The tertiary education system makes a significant contribution to New Zealand’s economic and social objectives, such as economic growth, improved labour productivity and equality of opportunity. New Zealand’s tertiary education strategy identifies how the tertiary education system is expected to contribute to national goals. At the time of writing *Profile & Trends 2008*, planning for New Zealand’s third tertiary education strategy was nearing completion.

Monitoring reports that assess New Zealand’s progress against the second strategy were released in July 2009. A short summary of the 2009 monitoring is included later in this chapter.

In January 2008, changes were implemented to the systems for the steering and funding of tertiary education. These reforms included a new quality assurance system being rolled out over 2009 to 2012 that focuses on self-assessment and external evaluation and review as a means of building continuous improvement. This is complemented by a programme of monitoring to inform investment decisions. These systems aim to support a sector-wide culture in which tertiary education organisations focus on improving their own performance, continuing to build their capacity for self-improvement.

The funding of provider-based tertiary education was split in 2008 into funding that supports the costs of teaching and learning and funding that supports tertiary education organisations to ensure that they have the capability needed to focus on their core roles and distinctive contributions. The multi-year investment plans developed in 2008 by providers and approved by the Tertiary Education Commission were intended to make sure that tertiary education resources are focused on courses that meet the goals of New Zealand and New Zealanders.

An article on recent changes to higher education policy and funding in Australia and Scotland is included later in this chapter. The article gives an overview of these changes before making some observations about how these policy approaches compare with the situation in New Zealand.
Tertiary education in New Zealand

Tertiary education includes all post-school education:

- foundation education, such as adult literacy and education for those with low-level qualifications who are looking for employment
- certificates and diplomas
- bachelors degrees
- industry training, including Modern Apprenticeships
- adult community education, and
- postgraduate qualifications, many of them requiring students to conduct substantial original research.

Tertiary education also includes programmes delivered in secondary schools, such as Gateway and the Secondary-Tertiary Alignment Resource (STAR).

2009 YEAR

In August 2009, the government introduced the Education (Polytechnics) Amendment Bill to enable the implementation of new governance arrangements for institutes of technology and polytechnics. These arrangements aim to improve the capability and effectiveness of polytechnic councils and to allow the government to respond more quickly to the risks posed by polytechnics with educational or financial performance issues.

In September 2009, the Minister for Tertiary Education released a draft of New Zealand’s third tertiary education strategy. The strategy will set the government’s goals and priorities for the tertiary education system for 2011 to 2015. The Education Act 1989 also requires the strategy to address the economic, social and environmental contexts and the development aspirations of Māori and other population groups.

The consultation on the draft strategy took place during October 2009. At the time of writing, New Zealand’s third tertiary education strategy was planned to be released in December 2009.

Government’s vision for the tertiary education system (contained in the draft strategy) is for a system that provides:

- access to high-quality tertiary education
- relevant and efficient tertiary education that meets the needs of students, the labour market and the economy, and
- increased employment opportunities for people while building a productive skills base for economic growth.
Expected contributions

The expected contributions of the tertiary education system to government’s higher-level goals focus on the following areas:

• providing New Zealanders of all backgrounds with opportunities to gain world-class skills and knowledge

• raising the skills and knowledge of the current and future workforce to meet labour market demand and social needs

• producing high-quality research to build on New Zealand’s knowledge base, respond to the needs of the economy and address environmental and social challenges, and

• enabling Māori to achieve tertiary education success as Māori.

Tertiary education priorities 2011-13

Government’s tertiary education priorities for the 2011 to 2013 investment planning cycle (included in the draft strategy) are to:

• increase the number of young people (aged under 25 years) that achieve qualifications at level 4 and above, particularly degrees

• assist Māori and Pasifika people to achieve at higher levels

• increase the number of young people moving successfully from school into tertiary education

• continue to assist adult learners to gain the literacy, language and numeracy skills for higher-level study or skilled employment

• improve the educational and financial performance of providers, and

• strengthen research outcomes.
Monitoring and evaluating New Zealand’s second tertiary education strategy

Monitoring and evaluating the impact of New Zealand’s tertiary education strategies plays the important role of informing the sector’s funding decisions; providing measures of progress in order to inform the planning rounds of tertiary education providers; and assisting business, industry and communities to activate their tertiary education priorities.

The second strategy was issued in December 2006 and covers the period from 2007 to 2012. It includes the priorities for the 2008 to 2010 tertiary education organisation investment plans. It is the second strategy to be published and explicitly states what government expected of the tertiary education system and the priority outcomes for action.

The monitoring results published in July 2009 comprised three parts:

- a monitoring summary that describes the sector at the time the second strategy was being implemented, together with brief descriptions of how tertiary education organisations responded to the second strategy
- a report on cross-strategy indicators that provides a detailed view of the overall health of the tertiary education system, using a set of indicators against which broader changes can be monitored over longer periods of time, and
- a report containing more detailed descriptions of the state of tertiary education focused on the second strategy’s three areas of expected contribution and the associated 2008 to 2010 priorities.

The three areas in which the second strategy was expected to contribute to our society were: success of all New Zealanders through lifelong learning; creating and applying knowledge to drive innovation; and strong connections between tertiary education organisations and the communities they serve.

