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PROFILE & TRENDS 2008

NEW ZEALAND'S TERTIARY
EDUCATION SECTOR



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What the tertiary education sector provides

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Tertiary Sector Performance Analysis and Reporting
Strategy and System Performance
MINISTRY OF EDUCATION

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What the tertiary education sector provides

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1 AN OVERVIEW

Tertiary education in New Zealand provides a wide range of learning, ranging from education in foundation skills to doctoral studies. The system embraces technical and vocational education and training, higher education, workplace training, adult and community education, and tertiary education within the senior secondary school.

While the system has evolved to meet the needs of New Zealand's society and economy, New Zealand also provides learning opportunities to a significant number of tertiary students from other countries who come to this country as international students.

The New Zealand Register of Quality Assured Qualifications – often known as KiwiQuals – provides a standard structure for naming and describing qualifications across levels and types of provision. It describes what learners can expect from a qualification and it provides for a measure of portability across the system.

In addition, the tertiary sector contributes to the national innovation system through its research activities; more than 60 percent of all New Zealand's published research papers come from the tertiary education sector.

2008 TERTIARY EDUCATION STATISTICS

You can find the latest tertiary education statistics in:

- *Profile & Trends 2008*, and
- the analytical tables.

See the Ministry of Education's Education Counts website: www.educationcounts.govt.nz

For a short commentary on the 2009 developments in tertiary education provision go to the *Profile & Trends 2008* home page and select chapter 3.

A short article on trends in the demand for tertiary education is also included in chapter 3.

2 NEW ZEALAND'S TERTIARY EDUCATION PROVISION

The government provides funding for New Zealand students undertaking formal learning. The courses and qualifications delivered by public tertiary education institutions and through private training establishments and other tertiary education providers as formal tertiary education have met minimum quality standards. The largest share of this funding is allocated on a per student basis, with differential rates set by subject area. This funding is seen as a contribution towards the costs of education.

FORMAL AND NON-FORMAL LEARNING

Learning opportunities within the New Zealand tertiary education system can be categorised as formal (that is, contributing towards a recognised qualification) and non-formal (that is, not contributing to a recognised qualification). Both formal and non-formal learning can be further divided into situations where students are enrolled with an education provider and situations where students are learning through a relationship with an employer or community organisation.

In most cases, the student is also charged an enrolment fee. In 2008, an investment plan system was introduced under which the Tertiary Education Commission makes funding decisions for up to three years based on the quality and relevance of the provision offered and on the past performance of tertiary education organisations. The largest share of funding continues to be delivered on a per student basis with some being allocated to tertiary education organisations to fund developments in their capability – the tertiary education organisation component.

While the funding per student – through the student achievement component – and the tertiary education organisation component are the largest funds administered by the Tertiary Education Commission, training programmes for some formal students are managed by the Commission through other funds – such as Youth Training – which are targeted to particular types of students. Some of those funds are described in more detail later on.

While most students in formal tertiary education are New Zealand citizens, international students make up a significant number of formal students (11 percent of all enrolments, in terms of equivalent full-time student units, in 2008). New Zealand attracts learners from a variety of off-shore markets, notably Asia which accounted for 66 percent of international students in 2008.

Although international students are usually required to pay the full costs of their tuition, Australian citizens living in New Zealand are treated as domestic students and pay domestic fees. International students studying towards a recognised doctoral qualification in New Zealand are funded in the same way as domestic doctoral students, attracting student achievement component funding.

3 INDUSTRY TRAINING

Industry training is designed by, and delivered in conjunction with, industry, and counts towards recognised qualifications. The costs of training are met jointly by government and industry. The training is administered and supported through the 39 national industry training organisations that have been established by particular industries or groups of industries.

Industry training organisations facilitate individual training arrangements, purchase off-job training from tertiary education providers and then tailor these arrangements to the needs of learners and employers.

All trainees enter into a training agreement with their employer and most of the training takes place on-job with their progress assessed by registered assessors. On-job training can take a number of forms: the learning can be self-paced, or the training can be delivered by an experienced staff member or an external trainer. In some cases, on-job training is complemented by off-job training. Industry training organisations facilitate individual training arrangements, purchase off-job training from tertiary education providers and then tailor these arrangements to the needs of learners and employers.

The [Modern Apprenticeships](#) programme is an employment-based education initiative aimed at encouraging participation in industry training by young people aged between 16 and 21 years. The initiative combines the mentoring aspect of the apprenticeship tradition with formal industry training that leads to recognised qualifications at levels 3 and/or 4 on the National Qualifications Framework. The Modern Apprenticeships programme is administered by the Tertiary Education Commission, which contracts the services of Modern Apprenticeships coordinators. The coordinators promote the programme, set up the training agreements, and act as mentors to the learners and their employers. They develop an individual training programme

for each learner that specifies the qualification(s) and generic skills they will gain, and maps out how this learning will take place.

