom, 1987; Kaplan, 2000; Mojab, 2000; Rahman, 2000; Readings, 1996).

A central aim of the 'Great Books' approach was the acquisition and consideration of *various* knowledges, or at least a single perspective on knowledge that was mindful of the effects of various political, economic and socio-cultural influences (Bloom, 1987; Kaplan, 2000; Readings, 1996). The various conditions and developments of the ancient and middle first millennia worlds were valued according to the contribution they could be seen to have made to the birth and nurture of modern liberal democracy. Contemporary (liberal/democratic/modernist) conditions were seen as a synthesis of the best - that is, the most rational, humanitarian, and logical/utilitarian - features of a range

of historical precedents. Under such conditions, and being mindful of various historical and contemporary alternatives, liberal democracy was considered more desirable than other forms of political economy. It was, consequently, a 'choice' to be promoted and defended by succeeding generations. The use of 'Great Books', which could be seen to encapsulate and articulate the preconditions and values underpinning this 'choice', was a logical means of perpetuating those social conditions most valued by those in a social, economic, and political position to 'choose'. They were, in effect, case studies. In theory, and problems associated with uncritical schooling practices, imposed democracy, and indoctrination notwithstanding (Oliver, 2004), each (educated) generation was in a position to evaluate and adopt those valued social conditions.

Cultural pluralism was, in such conditions, only viable when alternative cultures were able to operate without impinging upon the essential liberal democratic characteristics of the host state. Alternative customs were acknowledged, but were incorporated only to the extent that they could be seen to contribute to the betterment of existing socio-political and economic conditions. Whilst at times promoting the equalitarian principles of bi- or multi-culturalism, in reality most liberal democratic states, including New Zealand, continue to operate in this way today.

According to the type of cultural relativism advocated by many postmodernist theorists, however, various knowledges are studied and valued in isolation, and only from the perspective of their respective participant stakeholders. No external judgements or comparisons are attempted, as values are only considered relevant *within* the context under investigation (Abercrombie *et al.*, 1994, pp. 97-98 & 356). In other words, the type of comparative analyses undertaken by Mojab (2000) and Rahman (2000) may be considered culturally insensitive, Eurocentric, and inappropriate by advocates of cultural relativism. Rahman and Mojab each find fault with various (non-Western) socio-cultural norms characteristic of their homelands (Pakistan and Iran), and express a preference for Western rationalist/democratic conditions. Given their Western education, Rahman and Mojab may, therefore, be perceived by cultural relativists to be 'imposing' one set of Western 'universalistic' cultural norms (liberalism/modernity/rationalism) onto non-Western settings that should,

according to the precepts of cultural relativism, only be understood in relation to internal (indigenous/fundamentalist/patriarchal) reference points. What is not clear in the writings of post-modern theorists, however, is how the civic and intellectual freedoms they appear to take for granted in Western democracies would be maintained in the absence of a modernist/rational/individualist state apparatus. The perpetuation of such a system of political economy has, of course, up until now, been facilitated by the very type of liberal education post-modernists appear so eager to do away with.

It is important to again note, at this point, that the majority of stakeholders surveyed in this project declared a categorical preference for the liberal/modernist/rational model of university education. Whilst they were not given a choice between modernism and post-modernism as such, or between Western and non-Western ideals, the pattern of preferences shown over the full range of items can be seen to be indicative of a particularly strong endorsement of rational individualism. It may be surmised that the majority of employer and student stakeholders surveyed in this project value a continuation of this essentially Enlightenment ethos very highly indeed.

As discussed in Chapter Two, the rejection of the Enlightenment heritage on the part of many post-modernists constitutes a significant challenge to the way that research, education and civic life is both conceived and conducted. Is it possible, then, that the 'compare and contrast' ethos of breadth of study is undermined by cultural relativism, in as much as 'critical' thought is bounded by a single context, or is cultural relativism merely an alternate pathway made up of an unrelated series of single context-specific case studies? As the latter model does not allow for cross referenced analysis, it is difficult to see how it would significantly 'broaden' the enquirer's mind. The type of educated graduate desired by the majority of stakeholders surveyed in this study is one who has been trained to critically consider a range of possibilities, and to have developed sufficient moral and intellectual courage to choose in a decisive and informed manner. Such informed decisiveness requires both a breadth of contextual understanding and a willingness to choose one set of conditions over another. Critics of post-modernism may contend, therefore, that a relativistic outlook will not equip the graduate for the harsh realities of the world beyond the academic milieu.

The response of the critical multiculturalists

In the midst of this ongoing debate critical multiculturalists have sought to maintain a focus on issues 'of universal human rights, of liberation, community, and social justice' (Shapiro, 1995, p. 32). In so doing, they recognise the difficulties associated with continuing to embrace notions 'dismissed by critics as part of the metaphysics of modernity and so-called enlightenment' (*ibid.*). They nevertheless show interest in many of the defining principles of postmodernism, including Lyotard's central proposition that the 'grand narratives of legitimation are no longer credible… [and that these] canons are socially constructed and always will need to be reconstructed through dialogues among and between various communities' (Grant & Sachs, 1995, p. 90). Critical multiculturalists argue that multiculturalists and postmodernists 'should begin a dialogue' (*ibid.*). They see value in attempting to overcome the pitfalls of 'what is euphemistically called a "common culture"' (Giroux, 1995, p. xi), whilst 'at least maintain[ing] some kind of universal human vision' (Shapiro, 1995, p. 21). Shapiro (1995) further contends that 'we will need to decide whether the claim that all such universal visions are part of man's megalomaniacal desire for power and uniformity, or part of the deep failure of political nerve that now afflicts so many on the Left' (p. 21). This dilemma between showing a public preference for a particular set of values and labelling such decisiveness as cultural 'imperialism' relates closely to our overarching consideration of the nature and purpose of a university education. It points to the possibility that a liberal university education and the democratic ideal may be closely related; even inextricably intertwined.

The relationship between a liberal education and the democratic ideal

For many education theorists a defining principle of education is the notion that the educated person is the one who is able to make meaningful connections between oftentimes disparate knowledges and circumstances. Such a person is thought to be educated to the extent that they are able to discriminate in an informed, rational, and considered manner (Oliver, 2004). Of course, this does not mean that an educated person will necessarily make good ethical or just moral

decisions. The fact that such a person has been exposed to a range of broadening options does not predispose them to 'the good', whatever culture and convention might determine that to be. It merely informs them with respect to the wider meaning, context, and ramifications of any subsequent activities in which they might engage. Critics of American foreign policy, for instance, might question how politicians and policy makers exposed to a quality liberal education could make decisions adversely affecting the wellbeing of millions of citizens of far-off sovereign nations. But true education is not deterministic. The educated individual is still free – indeed, essentially so – to choose 'for themselves'. This choice might be in harmony with or in sharp contradiction to the best knowledge available. A distinguishing feature of freedom, of course, is that the free person is at liberty to choose badly.

Because cultural relativism appears to place a limitation upon the scope and process of this type of free and rational thought it appears incompatible with the very purpose of (Western) education. If one cannot compare and contrast, one cannot discriminate. If one cannot discriminate, one cannot choose. If one cannot choose, one is not free.

The possibility that each generation might have opportunity to choose for itself its own socio-cultural arrangements as encapsulated within a particular form of political economy, be it status quo or otherwise, might be viewed as the very essence of the democratic aspiration. The possibility, then, that a 'liberal' education is closely linked with the viability of liberal democracy is suggested by the findings of this enquiry. The various understandings of a liberal education considered in Chapter Two, especially those outlined by Rothblatt (1998), point to a close correlation between systems of education and social continuity and cohesiveness. In a contemporary context, it is clear that graduates of the New Zealand university system will be expected to play a key role in fostering social and economic progress (Maharey, May 2002; Ministry of Education, May 2002; TEAC, July 2000). Given this close association between education and the social and economic realms a broad and liberal education would seem the best way to foster a broad and liberal society.

Liberal education and the propagation of 'culture'

A problem associated with this enquiry is that while the question of culture looms large in the writings of some commentators (Adriaansens, 1998; Bloom, 1987; Readings, 1996), it was not realistically possible to pursue it in any depth during the primary data-gathering phase of the project. The matter of developing and perpetuating 'culture' was not put before stakeholders in a direct manner. In both the TEAC policy process, and the survey of stakeholders, the cultural element was more implied than it was specified.

Nevertheless, open-ended comments provided by respondents tended to reveal that stakeholders – especially employers – were aware of the cultural and other purposes of beyond-vocation 'exploratory' studies. The HR manager of a large private corporation, for example, stated that 'university is one time when people can take time to learn in a true learning environment' (EPRI18). This comment was one of several that indicated that stakeholders expect a university education to be different from other forms of tertiary and workplace learning. The general manager of a public sector organisation alluded to the wider socio-cultural notions implicit within the notions of breadth and exploration when he observed that 'a liberal education is at the heart of civil society' (EPUB42). A university student respondent highlighted the growth and development and self discovery aspects of a university education: '[Exploration] is an essential part as students are given opportunity to discover themselves, usually for the first time without their parents' (U9).

While it would appear that statements such as these harbour substantial 'cultural', 'moral', and 'instrumental' assumptions, it would be necessary to conduct follow-up interviews with respondents before a more adequate understanding of these implicit views could be elaborated. The scope of this project does not allow for a thorough examination of the university's role as a developer and reproducer of 'culture'. It does seek to identify, in broad terms, what the roles of the university might be in the development of a knowledge society. The specific relationships between the cultural elements of a so-called traditional liberal education and social, economic, and political progress are inferred throughout this thesis, but are not explored in any depth. Connections between what a university education might comprise in relation to social,

economic, and intellectual 'norms', and the reproduction of dominant (and other) cultures is an area of great interest in a knowledge-intensive environment, but it is beyond the scope of this enquiry.

In summary then, those commentators who favour a 'cultural' role for the university (e.g., Adriaansens, 1998; Bloom, 1987; Gasset, 1966; Readings, 1996), akin to what Rothblatt (1998) terms 'the harmony of the person in relation to a set of cultural values' (p. 34), are less inclined to see merit in blending liberal, vocational, and professional aspects of learning in a single topic. This is as problematic to them as is a dichotomous treatment of theory and practice to the employers surveyed in this project. What distinguishes the reservations of the culturalists from those of the integrationists is the alleged slippage of vital socio-cultural knowledge that may occur when these areas are not studied for their own sake and in their own right (Bloom, 1987; Flexner, 1968; Gasset, 1966; Kaplan, 2000; Readings, 1996). However, it is worth noting at this point, that a common misapprehension about the nature of a liberal education is that its central focus is the accumulation of 'objective' knowledge, or the perpetuation of a specified canon of knowledge (noun) *for its own sake*. Gilbert (2005) makes this assertion when arguing that, in a knowledge society, an effective (secondary) education will need to shift its focus away from specified knowledge (noun) and onto the processes of 'knowing' (verb), and the 'knower' themselves. But as we have already seen in our discussions of the various origins, nature and practices of liberal education, such a conception of a liberal education is, at best, incomplete. The central purpose of a liberal education has always been the intellectual, socio-political and cultural development *of the learner*. That which Newman (1966) hoped would be developed, 'for its own sake' (p. 115), was the intellect, the *process of thinking*, which, in stubborn defiance of postmodernist ponderings about its allegedly social locale (Gilbert, 2005), continues to reside in the individual.

Some commentators (e.g., Scott, 1998) express the view that the university is at risk of becoming a victim of its own success as learning organisations (especially large employers) increasingly take on the 'thinking' role of the university (p. 14). On the other hand, both employer and the university student cohorts surveyed in this project appear to favour a continuing differentiation

between workplace and university learning. Year 13 students, conversely, expressed a clear and statistically significant distaste for functional differentiation. As previously discussed, the notion of 'breadth-within' or 'breadth-beyond' any particular course of vocational (university) study remains problematic within this assumption, of course, and needs to be more thoroughly explored through further research. As for the notion of cultural relativism, recent academic contributions in a specifically New Zealand context appear to be seeking to provoke further discussion around this contentious topic (e.g., Rata, 2004).

In seeking to address the question of whether or not the specification within the *Tertiary Education Strategy* of mandatory 'generic' elements in tertiary education signals a 'return' to the broadening ethos of a 'liberal' or general education, the findings of the survey of stakeholders, and, to a more limited extent, the analysis of the TEAC policy process, suggest that stakeholders consider the broadening aspects of a university education essential. While it could be argued that breadth, in one form or another, has always been a feature of university education, it would appear that a more deliberate effort is currently being made to ensure that all students are exposed to the benefits of a 'general liberal education' (Victoria University of Wellington, 2004, p. 3).

This development is unlikely to satisfy those who equate a university education with the further development and overt perpetuation of valued cultural norms (Adriaansens, 1998; Bloom, 1987; Gasset, 1966; Readings, 1996). But the 'generic' emphasis outlined in the *Tertiary Education Strategy* does at least signal a 'return', of sorts, to the generalist, broadening principles of a liberal education.

But should 'breadth' comprise a core component of all university education? As has been intimated throughout this study it is very difficult to try to differentiate between vocational and academic learning (Rothblatt, 1998). This is in part because, as also noted throughout this study, 'no curriculum can guarantee liberal education since any subject can be taught narrowly or broadly' (*ibid.*, pp. 53-54). Given all four stakeholder cohorts' strong support for breadth, the concerns of commentators with regard to the increasingly complex demands of a knowledge society, and the 'generic' initiative signalled by policy makers in the *Tertiary Education Strategy 2002-2007*, it does seem clear, however, that all stakeholders are disadvantaged when breadth of study is not facilitated: 'Breadth

of thinking is very important' (EPRI33). When the responses to all relevant items are considered, it is clear that the overarching perception of the employer and university student stakeholders is that programmes of university study are strengthened when contextual and beyond-vocation aspects are incorporated. The responses of the Year 13 cohort, on the other hand, pointed to a rather more 'vocational' or instrumental expectation.

The second part of this chapter provides a brief examination of themes brought into focus by the subsidiary research questions framing this enquiry. Much of the remaining discussion centres around the relationship between teaching and research in a knowledge-intensive environment.

Part Two: The importance of teaching in a knowledge intensive environment

During the course of the review of the literature outlined in Chapter Two it became apparent that a major concern for some commentators was the part played by the traditional teaching/research nexus in contemporary Western universities. Of course, this enquiry is focused on the role of the New Zealand university in a knowledge society, but in the absence of local commentary and analysis it was considered expedient to look further afield.

A recurring feature of the literature was the need for a clearer differentiation between the teaching and research roles of the university academic. Student learning, considered by many commentators to be the most important societal contribution a university can make in a knowledge-intensive environment, was considered to be compromised when the teaching role of the university academic was 'trumped' by the more respected and rewarded research imperative (Aitkin, 1991; Carrotte, 1999; Cuban, 1999; Delanty, 2001).

In keeping with the subsidiary research questions framing this enquiry, which seek to explore the contemporary relevance of the twin imperatives alongside the notions of academic freedom and the critic and conscience role, it was decided to measure the strength of endorsement shown these traditional identifiers of the Western liberal university by the four cohorts of stakeholders selected to participate in this study. The next few sections explore the findings of

the survey of stakeholders alongside those of the review of the literature outlined in Chapter Two, and the review of recent policy developments set out in Chapter Three. The second major finding of this enquiry is that the teaching role of the university is considered to be of primary importance in a knowledge society context. Various implications of this finding will be discussed shortly.