Monitoring summary – the second tertiary education strategy

Included in the monitoring summary report is a description of the environment in which the tertiary education sector responded to the Tertiary Education Strategy 2007–12. It summarises the strategy’s contribution to Māori and Pasifika achievement and then describes the sector’s overall contribution to the three areas identified by the strategy.


Cross-strategy indicators

The cross-strategy indicators report covers six broad tertiary education outcomes against which changes in the tertiary education strategy and other governmental policy can be monitored.

The first tertiary education outcome is the level of knowledge and skills of New Zealand adults. This is measured by looking at the literacy, language and numeracy skills of the adult population and their highest qualification.

Secondly, the report looks at the benefits to individuals of undertaking tertiary study. This is measured by considering the income and employment levels associated with different types of qualifications, the rates of return to individuals of obtaining a qualification, and the health and wellbeing of individuals.

The results of research undertaken in the tertiary education sector is the third outcome described in the ‘indicators’ report. The measures used to represent this outcome are the type of research undertaken, the amount of research produced and its take-up by other academics.

Success in tertiary education is the fourth outcome. Six indicators have been chosen to represent this area. The first measure of success is the pattern of movement of students from school to tertiary education. Second is the rate of participation in tertiary education and the qualification level at which people study. The third measure considers the proportion of students who continue in study after their first year, and the fourth measure looks at the proportion of students who have completed a qualification within five years of starting study. The fifth indicator of success is the proportion of students who, after starting a qualification, went on to study at a higher level within five years. The last indicator considers success in industry training and covers the number of credits or certificates gained and the number of training programmes completed.

The affordability of tertiary education is the fifth broad outcome covered in the ‘indicators’ report. The two indicators used are the cost of tertiary education for students through fees and, over time, through loans, and the cost to the nation in terms of government expenditure.

Finally, the sixth broad tertiary outcome area considered is the contribution of tertiary education organisations. The first measure used is the number of students in provider-based and workplace-based tertiary education by sub-sector. The second indicator looks at international students in New Zealand and New Zealanders studying overseas.

**Expected contributions – the second tertiary education strategy**

The expected contributions report provides a detailed view of the tertiary education system for the following three areas:

- success for all New Zealanders through lifelong learning
- creating and applying knowledge to drive innovation, and
- strong connections between tertiary education organisations and the communities they serve.

Economic changes and their impact on the tertiary education system are described in some detail in the ‘contributions’ report. For example, at the time of the writing of the second strategy real gross domestic product was increasing and, in contrast, at the time of monitoring the second strategy real gross domestic product was decreasing. As the economic cycle has been associated with changes in people’s participation in tertiary education and the progression of students to higher levels of study, the monitoring of the strategy encompasses the economic environment.

**Success for all New Zealanders through lifelong learning**

The report looks at whether broad and equitable access to tertiary education participation exists and whether achievement is encouraged in relevant and quality qualifications. For example, the report includes commentary on Māori and Pasifika in tertiary education, people with disabilities, migrants and refugees, students from lower socio-economic backgrounds, upskilling to enable people to re-enter the workforce, and strong foundation skills. One of the priority outcomes is aimed at foundation skills, that is, increasing literacy, numeracy and language levels for the workforce.

Transitions from schooling to tertiary education are also included in this part of the ‘contributions’ report, with emphasis on higher school achievement to enable secondary school leavers to progress to a higher level of tertiary education study. Students staying in study and completing qualifications is also covered here. The report also looks at the strategy’s emphasis on increasing educational success for young New Zealanders – more people achieving qualifications at level 4 and above by the age of 25 years.

Another priority in the strategy is increasing the achievement of advanced trade, technical and professional qualifications to meet regional and national industry needs. The areas canvassed in the report include skill shortages and fields of study where there has been increased demand for graduates which had not been met, the trends in workplace-based training and the people in postgraduate study.

**Creating and applying knowledge to drive innovation**

This is the second expected strategic contribution. The approach taken was to make a judgement of the extent to which research and scholarship inform teaching and contribute to economic and social development. The monitoring starts by examining the information from the Performance-Based Research Fund, government’s main tertiary education funding mechanism. The relationship between the size of a university’s research staff and the number of equivalent full-time students taught per subject area is considered at bachelor and bachelors with honours level. In the case of masters and doctorates, an analysis is made of the number of equivalent full-time students taught by research staff producing work of international or national standard.

The strategy also aims to have the tertiary education research effort contribute to national goals, while improving the research connections and linkages. The report notes that there is limited systematic information available in this area. Recent efforts to identify national research priorities have focused on the biological sciences; engineering, technology and architecture; health; mathematical and information sciences and technology; medicine and public health; and physical sciences. The report canvasses a range of information sources to make an assessment of this area.

Concluding the research section of the ‘contributions’ report is a commentary on the priority outcome for research, which is to improve research connections and linkages to create economic opportunities.

**Strong connections between tertiary education organisations and the communities they serve**

This is the third expected strategic contribution. The ‘contributions’ report covers a conceptual model of effective engagement and includes evidence of increased cooperation among tertiary education organisations themselves, as well as the development of connections with schools, overseas universities, industry and business, Māori and iwi, and Pasifika communities.

Looking at the outcomes of connections, the monitoring report briefly covers the topics of improving the quality and relevance of education and knowledge; supporting economic transformation; and supporting social, cultural and environmental outcomes.

Recent changes to higher education policy and funding in Australia and Scotland

Over the last year, Australia and Scotland have been making significant changes to the way they invest in tertiary education, in particular higher or university-level education. This article gives an overview of these changes, looking first at Australia and then at Scotland, before making some observations about how these policy approaches compare with the situation in New Zealand.

