

The New Public Management and Tertiary Education: A Blessing in Disguise for Academics

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Keywords: New Public Management, NPM, Tertiary Education, PBRF

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Abstract: Tertiary teaching in higher education is not apolitical, due to the demands placed upon academics from stakeholders including accreditation bodies, government funding agencies, students and employers. Often, the demands of these stakeholders result in academics' responsibilities being pulled in different directions. The resultant effect is the expansion of the academics' roles beyond teaching, to include managing and meeting stakeholders' expectations, ensuring productivity in research and achieving satisfactory completion rates for their students. Given that, academics are expected to be managers, educators, researchers, strategists and administrators. This paper examines the tensions involved in the expanding roles of academics due to the ever-changing and competitive education landscape occurring both locally and globally. The New Public Management (NPM) framework, which uses private sector performance management techniques, is adopted in this study. Student surveys, government policies, universities and accreditation reports were used to demonstrate the changing and evolving higher education landscape in Australasia.

INTRODUCTION

In recent decades, the teaching and research environment of higher education institutions' (HEIs) in developed nations has undergone significant changes. 'User pays' (Roberts, 2007) and performance-linked teaching and research funding mechanisms were introduced to modernise the public education sector. These changes embrace the private sector mentality resulting from the New Public Management (NPM) push for improvement within the public sector (De Araujo, 2001; Tahar & Boutellier, 2013).

Public sector HEIs are required to compete for funding based on measurable outcomes, such as the numbers of students who enroll, retain and complete their qualifications,

¹ Examples of the significant changes that have taken place in HEIs can be found in Australia for the period since 2008. The changes include the establishment of the Education Investment Fund in 2009; distribution to all universities of AUD1 billion Better Universities Renewal Fund in 2008 and 2009; doubling of Australian postgraduate scholarships by 2012 from 2008 and the emergence of the new funding in the form of Sustainable Research Excellence initiative to improve support for the indirect costs of research and the Excellence in Research in Australia (ERA) to fund research excellence based on 157 Fields of Research (FoR). For further discussion see Sheil, T. (2010). Moving beyond university rankings: Developing a world class university, *Australian Universities Review 52*(1), 69-76.

together with research outputs. These business-like outcomes are based on market forces of efficiency and accountability given that substantial resources have been invested in tertiary education. For example, the Australian government spent AUD6.5 billion in 2011-2012 and AUD6.9 billion in 2012-2013 on higher education at universities (Parliament of Australia, 2013). Similarly, the New Zealand government invests approximately NZD2.0 billion annually on universities (Tertiary Education Commission, 2012).

The ongoing and increasing public demand for tertiary education over the past thirty years has led to pressure on governments to cut programs and/or increase efficiency in HEIs (Abbott, 2006; Deem, 2001; Lyotard, 1984). With changes in economic conditions and global competition,² there is an expectation for greater efficiency in managing public spending (Garrett-Jones & Turpin, 2012). Intensive competitive funding has been the trend for HEIs since tertiary education is regarded as a major revenue generating activity:³

"Universities are undergoing profound change. Competition is intensifying between universities nationally and internationally, students are becoming more conscious of the value of their education and its impact on their career opportunities, and governments and other stakeholders are asking questions and requiring evidence of value-for-money" (European Commission, 2010, p. 17).

The transformation of HEIs with a corporate focus has led to changes in the way resources and processes are managed. Historically, HEIs particularly universities were regarded as 'custodian of culture, the seat of higher learning and the paradigmatic site of free enquiry' (Thornton, 2009, p. 19). However, this idealistic view of HEIs has been replaced with measurable outcomes prescribed by funding agencies and accreditation bodies.⁴ Noncompliance with these requirements may result in funding cuts and the withdrawal of recognised programs by accreditation bodies.

The catalysts for greater accountability and efficiency within the public education sector were a direct result of neo-liberalism, the new knowledge economy (Kettl, 2005; Roberts, 2007) and globalisation (Liyanage & Andrade, 2012). With globalisation, significant revenues have been generated from exporting educational services. For example, international education activity contributed AUD15 billion in export income to the Australian economy in 2012 (Australian Educational International, 2013). The stimulus for greater efficiency compels HEIs to adopt business strategies to aggressively pursue international students and competitive funding.