University teaching in a New Zealand context

The former Associate Minister of Education (Tertiary) Steve Maharey has made the claim that in order 'to succeed in the knowledge society people will need to understand and apply knowledge' (2003, p. 5). He further argues that complex social needs and aspirations for future inclusiveness and prosperity require 'a holistic social development approach' (*ibid.*, p. 1). In order to attain a high level of social and economic productivity in a knowledge-intensive environment, he contends, 'we would expect to see increasing numbers of knowledge workers who are specialized in accessing and creating new knowledge and translating it for application into practice' (*ibid.*, p. 5).

The findings of this enquiry support the Minister's aspirations. The weight of evidence presented in this thesis would also tend to suggest, however, that the recent TEAC policy process has fallen short of providing the necessary means by which these conditions might become established in New Zealand. Critical 'top end' issues relating to how the university might best be structured and resourced to teach the knowledge and skills required in a knowledge society have not been addressed.

In Chapter Two it was explained that some overseas commentators specifically link a high standard of teacher/student interaction with a successful knowledge society. They consider the usefulness of this interaction to be enhanced by quality teaching that is promoted and rewarded in its own right, and not relegated as some 'poor cousin' (EPRI16) to staff research and publication activity (Aitkin, 1991; Carrotte, 1999; Cuban, 1999).

As reported in Chapter Five, however, a number of employer and university student respondents expressed concern over the standard of university teaching in New Zealand. All four cohorts expressed support for formal teacher training for university lecturers, with a common theme being that the 'quality of

university education is often compromised by poor teaching skills' (EPUB28). University students generally support the research activities of their lecturers (Richardson, 2004). They also hold the view that 'the lecturer's ability to teach is more important than the research they publish' (Langford, cited in *ibid.*, p. C2). Respondents stressed the need for lecturers to engage in 'research that bleeds into the teaching' (Y13H35).

Matters of teaching and learning internal to institutions were beyond the scope of the TEAC policy process. However, as discussed in Chapter Three, the TEAC documents did prescribe a link between 'creativity, critical thinking, competence with technology, and multidisciplinary or transdisciplinary thinking, learning and research', and the need to 'develop the competencies and attributes and the environment for a distinctive knowledge society' (TEAC, July 2001, p. 6). The need for more effective teaching is certainly implied, as it is in the requirement that 'generic' skills be incorporated into all programmes of learning by 2007 (Ministry of Education, May 2002, pp. 47-48).

A key finding of this enquiry is that the development in 'top end' students of broad cognitive and relational abilities, along with expertise in a relevant technical area, is imperative in a knowledge society. Some implications of this finding were discussed in the first part of this chapter.

A structural conflict can be seen to exist. The university is, by inference, being asked to produce graduates with advanced interactive, critical thinking, and conceptual skills. However, the funding and administrative initiatives inaugurated in the wake of the TEAC policy process do not provide for the type of 'breadth-within' and 'breadth-beyond' curriculum expansion needed to achieve the Minister's aspirations. 'Generic' learning components considered necessary in a knowledge society are prescribed, and tertiary institutions are expected to implement them. But, unlike the CoRE and PBRF research developments, other than a provision for some assessment of teaching proficiency and course completion, and the setting up of a 'National Centre for Tertiary Teaching Excellence' (TEC, 2006), no substantive 'additional' funding has been directed at the teaching function of the university. Recommendations put forward by the Teaching Matters Forum (July 2005) for the proposed operation of a 'Tertiary Teaching for Learning Centre' encompass 'all parts of the tertiary sector in New

Zealand' (p. 7). This sector-wide approach does not appear to address the specific structural determinants of the key teaching-research dilemma faced by university academics. It is possible then, by placing an even greater expectation on universities to produce 'useful' research, and to increase teaching effectiveness without addressing the pressures that make it difficult for university academics to attain a high standard in both teaching and research, the teaching function could be further neglected.

Higher order thinking is considered by most commentators to be most successfully developed during an extended period of tertiary education that includes both general (liberal) and specialist elements (e.g., Adriaansens, 1998; Delanty, 2001; Flexner, 1968; Rothblatt, 1998; Weijers, 1998). The stakeholders surveyed during this project expect that graduates will have been exposed to both breadth beyond and depth within their chosen disciplines. As outlined in the first part of this chapter, many of the writers cited in Chapter Two identify breadth of preparation as a prerequisite to effective specialisation in a knowledge-intensive environment. An implication of this trend is, of course, that vocational/professional programmes of study will need to be of longer duration in order to accommodate both vocational/professional and liberal/general aspects of an expanded curriculum.

It could be argued, however, that fiscal arrangements under which universities have been required to operate in recent years have reduced rather than enhanced the university's capacity to produce broadly informed graduates. In a user pays environment university students are less likely to participate in programmes of study which they perceive to have little 'relevance to the real world…. [as they] don't want to waste money and time' (U12). It is in this sense that the conditions under which university education is currently provided might, when viewed through the lens of critical theory, constitute a social crisis. Students have little incentive, outside the pursuit of self-funded personal interest, to engage with the type of holistic education needed to ensure their own and wider society's future prosperity. Indeed, the accumulation of an interest-bearing loan that is a disincentive to longer-term study, discriminates against women and ethnic minorities, and undermines graduates' ability to integrate into society, is seen by many as a serious human rights issue (NewstalkZB, 2003 [Internet]).

Adding to the complexity of the problem are concerns that too many people are undertaking a university education to the detriment of essential trades (Garner, 2004a & 2004b). More than half of those who commence a tertiary education do not graduate (Neville, 2004). This raises the possibility that equal opportunity initiatives underpinning a dramatic rise in the numbers of students studying at university may be ill conceived. As intimated by former TEC Chair Dr Andrew West, the true nature of a knowledge economy is still widely misunderstood. It appears that many people believe that it involves 'working indoors and using a computer' (West, cited in Garner, 2004a). As has been discussed throughout this thesis, the broad cognitive and relational skills such an environment requires are best developed in the context of a broad tertiary education which provides for both in-depth specialised study and contextual exploration.

However, the university's role as a primary provider of what some policy makers might term 'top end human capital,' dependent as it is on the competence and enthusiasm of its teaching staff, does not appear to have been strengthened by the TEAC policy process. University stakeholders harbour concerns about the quality of university teaching, and the impact that the more prestigious research imperative has upon it. Without a high standard of teaching at the university level it is difficult to see how the advanced intellectual skills considered necessary in a knowledge-intensive environment are to be developed (Aitkin, 1991; Bok, 1990; Cuban, 1999; Weijers, 1998).

The place of research in a knowledge intensive environment

Given these findings regarding the crucial role played by university teaching in a knowledge society, what are the associated implications for university research?

The relevant research questions guiding this enquiry are concerned with exploring the teaching-research nexus. The findings of the literature review suggested that the struggle to balance the demands of their teaching and research responsibilities constitutes a major dilemma for many university academics (Aikin, 1991; Carrotte, 1999; Cuban, 1999; McInnis, 2000; Ramsden *et al.*, 1995). While some commentators are in favour of resolving this dilemma through separation where warranted (e.g., Aitkin, 1991), others (e.g., Cuban, 1999) argue

for a change in the way that teaching and research are perceived and rewarded in relation to one another. Cuban argues that the university needs to elevate teaching to a position of equal status with research if it is to reach its full potential.

Survey questions invited participants to respond to statements about (a) economic purpose and student research, (b) the possible separation of teaching and research both within and between institutions, and (c) the desirability of teaching university students research skills.

Stakeholders showed no enthusiasm for a direct economic purpose for student research. Neither was the concept of teaching-only universities well supported by the stakeholders surveyed in this project. A separation of the teaching and research functions *within* individual institutions did gain support from private sector employers and Y13 students, however. As reported in Chapter Five, statistical significance was found in the association between public sector rejection and private sector endorsement of such a separation ($X^2 = 5.05$, $df = 1$, $p<0.05$). It would seem that those engaged in private enterprise, along with those who have grown up during the 1980s and 1990s, are more receptive to a break with liberal tradition. Given that these two groups are positioned to play a key role in social and economic development over the next few decades this finding may have significant implications for the future role of the university in New Zealand society.

Radical proposals put forward by the TEAC with regard to a separation of research and teaching were not addressed in the Education (Tertiary Reform) Amendment Act 2002. Of course, any attempt to legislate for such a separation would be vigorously opposed by the universities. The concept has long been a cause for disagreement between the universities and the Ministry of Education (Savage, 2000, pp. 55 & 87). During the early stages of the TEAC process, New Zealand universities certainly made clear their opposition to any separation of the twin imperatives (Burrows, 2000; University of Waikato, 2000; Victoria University of Wellington, 2000). The rationale underpinning their objections, echoed in the arguments of international commentators (Carrotte, 1999; Rowland *et al.*, 1998; Smeby, 1998), is that 'high quality teaching programmes depend directly upon high quality research programmes' (Victoria University of

Wellington, 2000). Delanty (2002) considers this partnership 'the unifying idea' of the modern university (p. 36). Stakeholders surveyed in this project agree.

In keeping with the general aims of the *Tertiary Education Strategy 2002-2007*, the development of high-level generic skills in the area of research was strongly endorsed by stakeholders: 'The ability to pull together information using a research framework is important' (EPUB 33). Again, there is a strong link in the minds of stakeholders between a university education and the subsequent ability to gather, process, analyse and present information. The implication seems to be that teaching and research should be encountered by the student in a way that not only directly informs and stimulates higher order thinking, but also equips the student with the skills required for subsequent independent enquiry in a vocational setting. In other words, academic research should not just be an end in itself but should also perform the role of informing the practice of wider social and vocation-specific research carried out by graduates in a variety of non-academic settings.

A clear trend to emerge during the survey of stakeholders, then, was the perceived importance of the teaching-research nexus. Respondents were aware of the potential for improved performance in both research and teaching should these activities be separated, but, in the university environment, considered the benefits of a continuing partnership to be greater than those likely to accrue as a result of separation:

> My first thought is that research would strengthen a lecturer's insights and depth of knowledge; but maybe these are different skill sets (EPUB 38);
>
> Provision should be made so that research bleeds into the teaching (Y13H35);
>
> I think it's important for the teachers to do the research, so they understand better what they are teaching (U21).

This preference contrasts with the TEAC recommendation that teaching and research be divided, but is in accord with the government's subsequent decision to maintain the status quo.

The government's policy actions in the area of research (PBRF and CoRE) can be seen as an attempt to strengthen links between the universities and economic development. There is a clear expectation that university research will play a significant part in opening up new avenues of revenue generation.

Knowledge creation is seen as the key to economic advancement in a twenty-first century context. University research, with its established ethos of knowledge creation and dissemination, is linked, by these policy developments, to economic prosperity in a knowledge-intensive environment. But, as described in earlier chapters, the PBRF and CoRE initiatives have the potential to both enhance and obscure the role of the university in a knowledge society in the sense that they may stimulate greater collaboration, discovery, and knowledge sharing, or they may, in some instances, distract from core teaching and learning activities.

A specific concern expressed by some commentators with regard to the university in general is that research activity tends to 'trump' teaching, with the result that university academics can be rewarded for work that has little direct benefit to student learning (Aitkin, 1991; Cuban, 1999). An environment in which proactive engagement in research and publication constitutes the major measure of productivity may further exacerbate the situation whereby a quantitative measurement of potentially 'trivial' publications can earn respect and promotion (Savage, 2000, pp. 171, 175, & 177). As long as it remains evident to the ambitious academic that the pathway to promotion is primarily through research and publication, a significant disincentive to the further refining of teaching practice remains in place. As reported in Chapter Five, stakeholders expressed concern about this tendency:

> The present university system tends to downgrade those who are good teachers (PEPUB 1);
>
> My biggest problem with university lecturing is that career wise it is seen as an adjunct to research work, i.e., poor cousin (EPRI 16).

A finding of this enquiry is that there is a widespread belief amongst commentators and stakeholders that research should inform teaching, and that the broad-based teaching of students is, all other things considered, the core role of the university in a knowledge society. It is likely that the most successful university in the context of a knowledge society will be the one that exercises the most diligence in teaching its students. Staff research will always have a part to play in informing this core role, but the weight of evidence considered throughout this enquiry would tend to suggest that the demands of a rapidly changing world may mean that the university will eventually revert to a more teaching-centred

mode of operation. The key findings of this enquiry are summarised in the concluding section of this thesis.

Part Three: Summary, Implications, and Areas for Further Research

A summary of key findings

The need for 'breadth' in university education

The major finding to emerge from this study is that stakeholders, commentators, and policy makers (the latter on paper at least) perceive a broad university education to be particularly desirable in a contemporary, knowledge-intensive environment. Some between-cohort variations in the stakeholder survey notwithstanding, this finding is categorical. It also contrasts with current arrangements whereby widespread instrumentalism and continued under-funding of universities is producing a narrowing curriculum, with little opportunity for the sort of holistic exploration associated by most commentators with the development of essential knowledge society prerequisites such as creativity, innovation, contextual awareness and critical thinking. Some university faculties are endeavouring to remedy this problem by building 'liberal' elements into existing vocational and professional programmes. Overall, however, economic restraints are limiting the ability of New Zealand universities to provide the breadth of education favoured by stakeholders, and advocated by those commentators who have explored the relationship between the university and the knowledge society in any degree of depth. Policy makers have prescribed a rudimentary type of generic or broad learning, but this is unlikely to cultivate the type of cognitive and relational skills and contextual awareness required in a knowledge society. A continuing emphasis on the part of policy makers and university administrators on research at the expense of teaching and learning is likely to hinder economic and social development in the context of a knowledge society.

Teaching of students the core role of the university

Skilled, reflective, and broadly informed graduates are considered vital in a knowledge-intensive environment. These increasingly well-educated (as opposed to merely well-trained) graduates will be expected to develop a range of cognitive, relational, and contextually appropriate problem solving abilities during their university studies. Beyond-vocation learning is likely to become a core component of most professional/vocational university programmes if suitable graduates are to be produced. The findings of this enquiry suggest that the current emphasis on staff research will need to shift to a more balanced perspective that rates and rewards the teaching activities of university academics on (at least) an equal footing with research. Staff research will play a vital role in continuing to inform teaching, but the most valuable social and economic contribution of the university is likely to be its ability to prepare its students for productive roles in wider society, including the vital research and development role. Teachers who are able to engage students intellectually and entice them to think broadly and critically are likely to find themselves in increasing demand.

Areas where further research may prove helpful

Differentiation, liberal education, and the New Zealand tertiary system

The specific need for a broader (and therefore longer and more expensive) university education, along with an increasing shortage of skilled (and well remunerated) tradespersons, may mean that students in a knowledge-intensive environment will be increasingly likely to choose to train in institutions other than the university. Longitudinal research which traces the educational and subsequent/concurrent vocational choices of New Zealand students may prove useful in terms of better understanding how the tertiary sector can be better structured and funded to provide for evolving social, market, and individual needs. A particular focus of this research might be analyses of graduates' and employers' evolving perceptions of the part played by instrumental and liberal aspects of tertiary training over time.

