



See Change

Learning and education for sustainability

Background Paper 3:
The tertiary education sector

Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata
PO Box 10-241, Wellington

January 2004

Introduction

This document provides background information for the Parliamentary Commissioner for the Environment's (PCE) report *See Change: Learning and education for sustainability*. It examines the framework for tertiary education in New Zealand and considers its contribution to education for sustainability.¹ It has been split into three parts:

1. An overview of the sector looks at what people are studying.
2. Government reforms of the tertiary education sector are explained.
3. More detailed information is provided on key components of the reforms, with an analysis of their potential contribution to environmental sustainability.

This background paper supplements the discussion on pages 74-81 of *See Change*.

1. Overview of the sector: students and courses of study

One in three adults had a tertiary qualification in 2001. Most of these (one in five adults) were vocational qualifications such as a trade certificate or diploma. One in eight adults had a degree from a university or polytechnic.² However, these statistics may conceal recent changes. Some recent trends include:

- **More people are getting tertiary qualifications.** After a period of low growth during the 1990's, more people have been participating in tertiary education. Almost 44 percent of people aged 18-24 years were enrolled in a tertiary education course in 2001.³ Much of the rise in student numbers has occurred at private training establishments and wananga, which offer many qualifications at a certificate level. Nearly 42% of students were studying towards a certificate in 2001.⁴
- **There has been a proliferation of private tertiary education providers.** Over the last decade there has been a huge growth in private training establishments, which number over 800.⁵ Nonetheless, over 80 percent of all tertiary students attended a university, college of education, polytechnic or wananga in 2001. 37 percent of students at this time were at university.⁶
- **More females are participating in the tertiary sector.** Since the mid-1990's, growth in student numbers has been dominated by females. 57 percent of all students in 2001 were female.⁷
- **Student debt is increasing.** Tertiary reforms in the 1990's introduced a student loan scheme. This shifted more of the costs of study on to students. Total student debt in 2002 was \$4.75 billion, with an average debt for each borrower of over \$12,000.⁸

¹ Consistent with the main report, the focus in this background paper is on the *environmental* dimensions of sustainability.

² Statistics New Zealand. 2002.

³ Ministry of Education. 2002b.

⁴ *ibid.*

⁵ *ibid.*

⁶ Ministry of Education. 2003a.

⁷ Ministry of Education. 2002b.

⁸ Ministry of Education. 2002a.

Formally enrolled students are currently distributed between:

- Universities (43 percent of students)
- Polytechnics (31 percent)
- Private training establishments (18 percent)
- Wananga and Colleges of Education (approximately four percent each).⁹

According to the 2001 census, the most common fields of study for people with a tertiary qualification were management and commerce or engineering (see figure 4.1).

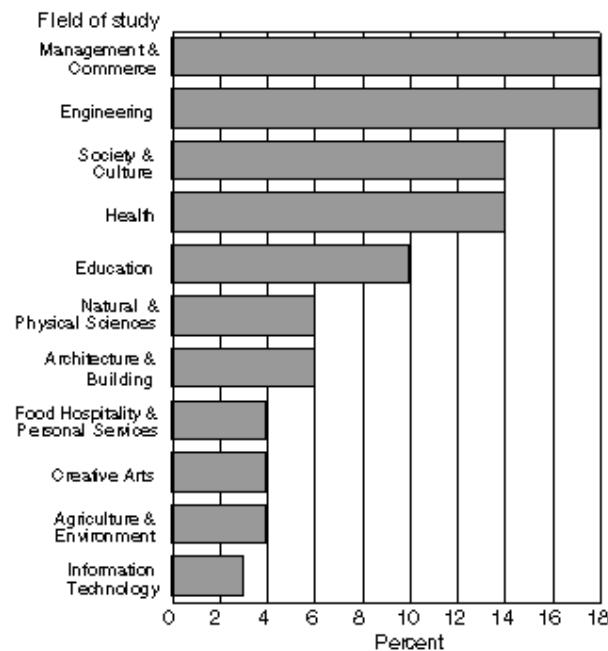


Figure 4.1: Broad fields of study for people with a tertiary qualification in 2001¹⁰

Source: 2001 Census

2. How is government shaping education and learning in the sector?

The government recently reformed the tertiary education sector. The intention was to make it contribute more explicitly to national development goals (these are discussed below). The Education (Tertiary Reform) Amendment Act 2002¹¹ established:

1. A **Tertiary education strategy** to set the overall direction and priorities for the tertiary education system over a five-year period. It aims to be aligned with the Government's national goals.
2. A **Statement of Tertiary Education Priorities (STEP)** issued by the Government at least once every three years. Based on the strategy above, these establish priorities for tertiary organisations and government agencies that are more short-term (up to three years).

⁹ <http://www.tec.govt.nz/services.html> [accessed August 2003].

