

New Zealand's Doctoral Education System

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Part I: Context

History: New Zealand's first university was the University of Otago, established in 1869. It became part of the University of New Zealand, which was New Zealand's only degree-granting university, from 1874 to 1961. The University had a federal structure, with several institutions throughout New Zealand. After the University of New Zealand was dissolved in 1961, there were four independent degree-granting universities (the University of Otago, the University of Canterbury, the University of Auckland and Victoria University of Wellington), and two agricultural colleges (Canterbury Agricultural College – which later became Lincoln University, and Massey Agricultural College (which later became Massey University). The University of Waikato was established in 1964, and the Auckland University of Technology was established in 2000, bringing the total current number of universities – all publicly funded – in New Zealand to eight.

All academic programmes at the New Zealand Universities, including doctoral degrees, are governed by the Universities New Zealand Committee of University Programmes (or CUAP). All eight universities offer Doctor of Philosophy Degrees, and most offer professional doctorates.

In recent years some Wānanga (institutions that maintain, advance and disseminate knowledge and develop intellectual independence, and assist the application of knowledge regarding ahuatanga (Māori tradition) according to tikanga Māori (Māori custom), and Polytechnical Institutes have also started offering doctorates.

Size and demography of doctorate pool: The doctoral programme has grown substantially in New Zealand universities since 2005, with most institutions reporting a one-and-a-half to two-fold increase in completions over this period. Table 1 shows doctoral completions for 2010, 2015 and 2017 across the eight universities, and one degree granting Wānanga.

Table 1: Completions of doctoral degrees in New Zealand institutions for 2010, 2015 and 2017.

Institution	2010	2015	2017
University of Auckland	290	380	440
Waikato University	210	80	75
Massey University	125	170	185
Victoria University of Wellington	145	170	160
University of Canterbury	110	165	185
Lincoln University	45	35	50
University of Otago	210	265	290
Auckland University of Technology	35	80	110
Te Whare Wānanga o Awanuiarangi	0	5	5
TOTAL	1170	1350	1500

(Source: https://www.educationcounts.govt.nz/statistics/tertiary-education/retention_and_achievement)

In 2005, about 51% of doctoral enrolments were female (49% male), and only 14% of doctoral enrolments were international students (86% domestic). By 2017, of the doctoral completions: 55% were female and 45% male; 52% were domestic students and 48% international; and the breakdown by disciplinary area was 25% natural and physical sciences, 23% society and culture, 15% health, 13% engineering, 8% management and commerce, 6% education, 4% information technology, and 3% each for agriculture & environment and creative arts.

Time-to-degree and completion of degree: Because students enter with either Honours or Master's degrees (including a significant research component), and the PhD in New Zealand is research-only, with no required coursework, there is an expectation that students will complete their research in 3 to 4 years. There is a lack of publicly accessible data on time to degree, but a recent study for one of the country's most research-intensive

universities (Otago) found high rates of submission for examination (83% across the institution), and submission occurred in a median 3.4 years for full-time candidates¹. There were notable disciplinary differences with higher submission rates in health science (88%) and science disciplines (84%), followed by humanities (79%) and commerce (74%). However, the fastest times to submission were in Commerce (3.5 y), Science (3.6 y), Humanities (3.7 y) and Health Science (3.8 y).

Purpose and goals of doctoral education: As stated by the New Zealand Qualifications Authority, “the doctoral degree is a research degree whereby the individual becomes an increasingly independent scholar who makes a substantial and original contribution to knowledge.”² The New Zealand Universities Committee on University Academic Programmes (2018, p.34) provides more detail on the nature of the doctorate:

“The doctorate involves a sustained, rigorous and systematic approach to the relevant body of knowledge, undertaken through experimentation, archival work, or other appropriate means; it includes an original research project that makes a significant contribution to knowledge and understanding or application of knowledge; it requires the preparation of a substantial thesis that presents the outcome of the research and places it in the broader framework of the discipline or field of study; and, undertaken under qualified supervision, it promotes intellectual independence and the capacity to undertake further research at an advanced level.”