Breadth-within or breadth-beyond: The structure of 'generic' learning

A series of studies which have as their focus the feasibility of either integrating or adding on essential historic, philosophic and contextual learning to existing professional and vocational programmes such as that offered by the Victoria University of Wellington Law Faculty may prove instructive. It is clear that more rather than less content is required in many professional programmes. Comparative studies of the various means employed by institutions of achieving greater coverage would provide a useful evaluation of consumer and provider perceptions of the effectiveness of these approaches.

Conclusion

The purpose of this enquiry has been to explore the roles of the New Zealand university in the context of a knowledge society. A review of the literature of the university in relation to the notions of a liberal education and a knowledge society indicated strong support for the concept of 'breadth' as a means of facilitating the type of holistic learning considered by a number of commentators most suitable in a knowledge-intensive environment. The problematic 'bundling' of the notion of the knowledge society with the conditions of a continuing neo-liberal project of instrumentalism and reductionism in tertiary educational provision was interrogated against documentary evidence that suggested that the conditions of a knowledge society had an autonomous existence outside a single system of political economy. An analysis of the recent TEAC policy process was conducted. A survey of stakeholders was also carried out. Statements put to respondents by way of a postal questionnaire were designed to measure the strength of perceived support for or opposition to a range of conditions broadly characteristic of either a 'traditional/liberal' or 'contemporary/neoliberal' conceptualisation of university education. Findings were analysed using a variety of textual and statistical methods. It was found that the primary role of the New Zealand university in a knowledge society is to provide a broad education which facilitates the exploration of contextual factors both within and beyond any particular vocational setting. The ability of the university academic to teach in a way that equips graduates with advanced thinking skills, including critical enquiry and research competencies, is considered vital in a knowledge-intensive environment. It is

suggested that the two greatest challenges facing the New Zealand university at the present time are (a) how to incorporate greater breadth of contextual and beyond-vocation study into an already crowded and often-times highly specialised vocation-specific curriculum, and (b) how to restructure the expectations and rewards associated with the normative career path of the university academic so that the teaching role assumes greater importance and is performed with greater effectiveness.

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Appendices

Appendix 1: New introductory clause - The Education (Tertiary Reform) Amendment Act 2002

New clause 4B

The object of this Part, Parts 13A to XVIII, and Part XIX (which relate to tertiary education), and of the provisions of Parts 18A, and XX to XXIV that relate to tertiary education, is to foster and develop a tertiary education system that—

‘‘(a) fosters, in ways that are consistent with the efficient use of national resources, high quality learning and research outcomes, equity of access, and innovation; and

‘‘(b) contributes to the development of cultural and intellectual life in New Zealand; and

‘‘(c) responds to the needs of learners, stakeholders, and the nation, in order to foster a skilled and knowledgeable population over time; and

‘‘(d) contributes to the economic and social development of the nation; and

‘‘(e) strengthens New Zealand’s knowledge base and enhances the contribution of New Zealand’s research capabilities to national economic development, innovation, international competitiveness, and the attainment of social goals; and

‘‘(f) provides for a diversity of teaching and research that fosters, throughout the system, the achievement of international standards of learning and, as relevant, scholarship.’’ (House of Representatives, 2002a).

Appendix 2: Approach letter to university privacy officer

Dear XXXX

In my capacity as a PhD candidate at the University of Waikato I am conducting a research project that has as its central focus the role of the university in New Zealand society at the beginning of the twenty-first century. I am especially interested in the ways in which university students view a university education. I am also surveying the views of public and private sector employers, along with Year 13 secondary students.

With your permission I would very much like to give a random selection of current students the opportunity to participate in this research project.

In order to conduct the project I would first require access to a list of currently enrolled students, preferably those who are in at least their second or third year of an undergraduate degree, or who are studying at the graduate or postgraduate level. Should you agree to me gaining supervised (or other) access to such a list, I would attach a numeric value to each name, before randomly selecting a sample using a table of random numbers technique. Alternatively, should you prefer to generate a numbered list from the university database and advise me of the number of students so listed, I could conduct the process of random selection on the basis of those numbers alone before forwarding to the appropriate University of Waikato official a list of randomly selected numbers (around 100). That person could then set aside the contact details of each student corresponding to the selected number. I am not sure what the preferred procedure would be for gaining student permission to participate, but I am more than happy to cooperate with any preferences that you might have.

I am aware that issues of privacy are of the utmost importance. However, I can assure you that once the selection process has taken place, and potential participants have been approached, no record of names will be kept, and participants will not asked to reveal their identity. If you consider it appropriate, I will approach those selected by way of email, letter, or telephone and ask them if they would be willing to complete a simple multiple choice questionnaire that will take approximately 15 minutes of their time. Participants can elect to complete either a hard copy or an electronic (Word 2000) version of the questionnaire. All record of participant contact details, including email addresses, will be destroyed as soon as returned questionnaires are electronically downloaded or received through the mail.

While there are significant privacy issues to overcome, your facilitation of uni student participation in this most interesting project would add great value to the research, and, hopefully, to the universities and graduates of the future!

I do appreciate the time you have set aside to consider my request. Please contact me should you require any further clarification or explanation.
Yours sincerely,

Appendix 3: Approach letter to university students

Dear Fellow Student,

Like you, I have been studying at the University of Waikato, and, like me, you no doubt have a keen interest in the future of tertiary education in New Zealand.

In my capacity as a PhD candidate at the University of Waikato I am conducting a research project that has as its central focus the role of the university in New Zealand society at the beginning of the twenty-first century. I am especially interested in the ways in which tertiary students view a university education. For the purposes of comparative analysis I am also surveying the views of public and private sector employers, and of Year 13 secondary students.

In this, the main stage of the project, I am approaching an anonymous, random selection of experienced university students with the request that they each complete a simple multiple-choice questionnaire. In keeping with guidelines set out in university policy, and with principles laid down by the Privacy Act 1993, you have been randomly selected from a University of Waikato database by the Systems Support Manager (Student and Academic Services Division). The project has ethical approval from the School of Education Ethics Committee. The selection process has been conducted with the assistance and approval of the University of Waikato Privacy Officer. I do not have access to your name or contact details. Should you agree to participate, and I very much hope that you do, you can either complete and return the enclosed questionnaire in the stamped return envelope provided, or, if you prefer, email me at ghjr@xtra.co.nz and request an electronic (Word 2000) version.

You are not asked to reveal your identity. Data from all returned questionnaires will be collated into an aggregated format from which conclusions and recommendations can ultimately be drawn. Completion of the questionnaire will take approximately 10 to 15 minutes of your time. If you do choose to respond by email, and you do not have an anonymous email account, your identity could be revealed. Be assured, however, that all emails will be deleted as soon as the attached questionnaire is downloaded.

I appreciate the time you have already set aside to read this letter, and wish you the very best with any further studies that you may be undertaking, and with your future career journey. I do hope that you decide to add your valuable opinions to this survey.

Yours sincerely,

Appendix 4: University student questionnaire

The Role of the 21st Century University

This questionnaire is part of a research project carried out by a doctoral student at the University of Waikato. The project seeks to examine the role of the university in New Zealand society at the beginning of the twenty-first century. The project meets the requirements and has the approval of the University of Waikato School of Education Ethics Committee. The information obtained from completed questionnaires will be collated, processed, and stored using confidential computer databases. The results of the survey will be published in the researcher's PhD thesis due for completion in 2003. The project complies with principles set out in the Privacy Act 1993 and the Official Information Act 1982. You are not asked to disclose your identity. If you do not have an anonymous email account and you respond by email your identity could be revealed to the researcher. However, all email messages will be deleted as soon as the attached questionnaire is downloaded. It should take you approximately 15 minutes to complete this questionnaire. Your participation is very much appreciated.

University Student Questionnaire

Thank you for agreeing to participate. Space is provided after each question for you to explain or qualify your answer if you wish. Only do this if you would like to add something to your existing answer. Write on the back of the page if you need more space.

If you are completing this questionnaire online, please use either the 'highlight' or 'underline' tool to mark your response to each question. If you choose to add explanations in the spaces provided, do not be concerned about the distortion to formatting that occurs when you type in a response. Create as much additional space as you need.

For each of the following questions, please circle or highlight the one response that comes closest to expressing your own point of view.

1) The university should be an institution independent of government control that is able to speak out on important social and economic issues at any time.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

2) Not all research by university students should have an economic purpose.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

3) To be effective universities need to be owned and run by those commercial and industrial interests whose staffing and technological needs most directly influence macro economic growth.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

4) It would be a pity if universities were to eventually focus more on the personal growth and intellectual development of individuals, leaving job training to other institutions.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

5) The thing that employers look for most when employing a university graduate is evidence of good grades.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

6) Teaching students how to identify the possible strengths and weaknesses of various points of view is a necessary part of a good university education.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

7) University lecturers do not need to be trained teachers like those who teach at other levels of the education system.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

8) If university staff were divided into those who do research and those who teach, both the standard of research and the standard of teaching would be raised.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

9) When employing a university graduate employers do not look for someone who had studied beyond the basic curricular requirements of their chosen profession.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

10) Adult (mature) students wishing to study at university should have to provide evidence that they are capable of succeeding at the university level.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

11) The government should direct university students into courses that best meet the needs of society and the economy.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

12) Teaching students how to do research is not an essential task of the university today.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

13) The main function of the university is to train professionals such as doctors, lawyers, teachers, engineers etc.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

14) Universities today should be strongly focused on producing graduates in the computer and related technological sciences.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

15) It would be better if some universities specialised in doing research and some concentrated mainly on teaching.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

16) A good way to produce better graduates is to restrict university admission to only those students who have already excelled at secondary school.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

17) The opportunity to explore different ideas and ways of looking at the world without the immediate pressure to get a job or to make money is not an essential part of a good university education.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

18) As a university graduate I expect that I will have studied topics beyond the basic curricular requirements of my chosen profession.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

19) It would be better if universities significantly reduced the amount of on-campus study and offered more courses extramurally through the Internet instead.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

20) Areas of study that do not produce a direct profit for the university should be eliminated.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

21) A university education should not be something that stands apart from other forms of tertiary education such as polytechnic and industry job training.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

22) Universities, polytechnics, and private training establishments (PTEs) should have exactly the same designated purpose, with no division between so-called 'vocational', 'academic', or 'research' functions.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

23) The first priority of the university should be to teach its students *how* - rather than *what* - to think.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

24) Traditional arts degrees (such as the B.A.) are not relevant in today's world.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

25) A high priority for the university at the present time is the further development of courses that teach students how to design, build, or use new technology.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

26) Direct vocational training at the tertiary level is best carried out by polytechnics rather than by universities.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

Rank the relative importance of the following selected functions (1 being of the highest importance, 5 the lowest) of the 21st century university. Please place one of the numbers 1-5 inside each of the brackets provided. Use each number only once.

Online users - do not be concerned about the small amount of distortion to the formatting of brackets that occurs when you enter your response.

The function of the 21st century university is

27 ( ) to provide opportunity for personal economic advancement
28 ( ) to advance the technological knowledge base of New Zealand companies
29 ( ) to make New Zealand more competitive in the international marketplace
30 ( ) to facilitate the personal development of individuals
31 ( ) to contribute to the building of a better, more humane and caring society

Imagine that you are a university graduate about to be interviewed for a key position in your chosen profession. Rank the following selected attributes according to how important you believe each will be in the eyes of your prospective employer. Please use the numbers 1 to 5 (1 being highest) to rank these attributes. Use each number only once.

32 ( ) The ability to think independently and from various points of view
33 ( ) A thorough theoretical knowledge of the field in question
34 ( ) Practical competence in the day to day requirements of the job
35 ( ) Evidence of having read and thought beyond the basics
36 ( ) An ability to communicate articulately and persuasively

37) On a scale of 1 to 10, please indicate how helpful you expect a university education to be in preparing you for your chosen profession or occupation (1 being extremely unhelpful, 10 extremely helpful.)

(Unhelpful) 1 2 3 4 5 6 7 8 9 10 (Helpful)

38) This time, please indicate how much you consider that your university education will have served to broaden and shape you as a person, both in a general intellectual sense (e.g., over and beyond your vocational preparation), and in terms of your overall development as a human being.

(Not much) 1 2 3 4 5 6 7 8 9 10 (A lot)

Participant details

39) In what degree programme are you currently or have most recently been enrolled? (e.g., BA, B.Com, M.Sc, etc.)_____

40) Is your primary reason for being at university job related? (i.e., preparation for a career)

( ) Yes ( ) No

If you answered 'No' to this question, please explain your reason for undertaking university study

_____

_____

41) What is your intended profession or occupation? _____

42) What is your gender? ( ) Female ( ) Male

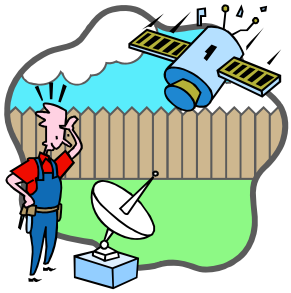
43) What is your age range?

( ) under 25 ( ) 25-35 ( ) 36-45 ( ) 46-55 ( ) 56-65 ( ) 66+

Thank you once again for taking the time to complete this questionnaire. Your participation in this research project is very much appreciated.

IMPORTANT

Please seal hard copy (paper) versions of this completed questionnaire in the return envelope provided and post to the researcher.



Online users: please save changes to this document and email as an attachment to **ghjr@xtra.co.nz.**

Appendix 5: Approach letter to secondary principals

Dear Mr XXXX,

In September of last year you very kindly allowed me access to your seventh form cohort in order to conduct a pilot survey of students' attitudes toward a university education. This was a great success and I am most grateful for your pro-active co-operation.

At the risk of over-stretching your goodwill I am now wondering if you would be prepared to allow me to survey the views of your 2002 seventh form class? I am presently working on the final data gathering stages of the project, and am interested in again inviting your entire seventh form cohort to complete and return a slightly revised questionnaire.

Your own involvement would be absolutely minimal as all I would require this time is that an envelope containing (a) a brief explanatory letter, (b) a copy of the questionnaire, and (c) a stamped return envelope, be handed to each of your seventh form students. Students would then be free to make their own decision as to whether or not they wish to take part. Once the questionnaires are distributed to students no further action on the part of yourself or of your delegated representative(s) would be required. I will ensure that all materials are delivered to your school office ready for distribution at a time that is most convenient for you.

I am grateful for the tremendous assistance that you have already provided in the earlier stages of this PhD project. I will contact you by telephone in the next few days to discuss the matter further. Alternatively, should you find it more convenient, feel free to email or telephone me at any time.

Once again, my grateful thanks,

Appendix 6: Approach letter to Year 13 students

Dear XXXX College Year 13 student,

Let me introduce myself. I am a former XXXX College student currently studying for a doctorate through the University of Waikato. My PhD research is focused on the role of universities within New Zealand society at the beginning of the 21st century.

As part of this project I am interested in finding out how senior secondary students view a university education. Even if you are not intending to go to university, I would very much like to include your opinions in my research.