The government provides several **targeted training funds** that provide fully subsidised education and training to specific groups. For example, Youth Training is for youth up to the age of 18 years who have left school with no or very low-level qualifications. The programmes funded by Youth Training provide foundation and vocational skills training at levels 1 to 3 on the qualifications register.

Training Opportunities is a labour market programme for people aged 18 years and over who are considered disadvantaged in terms of employment and educational achievement. The programmes funded by Training Opportunities provide foundation and vocational skills training at levels 1 to 3 on the qualifications register.

Table 1: Types of learning opportunities provided through the tertiary education system

	Formal	Non-formal
Enrolled with an education provider	<ul style="list-style-type: none"> – Student achievement component-funded students – International students – Targeted training programmes – Tertiary education in schools – Industry training and Modern Apprenticeships (off-job training) 	<ul style="list-style-type: none"> – Adult and community education through community providers, tertiary education institutions, schools and other community providers
Employment and community-based learning	<ul style="list-style-type: none"> – Industry training and Modern Apprenticeships (on-job training) 	<ul style="list-style-type: none"> – Adult and community education through community organisations – Adult literacy programmes

4 ADULT AND COMMUNITY EDUCATION

This type of education is non-formal and provides a bridge to further learning opportunities. It fosters a culture of lifelong learning, active citizenship, critical social awareness and increased control over the future for individuals and communities. The three national priorities for adult and community education (ACE) are:

- Strengthening social cohesion
- Raising foundation skills, and
- Targeting learners whose initial learning was not successful.

ACE is supported by, and delivered through, a range of community organisations, including other tertiary education providers such as Literacy Aotearoa and the Rural Education Activities Programme. Funding for ACE is also available to schools and tertiary education institutions.

ACE Networks are collaborative groups of local ACE providers and practitioners who provide an opportunity to share information, knowledge and expertise and work collaboratively to meet identified community learning needs. The networks are varied in nature, reflecting local conditions and requirements.

The government also funds [ACE programmes in secondary schools](#). These programmes included adult foundation learning, languages, business development, and health and fitness. There were 140,000 enrolments in school-based adult and community education in 2008.

Tertiary education institutions have also been able to run ACE programmes with support from government funding. In 2008, ACE programmes were provided by eight universities, 19 institutes of technology and polytechnics, and two wānanga and attracted an estimated 83,300 learners.

5 ADULT LITERACY, LANGUAGE AND NUMERACY EDUCATION

A range of learning opportunities is also funded in the area of adult literacy, language and numeracy, including English for speakers of other languages.

The Workplace Literacy Fund assists employers to establish workplace literacy projects where employees can access literacy, language and numeracy tuition, linked to workplace requirements.

Industry training embedded literacy and numeracy projects support industry training organisations to build the capability necessary to effectively include literacy and numeracy in their trade training.

Learners who enrol in level 1 to 3 certificate-level programmes in tertiary education providers get the opportunity to improve their literacy and numeracy levels in the course of that learning. Additional funding is being made available for certificate-level providers who embed explicit teaching and assessment of literacy and numeracy into their programmes.

Intensive literacy, language and numeracy provision reaches high-need groups who might not be able to access learning at work, such as parents, people who have more casual employment arrangements and people with very low levels of literacy and numeracy. Learning is provided in meaningful contexts such as family literacy (for example, how to prepare a budget) and resettlement. This provision is funded through the Intensive Literacy and Numeracy fund.

Training Opportunities and Youth Training programmes also provide some opportunities for particular groups of learners to build their literacy, language and numeracy skills for sustainable work.

Literacy Aotearoa provides flexible, community based individualised learning for adults. This is often a crucial first step for an individual in building their literacy and numeracy skills.

For the latest information on literacy, language and numeracy go to *Profile & Trends 2008*, chapter 7.

There is also a range of support provided for [English for Speakers of Other Languages \(ESOL\)](#). These include:

- Language Partners New Zealand, formerly known as the National Association of ESOL Home Tutor Schemes, which provides English language skills and resettlement support for migrants and refugees

- the Multicultural Centre for Learning and Support Services, which provides language and settlement support to migrants and refugees
- the English for Migrants scheme, which provides English language tuition for migrants to New Zealand who have pre-paid their training, and
- English for Speakers of Other Languages tuition is also provided through other funded provision, including Training Opportunities and student achievement component-funded courses.