Competitive funding from government is linked to performance indicators and therefore, public education is increasingly viewed as 'a commodity: something to be sold, traded and consumed' (Roberts, 2007, pp. 350-351). Consequently, the common maxims for HEIs

² There is increasing pressure on HEIs to earn some of their income from exporting their education services or from international students.

³ Universities in the United Kingdom contributed £3.4 billion to the economy in 2011-12 through services to business, including commercialisation of new knowledge, delivery of professional training and consultancy according to the Higher Education Funding Council for England (HEFCE) (2013), UK universities contribute to economic growth' (2013) at http://www.hefce.ac.uk/news/newsarchive/2013/news81928.htm. In 2010, Australian public universities had revenue of AUD22 billion according to Norton, A. (2012). *Mapping Australian Higher Education at* http://grattan.edu.au/static/files/assets/4f02a9af/122 mapping higher education.pdf>.

⁴Accreditation bodies certify the credibility, competence and authority of HEIs in providing credible and quality assured qualifications recognised by governments, professional bodies or higher education councils. This process plays an important role in attracting students to the HEIs concerned.

include marketisation (Marginson, 1994), academic capitalism (Park, 2011; Slaughter & Leslie, 1997) and entrepreneurialism. The performance indicators expect HEIs to maximise their outputs (Tipples, Krivokapic-Skoko, & O'Neill, 2007) thus shaping the operation and decisions made by faculties regarding staffing and programs offered (Hicks, 2012). For example, the New Zealand government expects HEIs to have a "strong focus on improving the economic outcomes from tertiary education and research" (Ministry of Education, 2014, p. 7).

One component of funding for HEIs relates to research funding. Over the last two decades, strategic directives were given by governments to fund research through mechanisms such as the United Kingdom Research Assessment Exercise (RAE), the Excellence in Research in Australia (ERA) and the New Zealand Performance Based Research Funding (PBRF). The funding criteria are largely to promote, encourage and incentivise research excellence. For example, the New Zealand government has a strategic priority in strengthening research-based institutions according to the latest Tertiary Education Strategy 2014-2019 document. This is evidenced by the increased PBRF funding from "NZD 372 million to NZD 410 million between 2008 and 2012 with the continued commitment to increase investment in the PBRF" (Ministry of Education, 2014, p. 16). The research funding criteria are based on measurable research outcomes, and the size of the research funding for HEIs is directly related to their ability to meet these outcomes. With this, there is an expectation that academics embrace their new and added role of a researcher.

Given the above wave of change, tertiary teaching is largely determined exogenously by stakeholders including funding agencies, accreditation bodies, employers and students. These changes are ongoing and fluid. The paper/module contents taught and the skills assessed are based on requirements from external stakeholders, giving little autonomy to academics. Further, the demands placed by faculties on research and administration require academics to acquire, develop and improve their research skills and capabilities.

This paper focuses on three interrelated aspects of the academic roles which are, teaching, research, and student-community-business engagement. It seeks to find general lessons to be learnt and/or to raise awareness amongst academics resulting from changes in the tertiary education sectors in Australia and New Zealand.⁶ In particular, it addresses the various roles academics adopt, and the tensions and challenges that these may cause.

The knowledge gained from this paper may assist academics, university management and government to become more informed about the changing trends of HEIs. This paper links the changes in HEIs to the NPM framework as it is within this framework that major transformation of the public sector have taken place (Luke, Kearins, & Verreynne, 2011). In order to have an in-depth understanding of changes in HEIs (as a result of NPM), this

⁵ See Ministry of Education. (2010). *Tertiary Education Strategy 2010 - 15* (Wellington: Office of the Minister for Tertiary Education); Research Councils UK at < http://www.rcuk.ac.uk/>; and the Australian Research Council at < http://www.arc.gov.au/>.

⁶ There has been no systematic and comprehensive research conducted regarding NPM on university staff and students. This study gathers several research undertaken by trade unions, government departments, academics and student engagement surveys to determine the changes on university staff and students since the introduction of NPM on HEIs.

study uses secondary data⁷ including government and universities policies, documents from funding agencies together with Australasian student engagement surveys.⁸

The paper is organised as follows. First, the literature pertaining to the metamorphosis of HEIs over the past few decades will be discussed. This is followed by a brief overview of the NPM framework used for this study. Third, the literature review on the commodification of higher education is discussed. This is followed by commentaries on the effects of the NPM on HEIs in the areas of teaching (including student engagement), research and the lives of academics. The paper concludes with an assessment of the changing and expanding roles of academics, and provides some lessons to be learnt from the Australasian experience. Limitations of the study and areas for further research will also be discussed in the final section.