Your views are very important and I encourage you to take the opportunity to have your say. I am also surveying the views of experienced university students and public and private sector employers throughout New Zealand.

All you need to do is complete the enclosed multi-choice questionnaire and post it back to me in the return envelope provided as soon as you are able. I do hope that you decide to take part in this most interesting project.

Best wishes for the remainder of your Year 13 year, and for whatever hopes and plans you may have for the future.

Kind regards,

Appendix 7: Year 13 student questionnaire

The Role of the 21st Century University

This questionnaire is part of a research project carried out by a doctoral student at the University of Waikato. The project seeks to examine the role of the university in New Zealand society at the beginning of the twenty-first century. The project meets the requirements and has the approval of the University of Waikato School of Education Ethics Committee. The information obtained from completed questionnaires will be collated, processed, and stored using confidential computer databases. The results of the survey will be published in the researcher's PhD thesis due for completion in 2003. The project complies with principles set out in the Privacy Act 1993 and the Official Information Act 1982. You are not asked to disclose your identity. It should take you approximately 15 minutes to complete this questionnaire. Your participation is very much appreciated.

Year 13 Questionnaire

The aim of this questionnaire is to learn more about New Zealand universities from the point of view of Year 13 students. It is not a test of how much students know about universities. It is simply a means of better understanding what expectations Year 13 students may have with regard to a university education.

Thank you for agreeing to participate. Space is provided after each question for you to explain or qualify your answer if you wish. Only do this if you would like to add something to your existing answer. Write on the back of the page if you need more space.

Please read the wording of each question carefully. Some questions might seem a bit difficult to follow at first, as they are worded in a way that is designed to help you to think about the issues involved a little more deeply. Most questions are quite straightforward however.

For each of the following questions, please circle, underline or highlight the one response that comes closest to expressing your own point of view.

1) The university should be an institution independent of government control that is able to speak out on important social and economic issues at any time.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

2) Not all research by university students should have an economic purpose.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

3) To be effective universities need to be owned and run by industries whose needs for trained employees most directly influence a country's economic growth.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

4) It would be a pity if universities were to eventually focus more on the personal growth and intellectual development of individuals, leaving job training to other institutions.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

5) The thing that employers look for most when employing a university graduate is evidence of good grades.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

6) Teaching students how to identify the possible strengths and weaknesses of various points of view is a necessary part of a good university education.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

7) University lecturers do not need to be trained teachers like those who teach at other levels of the education system.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

8) If university staff were divided into those who do research and those who teach, both the standard of research and the standard of teaching would be raised.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

9) When employing a university graduate employers do not look for someone who has studied beyond the basic curricular requirements of their chosen profession.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

10) Adult (mature) students wishing to study at university should have to provide evidence that they are capable of succeeding at the university level.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

11) The government should direct university students into courses that best meet the needs of society and the economy.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

12) Teaching students how to do research is not an essential task of the university today.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

13) The main function of the university is to train professionals such as doctors, lawyers, teachers, engineers etc.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

14) Universities today should be strongly focused on producing graduates in the computer and related technological sciences.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

15) It would be better if some universities specialised in doing research and some concentrated mainly on teaching.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

16) A good way to produce better graduates is to restrict university admission to only those students who have already excelled at secondary school.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

17) The opportunity to explore different ideas and ways of looking at the world without the immediate pressure to get a job or to make money <u>is not</u> an essential part of a good university education.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

18) As a university graduate I would expect to have studied topics beyond the basic curricular requirements of my chosen profession.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

19) It would be better if universities significantly reduced the amount of on-campus study and offered more courses extramurally through the Internet instead.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

20) Areas of study that do not produce a direct profit for the university should be eliminated.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

21) A university education <u>should not</u> be something that stands apart from other forms of tertiary education such as polytechnic and industry job training.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

22) Universities, polytechnics, and private training establishments (PTEs) should have exactly the same purpose, with each performing the same role of job training, study of theory, and research into new ways of doing things.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

23) The first priority of the university should be to teach its students *how* - rather than *what* - to think.

Strongly disagree	Disagree	Not sure	Agree	Strongly Agree

24) Traditional arts degrees (such as the B.A.) are not relevant in today's world.

Strongly disagree	Disagree	Not sure	Agree	Strongly Agree

25) A high priority for the university at the present time is the further development of courses that teach students how to design, build, or use new technology.

Strongly disagree	Disagree	Not sure	Agree	Strongly Agree

26) Direct job training at the tertiary level is best carried out by polytechnics rather than by universities.

Strongly disagree	Disagree	Not sure	Agree	Strongly Agree

Rank the relative importance of the following selected functions (1 being of the highest importance, 5 the lowest) of the 21st century university. Please place one of the numbers 1-5 inside each of the brackets provided. Use each number only once.

The function of the 21st century university is

27 ( ) to provide opportunity for personal economic advancement
28 ( ) to advance the technological knowledge base of New Zealand companies
29 ( ) to make New Zealand more competitive in the international marketplace
30 ( ) to facilitate the personal development of individuals
31 ( ) to contribute to the building of a better, more humane and caring society

Imagine that you are a university graduate about to be interviewed for a position in your chosen profession. Rank the following selected attributes according to how important you believe each will be in the eyes of your prospective employer.

Please use the numbers 1 to 5 (1 being highest) to rank these attributes. Use each number only once.

32 ( ) The ability to think independently and from various points of view
33 ( ) A thorough theoretical knowledge of the field in question
34 ( ) Practical competence in the day to day requirements of the job
35 ( ) Evidence of having read and thought beyond the basics
36 ( ) An ability to communicate articulately and persuasively

37) On a scale of 1 to 10, please indicate how helpful you expect a university education to be in preparing you for your chosen profession or occupation (1 being extremely unhelpful, 10 extremely helpful. Please answer this question even if you do not intend to go to university)

(Unhelpful) 1 2 3 4 5 6 7 8 9 10 (Helpful)

38) This time, please indicate how much you consider that a university education would serve to broaden and shape you as a person, both in a general intellectual sense (e.g., over and beyond your vocational preparation), and in terms of your overall development as a human being. Please answer this question even if you do not intend to go to university

(Not much) 1 2 3 4 5 6 7 8 9 10 (A lot)

Participant details

39) Do you intend to go to university in the next few years? ( ) Yes ( ) No

40) Do you intend to go to polytechnic in the next few years? ( ) Yes ( ) No

41) Do you intend to study by distance in the next few years? ( ) Yes ( ) No

42) What is your intended profession or occupation? _____

43) Are you a citizen of another country who is presently studying short-term in NZ? ( ) Yes ( ) No

44) What is your gender? ( ) Female ( ) Male

Thank you once again for taking the time to complete this questionnaire. Your participation in this research project is very much appreciated.

IMPORTANT

Please seal your completed questionnaire in the stamped envelope provided and post it directly to the researcher.

Thank you!

Appendix 8: Approach letter to employers

Dear

It is said that any enterprise is only as good as its personnel. As an employer you no doubt take a keen interest in the calibre of the staff your organisation employs.

In my capacity as a PhD candidate at the University of Waikato I am conducting a research project that has as its central focus the role of the university in New Zealand society at the beginning of the twenty-first century. I am especially interested in the ways in which employers and professional people view a university education.

In this, the main stage of this project, I am approaching a random selection of public and private sector employers throughout New Zealand with the request that they each complete a simple multiple-choice questionnaire. I am deliberately targeting high-ranking leaders and managers (especially CEO's and GM's), as the views of senior people such as yourself are informed by a strategic overview of staff capacity and organisational goals not always as well formed in divisional managers.

Should you agree to participate, and I very much hope that you do, you can elect to either complete and return the enclosed hard copy version in the stamped envelope provided, or request an electronic (Word 2000) version by return email if you prefer.

You are not asked to reveal your identity. Data from all returned questionnaires will be collated into an aggregated format from which conclusions and recommendations can ultimately be drawn. Completion of the questionnaire will take approximately 10 to 15 minutes of your time. Your participation would add tremendous value to this most interesting project, and, hopefully, to the university system and graduate job seekers of the future!

I do appreciate the time you have already set aside to read this letter.

Yours sincerely,

Appendix 9: Employer questionnaire

The Role of the 21st Century University

This questionnaire is part of a research project carried out by a doctoral student at the University of Waikato. The project seeks to examine the role of the university in New Zealand society at the beginning of the twenty-first century. The project meets the requirements and has the approval of the University of Waikato School of Education Ethics Committee. The information obtained from completed questionnaires will be collated, processed, and stored using confidential computer databases. The results of the survey will be published in the researcher's PhD thesis due for completion in 2003. The project complies with principles set out in the Privacy Act 1993 and the Official Information Act 1982. You are not asked to disclose your identity. If you do not have an anonymous email account and you respond by email your identity could be revealed to the researcher. However, all email messages will be deleted as soon as the attached questionnaire is downloaded. It should take you approximately 15 minutes to complete this questionnaire. Your participation is very much appreciated.

Employer/professional Questionnaire

Thank you for agreeing to participate. Space is provided after each question for you to explain or qualify your answer if you wish. Only do this if you would like to add something to your existing answer. Write on the back of the page if you need more space.

If you are completing this questionnaire online, please use either the 'highlight' or 'underline' tool to mark your response to each question. If you choose to add explanations in the spaces provided, do not be concerned about the distortion to formatting that occurs when you type in a response. Create as much additional space as you need.

For each of the following questions, please circle or highlight the one response that comes closest to expressing your own point of view.

1) The university should be an institution independent of government control that is able to speak out on important social and economic issues at any time.

Strongly disagree Disagree Not sure Agree Strongly Agree

_____

_____

2) Not all research by university students should have an economic purpose.

Strongly disagree Disagree Not sure Agree Strongly Agree

_____

_____

3) To be effective universities need to be owned and run by those commercial and industrial interests whose staffing and technological needs most directly influence macro economic growth.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

4) It would be a pity if universities were to eventually focus more on the personal growth and intellectual development of individuals, leaving job training to other institutions.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

5) The thing that I would look for most when employing a university graduate is evidence of good grades.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

6) Teaching students how to identify the possible strengths and weaknesses of various points of view is a necessary part of a good university education.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

7) University lecturers do not need to be trained teachers like those who teach at other levels of the education system.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

8) If university staff were divided into those who do research and those who teach, both the standard of research and the standard of teaching would be raised.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

9) When employing a university graduate I would not look for someone who had studied beyond the basic curricular requirements of their chosen profession.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

10) Adult (mature) students wishing to study at university should have to provide evidence that they are capable of succeeding at the university level.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

11) The government should direct university students into courses that best meet the needs of society and the economy.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

12) Teaching students how to do research is not an essential task of the university today.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

13) The main function of the university is to train professionals such as doctors, lawyers, teachers, engineers etc.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

14) Universities today should be strongly focused on producing graduates in the computer and related technological sciences.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

15) It would be better if some universities specialised in doing research and some concentrated mainly on teaching.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

16) A good way to produce better graduates is to restrict university admission to only those students who have already excelled at secondary school.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

17) The opportunity to explore different ideas and ways of looking at the world without the immediate pressure to get a job or to make money is not an essential part of a good university education.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

18) The most useful university graduate is the one who studies only those topics relevant to his or her chosen profession.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

19) It would be better if universities significantly reduced the amount of on-campus study and offered more courses extramurally through the Internet instead.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

20) Areas of study that do not produce a direct profit for the university should be eliminated.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

21) A university education should not be something that stands apart from other forms of tertiary education such as polytechnic and industry job training.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

22) Universities, polytechnics, and private training establishments (PTEs) should have exactly the same designated purpose, with no division between so-called 'vocational', 'academic', or 'research' functions.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

23) The first priority of the university should be to teach its students *how* - rather than *what* - to think.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

24) Traditional arts degrees (such as the B.A.) are not relevant in today's world.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

25) A high priority for the university at the present time is the further development of courses that teach students how to design, build, or use new technology.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

---

26) Direct vocational training at the tertiary level is best carried out by polytechnics rather than by universities.

Strongly disagree **Disagree** **Not sure** **Agree** **Strongly Agree**

Rank the relative importance of the following selected functions (1 being of the highest importance, 5 the lowest) of the 21st century university. Please place one of the numbers 1-5 inside each of the brackets provided. Use each number only once.

Online users - do not be concerned about the small amount of distortion to the formatting of brackets that occurs when you enter your response.

The function of the 21st century university is

27 ( ) To provide opportunity for personal economic advancement
28 ( ) To advance the technological knowledge base of New Zealand companies
29 ( ) To make New Zealand more competitive in the international marketplace
30 ( ) To facilitate the personal development of individuals
31 ( ) To contribute to the building of a better, more humane and caring society

If you were to interview university graduates for a key position in your firm/organisation today, how would you rank the following

selected attributes? Please use the numbers 1 to 5 (1 being highest) to rank your priorities as a prospective employer. Use each number only once.

32 ( ) The ability to think independently and critically
33 ( ) A thorough theoretical knowledge of the field in question
34 ( ) Practical competence in the day to day requirements of the job
35 ( ) Evidence of having read and thought beyond the basics
36 ( ) An ability to communicate articulately and persuasively

37) If you are a university graduate, on a scale of 1 to 10, please indicate how helpful your university education was in preparing you for your profession or occupation (1 being extremely unhelpful, 10 extremely helpful)

(Unhelpful) 1 2 3 4 5 6 7 8 9 10 (Helpful)

38) Again, if you are a university graduate, please indicate how much you consider that your university education broadened and shaped you as a person, both in a general intellectual sense (e.g., over and beyond your vocational preparation), and in terms of your overall development as a human being.

(Not much) 1 2 3 4 5 6 7 8 9 10 (A lot)

Participant details

39) Please indicate in the spaces below your own educational qualifications to date.

( ) School Certificate
( ) University Entrance
( ) University Bursary
( ) Sixth Form Certificate
( ) Higher School Certificate
( ) Undergraduate diploma (please specify topic)_____
( ) Trade certificate (please specify, e.g., carpentry etc.)_____
( ) Bachelors degree (please specify, e.g., B.Sc; B.A.; LLB, etc.) _____
( ) Graduate diploma (please specify)_____
( ) Honours degree (please specify)_____
( ) Masters degree (please specify)_____
( ) Doctoral degree (please specify, e.g., in science; law, etc.)_____
( ) Other (please specify) _____

40) If applicable, what year did you graduate from your most recent diploma, degree or trade certificate? _____

41) What is your field and occupation? (e.g., Communications, CEO)

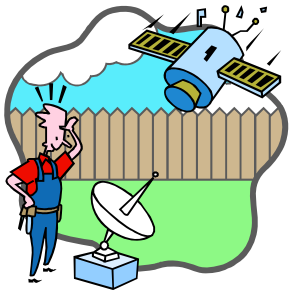
_____

42) What is your age range?

( ) under 25 ( ) 25-35 ( ) 36-45 ( ) 46-55 ( ) 56-65 ( ) 66+

43) What is your gender? ( ) Female ( ) Male

Thank you once again for taking the time to complete this questionnaire. Your participation in this research project is very much appreciated. Please seal hard copy (paper) versions of this completed questionnaire in the return envelope provided and post to the researcher.