Why look at Australia and Scotland?

Australia and Scotland are both similar to New Zealand but in different ways. All three countries share a challenging population distribution, with much of the population concentrated in cities, but a significant thinly spread non-urban population.

Australia and New Zealand share a mix of older universities, for example, the University of Otago in New Zealand or the University of Sydney in Australia, and relatively new ones. In New Zealand, the University of Waikato was founded in the 1960s and the Auckland University of Technology was a polytechnic until 2000. In Australia, in the late 1980s and early 1990s, many colleges of advanced education were merged to create new universities, while other colleges were absorbed into neighbouring universities, during the ‘Dawkins revolution’ in higher education.

Furthermore, the early university systems of both New Zealand and Australia were shaped by the Scottish, rather than the English, system. New Zealand’s first university, the University of Otago, was established in 1869 by the Scottish founders of Dunedin. As with the first Scottish universities, it was a public institution from the outset, and was conceived of not as a closed academic community, as was the case with the first English universities, but as an inclusive, publicly accountable teaching institution that would provide a means of preparing the general population for productive lives.1 Similarly, Australia’s first university, the University of Sydney, was founded in 1850 as a state-owned institution that would offer ‘a regular and liberal course of education’ to all colonial residents of the colony of New South Wales, without distinction as to class.2

Finally, the recent reviews in Australia and Scotland have identified challenges very similar to those facing New Zealand: the pressing need for higher education to contribute as much as possible to economic development; the tension between lifting participation and maintaining high standards; and, since the global economic crisis of late 2008, doing all this within tightening fiscal constraints.

Australia

Australia is our nearest neighbour and culturally quite similar to us. But it is much larger than New Zealand: about 28 times larger in area, and with about five times our population.

Like New Zealand, Australia has an indigenous population that is under-represented in university education. The indigenous population of Australia, consisting of Aboriginal and Torres Strait Islander peoples, is much smaller than the Māori population of New Zealand (2.3 percent compared to 15 percent). Australia’s indigenous population is less likely to access tertiary education than is the case in New Zealand: people from Aboriginal and Torres Strait Islander ethnic groups make up less than 1 percent of university enrolments in Australia.3

References

1. The University of Otago was constituted in 1869 through the efforts of Thomas Burns, www.teara.govt.nz/en/1966/burnsthomas/burnsthomas/en, who was its first Chancellor, and James Macandrew, www.teara.govt.nz/en/1966/macandrew-james/en. For a discussion of the historical distinctions between the Scottish and English university systems, see Carter, J. & Witherington, D., Scottish universities: distinctiveness and diversity, reviewed by Henry Fulton in Albion: A Quarterly Journal Concerned with British Studies, Vol. 25, No. 3 (Autumn 1993), pp. 556–558. In summary, the Scottish university system was established under state control, traditionally supervised by town councils and the Presbyterian Church, and with a strong focus on teaching and on providing a general education (including vocational education) to the population. This is in contrast to the English system, in which the old universities were privately established academic communities that separated themselves from the economic and social life of the general population and generally did not consider that they had a role to play in its education.

2. Quoted from the University of Sydney Act 1850, the university’s founding legislation. Transcript online at: www.foundingdocs.gov.au/resources/transcripts/nsw10_doc_1850.pdf.

3. In 2007, indigenous students made up 6,198 (0.85 percent) of the 726,000 equivalent full-time student units in Australia’s higher education system. In terms of individuals, 9,370 (0.91 percent) of the 1,030,000 individual students in higher education Australia in 2007 were indigenous students. In New Zealand, about 9 percent of students at universities and 13 percent at polytechnics studying at bachelor’s level and above are Māori. Australian data derived from tables 19, 35, 45 and 47 at: www.dest.gov.au/sectors/higher_education/publications_resources/profilesStudents_2007_full_year.htm. New Zealand data derived from table ENR.11 at: www.educationcounts.govt.nz/statistics/tertiary_education/participation.
The Australian economy also has higher rates of productivity than New Zealand, and this has been true since the early 1990s.\(^4\) This could be for one or more of the following reasons:

- Australia’s workforce is more skilled than ours.\(^5\)
- Australian workers’ skills are better utilised by their employers, perhaps because of the nature of the industries that make up the two labour markets.
- There is more private capital investment in Australia.
- Australia and New Zealand have different natural resources.

It is likely that all these factors, and a number of others, play a part. Australia shares some students with us, because a reciprocal agreement between governments means that our students pay domestic fees in one another’s countries, subject to various residency criteria.

According to one commentator on and researcher into tertiary education, investment in higher education in Australia declined in real terms in the 1990s and early 2000s. Simon Marginson, professor of higher education at the University of Melbourne, argued that between 1995 and 2004, per-student public funding fell by almost 30 percent, and total tertiary funding fell by 4 percent, at the same time as student numbers rose by a third. Universities sought to fill the funding gap through expanding their international enrolments, and some became heavily reliant on revenue provided by international enrolments. By 2006, international students accounted for 20 percent of all university enrolments in Australia, and education was Australia’s third-largest export industry.\(^6\)

One of the new Australian government’s core election promises was an education revolution at all levels of the system.