METAMORPHOSIS OF HIGHER EDUCATION INSTITUTIONS

Since 1980s, the role of governments and public sector organisations in Australia, Canada, New Zealand, the United Kingdom and the United States of America have come under intense public scrutiny (Parker & Gould, 1999) in terms of tax spending on the production of public goods and services. This scrutiny is based on the perception that public sectors are inefficient and are not customer focused (Hood, 1995). To address these concerns, governments began revamping the public sector by privatising, outsourcing and encouraging contestability for public funds (Moore, 1992).

The shift in focus for the public sector is to be efficient, accountable and responsive to the needs of customers (Roberts, 2007). In the tertiary education sector, HEIs were forced to adopt private sector management techniques by becoming more entrepreneurial (Marginson & Considine, 2000; Vigoda, 2003) and to operate under a 'performative' regime (Lyotard, 1984). Through increased audit and performance management practices, HEIs and individual academics are accountable for outcomes which they have less ability to determine. Once foreign to HEIs, there is now greater emphasis placed on 'strategic planning, cost reduction, the application of user pays and "client" orientation principles' (Tipples et al., 2007, p. 33) which are common strands of NPM.

NEW PUBLIC MANAGEMENT (NPM)

NPM was largely adopted in the public sector in the 1980s when there was growing dissatisfaction with increased public spending with little accountability (O' Flynn, 2007). Some reforms under the NPM include budget cuts, accountability for performance, privatisation or quasi-privatisation and improved financial management systems (Gruening,

⁷ Secondary data is data collected by someone other than the researchers in this study. Secondary data analysis saves time that would otherwise be spent collecting data and it provides a larger amount of data, which would be unfeasible for the researcher(s) to collect on their own. In addition, analysts of social change frequently use secondary data. For example, see Gillies, V. & Edwards, R. (2005). Secondary analysis in exploring family and social change: Addressing the issue of context, Forum: *Qualitative Social Research 6* Art 44 at http://nbn-resolving.de/urn:nbn:de:0114-fqs0501444. They considered secondary data essential, since it is impossible to conduct a new survey that can adequately capture past change. This is particularly relevant to this study given the public sector changes had taken place since 1980s. An advantage of using secondary data is that much of the background work has been carried out.

⁸ The Australasian student surveys include the Australasian Survey of Student Engagement (AUSSE) which was conducted by ACER under the direction of the Australian Council for Education Research. In 2012 over 30 institutions in Australia and New Zealand participated in AUSSE. AUSSE is a large survey of students' engagement and satisfaction with the delivery of services by tertiary institutions in Australia and New Zealand.

2001; Kelly, 1998). The NPM believes that market-oriented management should lead to greater cost-efficiency for the public sector. NPM is used as a "recipe for correcting the perceived failings of traditional public bureaucracies over efficiency, quality, customer responsiveness and effective leadership" (Hood, 2000, p. 4).

The NPM is defined as '...the entire collection of tactics and strategies that seek to enhance the performance of the public sector' (Behn, 2001, p. 26). Some describe NPM as 'an interdisciplinary study of the generic aspects of administration ... a blend of the planning, organising, and controlling functions of management with the management of human, financial, physical, information and political resources' (Garson & Overman, 1983, p. 275). The NPM favours decentralised administration, delegation of discretion, contracting for goods and services, and the use of market mechanisms of competition and customer service to improve performance (Canaan & Shumar, 2008; Peters, 2001). The push towards NPM has led to the commodification of higher education.