¹⁰ Statistics New Zealand. 2002.

¹¹ This legislation amended the Education Act 1989.

3. A system of **charters and profiles** for all tertiary organisations. To get government funding, tertiary institutes need to have an approved charter and profiles in place. Charters are assessed against the *STEP* and must align with the directions of the *Tertiary education strategy*. They set the direction for each organisation and identify their role in the tertiary education system. Profiles identify how an organisation will give effect to their charter over a shorter time period.
4. A **Tertiary Education Commission** is responsible for giving effect to the *Tertiary education strategy*. It negotiates charters and profiles, allocates funding, and builds capability and relationships in the tertiary sector.
5. A **funding framework** to support the development of capabilities within the tertiary education system. It aims to focus on areas that are important to the future development of New Zealand and New Zealanders.

The current structure of the system is illustrated in figure 4.2. Although changes are still under development, it is expected that this system will be fully implemented by 2005.¹² More detailed information on each component of the reforms is provided below.

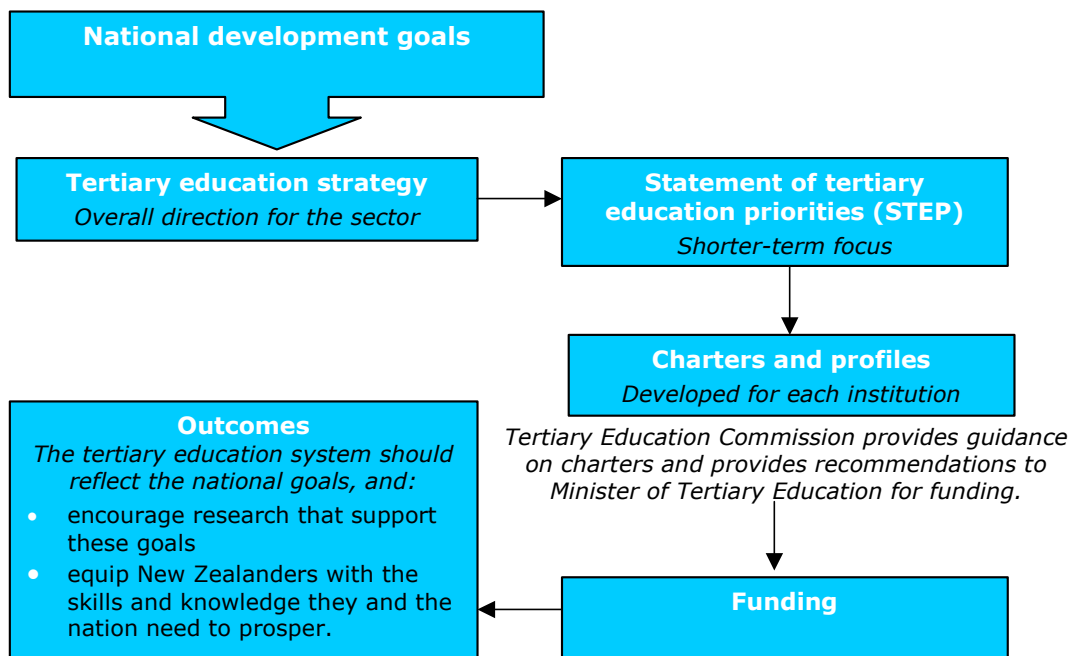


Figure 4.2: Structure of the tertiary education system

Source: Based on Ministry of Education (2002c)¹³

¹² Ministry of Education. 2003b.

¹³ Please note that this figure has been simplified from the original.

3. How do these reforms promote environmental sustainability?

The Tertiary education strategy

All government agencies and tertiary education organisations within the tertiary education system are guided by this strategy. It includes national goals, key messages for change and six 'specific strategies'. The national goals are based on the government's *Growth and Innovation Framework*¹⁴, namely:

- economic transformation
- social development
- Maori development
- environmental sustainability
- infrastructural development
- innovation.

The 'change messages' in the strategy identify the tertiary education system as a key "asset" for national development. The messages for tertiary education organisations and government agencies to work towards are:

- greater alignment with national goals
- stronger linkages with business and other external stakeholders
- effective partnership arrangements with Maori communities
- increased responsiveness to the needs of, and wider access for, learners
- more future-focused strategies
- improved global linkages
- greater collaboration and rationalisation within the system
- increased quality, performance, effectiveness, efficiency and transparency
- a culture of optimism and creativity.

The strategy then focuses on six 'specific strategies'. These are:

1. Strengthen the capability and quality of the tertiary system
2. Contribute to the achievement of Maori development aspirations
3. Raise foundation skills in literacy, numeracy and other basic skills
4. Develop high-level generic skills that New Zealanders need for a knowledge society
5. Educate for Pacific peoples' development and success
6. Strengthen research, knowledge creation and uptake for a knowledge society.