Online users: please save changes to this document and email as an attachment to **ghjr@xtra.co.nz.**

Appendix 10: Summary of Results – University Student Cohort

(Response rate = 41%)

Item	Strongly Agree/Agree %	Unsure %	Strongly Disagree/Disagree %
1 University as social conscience	64	13	23
2 Economic purpose to student research	5	5	90
3 Private control of universities	0	20.5	79.5
4 Personal growth before job training	30.8	7.7	61.5
5 Employers prioritise good grades	12.8	20.5	66.7
6 Necessity of teaching critical thinking	87.2	12.8	0
7 Necessity of training for uni teachers	59	7.7	33.3
8 Divide teaching and research	19.2	24.4	56.4
9 Employer preference for broadness	51.3	30.8	17.9
10 Meritocratic selection of mature students	56.4	5.1	38.5
11 Govt direction of topics studied	11.5	9	79.5
12 Teach students how to research	89.7	0	10.3
13 Main function professional training	28.2	5.1	66.7
14 Strong focus on computer/tech science	7.7	12.8	79.5
15 Distinguish research & teaching uni's	15.4	12.8	71.8
16 Meritocratic secondary selection	7.7	5.1	87.2
17 University as exploratory site	64	18	18
18 Expectation of broadness	87.2	7.7	5.1
19 Decrease oncampus/increase Internet	15.4	15.4	69.2
20 Profit imperative for uni's	2.6	5.1	92.3
21 University education should be elite	51.3	10.3	38.4
22 Differentiation/functional classification	69.3	17.9	12.8
23 Critical thinking paramount	89.7	7.7	2.6
24 Continued relevance of humanities	76.9	17.9	5.2
25 Emphasis on developing new technology	59	23	18
26 Direct vocational training best poly-based	37.2	34.6	28.2
Function of 21st century university	**Rank**		
27 Personal economic advancement	4		
28 Advance technological knowledge of companies	5		
29 Make NZ more competitive	3		
30 Personal development of individuals	1		
31 Build more humane society	2		
Student perspective of employer priorities:	**Rank**		
32 Critical thinking	1		
33 Theoretical knowledge	4		
34 Practical competence	3		
35 Broadness of thought and preparation	5		
36 Communication skills	2		
37 Vocational usefulness of university educ	7.87/10		
38 Humanitarian/intellectual value of uni educ	7.83/10		
39 Degree programme most recently enrolled	Ave=honours	(2.23)	
40 Primary reason for uni study	73% Job related		27% Other
41 (Intended) profession or occupation	various		
42 Gender	82% Female		18% Male
43 Age range: ***under 25***=38.4%; ***25-35***=15.4%; ***36-45***=18%; ***46-55***=23%; ***56-65***=2.6%; ***66+***=2.6% (n=39)			

Appendix 11: Summary of Results – Year 13 Student Cohort

(Response rate = 38%)

Item	Strongly Agree/Agree %	Unsure %	Strongly Disagree/Disagree %
1 University as social conscience	62.2	33.8	4
2 Economic purpose to student research	9.5	10.4	79.7
3 Private control of universities	37.8	24.4	37.8
4 Personal growth before job training	56.8	18.9	24.3
5 Employers prioritise good grades	66.2	17.6	16.2
6 Necessity of teaching critical thinking	79.7	14.9	5.4
7 Necessity of training for uni teachers	64.9	14.9	20.2
8 Divide teaching and research	41.9	36.5	21.6
9 Employer preference for broadness	45.9	28.4	25.7
10 Meritocratic selection of mature students	50	13.5	36.5
11 Govt direction of topics studied	25.7	10.8	63.5
12 Teach students how to research	58.1	12.2	29.7
13 Main function professional training	31.1	8.1	60.8
14 Strong focus on computer/tech science	17.6	13.5	68.9
15 Distinguish research & teaching uni's	22.3	31.8	45.9
16 Meritocratic secondary selection	23	8.1	68.9
17 University as exploratory site	54	23	23
18 Expectation of broadness	73	16.2	10.8
19 Decrease oncampus/increase Internet	21.6	23	55.4
20 Profit imperative for uni's	6.75	13.5	79.75
21 University education should be elite	47.3	16.9	35.8
22 Differentiation/functional classification	33.8	23	43.2
23 Critical thinking paramount	81	12.25	6.75
24 Continued relevance of humanities	73	14.9	12.1
25 Emphasis on developing new technology	12.1	36.5	51.4
26 Direct vocational training best poly-based	29.7	37.8	32.5
Function of 21st century university:	**Rank**		
27 Personal economic advancement	3		
28 Advance technological knowledge of companies	5		
29 Make NZ more competitive	2		
30 Personal development of individuals	1		
31 Build more humane society	4		
Student perspective of employer priorities:	**Rank**		
32 Critical thinking	1		
33 Theoretical knowledge	2		
34 Practical competence	3		
35 Broadness of thought and preparation	5		
36 Communication skills	4		
37 Vocational usefulness of university educ	8.31/10		
38 Humanitarian/intellectual value of uni educ	7.51/10		
39 Intending to undertake uni study	80% yes		20% no
40 Intending to undertake poly study	18% yes		82% no
41 Intending to study by distance	19% yes		81% no
42 Intended profession or occupation	various		
42 Gender	51% female		49% male
(n=74)			

Appendix 12: Summary of Results – Public Sector Employer Cohort

(Response rate = 78%)

Item	Strongly Agree/Agree %	Unsure %	Strongly Disagree/Disagree %
1 University as social conscience	91.2	2.5	6.3
2 Economic purpose to student research	2.5	2.5	95
3 Private control of universities	8.9	17.7	73.4
4 Personal growth before job training	36.7	17.7	45.6
5 Employers prioritise good grades	50.6	2.5	46.9
6 Necessity of teaching critical thinking	100	0	0
7 Necessity of training for uni teachers	67	8.9	24
8 Divide teaching and research	26.6	34.2	39.2
9 Employer preference for broadness	67.1	8.9	24
10 Meritocratic selection of mature students	49.4	8.9	41.7
11 Govt direction of topics studied	16.5	10.1	73.4
12 Teach students how to research	76	2.5	21.5
13 Main function professional training	17	7	76
14 Strong focus on computer/tech science	32.3	7	60.7
15 Distinguish research & teaching uni's	11.4	19.6	69
16 Meritocratic secondary selection	16.4	11.4	72.2
17 University as exploratory site	58.2	10.2	31.6
18 Expectation of broadness	92.4	3.8	3.8
19 Decrease oncampus/increase Internet	13.9	31.6	54.5
20 Profit imperative for uni's	2.5	5.7	91.8
21 University education should be elite	43	14	43
22 Differentiation/functional classification	70.8	20.3	8.9
23 Critical thinking paramount	94.9	3.8	1.3
24 Continued relevance of humanities	89.9	3.8	6.3
25 Emphasis on developing new technology	63.3	19	17.7
26 Direct vocational training best poly-based	44.3	29.1	26.6

Function of 21st century university:	**Rank**
27 Personal economic advancement	5
28 Advance technological knowledge of companies	4
29 Make NZ more competitive	2
30 Personal development of individuals	1
31 Build more humane society	3

Employer priorities for graduates:	**Rank**
32 Critical thinking	1
33 Theoretical knowledge	5
34 Practical competence	4
35 Broadness of thought and preparation	3
36 Communication skills	2

37 Vocational usefulness of university educ	7.13/10
38 Humanitarian/intellectual value of uni educ	7.57/10

39 Educational qualifications Ave=grad dip (9.04)
40 Time of most recent graduation: ***1960s***=14.5%; ***1970s***=18.8%; ***1980s***=29%; ***1990s***=34.8%; ***2000s***=2.9%
41 Field and occupation Various
42 Age range: ***under 25***=0%; ***25-35***=6.4%; ***36-45***=28.2%; ***46-55***=46.1%; ***56-65***=16.7%; ***66+***=2.8%
43 Gender 22% Female 78% Male
(n=43)

Appendix 13: Summary of Results – Private Sector Employer Cohort

(Response rate = 61%)

Item	Strongly Agree/Agree %	Unsure %	Strongly Disagree/Disagree %
1 University as social conscience	88.9	2.8	8.3
2 Economic purpose to student research	2.8	2.8	94.4
3 Private control of universities	13.9	22.2	63.9
4 Personal growth before job training	41.7	11.1	47.2
5 Employers prioritise good grades	58.3	2.7	44.4
6 Necessity of teaching critical thinking	100	0	0
7 Necessity of training for uni teachers	63.9	5.6	30.5
8 Divide teaching and research	41.7	36.1	22.2
9 Employer preference for broadness	58.3	13.9	27.8
10 Meritocratic selection of mature students	50	5.6	44.4
11 Govt direction of topics studied	13.9	5.6	80.5
12 Teach students how to research	75	0	25
13 Main function professional training	20.8	7	72.2
14 Strong focus on computer/tech science	30.6	5.5	63.9
15 Distinguish research & teaching uni's	8.3	25	66.7
16 Meritocratic secondary selection	13.9	11.1	75
17 University as exploratory site	55.6	11.1	33.3
18 Expectation of broadness	97.2	2.8	0
19 Decrease oncampus/increase Internet	13.9	25	61.1
20 Profit imperative for uni's	2.8	8.3	88.9
21 University education should be elite	47.2	11.1	41.7
22 Differentiation/functional classification	66.7	27.7	5.6
23 Critical thinking paramount	94.4	5.6	0
24 Continued relevance of humanities	88.9	5.5	5.6
25 Emphasis on developing new technology	72.2	13.9	13.9
26 Direct vocational training best poly-based	47.2	33.4	19.4
Function of 21st century university:	**Rank**		
27 Personal economic advancement	4=		
28 Advance technological knowledge of companies	4=		
29 Make NZ more competitive	2		
30 Personal development of individuals	1		
31 Build more humane society	3		
Employer priorities for graduates:	**Rank**		
32 Critical thinking	1		
33 Theoretical knowledge	5		
34 Practical competence	3		
35 Broadness of thought and preparation	4		
36 Communication skills	2		
37 Vocational usefulness of university educ	7.18/10		
38 Humanitarian/intellectual value of uni educ	7.55/10		
39 Educational qualifications	Ave=grad dip (8.61)		
40 Time of most recent graduation: ***1960s***=19.4%; ***1970s***=12.9%; ***1980s***=32.3%; ***1990s***=32.3%; ***2000s***=3.1%			
41 Field and occupation	Various		
42 Age range: ***under 25***=0%; ***25-35***=11.4%; ***36-45***=28.6%; ***46-55***=40%; ***56-65***=17.1%; ***66+***=2.9%			
43 Gender	22.9% Female		77.1% Male
(n=36)			

Appendix 14: Between cohort analysis of agreement (%) and disagreement (%)*

Item	Year 13 students (n=74)	University students (n=39)	Public sector employers (n=43)	Private sector employers (n=36)
1 University as social conscience	62.2	64	93	88.9
2 Economic purpose to student research	*79.7*	*90*	*95.3*	*94.4*
3 Private control of universities	37.8	*79.5*	*81.4*	*63.9*
4 Personal growth before job training	56.8	*61.5*	*44.2*	*47.2*
5 Employers prioritise good grades	66.2	*66.7*	48.8	58.3
6 Necessity of teaching critical thinking	79.7	87.2	100	100
7 Necessity of training for uni teachers	64.9	59	69.8	63.9
8 Divide teaching and research	41.9	*56.4*	*53.5*	41.7
9 Employer preference for broadness	45.9	51.3	74.4	58.3
10 Meritocratic selection of mature students	50	56.4	48.8	50
11 Govt direction of topics studied	*63.5*	*79.5*	*67.4*	*80.5*
12 Teach students how to research	58.1	89.7	76.7	75
13 Main function professional training	*60.8*	*66.7*	*79*	*72.2*
14 Strong focus on computer/tech science	*68.9*	*79.5*	*58.1*	*63.9*
15 Distinguish research & teaching uni's	*45.9*	*71.8*	*70.9*	*66.7*
16 Meritocratic secondary selection	*68.9*	*87.2*	*69.8*	*75*
17 University as exploratory site	54	64	60.5	55.6
18 Expectation of broadness	73	87.2	88.4	97.2
19 Decrease oncampus/increase Internet	*55.4*	*69.2*	*48.8*	*61.1*
20 Profit imperative for uni's	*79.7*	*92.3*	*94.2*	*88.9*
21 University education should be elite	47.3	51.3	*44.2*	47.2
22 Differentiation/functional classification	*43.2*	69.3	74.4	66.7
23 Critical thinking paramount	81	89.7	95.3	94.4
24 Continued relevance of humanities	73	76.9	90.7	88.9
25 Emphasis on developing new technology	*51.4*	59	55.8	72.2
26 Direct vocational training best poly-based	*32.5*	37.2	41.9	47.2
(N=192)				

*In each case the number tabled represents the highest percentile result for each item. Where 'agree' and 'disagree' scores are identical (e.g. Y13 item 3) the level of agreement is tabled. Where the 'unsure' category has returned a higher score than either 'agree' or 'disagree' (e.g. Y13 item 26) the next highest score is tabled.

Appendix 15: Individual item analyses – Gender effect, combined employer cohort (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Female**	**Male**	**Sig**	**Female**	**Male**
1	94.1	90	p<0.05*	0	8.3
2	5.9	1.7	ns	94.1	95
3	5.9	8.3	ns	82.4	71.7
4	35.3	38.3	ns	47	45
5	64.7	45	ns	29.4	51.7
6	100	100	ns	0	0
7	94.1	58.3	ns	5.9	30
8	29.4	25	ns	35.3	41.7
9	64.7	68.3	p<0.05	29.4	21.7
10	58.8	45	ns	29.4	46.7
11	11.8	16.7	p<0.02**	76.5	73.3
12	82.4	73.3	p<0.01**	11.8	23.3
13	0	20	p<0.05*	88.2	75
14	23.5	36.7	ns	76.5	55
15	17.6	10	ns	70.6	70
16	29.4	11.7	p<0.05	58.8	76.7
17	58.8	60	ns	35.3	26.7
18	94.1	91.7	ns	0	5
19	11.8	15	ns	52.9	55
20	11.8	0	ns	88.2	95
21	52.9	40	ns	41.2	43.3
22	76.5	68.3	ns	0	11.7
23	100	93.3	p<0.02*	0	1.7
24	94.1	88.3	ns	5.9	5
25	47	66.7	p<0.02	29.4	15
26	52.9	41.7	ns	35.3	23.3

ns = p>0.05 * Significance not reported due to low values in some cells
n = 79 ** Should be interpreted with caution due to low value in one cell

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire. This applies to items 2,3,5,7,8,10,11,13,14,15,18,19,20 and 25.