COMMODIFICATION OF HIGHER EDUCATION

The neo-liberal era commodifies public tertiary education and research (Lomax-Smith, Watson, & Webster, 2011; Tertiary Education Commission, 2012) with the implementation of user pays and adopting research ranking mechanisms through the PBRF, ERA and RAE (Curtis, 2007). The Australian and New Zealand government funding for teaching and learning in tertiary education is based on the equivalent full-time students (EFTS) formula. Specifically, the New Zealand government establishes educational performance indicators (EPIs)⁹ for all HEIs to comply with in order to obtain central government funding. The rationale of EPIs is that funds should flow to performing HEIs (Herbst, 2007). The idea of rewarding performing universities is also suggested by the European Commission:

Universities should be funded more for what they do than for what they are, by focusing funding on relevant outputs rather than inputs, ... Competitive funding should be based on institutional evaluation systems and on diversified performance indicators with clearly defined targets and indicators supported by international benchmarking' (European Commission, 2010, p. 9).

There are five key measures under the EPIs of which the New Zealand Tertiary Education Commission (TEC) uses to assess the annual contribution of HEIs (Ministry of Education, 2010, p. 23). The five key measures as specified by TEC (Tertiary Education Commission, 2012, p. 4) are:

- Student Achievement Component (SAC) relating to course completion, student retention, qualification completion and student progress.
- Research
- Scholarships and Learners
- Teaching and learning
- Capability.

⁹ The Australian Department of Education uses the 'Quality Indicators for Learning and Teaching' to assess the performance of HEIs in Australia. For more information, see https://education.gov.au/upholding-quality-quality-indicators-learning-and-teaching.

The inability of HEIs to fulfil these measures may lead to adverse consequences in their future funding. From 2012, a maximum of five percent of a HEI's total SAC funding will be at risk, based on the organisation's educational performance in the previous year (Tertiary Education Commission, 2012), thus making tertiary education a risky business.

Tertiary education business is risky as it is largely dependent on student numbers including international students (Sheil, 2010). Both exchange rates and government immigration rules can significantly impact on international student numbers. These factors, compounded by the competitive nature of tertiary education funding, means that funding for tertiary education business is uncertain and variable. To hedge against this uncertainty, HEIs need to look at alternative and/or supplementary income streams from research. To obtain research funding, HEIs have to comply with research requirements such as the PBRF, ERA and RAE.

Importance of Research and Academia

The New Zealand PBRF signals the beginning of the commodification of academic life in terms of teaching and research activities. For example, under section 254(3)(a) of the New Zealand Education Act 1989, degrees must be 'taught mainly by people engaged in research.' The PBRF, ERA and RAE have been argued as tools to promote research at the expense of teaching and learning (Tipples et al., 2007). The new market-oriented research funding mechanism is to ensure resources follow demonstrated research performance, rather than being spread thinly across all HEIs (Tertiary Education Commission, 2004). These performance-based research funding systems have also been applied in 14 other countries since 2010 (Hicks, 2012).

In addition to receiving research funding from central government mechanisms, HEIs also generate other research revenues from selling or licensing their research findings through their research commercialisation units. For example, all the eight New Zealand universities have their own independent research commercialisation unit. The most established and oldest commercial research unit is Auckland UniServices Limited, which is attached to the University of Auckland. Auckland UniServices Ltd was established in 1988 and contributed NZD145 million to the University of Auckland in 2011, invested over NZD17 million and generated a return of NZD115 million from commercialisation income and royalties from 2009 to 2013. 10

The most important component of the research activity under the PBRF is the Quality Score and rewards individual academics who publish in high-ranking journals and have high quality outputs under the peer esteem and contribution to research environment categories. This funding formula valorises academics for their research outputs and

For further information see Auckland UniServices Limited at http://www.linkedin.com/company/auckland-uniservices-limited

¹¹ Each academic in the participating universities was required to complete an Evidence Portfolio (EP) with three sections: a list of research outputs (including four nominated as the best plus 15 others) together with sections on 'peer esteem' and 'contributions to the research environment.' The first of the three would count for 70 percent of the individual rating, while the other two would be worth 15 percent each. The EPs were evaluated by external panels of researchers in disciplinary clusters. Individual academics are graded using the following categories: A (researcher of a world-class standard), B (very good quality research), C (good quality research) or R (did not meet the requirements for a C). PBRF allocations for each participating university would be based on the aggregated individual grading plus postgraduate completions and external research income.

has led many HEIs¹² to hire and promote academics with impressive research outputs (Macfarlane, 2011).