Higher education in Australia

‘Higher education’ in Australia refers to education undertaken at any of:

- 39 universities (37 of which are public institutions)
- one Australian branch of an overseas university
- three self-accrediting higher education institutions, and
- about 150 non-self-accrediting higher education institutions, including six technical and further education institutes.

Australia’s higher education and vocational education sectors have historically been quite separate, but the lines between them have blurred in recent years as the technical and further education institutes have begun to be accredited as higher education providers.

Changes to Australian higher education: the Bradley review

The Review of Australian Higher Education – the Bradley review – was commissioned in 2008 by the Hon Julia Gillard, the Australian Minister for Education, Employment, Workplace Relations and Social Inclusion.

She tasked the review with examining the future direction of the higher education sector, its fitness for purpose in meeting the needs of the Australian community and economy, and the options for ongoing reform\(^7\) – a broad brief. The review was led by an expert panel chaired by Emeritus Professor Denise Bradley, former Vice Chancellor of the University of South Australia.

The review panel provided a final report to Minister Gillard in December 2008. This report argued for the importance of higher education to Australia’s social and economic wellbeing. It expressed concern that the higher education system in Australia was falling behind internationally in terms of investment and performance, and that the system was under-funded and disorganised in places, with unclear governance and mixed quality of provision.

The review made substantial recommendations for addressing these problems. Its report can be found online at: www.deewr.gov.au/highereducation/review/pages/reviewofaustralianhighereducationreport.aspx.

Recommendations of the review

At the time of the review, funding of higher education in Australia was heavily centrally planned: a given number of Commonwealth-subsidised places were allocated to each institution on an annual basis with, from 2008, a 5 percent tolerance band for additional enrolments.

The review’s key recommendation was that this system be replaced by a demand-driven funding system, whereby every domestic student would be entitled to a Commonwealth-subsidised place at the institution(s) of their choice, subject to institutional entry standards, without any cap on duration or dollar value. The Bradley review estimated that moving to this system would cost the federal government an extra $1.1 billion\(^8\) over four years.

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5. This may be in part as a result of the composition of our economies. Many of New Zealand’s main industries, for example, agriculture, manufacturing, can, in times of low unemployment, absorb workers without qualifications, meaning that as the economy booms productive efficiency can actually decline. Although our economy grew significantly during the 1990s and early 2000s, the overall skill level of our workforce went down as many new entrants to the workforce lacked qualifications.
8. All references are to Australian dollars unless otherwise stated.
The review also recommended:

- targets for participation and achievement
- substantial changes to the student income support system, making it more generous for students from low-income families but tightening other eligibility criteria
- a 10 percent increase in public base funding for teaching and learning in higher education by 2010, and regular increases thereafter, with some funding to be allocated according to performance against specific indicators
- $300 million extra per year in research 'block grant' competitive funding
- dedicated funding to support regional provision
- a single national independent regulatory and quality assurance agency for higher education and, in time, vocational education and training, as well as a new accountability framework and quality assurance system, and
- a new Ministerial Council to coordinate the higher and vocational education and activities of different state governments.

The cost to the Australian federal government of implementing the Bradley review’s recommendations was estimated to be about $6 billion over four years.

**Australian government’s response to the review**

Minister Gillard announced the Australian federal government’s response to the recommendations in early March 2009. This was followed on 12 May 2009 with budget announcements giving more detail about the proposed changes, including the commitment of an extra $5.7 billion over four years for the higher education and innovation sectors.

A summary of nine main areas of reform is given below.

**Student-led funding**

From 2010, the Australian federal government will progressively remove its centrally allocated volume caps on subsidised university places for domestic students. The fundamental aim of this change is, in the words of Minister Gillard, to “let student demand, moderated by public and university priorities, determine where public dollars go”.

Under the current system, a set number of Commonwealth-subsidised places are allocated to each higher education institution on an annual basis, with a 5 percent tolerance band for additional enrolments. In contrast to New Zealand, enrolments in Australia above the 100 percent threshold but within the tolerance band still attract a government subsidy. The tolerance band will be extended to 10 percent in 2010, and then removed entirely in 2012.

This will mean that, from 2012, any student will be able to apply to any accredited institution they choose and, provided they meet the institution’s entry criteria and the institution wants to enrol them, they will receive a subsidised place.

Existing fee caps (on fees that universities can charge to students in Commonwealth-subsidised places) will be retained. Core operational funding for providers will still be delivered directly from the Australian federal government via funding agreements, subject to satisfactory institutional performance.

The changes will allow an extra 50,000 students to enter university studies by 2013 at an estimated cost of $491 million over four years (considerably lower than the Bradley review’s estimate of $1.1 billion). The Australian federal government has indicated that, where necessary, it will provide additional funding to ensure that ‘public good’ course enrolments, for example, medicine, dentistry, teacher training, and perhaps courses in the arts, are protected from the possible effects of the demand-led system.

The Australian federal government hopes that these changes will encourage the higher education sector to expand its provision, promoting attainment of the target discussed below. It also hopes to raise the quality of university provision by rewarding universities that are able to attract more students.

**A target for attainment**

The Australian federal government has set a target that, by 2025, 40 percent of all Australians aged 25 to 34 years will have a qualification at bachelor’s level or above. The level is currently 32 percent in Australia, and 30 percent in New Zealand.

This target is supplementary to an existing government target, set in November 2008 by the Council of Australian Governments as part of its National Skills and Workforce Development Agreement, to halve, by 2020, the proportion of Australians aged 20 to 64 years who do not have qualifications at level 3 certificates or above.