Appendix 16: Individual item analyses – Gender effect, Year 13 student cohort (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Female**	**Male**	**Sig**	**Female**	**Male**
1	52.8	24	ns	8.3	0
2	11.1	5.9	ns	77.8	85.3
3	41.7	38.2	ns	36.1	35.3
4	30.6	20.6	ns	52.8	55.9
5	58.3	67.6	ns	22.2	11.8
6	86.1	73.5	ns	2.8	8.8
7	61.1	67.6	ns	25	14.7
8	38.9	47	ns	25	20.6
9	52.8	41.2	ns	13.9	35.3
10	50	50	ns	38.9	35.3
11	27.8	17.6	ns	63.9	64.7
12	58.3	58.8	ns	22.2	35.3
13	25	38.2	ns	66.7	55.9
14	13.9	17.6	p<0.01	72.2	67.6
15	25	17.6	ns	47.2	44.1
16	16.7	29.4	ns	75	26.5
17	58.3	52.9	ns	19.4	26.5
18	11.1	11.8	ns	69.4	79.4
19	16.7	14.7	ns	58.3	58.8
20	5.6	5.9	ns	88.9	73.5
21	44.4	52.9	ns	41.7	20.6
22	22.2	47	ns	50	35.3
23	86.1	76.5	ns	5.6	8.8
24	75	67.6	p<0.02*	8.3	17.6
25	44.4	58.8	p<0.05*	8.3	17.6
26	36.1	26.5	ns	30.5	29.4

ns = p>0.05
n = 74 * Should be interpreted with caution due to low value in one cell

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire. This applies to items 2,3,5,7,8,10,11,13,14,15,18,19,20 and 25.

No gender effect analyses were conducted for the university student cohort as there were too few male respondents for effective chi square analysis (male n = 7, female n = 32).

Appendix 17: Individual item analyses – public sector employers compared with university students (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Epub**	**Uni**	**Sig**	**Epub**	**Uni**
1	93	64.1	p<0.01	4.6	23
2	4.7	5.1	p<0.01*	95.3	89.7
3	4.7	0	p<0.01*	81.4	79.5
4	32.6	30.8	ns	44.2	61.5
5	48.8	12.8	ns	48.8	66.7
6	100	87.2	ns	0	0
7	69.8	58.9	p<0.01	18.6	33.3
8	13.9	19.2	ns	53.5	56.4
9	74.4	51.3	ns	20.9	17.9
10	48.8	56.4	ns	39.5	38.5
11	18.6	11.5	p<0.05	67.4	74.4
12	76.7	89.7	ns	18.6	10.2
13	13.9	28.2	p<0.05	79	66.7
14	33.7	7.7	ns	58.1	79.5
15	13.9	15.4	ns	70.9	71.8
16	18.6	7.7	p<0.05**	69.8	87.2
17	60.5	64.1	ns	30.2	17.9
18	88.4	5.1	ns	6.9	87.2
19	13.9	15.4	ns	48.8	69.2
20	2.3	2.6	p<0.05*	94.2	92.3
21	39.5	51.3	ns	44.2	38.5
22	74.4	69.2	ns	11.6	12.8
23	95.3	89.7	p<0.05*	2.3	2.6
24	90.7	76.9	ns	6.9	5.1
25	55.8	58.9	p<0.01	20.9	17.9
26	41.9	37.2	ns	32.6	28.2

ns = p>0.05 * Significance not reported due to low values in some cells
Epub n = 43, Uni n = 39 ** Should be interpreted with caution due to low value in one cell

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire. This applies to items 2,3,5,7,8,10,11,13,14,15,18,19,20 and 25.

Appendix 18: Individual item analyses – Year 13 students compared with university students (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Year 13**	**Uni**	**Sig**	**Year 13**	**Uni**
1	62.2	64.1	ns	4	23
2	9.5	5.1	p<0.05	79.7	89.7
3	37.8	0	ns	37.8	79.5
4	24.3	30.8	ns	56.8	61.5
5	66.2	12.8	ns	16.2	66.7
6	79.7	87.2	ns	5.4	0
7	64.9	58.9	p<0.01	20.3	33.3
8	41.9	19.2	p<0.02	21.6	56.4
9	45.9	51.3	ns	25.7	17.9
10	50	56.4	p<0.01	36.5	38.5
11	25.7	11.5	p<0.05	63.5	74.4
12	58.1	89.7	ns	29.7	10.2
13	31	28.2	ns	60.8	66.7
14	17.6	7.7	ns	68.9	79.5
15	22.3	15.4	p<0.02	45.9	71.8
16	22.9	7.7	p<0.02	68.9	87.2
17	54	64.1	ns	22.9	17.9
18	10.8	5.1	ns	72.9	87.2
19	21.6	15.4	p<0.02	55.4	69.2
20	6.7	2.6	p<0.01	79.7	92.3
21	47.3	51.3	ns	35.8	38.5
22	33.8	69.2	p<0.02	43.2	12.8
23	81	89.7	p<0.01	6.7	2.6
24	72.9	76.9	p<0.05	12.2	5.1
25	51.4	58.9	ns	12.2	17.9
26	32.4	37.2	p<0.05	29.7	28.2

ns = p>0.05
Y13 n = 74, Uni n = 39

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire. This applies to items 2,3,5,7,8,10,11,13,14,15,18,19,20 and 25.

Appendix 19: Individual item analyses – Year 13 students compared with public sector employers (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Year 13**	**Epub**	**Sig**	**Year 13**	**Epub**
1	62.2	93	ns	4	4.6
2	9.5	4.7	ns	79.7	95.3
3	37.8	4.7	p<0.02*	37.8	81.4
4	24.3	32.6	ns	56.8	44.2
5	66.2	48.8	ns	16.2	48.8
6	79.7	100	ns	5.4	0
7	64.9	69.8	p<0.05	20.3	18.6
8	41.9	13.9	ns	21.6	53.5
9	45.9	74.4	ns	25.7	20.9
10	50	48.8	ns	36.5	39.5
11	25.7	18.6	ns	63.5	67.4
12	58.1	76.7	ns	29.7	18.6
13	31	13.9	ns	60.8	79
14	17.6	33.7	p<0.05	68.9	58.1
15	22.3	13.9	ns	45.9	70.9
16	22.9	18.6	p<0.06	68.9	69.8
17	54	60.5	ns	22.9	30.2
18	10.8	88.4	ns	72.9	6.9
19	21.6	13.9	p<0.01	55.4	48.8
20	6.7	2.3	p<0.01*	79.7	94.2
21	47.3	39.5	ns	35.8	44.2
22	33.8	74.4	p<0.02	43.2	11.6
23	81	95.3	ns	6.7	2.3
24	72.9	90.7	ns	12.2	6.9
25	51.4	55.8	p<0.01	12.2	20.9
26	32.4	41.9	p<0.05	29.7	32.6

ns = p>0.05
Y13 n = 74, Epub n = 43

* Should be interpreted with caution due to low value in one cell

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire. This applies to items 2,3,5,7,8,10,11,13,14,15,18,19,20 and 25.

Appendix 20: Individual item analyses – Year 13 students compared with private sector employers (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Year 13**	**Epri**	**Sig**	**Year 13**	**Epri**
1	62.2	88.9	p<0.05*	4	8.3
2	9.5	2.8	ns	79.7	94.4
3	37.8	13.9	p<0.01	37.8	63.9
4	24.3	41.7	ns	56.8	47.2
5	66.2	58.3	ns	16.2	44.2
6	79.7	100	p<0.05*	5.4	0
7	64.9	63.9	ns	20.3	30.5
8	41.9	41.7	p<0.01	21.6	22.2
9	45.9	58.3	p<0.05	25.7	27.8
10	50	50	ns	36.5	44.4
11	25.7	13.9	p<0.01	63.5	80.5
12	58.1	75	p<0.01	29.7	25
13	31	20.8	ns	60.8	72.2
14	17.6	30.6	ns	68.9	63.9
15	22.3	8.3	ns	45.9	66.7
16	22.9	13.9	ns	68.9	75
17	54	55.6	p<0.01	22.9	33.3
18	10.8	97.2	p<0.01*	72.9	0
19	21.6	13.9	ns	55.4	61.1
20	6.7	2.8	p<0.02**	79.7	88.9
21	47.3	47.2	ns	35.8	41.7
22	33.8	66.7	ns	43.2	5.6
23	81	94.4	ns	6.7	0
24	72.9	88.9	ns	12.2	5.6
25	51.4	72.2	ns	12.2	13.9
26	32.4	47.2	p<0.05	29.7	19.4

ns = p>0.05 * Significance not reported due to low values in some cells
Y13 n = 74, Epri n = 36 ** Should be interpreted with caution due to low value in one cell

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire. This applies to items 2,3,5,7,8,10,11,13,14,15,18,19,20 and 25.

Appendix 21: Individual item analyses – Public sector employers compared with private sector employers (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Epub**	**Epri**	**Sig**	**Epub**	**Epri**
1	93	88.9	ns	4.6	8.3
2	4.7	2.8	ns	95.3	94.4
3	4.7	13.9	ns	81.4	63.9
4	32.6	41.7	ns	44.2	47.2
5	48.8	58.3	p<0.05	48.8	44.2
6	100	100	p<0.02*	0	0
7	69.8	63.9	ns	18.6	30.5
8	13.9	41.7	p<0.05	53.5	22.2
9	74.4	58.3	p<0.05	20.9	27.8
10	48.8	50	p<0.05	39.5	44.4
11	18.6	13.9	p<0.01	67.4	80.5
12	76.7	75	p<0.01	18.6	25
13	13.9	20.8	p<0.05	79	72.2
14	33.7	30.6	p<0.01	58.1	63.9
15	13.9	8.3	ns	70.9	66.7
16	18.6	13.9	ns	69.8	75
17	60.5	55.6	ns	30.2	33.3
18	88.4	97.2	p<0.01*	6.9	0
19	13.9	13.9	ns	48.8	61.1
20	2.3	2.8	ns	94.2	88.9
21	39.5	47.2	p<0.02	44.2	41.7
22	74.4	66.7	p<0.02	11.6	5.6
23	95.3	94.4	ns	2.3	0
24	90.7	88.9	ns	6.9	5.6
25	55.8	72.2	p<0.05	20.9	13.9
26	41.9	47.2	ns	32.6	19.4

ns = p>0.05 * Significance not reported due to low values in some cells
Epub n = 43, Epri n = 36

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire. This applies to items 2,3,5,7,8,10,11,13,14,15,18,19,20 and 25.

Appendix 22: Individual item analyses – Private sector employers compared with university students (raw frequencies not tabled)

	Strongly Agree/Agree (%)		(X^2)	Strongly Disagree/Disagree (%)	
Item	**Epri**	**Uni**	**Sig**	**Epri**	**Uni**
1	88.9	64.1	ns	8.3	23
2	2.8	5.1	p<0.01*	94.4	89.7
3	13.9	0	p<0.01*	63.9	79.5
4	41.7	30.8	p<0.05	47.2	61.5
5	58.3	12.8	ns	44.2	66.7
6	100	87.2	p<0.02*	0	0
7	63.9	58.9	p<0.01	30.5	33.3
8	41.7	19.2	ns	22.2	56.4
9	58.3	51.3	ns	27.8	17.9
10	50	56.4	ns	44.4	38.5
11	13.9	11.5	ns	80.5	74.4
12	75	89.7	p<0.02	25	10.2
13	20.8	28.2	p<0.05	72.2	66.7
14	30.6	7.7	ns	63.9	79.5
15	8.3	15.4	ns	66.7	71.8
16	13.9	7.7	ns	75	87.2
17	55.6	64.1	p<0.05	33.3	17.9
18	97.2	5.1	ns	0	87.2
19	13.9	15.4	p<0.01	61.1	69.2
20	2.8	2.6	ns	88.9	92.3
21	47.2	51.3	ns	41.7	38.5
22	66.7	69.2	p<0.02*	5.6	12.8
23	94.4	89.7	p<0.05*	0	2.6
24	88.9	76.9	p<0.01*	5.6	5.1
25	72.2	58.9	ns	13.9	17.9
26	47.2	37.2	ns	19.4	28.2

ns = p>0.05
Epri n = 36, Uni n = 39

* Significance not reported due to low values in some cells

NB. In order to report respondents' agreement or disagreement with the concept underpinning each item, as opposed to each question as posed, scores have been reversed for those items that were worded in a negative sense in the questionnaire.

Appendix 23: Open-ended comments – University student cohort

Item	Respondent	Response	Comment
1	U 9	D	University standing reflects on our country & should align with govt. opinions to an extent. Yet there should be the freedom of independence. But if students expect help from the govt. fees-wise they should expect some input from the govt.
1	U 11	NS	I think there needs to be some control by an outsider, so they are able to step in and resolve certain issues/problems that may arise.
1	U 12	NS	It doesn't really matter whether it is private or govt, there will always be some regulating controls, no matter what
1	U23	SA	Yes otherwise institution becomes a form of social control
1	U32	D	Should have partial government input
1	U34	D	The university should be able to voice issues but the govt has responsibilities that also need to be considered
1	U35	SA	State funding remains as an incentive to support NZ presence
2	U 9	SA	Money seems to be more important than people now – why?
2	U23	SA	People should have individual choice
2	U32	A	Information is key to success in all areas
3	U 5	D	Corporations should not own the people.
3	U 9	SD	To be effective unis need to consult the general community to assess the needs of employers & the skills/knowledge employers need. To be effective unis need to draw from other countries, past experiences & knowledgeable people.
3	U 12	D	Otherwise the indigenous input would disintegrate totally
3	U23	SD	Depends how you see "effectiveness". Through economic terms where there is a proven economic return, or otherwise
3	U32	NS	What? Speak plain English. We are uni students not language scholars. We are a nation made up of many small businesses – micro economic growth is more important than macro because we need all the little voices to be heard not the few loud ones
3	U34	D	Commercial/industrial interests should be considered but a university is not ineffective if these are not its objectives
3	U35	NS	e.g. management school needs industry validation (science technology etc.) "owned"
4	U 5	NS	While it is important to pursue personal growth, university should still offer job development so will.
4	U 9	A	Personal growth &intellectual development is important & work experience adds to this. Practical experience is as important as theoretical knowledge.
4	U 20	NS	I have spent 7 years at uni and don't really think I had "job" training.
4	U23	A	Nice to have both present at same time
4	U31	D	Students still need to know how what they are studying relates to the "real world", but it depends on the course
4	U32	SA	You can have all the qualifications in the world but no experience and you will have no chance of getting a job
5	U 9	SD	Personality, characteristics & experience are major factors in employment. Getting the degree counts – not necessarily high marks.
5	U 11	D	They also tend to look at a person's personality and willingness
5	U 20	NS	Probably – but the covering letter seems important
5	U23	D	Depends which employers
5	U27	D	They look at the end qualification
5	U32	SD	They want the right attitude and grades and a willingness to learn
6	U 9	SA	Students need to be open-minded & be able to experience different views. This helps in personal development.
6	U23	SA	Otherwise how do you hold a critical robust position
7	U 3	SD	Many uni lecturers aren't teachers, only academics and that can often be where problems lie.
7	U 7	D	Some training should have been done
7	U 9	SD	Some genius's are excellent in doing their areas of expertise, and can be terrible at teaching someone else. Teaching training is necessary for students to receive the best opportunities.
7	U 12	NS	Some lecturers are really good because of their experiences; while those that are trained, can be boring because they are limited to a textbook
7	U 13	SD	Vehemently
7	U 18	D	Not trained as such in 'teaching' but have the knowledge and qualifications to teach what they know
7	U 20	A	"Experts" come from all walks of life
7	U21	SD	Just because they know the content, they are not necessarily *effective teachers*. We pay fees to be *taught*, not talked *at*.
7	U 22	D	They need to be trained, but perhaps not to the same degree as high school teachers
7	U23	D	It would help – I have had some poorly trained lecturers particularly at Auckland University