Little value is given to teaching academics as teaching is not individually recognised. This is because SAC funding is bulk funded based on student enrolments, retention and degree completion, which requires institution and not individual accountability (Curtis & Matthewman, 2005; Hall, Morris Matthews, & Sawicka, 2003). On the other hand, there is greater emphasis on research because of the individualised scores (A, B, C and R) attributed to academics in New Zealand under the PBRF mechanism.

The next section uses secondary data¹³ to identify the changes that have taken place in Australian and New Zealand HEIs with some focus on New Zealand universities as the New Zealand research funding was largely allocated to the eight universities. Moreover, New Zealand universities are unique due to their compliance with the Treaty of Waitangi.¹⁴ The Treaty requires all universities to have an indigenous Maori Pro-Vice Chancellor to ensure that the university's vision, mission, strategies and plans align with the principles of the Treaty.

EFFECTS OF NPM ON HIGHER EDUCATION INSTITUTIONS

Despite the promise that NPM will result in improved efficiency amongst HEIs, the requirement for greater accountability has resulted in some adverse consequences for academics. Research in the United Kingdom, Australia and New Zealand has shown that academics are working longer hours, experiencing greater stress, and have declining morale (Jarvis, 2001; Pick, Teo, & Yeung, 2012; Tipples et al., 2007). Further, the competitive nature of funding has led to less cooperation, a decline in academic autonomy (Marginson & Considine, 2000), with HEIs becoming less collegiate and more bureaucratic and corporate (Curtis & Matthewman, 2005; Tipples et al., 2007). Academics are motivated to compete with their colleagues and to promote themselves effectively in order to gain better salaries and work conditions, thus becoming 'research entrepreneurs' (Roberts, 2007, p. 360). Over time, 'academics may become more 'herd-like' in their activities, following the rules of the research game and doing only what is required to succeed, instead of undertaking scholarly research out of curiosity' (Roberts, 2007, p. 361).

¹² Australian and New Zealand HEIs are made up of different organisations. The Australian HEIs are made up of universities, TAFEs, colleges and private tertiary institutions. Similarly, New Zealand HEIs are made up of universities, polytechnics, institute of technologies, wananga and private training establishments. The New Zealand government acknowledges that the bulk of the research in the tertiary sector are conducted by universities and to a lesser extent the more applied and specialised research were undertaken by non-university HEIs. .Given that, the balance of pressures to undertake research is different on academics in these organisations.

¹³ Examples of other studies on HEIs that use secondary data are: Liyanage, S., & Andrade, A. (2012). The changing role of research and education in New Zealand universities. *Science Technology & Society, 17*(2), 201-232; Garrett-Jones, S., & Turpin, T. (2012). Globalisation and the changing functions of Australian universities. *Science Technology Society, 17*(2), 233-274; Roberts, P. (2007). Neoliberalism, performativity and research. *Review of Education, 53*, 349-365; and Sheil, T. (2010). Moving beyond university rankings: developing a world class university system in Australia. *Australian Universities Review, 52*(1), 69-76.

¹⁴ The Treaty of Waitangi (the Treaty) sets out the rights and obligations by the New Zealand government (the Crown) in meeting the needs of indigenous Maori. It was signed in 1840, but the principles of the Treaty have been more widely recognised since the 1970s. The Treaty established a British government over New Zealand but it recognises Maori ownership of their lands. Maori look to the Treaty for rights and remedies for land loss and unequal treatment by the Crown.

NPM has brought about significant changes to HEIs in terms of undermining collegial values (Deem, 1998), increasing the 'trust gap' between employees and management (Aydin, Kursad, Memduhoglu, Oguz, & Gungor, 2008), causing job insecurity (Chandler, Barry, & Clark, 2002; Kinman & Court, 2010; Tytherleigh, Webb, Cooper, & Ricketts, 2005), increasing work intensification (Szekeres, 2006; Vidovich & Currie, 2011) and decreasing job satisfaction (Martin, 2008; Pick et al., 2012). A national Australian staff survey in 2002 found that half the university staff were at risk of psychological illness due to increased stress and pressure in their workplace (Winefield, Gillespie, Stough, Dua, & Hapuararchchi, 2002). A more recent interview of Australian university staff disclosed that some feared changes to their jobs and projected unfavourable outlooks in their careers (Pick et al., 2012).