**A target for equity**

A focus on equity in Australia’s higher education system was a key theme of the Bradley review: indigenous people, people from low socio-economic groups, and people living in remote areas are significantly less likely than the general population to participate in higher education. In responding to the review, the Australian federal government emphasised that, for economic reasons as well as moral, Australia cannot afford to allow these significant proportions of its population to go without higher education.
The Australian federal government has adopted the Bradley review’s proposed goal that, by 2020, 20 percent of higher education enrolments at undergraduate levels will be students from low socio-economic backgrounds. The current level is about 16 percent in Australia [no data exists for New Zealand].

The Australian federal government has acknowledged tension between the responsibilities of the tertiary and compulsory education sectors with respect to this goal. For significant change to be achieved at tertiary level, participation and engagement in primary and secondary and even early childhood education need to improve for these groups.

To promote attainment of the goal within the higher education system, the Australian federal government has committed:

- $437 million over four years to boost participation in higher education by people from disadvantaged backgrounds
- $325 million for a new loading to reward institutions for attracting and retaining students from disadvantaged backgrounds, and
- $108 million over four years for universities to build long-term partnerships with schools and communities in disadvantaged areas to lift participation in higher education.

It has also made changes to its student support system, to provide higher levels of support to those most at need. The age of eligibility for a student allowance will be progressively lowered from 25 years to 22 years by 2012 but, at the same time, the definition of ‘independence’ will be tightened so that only students who have demonstrated genuine self-support can qualify for an allowance before the age of 22. This is expected to generate savings that can be reinvested to help fund other student support initiatives, including:

- a higher parental-income threshold for student allowance recipients, benefiting around 102,000 students
- a higher personal income threshold for income earned by students while enrolled, benefitting around 62,000 students
- a new Student Start-up Scholarship, worth $2,254 per annum, for all students on income support at university to cover costs of study, benefitting around 146,000 students, and
- a new Relocation Scholarship, worth $4,000 in the first year and $1,000 in each subsequent year, for eligible university students who have to move away from the family home to do their course.

**Increased indexation**

The Australian federal government is investing $578 million over three years to increase indexation of funding for higher education. From 2012, the new indexation rate will be applied to all funding components without condition. The new indexing arrangements will be based on a professional wage and salary cost index.

**Performance funding**

From 2012, the Australian federal government will spend $206 million over two years in new performance funding. This replaces the Learning and Teaching Performance Fund, from which $323 million over four years will be redirected into the new funding stream.

To allocate the new funding, the government will set agreed performance targets for providers across teaching quality, participation, student engagement and completion rates, and attach reward-funding to the targets. A new regulatory body (see below) will provide an independent assessment of whether agreed performance targets have been met.

**A national regulatory body**

To complement the demand-led and performance-driven funding system, the Australian federal government has announced that it will establish a Tertiary Education Quality and Standards Agency. This new agency will accredit providers, carry out audits of standards and performance, streamline current regulatory arrangements to reduce duplication, and provide for national consistency. It will work with universities to improve areas such as retention, selection, exit standards and graduate outcomes.

The Tertiary Education Quality and Standards Agency will replace the current complex regulatory system in which federal and state governments play different roles with respect to monitoring and quality assurance, and in which quality standards differ between institutions, between states and between types of provider. The new agency will not regulate the vocational education and training sector at first, but may expand to do so in time.

As well as the Tertiary Education Quality and Standards Agency, the existing advisory board Skills Australia will provide advice to the Australian federal government about how well the higher and vocational education sectors are meeting Australia’s skills needs.

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9. The socio-economic status of students is calculated in Australia using the postal codes of students’ home addresses. There are significant problems with this as a proxy because of the variation in socio-economic wellbeing within a single postal code, and because students’ addresses while they are studying do not always reflect the financial resources available to them from their families, if they are living away from home.

10. Skills Australia is an independent statutory body established by Minister Gillard to provide her with advice on Australia’s current, emerging and future workforce skills needs and workforce development needs. Its ambit has been officially extended to encompass advice on the tertiary sector.
The role of the vocational education and training sector

The Australian federal government has recognised the need to improve the national cohesion of the vocational education and training sector, particularly with respect to quality assurance, and the need to create better links between vocational and academic qualifications and provision.

To promote this, it plans to establish a Ministerial Council to have oversight of the entire tertiary education sector, with representatives from all tertiary education and training systems. The ultimate aim is to develop strong and cohesive national regulatory arrangements for the vocational education and training sector.

Investment in infrastructure

The Australian federal government announced in Budget 2009/10 that it will provide $3 billion from the Education Investment Fund, a relatively new fund that was first announced in Budget 2008/09, to fund priority infrastructure projects in universities and public research agencies.

The new $3 billion of funding includes $1.8 billion for 53 immediate-start projects that have been identified as vital to furthering education outcomes or building Australia’s research capability. These include 12 projects for vocational education and training infrastructure, 11 projects for higher education teaching and learning facilities, and eight projects for research infrastructure.

The new funding includes $750 million for future Education Investment Fund funding rounds, and also $650 million for a special Sustainability Round of funding in 2009/10.

Investment in research

The Australian federal government announced in Budget 2009/10 that it will provide $512 million to universities for the indirect costs of research and will also progressively increase funding to around 50 percent of the direct costs. It will also provide $52 million to help small and regional universities build collaborative research networks and adapt to a more performance-focused research environment.