Within these strategies there are 35 more focused objectives (see below).

Potential contribution to environmental sustainability

The *Tertiary education strategy* clearly identifies environmental sustainability as a national objective. Within this objective, it highlights a need for research and skills to:

- contribute to international understanding of climate change and reduce local impacts of these changes
- sustain our biodiversity
- manage biosecurity risks
- manage changing patterns of (intensive and extensive) use of the land and sea

¹⁴ New Zealand Government. 2002.

- help all New Zealanders develop an awareness of the environment and the impacts economic and social activities have on it.¹⁵

However, among the six ‘specific strategies’, only one makes reference to environmental sustainability. This is *Strategy Six: Strengthen research, knowledge creation and uptake for our knowledge society*. This suggests that new knowledge should be applied to enable the achievement of environmental goals (among others). Nonetheless, the focus within this section is mostly on economic transformation and innovation goals, as well as Maori development. No further connections are made in this section to environmental sustainability as a national goal.

Furthermore, none of the objectives in the Strategy make any explicit reference to environmental sustainability or the research and skills that were previously identified in this area. It is only included *implicitly* (as a national goal) in:

- *Objective 29*: Basic research should underpin the tertiary sector’s contributions to (among other things) the achievement of national goals.
- *Objective 33*: There should be greater alignment of tertiary education research with national goals.

Other objectives that have some relevance to sustainability are:

- *Objective 22*: Highlights the importance of developing skills for active citizenship in a democracy, and to develop a sense of distinctive cultural identity.
- *Objective 23*: Identifies a need to develop high-level generic skills. The primary focus is on skills required by employers, rather than those that may be useful in everyday life beyond the workplace. This section includes a diagram (based on an Australian study) that identifies 19 generic skills, grouped into four sections. Cultural and environmental awareness is noted as a generic skill, listed under ‘interpersonal skills’ (see bottom left hand corner of figure 4.3 below).

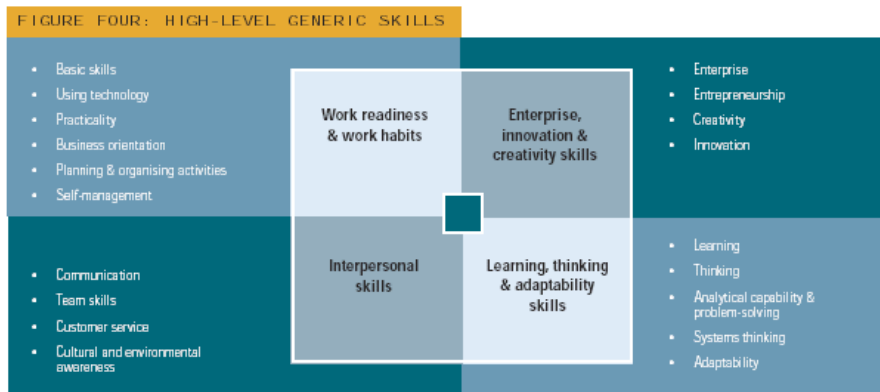


Figure 4.3: Generic skills identified in the Tertiary Education Strategy

Source: Ministry of Education (2002c)

None of the tools that have been developed to measure progress of the strategy are linked to environmental sustainability. For example, the strategy highlights a need for

¹⁵ Ministry of Education. 2003:13.

tertiary research to focus on meeting social and economic objectives but makes no links to the environment.¹⁶

Statement of Tertiary Education Priorities (STEP)

The first full *STEP* was released in August 2003 and will be in place until the end of 2004.¹⁷ The key priority for this period is to develop capacity within the tertiary education system. It emphasises the importance of “establishing the system and changing behaviours and attitudes to reflect the new ways of thinking and working.”¹⁸ It sets priorities for tertiary education organisations and government agencies for each of the ‘specific strategies’ listed in the *Tertiary education strategy*.¹⁹ None of these priorities are linked to environmental sustainability, despite the fact that environmental sustainability was highlighted as one of the overarching goals for national development.

Charters and profiles

All tertiary education organisations need to have a charter approved by the Tertiary Education Commission. The Charter sets out the role of an organisation in the tertiary education system and how it will contribute to the *Tertiary education strategy*. Profiles are prepared annually and need to demonstrate how an organisation will give effect to their charter.

The Tertiary Education Commission has produced guidance on what needs to be in a charter.²⁰ Every charter must include the following sections:

- Mission
- Special character
- Contribution to New Zealand’s identity and economic, social, and cultural development
- Contribution to the tertiary education system as a whole
- Approach to collaboration and cooperation with other tertiary education organisations
- Approach to fulfilling Treaty of Waitangi obligations
- Approach to meeting the needs of Pacific peoples
- Approach to meeting the educational needs of learners
- Approach to ensuring that the organisation develops and supports a staff profile that reflects its mission and special character
- Governance and management structure and principles
- Consultation undertaken in preparation of the Charter.