7	U27	SD/D	There is some appalling teaching at university and complete ignorance by some of the most basic principles of teaching
7	U31	A	But they should still undergo some sort of training so they can communicate effectively
7	U32	SD	They must know how to relate, how to teach. Expert knowledge in an area is only of use if it can be transferred to another person
7	U34	A	Some knowledge on portraying information is required, but not to the extent teachers from other levels of education do
8	U 5	A	Some lecturers have no interest in conveying or teaching knowledge & information.
8	U 9	D	Logically the more one specialises the better the standard, however the nature of uni teachers is such that both appeal to some extent & researching techniques need to be passed on.
8	U 11	D	Staff that carry out research-only are depriving students of "first hand experience" teachings
8	U 20	D	Is this what you, the researcher, wants??
8	U 21	D	I think it's important for the teachers to do the research, so they understand better what they are teaching.
8	U27	A	Possibly
8	U32	NS/A	Would put a greater focus on an area but times change and teachers need to keep informed of what's new, best that they do their own research
9	U 20	NS	I can't speak for employers – but I would expect experience also plays a part in selection
9	U23	SD	Especially law wanting LLB Bcom/BA
9	U32	D	They look for the person who will go the extra mile
10	U 3	A	Don't young students have to as well?
10	U 5	A	Life skills do not always prepare one for the discipline of study.
10	U 9	D	I think the basic expectations are good at the moment. I think making 'writing for university purposes' compulsory is an excellent idea. To test mature students can scare off those that are able.
10	U 11	D	If they have never attended uni level courses, how can they provide any evidence?
10	U 20	SD	This experience would be provided within the first semester. What's the difference between a mature student and a "not mature" student? Isn't an adult over 16 anyway? What's your point here?
10	U 21	SA	*Everyone* should provide evidence of this
10	U23	A	It is a strain to be in a first year programme with people who clearly are way out of their depth
10	U32	A	Everyone should be required to do this. Age is not a factor.
10	U34	A	What is in place currently seems to be appropriate
10	U35	A	e.g. managerial experience
11	U 9	SD	Individual choice is important. And finding your own career path(s) is important too.
11	U 20	D	Like telling people to be teachers because of the shortage, now 300 people apply for 1 teaching position
11	U 21	D	Encourage perhaps – but not 'direct'
11	U23	SD	The government should govern the country/economy not universities
11	U27	NS/A	Encourage rather than direct
11	U31	D	Although the government could more actively promote these areas and offer funding/scholarships
11	U32	SD	Free will!
11	U35	D	But if desired govt should provide incentives to do so = $
12	U 9	SD	Learning from the past & gathering useful information are important skills in employment.
12	U 11	SD	In many industries, research is an integral part of operations, if students don't know how to conduct research, then industrial operations will suffer
12	U 12	SA	All assignments have a research element. As one furthers their tertiary education, it is all research
12	U 20	A	By circumstance you learn to research when you complete a degree
12	U 21	SD	Yes it is!!!
12	U23	SD	If universities don't who will
12	U32	D	Research is what arms us with knowledge – unis are knowledge providers
13	U 9	SD	The uni functions to provide a support network for students (17 yrs of age +) to develop skills in proffered fields of study, whether that be counselling, ???? teaching
13	U 12	D	The focus seems to be so, but then you have courses that makes universities "community friendly" to give universities added diversity
13	U 20	D	So train 2/9 of the industrial categories in the top earning 7% of the population? What about the rest?
13	U25	NS	Probably, the university should teach students about "soft" educational matters (e.g. ethics, communication) as well so that they can broaden their way of thinking, and have abilities to perform their future careers effectively

13	U27	D	Thinkers! Reflective practitioners!
13	U32	SD	University is for those who wish to develop a greater area of knowledge in any profession
13	U38	A	*One* of the functions
14	U 9	SD	All areas of society are important. An over supply of computer technicians will result in lowering of pay and decreased demand sending Nzers overseas for employment.
14	U 12	D	There would certainly become an imbalance/bias of resources
14	U 20	D	Why? Because they relate to ????
14	U 21	D	We need: teachers, doctors, dentists, health professional… (people who *help* people)
14	U23	D	Why should they – demand or government manipulated
14	U27	NS	Breadth is as important as depth – exclusivity has its own problems
14	U28	D	The market will establish course requirements
14	U32	NS	Whatever students want to study
14	U34	D	Need to be focused on producing capable students
14	U35	NS	Market demand identifies what is wanted
14	U39	D	However computer literacy for all students is important
15	U 5	D	Universities should be holistic
15	U 9	D	Half the students when starting uni don't really know what today a mixture of teaching & research allows them to find their niche.
15	U 20	A	But with cross over effects – you can't really have 1 without the other and only *some*
15	U 21	NS	Perhaps – I think that you can't have one without the other
15	U27	NS	How would this be decided? Applied?
15	U32	A	Might be a good idea but who would fund them? Tax payers? Who benefits?
16	U 5	D	Many people blossom or mature after their teens not during
16	U 9	SD	Students excel due to talent & environment/teaching style/life issues etc. those that excel at school will not necessarily excel at uni (and vice versa). Some of the talent student I knew did the minimum whole & never went to class, cause they could still pass.
16	U 11	D	University studies are much more different to secondary school studies, and school studies aren't always suited to a person
16	U 12	SD	The universities enrolment would definitely be reduced drastically if they took this approach. This could be seen as violating human rights
16	U 20	D	Oh that's nasty! And elitist!
16	U23	SD	No and some bridging course may be helpful
16	U26	SD	Agh!!! I failed at secondary school and got A's at uni!!!
16	U27	NS	Not sure I agree with this rather elitist view – not all do well at secondary school for a variety of reasons
16	U28	D	Effective learning is not dictated only by intelligence
16	U31	D	University is much different to secondary school, you can't always predict that a person who did not excel at school won't do well at uni
16	U32	NS	School is not always the best indicator of a student's academic potential
16	U33	D	Some people really find their "place" at uni and excel, where the same people might have struggled at high school
16	U39	NS	A student who is marginal at secondary school may still have university potential
17	U 9	SD	This is an essential part as students are given the opportunity to discover themselves, usually for the first time without their parents.
17	U 16	D	Wording of question is poor
17	U 20	NS	I don't understand this question
17	U23	SA	It worked for me
17	U28	NR	Contradictory question!
17	U35	A	i.e. an option available
18	U 9	A	As I had the opportunity to take classes outside of my chosen field.
18	U 12	A	I'd be more confident knowing that the information/courses had relevance to the real world. Don't want to waste money and time.
18	U23	A	Unless doing a very specific qualification
18	U39	A	Such as the underlying thinking in a broader sense
19	U 4	D	Should have extramural *as well* as on-campus not instead of/
19	U 5	D	Much as I hated "group work" getting on with others is an important part of life
19	U 9	D	I think the experience of uni is a growth one & can be essential for students growth & development.
19	U 11	SD	With some courses, face to face contact between lecturer and students produces better course grades and student understanding
19	U 12	D	Universities need to cater for different learning styles.
19	U 15	SD	Face to face is much better especially for teachers
19	U23	A	Cut down on unnecessary travel and resources
19	U27	SD	The internet is absolutely no replacement for face to face discussion
19	U28	D	Choice is needed
19	U32	NS	Depends on nature of course and students' preferred method of learning. Better

			for who? Students? – flexibility. Uni? – lower overhead costs. We will end up with a faceless future.
19	U33	SD	With the first part of that statement, but agree that more courses could be offered through the internet
19	U38	A	As well as
19	U39	D	Personal contact/class contact is important
20	U 9	SD	If the community benefits/there are any positive offsprings from the study then the study area should be offere.
20	U 12	SD	This image wouldn't sit very well in communities. This view would cater for the minority few, not the majority.
20	U 20	D	What about kudos?
20	U23	SD	What would happen to 'thinking' if that occurred?
20	U28	NR	Profit – in what sense?
20	U32	A	Uni is a for profit organisation isn't it? Makes business sense – but have all options been exhausted?
20	U 35	NS	If keeping such area(s) risks the uni then "possibly"
21	U 9	D	Uni is recognised as theory orientated study. However practical study is just as important. Doctors would not handle without nurses. And everyone would complain if there were no trained mechanics. Every trade is useful in our society.
21	U 15	D	To have a uni degree is really something!
21	U32	A	Only prestige and reputation for quality of lecturing should set them apart
21	U35	NS	Both have a relevant "place" – one meets a need for industry training but lacks research standards validity, one does
22	U 9	D	It is good to have the practical areas & research areas specialising to an extent.
22	U27	NS	Not sure of your question's intent
23	U 9	SA	Students at college are taught to regurgitate, uni students need to be taught to individually think.
23	U 12	NS	As long as they both had "options", not just one way (the universities' way) of how or what to think.
23	U 20	D	Surely by 16 or 17 or 40, or 50 the student should already have learnt this – what did they do at primary and sec level?
23	U23	A	I'd like to think that "how to think" would be taught at school
23	U28	NR	You need both
23	U33	SA	Very important!
24	U 5	NS	Music and the arts are part of who we are as a society
24	U 9	SD	B.A. graduates can still get jobs. All experience & learning is relevant in todays society.
24	U 20	D	What's today's world – its not the same as yesterday or tomorrow
24	U23	SD	According to whom
24	U27	D	See Q23
24	U31	D	They are still relevant, just not so much to the job market
24	U32	SD	It takes all sorts. Where would we be without the Nando's in this world? Relevance is a subjective term – to whom is it relevant – and – who has the authority to say? Someone needs to preserve that knowledge it may be needed someday and if no-one studies it, it is lost for ever
24	U33	SD	Not relevant in what way? Because it's hard to get a job with a BA degree? Maybe. But I think the arts are part of our culture and will always be rlelvant in showing our history, where we are from, etc. it's important.
25	U 9	A	Using new technology is part of any job & needs to be integrated into all courses.
25	U 11	A	But this shouldn't interfere with other courses and lines of study/research, but should be integrated through all levels and areas
25	U 20	NS	Not at my classes
25	U23	SD	How about leaving politics and economics out of learning institutions
25	U32	A	Sign of the times
25	U 35	A	Demand = supply
25	U37	A	Not in opposition to "higher" learning but compatible with
26	U 5	NS	Vocational training still needs to be available at university
26	U 20	NS	I maintain I never had "training" just lectures – we never went "out in the field" – maybe you did in education but not in my department
26	U23	A	Yes. Universities should promote elitism
26	U39	D	Depends on vocation
37	U 20	5	Well I expected it to be 10 when I began my degree but I now think 5
37	U 21	10	Essential
37	U28	6	Learning continues beyond the walls of the university
37	U32	5	Practical competence and experience is what gets you the job. Not having a degree is what will stop you getting the job
38	U 15	10	A great experience as a mature student to be part of the uni scene, and to achieve a degree and so help me in my chosen career
38	U 16	2	This is mainly as I have come in as an adult student to complete my degree while still working in my profession (teacher)
40	U 18	No	I am building on to the skills I already have to improve my performance

40	U 20	No	In the beginning it was to educate myself, but as the loan increased now it's more for the $ a job will bring
40	U27	No	I work in a tertiary institute where education is highly valued – therefore I continue studying
40	U35	No	Studying to obtain a "macro" of what is happening for myself in my chosen profession – employer 2nd
40	U38	No	Partly, interest in stimulus of learning
40	U39	Yes	But also self-development

Appendix 24: Open-ended comments – Year 13 student cohort

Note: Respondents from the three sample schools were coded Y13 'H', 'T', or 'M'.

Item	Respondent	Response	Comment
2	Y13H15	D	Not all but a majority
4	Y13H26	NS	It should include both
5	Y13H1	NS	I believe that as well as good grades, employers look at comments on work habits etc.
5	Y13H15	A	Along with experience
5	Y13H28	A	But should also include the individual's effort towards work
5	Y13H35	D	Experience is vital
6	Y13H15	NS	It shouldn't be up to the university (own judgement) but good
7	Y13H15	SD	Just because you know information about a subject doesn't mean you have the ability to teach it to others
7	Y13H35	D	They don't need to be but it would help them to communicate ideas efficiently
8	Y13H15	NS	Then the teacher's research skills would drop and the researcher's teaching skills would drop
8	Y13H35	A	However, provisions should be made so that research bleeds into the teaching
8	Y13H36	A	Unless they weren't particularly good at researching and still did it etc.
10	Y13T7	A	But should be allowed entry if willing
10	Y13H1	D	I believe everyone should have an equal opportunity to attend university, no matter their educational background and level
10	Y13H15	A	And that they will be committed
10	Y13H26	D	Anyone who wants to go should have an opportunity
10	Y13H36	NS	It would mean the standard would be higher but allowing adult students who don't have the grades to study gives them a second chance – maybe capable
11	Y13T11	D	The government does not know the needs of an individual
11	Y13H15	SD	If this was to happen there would be some unhappy people in different professions
11	Y13H35	SD	We ain't no extreme wing government here
12	Y13H26	A	Should already be known
12	Y13H28	A	Students should know how to research and that should be a individual effort
13	Y13H22	D	Further education for everyone
13	Y13H26	A	Also should involve personal growth
13	Y13H35	D	Research is an important part, as are study skills learnt
14	Y13H1	A	Computers are a necessary part of life today, and as I believe computer trained graduates are in strong demand
14	Y13H35	SD	It may be the future but we should not either market that way, or limit ourselves
15	Y13H28	SD/D	Both together
15	Y13H35	D	Not what polytechs are for
16	Y13T16	NS	It probably would produce "better" graduates however universities today are elitist enough as it is without further restrictions being placed upon students desiring to attend them
16	Y13H1	D	I disagree due to the same reason in question ten
16	Y13H15	D	That would exclude students that are capable but did not excel as well as others
16	Y13H28	D	Should be given equal chance
16	Y13H35	D	Some peoples levels are higher than others with less effort and will to work is what is required
17	Y13H15	D	There's enough pressure from whanau to get a job and make money and it would just aggravate the situation
19	Y13H15	D	It's good to have a personal touch every so often
20	Y13T11	SD	People like to give service, not make a profit
20	Y13H15	D	Not everything's about profit
20	Y13H35	SD	The world *should not* be driven by money
21	Y13H7	D	At the moment cause it's more prestigious
21	Y13H28	D	University promotes a higher standard
22	Y13H15	SA	Everybody has the same chance of education no matter where they live and have the same chances at different jobs
22	Y13H28	D	They should be designed to set the learning standard to best benefit the student
23	Y13H1	SA	I believe "forcing" ideas on to people is a breech of individuality, and teaching people how to think, rather than what is a great priority
23	Y13H28	D	Student should have their own points of view, be individuals
24	Y13H15	D	There will always be traditional art
24	Y13H28	SD	There are creative people in society who should have a degree to suit them
26	Y13H26	D	Universities would be more effective if they gave more job training

Appendix 25: Open-ended comments – Public sector employer cohort

Note: Some open-ended comments made by employers during the pilot stage of the project have been included. These are identified by the letter 'P' before the respondent code (i.e., 'PEPUB1' = 'pilot employer public [sector respondent] 1').