This funding complements a new higher education research quality and evaluation initiative, Excellence in Research for Australia, announced by the Australian government in February 2008. The Excellence in Research for Australia initiative is being developed by the Australian Research Council and is currently being trialled ahead of full implementation in 2010. The initiative will assess research quality within Australia’s higher education institutions using a combination of indicators and committee-based expert review. The process will identify research areas that are internationally competitive and those that could develop with further investment, both within each institution and within disciplines across multiple institutions.

Scotland

Scotland

Scotland is just over a quarter the size of New Zealand in terms of area but has a slightly larger population – 5.1 million people. Like New Zealand, Scotland has a close neighbour (England) with a stronger economy, which attracts graduates and top academic staff.

Scotland is much less ethnically diverse than either Australia or New Zealand: the most recent Scottish census found that only 2 percent of Scotland’s population identify as coming from a minority ethnic group.11

The Scottish government, officially known as the Scottish Executive, is responsible for most of the issues of day-to-day concern to the people of Scotland, including health, education, justice, rural affairs, and transport. The current Scottish National Party administration was formed after elections in May 2007. Shortly after its election, the government defined a set of strategic objectives for Scotland: wealthier and fairer; smarter; healthier; safer and stronger; and greener. It also identified a set of national outcomes aligned to these objectives.

Higher education in Scotland

Scotland’s higher education system consists of 13 universities and eight other higher education institutes, as well as 43 colleges that are similar to our polytechnics.

The balance of private and public funding for higher education has changed significantly over time: in the late 1970s, about 80 percent of funding for Scottish higher education institutions came from the state, whereas that proportion in 2006 was just over 50 percent, with the remainder being raised through tuition fees, research contracts, and services such as consultancy.

Until 2009/10, funding arrangements for higher education institutions in Scotland were complex and involved multiple funding streams. The main funding came from the Scottish Funding Council via a teaching grant (amounting to £634 million in 2006/07), which paid for core teaching and capital costs, and was calculated for each institution based on a combination of enrolment numbers and fields of study (with fields arranged into 13 different pricing bands).

The teaching grant was supplemented by separate dedicated funds for research, such as the Main Quality Research Grant, worth £176 million in 2006/07, as well as smaller research funds dedicated to specific areas of research, and infrastructure, principally the Learning and Teaching Infrastructure Fund, introduced in 2005/06 with a value of £28 million. Some of these supplementary funds were administered by the Scottish Funding Council and some by United Kingdom Research Councils.

11. www.scotland.gov.uk/resource/doc/933/0041854.pdf. Minority ethnic group in this context excludes people from non-Scottish white British, white Irish; and other white ethnic groups.
Changes to Scottish higher education: 
the New Horizons report

In November 2007, the Cabinet Secretary for Education and Lifelong Learning, the Scottish Education Minister Fiona Hyslop, agreed to establish a Joint Future Thinking Taskforce on Universities with Universities Scotland – the representative body for Scotland’s 21 universities and higher education institutions. The taskforce was chaired jointly by Ms Hyslop and the convener of Universities Scotland, Sir Muir Russell. The taskforce also included three additional members of Universities Scotland, two university representatives, the chair of the Scottish Funding Council (roughly the equivalent of New Zealand’s Tertiary Education Commission) and three departmental officials. The taskforce did not directly include business, student or community representatives.

At its first meeting in December 2007, the taskforce agreed that its remit would be to consider:

- how to optimise and shape the contribution that the Scottish university sector can make during the next 20 years to the Scottish economy, to Scottish culture and society and to the political priorities of the Scottish government
- what opportunities can be created and what barriers will need to be overcome to achieve that, and
- what resources will be needed and how they will be provided.

As with the Bradley review, therefore, the brief was a broad one – though unlike the Bradley review, the taskforce focused on the university sector rather than the wider tertiary education sector.

The taskforce published a report in June 2008 – New Horizons: responding to the challenges of the 21st century – as a basis for consultation and submissions. A final report, with the same title, was published on 14 November 2008 presenting the taskforce’s conclusions, along with a positive response from the Scottish Funding Council.

The final report in November 2008 was endorsed by the Scottish government, and its recommendations are currently being implemented. They will take effect from September 2009, which is the start of the Scottish academic year 2009/10.

Recommendations of the New Horizons report

The taskforce’s final report stressed that Scotland’s university sector performs well in many respects. It achieves very well for its size in international terms in research, and contributes to government goals for Scotland through teaching and research in many key areas including health, law, and the arts. It also plays a vital role in creating and contributing to cultural and social wellbeing.

The report went on to explain that, given growing international competition for skills, environmental pressures, and demographic patterns, Scotland will increasingly rely on its universities to contribute to national prosperity over the next decade.

The report proposed that, given the economic significance and size of universities, they should be recognised as a sector of the Scottish economy in their own right. This recommendation was accepted by the Scottish Cabinet. The report argued that Scotland needed its universities to respond to this new role by:

- improving the way they contribute to the current and future workforce’s skill base (especially given the ageing population)
- improving their connections with businesses
- attracting international students and staff
- addressing the needs of a diverse student base
- collaborating with one another more effectively, as well as with higher education institutions, and
- seeking funding from the philanthropic and private sectors as well as from the Scottish government.