The doctorate requires at least 360 credits and is at the New Zealand Qualifications Framework level 10. Normally this represents 3 to 4 years of full-time study. For a professional or named doctorate, coursework may contribute to the assessed programme of study, but the work contributing to the thesis must engage the candidate for a minimum of two full-time academic years and contribute not less than two thirds of the overall credit for the degree.

Part II: Structure of Doctoral Education

Main national policies and reforms affecting doctoral education: Four main agencies oversee doctoral education in New Zealand:

- **Tertiary Education Commission** – a Crown Agency who leads the Government’s relationship with the tertiary education sector
- **Ministry of Education** – oversight of all education; have a national qualifications framework
- **New Zealand Qualifications Authority** – ensures New Zealand qualifications are valued as credible and robust both nationally and internationally
- **Universities NZ** – body supporting all eight universities ; Committee of University Programs oversees all university qualifications

There have not been any significant reforms in doctoral education except for:

- A policy introduced by the Tertiary Education Commission in 2006, which allowed international PhD candidates to pay domestic fees
- A proliferation of professional doctorates, including those in education, health, medicine, clinical psychology, clinical dentistry, midwifery, nursing, social work, business, music, musical arts, and fine arts.
- Introduction of a creative component to PhDs

Funding: All universities (and polytechnics) receive two types of government funding for PhD students: student achievement funding, which is an amount paid annually upon enrolment for up to 4 years per student; and performance-based research funding, for completion of the research degree, which is paid to the institution over about three years following completion.

¹ Spronken-Smith, R., Cameron, C. & Quigg, R. (2018). Factors contributing to high PhD completion rates: a case study in a research-intensive university in New Zealand. *Assessment & Evaluation in Higher Education*, 43(1): 94-109.

² <https://www.nzqa.govt.nz/studying-in-new-zealand/understand-nz-quals/doctoral-degree/>

PhD candidates must pay fees (but, as noted above, international students can pay domestic fees), and each university offers scholarships to top students that can cover their fees and provide a living stipend. Some PhD candidates are supported by funding from research grants or from industry collaborations.

Quality Assurance/Control: All university programmes, including doctoral ones, are regularly reviewed. The institutions have 6-10 year cycles of reviewing programmes, and these reviews include internal, external but within New Zealand, and international reviewers. Moreover, the Academic Audit Unit (which is external to Universities NZ) reviews each university about every 6 years. The system provides a great deal of autonomy to universities, but the reviews – both internal and the audit, provide quality assurance. Each university regularly runs surveys to gain feedback on the graduate research experience (for doctoral and research masters' degrees), and these surveys are used to improve practice.

Career paths of doctorate recipients: Currently there is no systematic tracking of all doctoral graduates to see which careers they enter. Some universities capture data on careers from alumni, but this is an area where most universities are seeking improved data.

Part III: Trends

International collaboration: Most universities have PhD candidates who are researching in joint arrangements with either an industry or government research institute. It is also fairly common for candidates to have a supervisor in another New Zealand university. In recent years, there has been increasing interest in joint degrees with international partners, with most universities now offering these joint arrangements.

Equal opportunities: The Tertiary Education Strategy (2014-2019)³ is committed to improving outcomes for Māori and Pasifika students. While significant gains have been made to increase participation by these students, more progress is needed. The government provides double the completion funding for doctoral Māori and Pasifika students, and quadruple the funding if the thesis is written in Te Reo (Māori). Most universities offer targeted scholarship funding for Māori and Pasifika students, as well as academic and pastoral support.

Digital transformation: There are aspects of PhD programmes that have been influenced by advances in technology. Many universities make workshops in researcher development available through web conferencing sessions, and have online resources. Web-conferencing is also frequently used to conduct the oral examination. Most universities have moved to digital submission of theses for examination and for the final copy (some still allow hard copy as well).

Most important aspects for New Zealand: The most burning issues facing doctoral programmes in New Zealand include the well-being and mental health of candidates, ensuring best practice supervision, and the desire for more structured approaches for professional development and career planning. Other common issues include supporting international candidates, especially those with English as an additional language, managing the large number of applications for study in New Zealand, and maintaining the domestic fee arrangement for international PhD candidates.

³ <https://www.education.govt.nz/further-education/policies-and-strategies/tertiary-education-strategy/>