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The tertiary education system at the start of the strategy
The tertiary education system in 2002

In the period to 2002, there were increased numbers and proportions of the New Zealand population who held tertiary qualifications. This trend has been accompanied by strong growth in participation in tertiary education, matched by growth in the number of qualifications completed. Government spending on tertiary education as a proportion of Gross Domestic Product (GDP) had also grown. However, on international measures of tertiary educational attainment and participation, New Zealand sat at about the OECD average.

**Figure 1: Participation in formal tertiary education, July 1994–2002**

Much of the increase in tertiary education participation came from people in older age groups, women and Māori. The largest increases were in qualifications below degree level. The rapid growth in the wānanga was an important part of this picture, but it is only part of it. There was also strong growth in participation in other sub-sectors, including enrolments by Māori students.

Differences in participation by ethnic group were still evident, in spite of the overall growth in numbers. In 2002, Pasifika peoples had the lowest participation rates in tertiary education, although both numbers and rates of participation had been increasing. There is concern about completion rates for Pasifika students at degree and postgraduate level. While Māori participation rates exceeded those of non-Māori, the most significant growth in participation by Māori has been in lower-level qualifications. Māori and Pasifika students remain significantly under-represented at postgraduate level.

New Zealand is faced with a significant skills challenge as the world shifts to a knowledge-based economy and society. The foundation competencies of much of the adult population are lower than desirable. However, this is a similar situation to that in other OECD countries. There are low numbers of people who can speak te reo Māori, putting this unique taonga at continued risk. However, participation in industry training, foundation education and te reo Māori have increased significantly. An example of this is the increased enrolments in mixed-field courses, which are courses that focus on life, employment and study skills.

**Figure 2: Age-standardised participation rates by ethnic group, July 2001 and 2002**

**Figure 3: Enrolments in mixed-field courses by qualification level, 2000–2002**

The tertiary education sector was the largest producer of published research in New Zealand in 2002. The sector made a strong contribution to pure basic and strategic research. Quality indicators show the best research produced in the New Zealand tertiary education system is of a good standard and the amount of research produced has been increasing.

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1 See Technical and Data Definitions for explanation of age-standardisation.
2 See Technical and Data Definitions for explanation of these terms.
Raise foundation skills so that all people can participate in our knowledge society

The 1996 International Adult Literacy Survey showed that raising foundation competencies of much of the adult population would be one of the significant challenges across OECD countries as they move into a knowledge economy and society. The economic development of the country is much more dependent on people having the ability to engage with information and knowledge in their work. Raising foundation skills across the population is therefore critical to New Zealand’s economic and social development.

The new policy framework for foundation learning will be implemented progressively over the next three years. The initial focus is on quality and information. An early start has been made with the adult literacy achievement framework. The medium-term focus will be on extending access for those in need of foundation education who are currently not participating.

In 2002, nearly one in five school leavers left school with no qualifications. The proportion was higher for Māori and Pasifika school leavers. These people are much more likely to have low levels of foundation skills.

At the same time, there has been a steady increase in the proportion of school leavers moving directly into tertiary education. Programmes such as the Secondary-Tertiary Alignment Resource (STAR) and Gateway, as well as local-level connections between schools and tertiary providers, have assisted this. Youth training continued to provide an option for young people who have disengaged from school to re-enter education.

While adult literacy and training opportunities continue to be key foundation education programmes, there has been a significant growth in provision of foundation learning courses through TEOs, especially in the wānanga and the polytechnics.

Develop the skills New Zealanders need for our knowledge society

Industry Training Organisations (ITOs) have begun to take a greater leadership role in their industries and develop a more strategic view of training needs. ITOs have achieved increased coverage of employers and employees. However, some gaps in coverage persist, which the TEC is working with ITOs to fill. Women, however, remain significantly under-represented in industry training, including Modern Apprenticeships.

Figure 4: Participation in industry training, 1995–2002

Source: Tertiary Education Commission, Industry Training 2002
Notes: Figures for December 2000 onwards are based on electronic returns and are not exactly comparable with previous years, which were returned through a manual reporting system.
Totals include Modern Apprenticeship numbers.

There was a high level of engagement of people over 25 in tertiary education in 2002. Industry training has been effective in engaging trainees aged over 40. Adult and community education provides learning opportunities to a significant proportion of the adult population.

There were significant differences in participation in tertiary education by ethnic group, disability status and socio-economic background. These differences highlight the need to further improve access:

- for Māori to degree-level tertiary education
- for Pasifika peoples at all levels
- for students with a disability
- from school to tertiary for students from low socio-economic backgrounds.

There has been sustained growth in postgraduate enrolments and completions. However, there is a need to ensure that there is sufficient supply of people with high-level specialist skills in areas critical to New Zealand’s economic and social development.
The Baseline Picture

Strengthen research, knowledge creation and uptake for our knowledge society

About one-third of New Zealand’s research investment in 2002 was made by the tertiary education sector. The tertiary education sector was the largest producer of research output (as measured through publications). The tertiary education sector is an important contributor to basic and strategic research, with nearly 70 percent of expenditure in the tertiary education sector being in this area.

Figure 5: Types of research being undertaken by universities, 2002

Source: Statistics New Zealand, Research and Development Survey 2002

Māori research (covering research by Māori, about Māori and/or for Māori) is an emerging field within the tertiary education sector that has considerable creative potential. It has been hampered by limited capacity, as well as by the diversion of experienced researchers into other activities, including management, mentoring and advice on Māori development. The establishment of Ngā Pae o te Māramatanga (the Māori Centre of Research Excellence (CoRE)) is an important initiative to develop capacity in this area.