Something for something: two funds

The report proposed a ‘something for something’ approach, whereby in return for progress on the part of universities toward the goals listed above, the Scottish government would move toward a funding system that better reflects the preferences of the university sector.

The basic premise is that universities will benefit from lower compliance costs, simpler operational funding, and more autonomy in spending their operating funds – a lighter touch approach – and, in return, the Scottish government will benefit from universities placing a bigger focus on the areas of teaching and research that will best promote Scotland’s national goals.

The report proposed to achieve this by dividing university funding into two pools: a General Fund, for core operational funding, and a smaller Horizon Fund, to incentivise universities’ contributions to government goals. The taskforce report stated that funding could move from the Horizon to the General Fund over time, if activities initially supported by the Horizon Fund became mainstream activities for which there was a continuing need.

These two funds have now been established, and the first funding round announcements were made in March 2009.

The General Fund covers operational costs and is administered by the Scottish Funding Council according to simple formulae. It replaces multiple smaller operating funds with varying reporting requirements, and its introduction therefore lowers compliance costs for universities, and makes operational funding easier to calculate, more flexible and more transparent. In 2009/10, the Scottish government invested £988 million in the General Fund, including £211 million for a new Research Excellence Grant to support and develop Scotland’s research excellence.
The Scottish Funding Council describes the Horizon Fund’s purpose as being to “act as a catalyst for change in support of Scotland’s future economic, social, civic and cultural future” and states that it is a significant catalyst for change in ways that are potentially groundbreaking, nationally and internationally.12

The Horizon Fund allocates money to universities or to groups of universities based on outcome agreements negotiated with the funding council to address areas of national need. These agreements are made either with individual institutions or with groups of institutions, and are adapted to reflect institutions’ different missions and strengths.

The Scottish Funding Council announced seven priority areas for the initial 2009/10 funding round:

- employability and skills intervention
- access and progression
- world-class research
- knowledge transfer and innovation
- differentiation, diversity and specialism
- sector-wide capacity, and
- collaboration.

Universities then applied for funding by demonstrating how they expected to use that funding to contribute to one or more of these goals. In 2009/10, the Scottish Funding Council invested £126 million through the Horizon Fund.

**Tripartite advisory group**

A tripartite advisory group has been established to support the new funding arrangements. This group, which had its first meeting in May 2009, consists of representatives from the Scottish government, the Scottish Funding Council and the university sector. It acts as a liaison between the three bodies and advises the Cabinet Secretary for Education and Lifelong Learning (who chairs it) on:

- how effectively the new funding structure is working
- what level of public investment is required to maintain broad overall comparability with the rest of the United Kingdom (see challenges below), and
- the strategic outputs and outcomes that should be monitored by the Scottish Funding Council.

The tripartite advisory group’s terms of reference are available online at www.scotland.gov.uk/resource/doc/82254/0069176.pdf.

**Reciprocal challenges**

To set targets at the outset of the new funding arrangements, and to recognise the new role of universities as an economic sector in their own right, the taskforce report presented the following reciprocal challenges between the Scottish government and universities.

**Challenges from the Scottish government:**

Challenge 1 – Scottish universities must demonstrate that they use the funds they receive from the Scottish government to support activities which are well aligned with the Scottish government’s purpose, its economic and skills strategies and its other policy frameworks.

Challenge 2 – learning provision in universities must become more flexible in order to respond to the changing needs of students and more capable of being delivered by closer and differing institutional collaborations and structures.

Challenge 3 – universities must contribute [sic] more directly to Scotland having a world-class knowledge economy by embedding a culture of engagement between themselves and the Scottish micro, small and medium sized business base.

**Challenges from Universities Scotland:**

Challenge 1 – by 2028 Scotland must be in the top quartile of the Organisation for Economic Co-operation and Development countries for percentage of gross domestic product invested in its universities and for national investment in research, development and innovation. These are not excessively ambitious targets for a country aspiring to develop an advanced knowledge-based economy, but currently Scotland falls far short of them. Progress towards achieving them needs to start now.

Challenge 2 – in order to meet the future labour market needs of an advanced knowledge-based economy, as a minimum Scotland must aim to be in the top quartile internationally for its higher education participation rate and must substantially increase research student numbers.

Challenge 3 – the new General Fund for universities funding stream must deliver sustainable funding for all mainstream university activities, including learning and teaching, research, knowledge exchange and the renewal of infrastructure; and the Horizon Fund for universities funding stream must provide the resources necessary to support strategic change and non-standard funding needs and to fund new initiatives and projects, including investment in capacity building.

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Comparisons with New Zealand

Australia, New Zealand and Scotland are all seeking greater national competitiveness and economic growth through improvements to higher education, in particular with respect to the underachievement of particular groups. They are all seeking high-performing tertiary institutions that attract and retain a wide range of students and support them to achieve in areas that meet national social and economic needs. Their approaches to these goals have differed in various ways.

Participation and funding levels

New Zealand

In the early 1990s, New Zealand made significant changes to its tertiary funding system, with the aim of opening the system up to more students at a manageable cost to the Crown. Tuition fees were deregulated in 1992, and student loans were introduced to cover tuition fees and to provide living cost support for those who did not meet the criteria for a student allowance. In 1995, 17 percent of the population aged 20 to 29 years was enrolled in tertiary education; by 2000, that had risen by over a third to 23 percent. In 2006, 29 percent of the population aged 20 to 29 years was enrolled in tertiary education.13

Having achieved higher levels of participation, the recent focus in New Zealand has been on getting better value for money from existing funding (levels of which have been rising for most of the last decade), and by improving the quality and relevance of tertiary education within an enrolment cap.