Item	Respondent	Response	Comment
27-31	EPUB 37		These have been ranked but none of them get to the heart of the function of universities, which is to advance knowledge/learning of disciplines such as science, mathematics, literature, art and the social sciences. Knowledge largely for its own sake in an environment where absolute freedom of thought and expression prevails.
27-31	EPUB 38		This (31) is a bit slanted; would have ranked it higher if the emphasis had been solely on 'better'. Not opposed to these – but would put higher priority on other attributes
32-36	EPUB 38		The balance/order between 3 & 5 would vary depending on the specific nature of the job – but 1 & 2 are more universal
1	EPUB 28	A	But govt has the right to fund/not fund
1	EPUB 35	A	Getting them to that point might be difficult. See question 11.
1	EPUB 37	A	Provided the commentary is apolitical
2	EPUB 20	D	This to some extent depends on how broadly you define "economic"
2	EPUB 28	A	But it should always be preparing students for a working life
3	EPUB 2	SD	But not all government either – can be a mix
3	EPUB 29	SD	Universities *must* be independent of commercial interests. However, they should not ignore those interests – some degree of cooperation is, at times healthy
3	EPUB 33	SD	This group is important but should not dominate by ownership what is taught and researched
4	EPUB 5	D	Increasingly, job training is carried out by companies
4	EPUB 25	NS	Depends on vocation. There is a role for "polytech" type universities
4	EPUB 28	NS	This assumes personal growth and intell development are not part of job training!
4	EPUB 35	NS	Both important; and interrelated
5	EPUB 2	D	Just a "pre-qualification" or starting point
5	EPUB 5	D	It's a combination
5	EPUB 9	A	Also the type of degree and 'other' experience
5	EPUB 18	D	Area of study of main interest, work experience and then grades
5	EPUB 28	A	*One* thing I would look for
5	EPUB 34	D	Not most, but are important
5	EPUB 35	A	Necessary but not sufficient
5	EPUB 38	A	Probably true – but would also look at relevance of courses studied. Assume context of question is about academic performance/achievement, rather than broader assessment of the graduate's wider strengths
5	EPUB 41	A	But also very interested in their social skills
6	EPUB 28	SA	Pity it doesn't happen more often!
7	EPUB 5	A	Some good "lecturers" are business people with "real-life" experience
7	EPUB 11	NS	Depends on subject being taught
7	EPUB 18	SD	Just because you know a topic does not mean you are good at teaching it (speaking from experience)
7	EPUB 28	SD	Quality of university education is often compromised by poor teaching skills
7	EPUB 42	SD	They need to be trained educators – not necessarily teachers, as in PPTA
8	EPUB 5	D	Teachers should research and visa versa
8	EPUB 21	D	Teaching and research are integral to each other (explanation and articulation)
8	EPUB 28	D	While staff may have different strengths there should always be a balance
8	EPUB 38	D	My first thought is that research would strengthen a lecturer's insights and depth of knowledge; but maybe these are different skill sets
9	EPUB 5	D	An "all-rounder" is needed
9	EPUB 14	NS	It depends on the job I am recruiting for
9	EPUB 25	NS	Depends on the type of job
9	EPUB 37	D	For a highly specialised position however, especially for a short term contract, we would probably not look much beyond professional qualifications
9	EPUB 38	D	Obviously a broader education makes for a broader person, and suggests a lively and enquiring mind
10	EPUB 2	NS	What would the "evidence" be?
10	EPUB 28	A	But that assessment should not be based on historic academic achievement
10	EPUB 35	A	*All* students should be accepted if there is reasonable prospect of success – and *especially* if their study is heavily subsidized
10	EPUB 37	A	But only for restricted entry papers
11	EPUB 5	SD	Govt should not pick winners
11	EPUB 9	NS	However there should be information available showing shortages/job prospects
11	EPUB 25	A	Particularly if major funding is from government
11	EPUB 29	D	No, encourage with incentives
11	EPUB 29	NS	In some areas there may be need for incentives but this should involve a mere

			handful of subjects where there are clear shortages i.e. teaching
11	EPUB 34	A	Encourage, not direct
11	EPUB 35	NS	Answer depends on who pays. Ideally, university should be private trusts or similar and not be govt funded or directed
11	EPUB 37	D	But some promotion (rather than direction) of courses that address strategic skill gaps would be appropriate
11	EPUB 42	A	Society as in a liberal democracy not an economic state also requiring associated social and health services
12	EPUB 28	NS	At undergrad levels – no; at post grad levels – yes
12	EPUB 33	D	The ability to pull together information using a research framework is important
13	EPUB 7	NS	Several functions of equal value – this is one
13	EPUB 14	NS	This is one function
13	EPUB 25	A	But they should train all to think broadly
13	EPUB 28	SD	Historical viewpoint
13	EPUB 31	SA	Currently
13	EPUB 34	A	Not the only function, but important
13	EPUB 37	D	This is an important function, just not the main function
13	EPUB 38	D	This is only part of the uinversity's function – not the main one
14	EPUB 7	NS/A	Similar to above
14	EPUB 9	A	Along with arts, commerce etc!
14	EPUB 19	A	But only as *one* of the things they are strongly focused on
14	EPUB 21	A	But one aspect of the picture only
14	EPUB 25	A	Certainly more than now
14	EPUB 37	A	Should be a strong focus but not at the expense of producing graduates in other disciplines
14	EPUB 38	D	Agree that this should be a focus – but not a predominate one. It is only a part of information management, anyway
14	EPUB 42	A	Innovation is good – technology, not necessarily just computers
15	EPUB 5	D	A strong university does both
15	EPUB 28	D	Need balance
15	EPUB 38	D	Universities surely need a blend of both to be successful
15	EPUB 42	D	Universities are meant to be communities of learning, not intellectual factories
16	EPUB 5	D	2^{o} and 3^{o} education are different
16	EPUB 7	NS	What constitutes better?
16	EPUB 9	D	That's what the current system does and we don't get good graduates!
16	EPUB 14	A	I am not sure we want to do this though
16	EPUB 18	NS	Depends how you define "excel"
16	EPUB 20	A	In general terms – yes however take care not to exclude those who have a cert; dip and wish to 'retrain' or 'upskill'
16	EPUB 28	SD	School system suits a narrow, traditional grouping of students
16	EPUB 30	A	This would produce a high achieving student body in an academic sense, but would limit the diversity of the students body and narrow universities' impact on society
16	EPUB 34	NS	Depends on what you mean by better
16	EPUB 37	D	Employers are looking for well rounded graduates not just those with excellent academic records at all stages of their lives
16	EPUB 39	D	But must meet certain std.
16	EPUB 42	D	Secondary school is a limited indicator of ability
17	EPUB 9	NS	This is an ideal we should aim for but not attainable I think
17	EPUB 18	SD	Universities do not prepare graduates for entering workplaces, which are more diverse than an academic environment
17	EPUB 25	SA	We all face/faced pressure to get a job. That does not eliminate opportunity to explore etc – that happens throughout life
17	EPUB 35	NS	Not sure it is meaningful to abstract from the reality of pressure etc in considering practical issues to do with what is offered in universities and how they are run
17	EPUB 38	A	Have difficulty with this wording, especially ???? of the term 'essential'; I do believe that the opportunity is – and should – be a strong benefit of a university education
17	EPUB 42	SD	A liberal education is at the heart of civil society
18	EPUB 14	NS	Depends what the profession is. I want doctor who knows about medicine!
18	EPUB 25	NS	Again depends on what the job is
18	EPUB 34	D	Not only
18	EPUB 38	D	Too narrow a view – need intellectual capacity more than specific functional competence
19	EPUB 20	D	There's already enough of that – not actually needs ??? universities altogether – not more of the same
19	EPUB 21	D	Face to face discussion and teaching cannot be fully substituted by distance study processes – from my own experience
19	EPUB 25	NS	Again it is horses for course
19	EPUB 28	NS	Agree with latter part of statement but not first
19	EPUB 37	NS	There is a well-established place for face-to-face discussion between tutors and students to promote learning, however extramural study has obvious advantages too.

			E.g. for those in full time employment
19	EPUB 42	NS	Most seem to run a healthy mix of full time courses, distance learning and on-campus sessions
20	EPUB 25	SD	None of it produces a profit. Taxpayers subsidize most.
20	EPUB 28	D	However course that do not attract enough students over time to be sustainable should be dropped
20	EPUB 35	NS	Ultimately, each area of study has to "work" for a university however that is measured. That may or may not mean "profitable"
20	EPUB 38	D	Needs to be some 'public good' contribution
21	EPUB 7	NS	Depends on *how* it stands apart. E.g. even within univ some courses stand apart from others
21	EPUB 19	NS	It depends if you mean 'stands apart' as in different from which I agree with or stands apart as in superior to which I don't agree with
21	EPUB 20	SA	In my experience some polytech and industry grads are better equipped and better able to approach research etc than univ grads
21	EPUB 21	A	It is different and should be recognised as such. THINKING PROCESSES.
21	EPUB 28	SA	Should be part of a spectrum, with no barriers between
21	EPUB 37	A	Universities should be in continual contact with other educational institutions so they can promote learning over a wide front and so they can keep in touch with developments in science, technology etc
21	EPUB 42	A	It's about achieving the same ends
22	EPUB 7	D	(PTEs) no research purpose?
22	EPUB 20	NS	Grey area – some polys and unis are on a par – others are clearly not – so what "qualification" have you around this statement
22	EPUB 28	NS	The research function is one that unis tend to specialise in – however the concept of a vocational/academic difference is a nonsense
22	EPUB 35	A	Labels don't take you very far. Each institution should stand on the quality of its graduates irrespective of what it calls itself or its activities
22	EPUB 37	NS	Recognise that polytechs and PTEs will tend to be more vocational but this should not preclude them from having research and academic functions if they feel those are appropriate to their aims/goals
22	EPUB 38	D	Each should fulfil different needs
22	EPUB 42	D	They serve different, though complementary, needs
23	EPUB 28	SA	Pity they don't do more of this
24	EPUB 18	SD	See above re teaching how to think
24	EPUB 20	D	Every degree/qual is useful – even if to validate experience
25	EPUB 9	A	Although can also be done by polytechs etc.
25	EPUB 19	NS	Yes a priority and a high one but not to the exclusion of som/many other things
25	EPUB 20	NS	Even though technology is the flavour of the month – this is not for everyone and no 1 economy in the world is based solely on technology somewhat shortsighted
25	EPUB 28	NS	Depends on what the uni is currently doing
25	EPUB 37	D	A priority perhaps but not necessarily a high priority (polytechs may have this as a higher priority).
25	EPUB 38	A	IT literacy is important – but ???? needs to be broader than technology, and encompass information management
26	EPUB 7	SD	Is that dentistry etc? if so SD
26	EPUB 28	A	Do not support concept of a difference between vocational/academic. Doctors and lawyers are vocations?
26	EPUB 35	NS	Whoever does it best should do it
26	EPUB 38	NS	Maybe but universities still have a role in teaching professional competencies
26	EPUB 42	NS	Whatever works best – avoiding academic snobbery

Appendix 26: Open-ended comments – Private sector employer cohort

Item	Respondent	Response	Comment
32-36	EPRI 1		(See list of desired graduate attributes attached - Appendix 27)
3	EPRI 18	NS	There is room for various funding models
4	EPRI 18	A	But it must be balanced. University is one time when people can take time to learn in a true learning environment
5	EPRI 1	SA	Not because I view this as evidence of superior intellect, but because I view it as evidence of personal discipline and application – very necessary for work
5	EPRI 9	D	Good grades are only 1 important indication
5	EPRI 16	D	Good grades help. Subsequent work experience is probably more important
5	EPRI 18	A	But not always A's
5	EPRI 34	A	Among other qualities
6	EPRI 10	A	I agree in part – a weakness is an overdone strength
6	EPRI 36	A	Necessary part of school education
7	EPRI 1	D	Uni lecturers still must know how to engage their students
7	EPRI 6	D	At undergrad level
7	EPRI 16	SA	My biggest problem with university lecturing is that career wise it is seen as an adjunct to research work i.e. poor cousin
7	EPRI 33	A	It is important that at a tertiary level students are exposed to real world experience as well as stretching their academic training
9	EPRI 33	NS	It depends on what the role is
10	EPRI 9	D	As long as they pay – no problem
11	EPRI 1	NS	Could use inducements (scholarships) rather than overt direction
11	EPRI 6	A	For publicly funded education
11	EPRI 16	D	They should direct university funding that way
11	EPRI 34	SD	Especially if it is the govt who decides what are the needs of society and the economy
12	EPRI 16	D	How else can they learn to think?
12	EPRI 33	D	All needs of society need to be reflected in the university training
14	EPRI 6	D	Focus on those areas of the NZ economy where comparative advantage exists
14	EPRI 16	A	Not to the exclusion of other areas
14	EPRI 34	D	Focus should be broadly focused
15	EPRI 14	A	If the research unis share the info
16	EPRI 6	D	Entry for mature students
16	EPRI 33	SD	It is not always the brightest that are the best
16	EPRI 34	D	Some students for a variety of reasons are late starters
17	EPRI 16	NS	Don't understand the question
18	EPRI 33	D	Breadth of thinking is very important
19	EPRI 1	SD	Working together is a key component of business
19	EPRI 34	NS	Answer to this question depends on many factors including the degree of contact between the student and the university and the degree of supervision
21	EPRI 16	A	But what does "stands apart" mean?
21	EPRI 18	NS	It will vary on the skills/knowledge required
21	EPRI 33	A	The tertiary system should be integrated in its objectives
21	EPRI 34	NS	I am not sure what stands apart means – a university education differs from polytechnic and industry training – they serve, to a large extent, different purposes and students with differing imperatives – they are different, but a university is not necessarily better for the students
24	EPRI 33	SD	It teaches you to think and provides a solid foundation for further vocational training. I have one!!
24	EPRI 34	SD	They are relevant for many people – we don't all wish to be technocrats
25	EPRI 34	A	A priority – an educated person needs to know how to take advantage of technology – there needs to be a balance
26	EPRI 34	D	Depends on the type of vocational training and what you mean by vocational training – is an engineering degree a medical degree or a law degree vocational training – if so I disagree

Appendix 27: Desired graduate attributes – Private sector employer (EPRI 1)

Graduate attributes

First: Good grades (A's + some b's) in yrs 2-3.
C's are tolerated for 1st yr. only – we assume
They've had a good time before knuckling down

Then:
- *Ability to deal with conflict – front people.
- Ability to influence others
- *Strategic conceptual skills
- Willingness to transfer knowledge to others
- Passion for success – able to overcome obstacles, tenacity etc.
- *Self awareness.

* – must-haves – we won't select if they don't have these, because too hard to develop.

The above competencies are leadership competencies & tell us if the student has the right stuff to be a senior manager.