There are indicators that research from the New Zealand tertiary education sector is of good standard. Indexed research papers from the New Zealand tertiary education sector have received a similar level of citation as papers internationally, given the journals that they are published in. Contract research earnings have increased, both in absolute terms and as a proportion of institutional income. The establishment of the new PBRF will provide a greater focus on the quality of research work.

The evidence from publications suggests that most research collaboration in the tertiary sector has been international, with much less collaboration taking place between tertiary education organisations within New Zealand.

The recent establishment of the CoREs will help strengthen research collaboration within New Zealand. All but one involve a range of universities and, in several cases, provide links between universities and Crown Research Institutes.

Both enrolments and completions in PhDs have increased steadily over the six years to 2002. However, Māori and Pasifika students continue to be under-represented at this level.

Te rautaki mātauranga Māori—contribute to the achievement of Māori development aspirations

Māori participation in tertiary education in 2002 was high and has risen substantially since 1999. Even allowing for the age profile of the Māori population, Māori participation exceeded that of non-Māori. As at 31 July 1999, 8.0 percent of the Māori population over 15 years were studying in tertiary education. By 31 July 2002, this had risen to 14.5 percent. The corresponding figures for non-Māori were 8.4 percent in 1999 and 10.0 percent in 2002.

A large part of this participation increase has been fuelled by the expansion of the three wānanga. Enrolments at the wānanga grew by 1,462 percent (from 1,883 to 27,535) between July 1999 and July 2002, with the increase in enrolments in wānanga contributing 35 percent of all growth in the tertiary education sector over that period.

The growth in participation has been greatest for Māori women and Māori in older age groups. There is cause for continued concern about lower rates of young Māori in tertiary education and lower proportions of Māori going directly from school to tertiary study.

While Māori enrolments at degree-level and higher increased faster than for non-Māori, the most significant increase in participation was in below degree-level qualifications. The growth in enrolments below degree-level has flowed through to increased completion of qualifications by Māori at this level. However, there are concerns about Māori completion rates at higher levels.
Māori were well represented in industry training, including Modern Apprenticeships. However, their distribution across ITO areas is uneven, with larger concentrations in some industries.

**Figure 6: Māori enrolments in formal tertiary education by qualification level, July 1997–2002**

There has been significant growth in the provision of kaupapa Māori education through the three wānanga. There were also 162 registered providers identifying as Māori providers. New Zealand Qualifications Authority (NZQA) audit results indicate that these providers need support to build their capability. In 2003, NZQA was providing active support to 137 of them. Polytechnics had also increased their capacity in providing te reo Māori courses.

There were low proportions of Māori working as teaching staff in the tertiary education sector. The challenge is for TEOs to improve their recruitment of Māori staff, including encouraging Māori students at degree and postgraduate level to consider a tertiary teaching career.

**Educate for Pacific peoples’ development and success**

There has been increased participation by Pasifika domestic students over the six years to 2002, both in total numbers and as a proportion of all students. However, taking account of the age distribution in the Pasifika population, Pasifika participation rates were still lower than other ethnic groups. The targets set in the Pasifika Education Plan for Pasifika enrolments and graduations in tertiary education were not fully achieved in 2002.

In 2002, Pasifika students had a similar spread of participation across degree and sub-degree qualifications to non-Pasifika students. As with other groups, there has been substantial growth in numbers enrolling in qualifications below degree level. Pasifika students were still significantly under-represented in Modern Apprenticeships.

While Pasifika trainees were represented in industry training at about the same level as in the overall workforce, they were more concentrated in some industries. Pasifika peoples were significantly under-represented in Modern Apprenticeships.

Completion of sub-degree level qualifications by Pasifika students has grown faster than completions of degree-level qualifications. Completion of postgraduate qualifications by Pasifika students decreased in the years 2000 to 2002. This data reinforces concerns about completion rates of Pasifika students at degree and postgraduate levels.

**Figure 7: Completion of qualifications by Pasifika students by qualification level, 2000–2002**

There is a small Pasifika private training establishment sector, with 33 registered providers identifying as Pasifika providers. NZQA audit results indicate that these providers need support to build their capability. In 2003, NZQA was providing active support to about half of them.

Pasifika peoples are significantly under-represented among teaching staff in TEOs.
Strengthen system capability and quality

The financial performance of TEOs has improved since 2000, providing a sound basis for strengthening strategic capability and quality in the sector. Fewer public tertiary institutions were operating at a deficit in 2002. Taken as a whole, the public tertiary education institutions (TEIs) met all the benchmarks for satisfactory financial performance for the first time. This improved performance has accompanied further expansion in export education, with international student numbers growing from 8,900 at 31 July 1999 to 26,900 at 31 July 2002, an increase of 257 percent.

Figure 8: Key financial performance indicators for TEIs, 1999–2002

Results for 2002 show improved but more mixed financial performance by private training establishments (PTEs).

A number of collaborative initiatives have been developed by TEOs over the last few years. These aim to contribute to a variety of outcomes relevant to the TES. Assistance is being provided to encourage further collaboration.

The establishment of the New Zealand Register of Quality Assured Qualifications is a significant step towards a more coherent system of qualifications across the tertiary education system. A project on enhancing quality will encourage a greater focus on strengthening the quality of tertiary education teaching.

There are risks to the sustainability of the growth in international students because of the high reliance on recruitment from a narrow range of countries, particularly in the North Asia region. The code of practice for the pastoral care of international students, the development of more robust quality assurance mechanisms and other policy developments seek to mitigate these risks.

Note: The original indicators have different scales. In order to compare them they have been changed to the same scale, where 100 represents the Ministry of Education’s recommended minimum level that TEOs should achieve on each indicator. See Ministry of Education, New Zealand’s Tertiary Education Sector Profile and Trends 2002, p 138, for original data and an explanation of each indicator.