6 TERTIARY EDUCATION WITHIN SENIOR SECONDARY SCHOOLS

The development and introduction of the National Qualifications Framework has supported new options for accessing tertiary education within the senior secondary school.

The [Gateway](#) programme enables senior secondary school students to access workplace learning as an integrated part of their school education. Students pursue individual learning programmes, gain new skills and knowledge in a workplace or their local community and gain unit standards that can be credited towards the National Certificate of Educational Achievement or other national certificates.

The [Secondary-Tertiary Alignment Resource \(STAR\)](#) assists schools to meet the needs of senior secondary students by granting additional funding for schools to use in accessing a wide range of courses to provide greater opportunities for senior students. STAR funding is a capped resource available to schools with students in year 11 and above. The objectives of STAR are to enable schools to:

- facilitate transition to the workplace for students, particularly those intending to go straight into the workforce or those likely to leave school without any formal qualifications
- provide or purchase tertiary-type courses that will meet students' needs, motivate them to achieve, and facilitate their smooth transition to further education, training and employment, and
- support students to explore career pathways and help them make informed decisions about their schooling and future work or study.

STAR courses can involve work-based learning and/or study towards credits for the National Certificate of Educational Achievement and recognised tertiary qualifications.

7 REGISTER OF QUALITY ASSURED QUALIFICATIONS

The New Zealand Qualifications Authority was established in 1990 with a key function of having an overview of qualifications in the senior secondary school and tertiary education sectors. This function was initially exercised through the development of the National Qualifications Framework where national certificates and diplomas and their component unit standards are registered. This framework has now been expanded through the development of the New Zealand Register of Quality Assured Qualifications, Te Āhurutanga (the KiwiQuals website). The register includes the National Qualifications Framework as a sub-set, but also incorporates qualifications developed by universities, institutes of technology and polytechnics and wānanga. The register provides a way of:

- identifying clearly all quality-assured qualifications and accredited providers in New Zealand
- defining common naming conventions and requirements across the various systems of qualification approvals
- ensuring that all qualifications have a purpose and relation to each other that students and the public can understand
- maintaining and enhancing learners' ability to transfer credit by the establishment of a common system of credit, and
- enhancing and building the international recognition of New Zealand qualifications.

The register establishes 10 levels of qualifications and qualification titles that can be used at each level where level 1 is the lowest level of complexity and level 10 is the highest.

For each qualification, there is a statement of learning outcomes that sets out what the whole qualification represents in terms of the application of knowledge, understanding, skills and attitudes, as well as the components of the qualification.

Each qualification has a specific credit value that represents the amount of learning and assessment that is typically required to achieve the qualification.

Table 2: Levels and qualification titles for the New Zealand Register of Quality Assured Qualifications, Te Āhurutanga.

Level	Name sequence
10	Doctorates
9	Masters degree
8	Postgraduate diplomas and certificates Bachelors degree with honours
7	Bachelors, graduate diplomas
6	Graduate certificate
5	Diplomas
4	
3	Certificates
2	
1	

The general qualification definitions are as follows:

Certificates may be used in a wide range of contexts across all levels up to and including level 7, and are often used to prepare candidates for both employment and further education and training.

Diplomas often prepare learners for self-directed application of skills and knowledge. These qualifications often build on prior qualifications or experience and recognise capacity for initiative and judgement in technical, professional and/or managerial roles.

Graduate certificates and graduate diplomas are designed primarily as vehicles for graduates to pursue further study at an undergraduate level, either as a bridge to further study in a new area or to broaden and deepen existing knowledge areas.

Bachelors degrees provide a systematic and coherent introduction to the knowledge, ideas, principles, concepts, chief research methods and problem-solving techniques of a recognised major subject or subjects. These qualifications involve at least one sequential study programme that prepares learners for postgraduate study and supervised research. Bachelors degree programmes are taught mainly by people engaged in research and emphasise general principles and basic knowledge as the basis for self-directed work and learning.

A **bachelors degree with honours** may be awarded to recognise advanced or distinguished study in advance of a level 7 bachelors degree. It typically involves an additional year of study and/or research at level 8.

Postgraduate certificates and postgraduate diplomas are designed to extend and deepen a candidate's knowledge and skills by building on attainment in the principal subject(s) of the qualifying degree. These qualifications provide a systematic and coherent survey of current thinking and research in a particular body of knowledge and may include instruction in relevant research methodologies.