¹⁶ Ministry of Education. 2003:65.

¹⁷ Ministry of Education. 2003b.

¹⁸ *ibid.* page 9.

¹⁹ It also notes that different organisations within the sector are expected to interpret and apply the priorities differently, depending on their distinctive roles, ‘strategic niches’ and available resources.

²⁰ This guidance has been produced in three different documents by the Tertiary Education Commission (2003a, 2003b, and 2003c).

Additional guidance for large tertiary education providers (such as Universities) states that charters:

should outline how the activities of the provider contribute to achieving the Tertiary Education Strategy and the government's wider development goals. The provider needs to set out how its education and research activities contribute to the achievement of goals such as:

- *economic transformation*
- *social development*
- *Maori economic, social, and cultural development and advancement*
- *innovation.*²¹

Although organisations need to illustrate their contribution to New Zealand's identity and economic, social and cultural development, no *explicit* reference is made to environmental sustainability.

The Tertiary Education Commission

The Tertiary Education Commission discusses the content of charters with tertiary education organisations and provides recommendations to the Minister of Tertiary Education for approving them. As noted above, guidance materials produced by the Commission do not make any explicit reference to environmental sustainability.

The Commission has developed a set of 22 criteria for assessing charters. One of these criteria has some relevance to environmental sustainability. A providers needs to show "how it will contribute to the *Tertiary education strategy* and other of the government's national strategies." Presumably a provider would need to show how it contributes to *all* of the national objectives in the Strategy (including environmental sustainability) although this is not explicitly stated.

The funding framework

A new funding framework is being introduced in 2004. There are three broad elements to the framework: funding for teaching and learning; funding for research; and targeted funding into strategic areas. The funding framework will be aligned with the *Tertiary education strategy*, and over time more funding will be invested in areas that align with this strategy and the *Statement of Tertiary Education Priorities*.

Summary

Environmental sustainability is clearly identified as a national goal in the *Tertiary education strategy*. At a strategic level, tertiary education organisations and government agencies in this sector are therefore expected to align themselves with this goal. However, the strategy itself does not give much priority to environmental sustainability in its 'specific strategies' or objectives for action.²²

Despite being highlighted as a national goal early on, there are few explicit references to environmental sustainability throughout the rest of the strategy. A much stronger focus is placed on economic transformation and innovation to build a 'knowledge economy'. It also includes a strong focus on Maori development. It is therefore very difficult to see how this strategy can contribute to the national goal of

²¹ Tertiary Education Commission. 2003a:9.

²² See also the discussion on government's education priorities on page 53 of *See Change*.

environmental sustainability, especially the desire to “help all New Zealanders develop an awareness of the environment and the impacts economic and social activities have on it”²³ – or to enable people to learn how to live in more sustainable ways.

It is also concerning that guidance materials produced by the Tertiary Education Commission, and the criteria they have established for assessing charters, do not make explicit mention of environmental sustainability. Because tertiary education providers are expected to work towards *all* of the national goals (including environmental sustainability), it would be beneficial for the Commission to provide clearer guidance in this area.

Glossary

<i>wananga</i>	a public tertiary education provider with an emphasis on the application of knowledge regarding ahuatanga Maori (Maori tradition) according to tikanga Maori (Maori custom).
<i>tertiary education providers</i>	post compulsory educational institutions that provide formal programmes of study.

References

- Ministry of Education. 2002a. *Student loan scheme annual report – September 2002*. Wellington: Ministry of Education.
- Ministry of Education. 2002b. *Tertiary education participation report 2002*. Wellington: Ministry of Education.
- Ministry of Education. 2002c. *Tertiary education strategy 2002-07*. Wellington: Ministry of Education.
- Ministry of Education. 2003a. *Full year tertiary statistics 2001*. Available at: <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=7548&indexid=7552&indexparentid=6142> [accessed August 2003].
- Ministry of Education. 2003b. *Statement of Tertiary Education Priorities 2003/04*. Wellington: Ministry of Education.
- New Zealand Government. 2002. *Growing an Innovative New Zealand*. Wellington: New Zealand Government.
- Statistics New Zealand. 2002. *2001 Census*. Wellington: Statistics New Zealand.
- Tertiary Education Commission (TEC). 2003a. *Charter Guidelines For Large Tertiary Providers including Tertiary Education Institutions*. Wellington: TEC.
- Tertiary Education Commission (TEC). 2003b. *Charter Guidelines For Small Tertiary Education Organisations*. Wellington: TEC.
- Tertiary Education Commission (TEC). 2003c. *Charter Guidelines For Industry Training Organisations*. Wellington: TEC.

²³ *ibid.*, page 13.