Australia

In contrast, the Australian federal government has decided that it needs to significantly lift participation in higher education in order to meet its attainment and equity targets.

It has also decided that this cannot be achieved within existing funding and so has committed substantial extra funding – nearly $6 billion over four years – to the higher education system.

Scotland

If the Scottish government is to meet the challenge set for it by Universities Scotland, there will have to be increases in coming years to both funding and participation levels. Universities Scotland has sought for Scotland to be in the top quartile of Organisation for Economic Cooperation and Development countries for percentage of gross domestic product invested in its universities, and for national investment in research, development and innovation, by 2028; and in the top quartile internationally for its higher education participation rate.

Funding mechanisms: central planning versus market demand

New Zealand

Before 1999, New Zealand had a capped funding system, under which each provider was allocated a number of funded places. From 1999, funding was demand-driven – every valid enrolment attracted a subsidy. Unlike the Australian government’s recent decision to shift to demand-driven funding of higher education, the New Zealand system applied to all parts of the provider-based tertiary education system. From 2003, cost pressures meant that the New Zealand government imposed partial caps on parts of the system.

In more recent years in New Zealand, policy discussions have placed more emphasis on managing fiscal risk to the Crown, and providing stable funding to institutions, than on having a demand-led system. This is reflected in the system of capped enrolment and fees, and in the multi-year plan-based investment approach of the Tertiary Education Commission, introduced in 2008. In practice, though, the balance between central planning and institutional direction setting in our tertiary system has shifted backward and forward as institutions’ behaviour has adjusted to changing incentives.

Although the focus of government is beginning to change, both as a result of the change in government in late 2008 and to respond to the increase in demand that has resulted from the economic situation, policy settings in New Zealand still place considerable emphasis on central planning. There has also been reliance on ex ante quality assurance, regulation and upfront purchasing and planning, rather than through back-end monitoring and performance-based funding. However, a new quality assurance and monitoring system, being phased in over 2009 to 2012, sees providers’ performance being assessed against the targets set in their investment plans. Providers are now expected to manage quality improvement through self-review, moderated by periodic external evaluation and review.

In addition, the establishment of the Performance-Based Research Fund in 2004 introduced a significant performance-based element to the New Zealand tertiary funding system. The Performance-Based Research Fund accounted for just over $241 million in the 2009 budget.

Scotland

As a result of the Scottish taskforce’s New Horizons report, Scotland has introduced a funding system that is broadly similar to New Zealand’s. Scotland’s General Fund, like our student achievement component funding, is tied primarily to student volumes and is designed to cover institutions’ core operating costs. Their Horizon Fund, like our tertiary education organisation component funding, is allocated to institutions via multi-year agreements, to fund institutions to contribute to national goals in their areas of strength.

Scotland’s changes to its funding system have simplified it and lowered compliance costs for the sector, especially by amalgamating multiple small funds. New Zealand’s system is undergoing a similar process of simplification, initiated by the current government, for whom it is a key priority.

Australia

As a result of the Bradley review, Australia has moved away from its centrally planned system to a demand-driven system, with no institutional enrolment caps and a strong focus on performance-based funding. At the time it was proposed, this change was possibly more significant in terms of messaging than in terms of its expected immediate effect on participation: the Bradley review’s final report stated that there was already, in 2008, little unmet demand for higher education in Australia, and that most institutions could already enrol as many Commonwealth-supported students as they wanted to without exceeding the tolerance band of their centrally determined cap. In this sense, the funding system that existed in 2008 was already substantially demand-driven for each institution. In September 2009, however, Australian media reported that demand was now significantly outstripping supply for higher education places, partly as a result of the economic downturn.14

It is worth noting that despite the move away from central planning and toward a demand-led system, Australian higher education institutions will still compete for public funding based on a combination of student numbers and performance against agreed indicators – as will those in New Zealand and Scotland.

Student support

The changes to the Australian student support system make the system more targeted towards those aged 21 years or below (though more generous to those with low family incomes) than it is presently. This is in contrast to the general move in New Zealand toward wider eligibility for student allowances – though both countries have sought to raise parental income thresholds and lower the ‘age of independence’.

Scotland is also considering changes to its student support system, but for reasons of length these are not discussed in this article.15

Conclusion

At the time of writing, many of the policies outlined in this article are still in development or are beginning to be implemented. The global financial situation remains uncertain and, in New Zealand as in Australia and Scotland, rising unemployment has seen more young people turn to education rather than to employment on leaving school, as well as older people in the workforce keen to upskill.

In these uncertain times, it is interesting and useful for us in New Zealand to be able to observe the challenges and successes of Australia and Scotland as they implement their policies in higher education.


15. The Scottish government is considering a shift from loans to grants as a core part of its student support system. Currently the Scottish government funds the costs of servicing loans to students, but the capital cost of the loans is funded by the UK Treasury – which makes the shift to grants much less expensive to Scotland than would be the case in Australia or New Zealand. The Scottish government undertook extensive consultation on these issues in 2008, and more information can be found in the consultation document, which is online at: www.scotland.gov.uk/Publications/2008/12/12161819.