Masters degrees are normally designed to build on the principal subject(s) of the qualifying degree. However, the degree may build on relevant knowledge and skills derived from occupational experience, as in the Master of Business Administration (MBA). Different discipline areas have different traditions. Typically, they require students to demonstrate mastery of theoretically sophisticated subject matter; evaluate critically the findings and discussions of literature; research, analyse and argue from evidence; apply knowledge to new situations; and engage in rigorous intellectual analysis, criticism and problem-solving. A masters degree programme contains a significant element of supervised research, usually resulting in a thesis, dissertation or substantive research paper.

Doctoral degrees are research degrees at a significantly higher level than masters, undertaken under the guidance of recognised experts in the field of study. A doctorate is awarded on the basis of an original and substantial contribution to knowledge as judged by independent experts, applying contemporary international standards.

A **higher doctorate** is awarded for independent work of special excellence, as judged by leading international experts. A higher doctorate does not require a person to have enrolled for the degree; the research on which the awarding of the degree is based will have been completed and may have been published over many years.

Honorary doctorates are awarded in recognition of exceptional contributions made over time to the creation of knowledge in a discipline, to the institution awarding the degree, to a profession or to society at large.

8 RESEARCH AND KNOWLEDGE CREATION AND ITS TRANSFER

The country's innovation system is a complex network of research organisations, educational institutions, industry associations, financial institutions and communities. That system relies on the supply of knowledge, highly skilled workers and financial investment that supports the growth of new ideas, products, processes and organisations to create economic, social and environmental benefits.

The tertiary education system plays a key role in furthering research and innovation in New Zealand. The advancement of knowledge through education and research is a core function of the tertiary education sector. The sector also undertakes significant research focused on adapting, transferring and exploiting domestic and international knowledge and technology. It does this alongside, and sometimes in partnership with, other research organisations, industry and business, community organisations, and government. The tertiary education sector is responsible for the largest share of the country's research output.

In addition, the tertiary education sector is responsible for the training of the research workforce and for producing graduates with skills, knowledge and attributes that enable them to contribute to the innovation system.

The primary roles of tertiary education research activities are to:

- support degree-level teaching and ensure that degree graduates are of high quality and informed by up-to-date scholarship and developments in the knowledge base
- train New Zealand's future knowledge-creators and innovators
- contribute to improving the knowledge base through high-quality research that generates new knowledge, and
- interpret new knowledge and disseminate it as a means of influencing people in communities and business.

Universities make an important contribution to the national research effort in the area of basic research,¹ which involves exploring and expanding the frontiers of knowledge. Whereas the Crown research institutes and many other research providers are more likely to focus on applied or strategic research, the traditional role of the universities in postgraduate training, and the nature of the funding for research in the universities, mean that university-based researchers have greater opportunity to work in basic research. The latest available information from the Research and Development Survey published by Statistics New Zealand in 2009, estimates that two-thirds of all research conducted in the tertiary education sector is basic research. The survey reports that, in 2008, just over half (53 percent) of the basic research in New Zealand was conducted in the universities.

¹ Research that is carried out for the advancement of knowledge, without seeking long-term economic or social benefits or making any effort to apply the results to sectors responsible for their application.

As part of the tertiary education reforms that began in 2000, the government has developed two major new means of promoting and funding research in the sector.

The first is the [centres of research excellence](#). The first centres were established during 2002 and 2003. The centres of research excellence have been designed to support world-class research that will contribute to New Zealand's development as a knowledge society. The centres are inter-institutional research networks with researchers working together on a commonly agreed research plan. The seven centres and the areas of study they cover are described on the ministry's webpage *The tertiary education system* (go to the *Profile & Trends* homepage on Education Counts for a link to this webpage), together with the name of the host university.

The second is the [Performance-Based Research Fund](#), which was phased in over the period 2004 to 2007. This fund has shifted the basis of research funding from a system based on student enrolments to one where funding is allocated on the basis of research performance, as evidenced through research outputs, external research income and research degree completions by postgraduate students.² One consequence of the shift to the Performance-Based Research Fund is that much more information is now collected on research in tertiary education, for example the quality of the research, the people conducting research in tertiary education organisations and the relative research performance in different research fields and organisations.

A considerable amount of tertiary education research is also funded through research contracts. Some of these come from government-managed research funds, such as those administered by the Foundation for Research, Science and Technology. Many other research contracts come from the private sector. In some areas, universities and some polytechnics have entered into more formalised knowledge creation and transfer programmes with the private sector, involving joint research programmes, commercialisation of research outputs and development of research and technology parks.

² Detailed information on the operation of the Performance-Based Research Fund can be found in Tertiary Education Commission (2007) *Performance-Based Research Fund: evaluating research excellence – the 2006 assessment* and in Ministry of Education (2003) *Profile & Trends 2002: New Zealand's tertiary education sector*, pp 108–110.