There is also an increasing demand on academic and faculty resources to comply with 'performance-oriented decrees from the university executive' (Lewis, Marginson, & Synder, 2005, p. 62). HEIs are strategically pursuing more funding by devoting their resources to meeting specified EPIs for teaching and research. The competitive nature of HEIs' responses to budget cuts, and neo-liberal expectations from central governments, has led to erosion in some workplace conditions (Tipples et al., 2007) and staff redundancy. It is in the context of such change and uncertainty which affects academics' responses towards education and research in general. This has caused a change in commitment, away from teaching and learning, and towards research. This perception is supported by the AUSSE student engagement survey from 2009 to 2012.

Australasian student engagement survey results (AUSSE): 2009 to 2012

The aim of the student engagement surveys under AUSSE is to gain an understanding, from the perspectives of students, of the dynamics, constraints and opportunities facing higher education and tertiary education institutions in Australia and New Zealand. It provides key insights into six significant educational phenomena which are: academic challenge, active learning, student-staff interactions, enriching educational experiences, supportive learning environment and work integrated learning (see **Appendix I**).

AUSSE measures student engagement through the administration of the Student Engagement Questionnaire (SEQ) to a representative sample of first and later-year students in each participating HEI in Australia and New Zealand (Australian Council for Educational Research, 2013). AUSSE was developed to bring together existing work in higher education in a collaborative, multi-institutional approach, thus providing data for cross-national comparisons.

Of the six educational phenomena, Australasian students gave the **lowest rating** for staff-student interactions from 2009 to 2012. Basically, students did not experience positive staff interactions which impact significantly on their learning. Umbach & Warwrzynski (2005) and others suggest that the educational environment created by teachers' behaviours, beliefs and attitudes has a dramatic effect on student learning and engagement (Zepke, Leach, & Butler, 2009). In the AUSSE 2009 to 2012 survey, less than 30 percent of all students,

¹⁵ See examples of redundancies at universities in New Zealand and United Kingdomy in 'University Seeks Volunteers for Redundancy' *Stuff Newspaper (online)* 14 August 2012 at http://www.stuff.co.nz/national/education/7476793/ University-seeks-redundancy-volunteers>; and Paton, N. (2011). What next for academics who are made redundant?, *The Guardian (UK)*, 1 February 2011 at http://www.theguardian.com/education/2011/feb/01/academic-job-losses.

¹⁶ Thirty HEIs in Australia and New Zealand participated in this nationwide student engagement survey.

including those in their first year and in later years, reported having meaningful and frequent interactions with teachers outside the classroom over the four years (Australian Council for Educational Research, 2013, p. 36). The following questions were asked about the student-staff interactions phenomenon (Australian Council for Educational Research, 2013, p. 40):

- Discussed your grades or assignments with teaching staff;
- Talked about your career plans with teaching staff or advisors;
- Discussed ideas from your readings or classes with teaching staff outside class;
- Received prompt written or oral feedback from teachers on your academic performance;
- Worked with teaching staff on activities other than coursework (committees, orientation, student organisations, etc.); and
- Worked on a research project with a staff member outside of coursework requirements.

Appendix II showed the low rating given to student-staff interactions from 2009 to 2012 from the AUSSE surveys. This low rating may result from decreased time and effort spent on students by academics, due to the many pressures imposed by stakeholders. This is further confirmed by other student engagement surveys conducted in New Zealand and overseas.

Other Student Engagement Surveys in New Zealand and Overseas

Of the six student engagement phenomena, the student-staff interactions amongst degree students studying in Australia, New Zealand, South Africa and the USA remained the **lowest** in terms of scale scores (Radloff & Coates, 2011, pp. xi-xii) as shown in **Table 1**. As the scores are rated out of 100, the student-staff interactions criteria had well below average scores in all four countries.

Table 1: Student-staff interactions amongst degree students in Australia, New Zealand, South Africa and the United States of America in 2010-11 (Radloff & Coates, 2011, pp. xi-xii).

Criteria	New Zealand	Australia	South Africa	USA
Student staff interactions				
First year students	18	21	21	36
Later year students	23	25	27	42

Similarly, students in New Zealand HEIs also recorded the lowest rating for the student-staff interactions criteria in another study conducted in 2010-2011. Further breakdowns revealed that first-year tertiary students gave an average score of 20.1 (out of 100) and later year students gave a score of 24.9 (Radloff, 2011, p. 14). The domestic and international students studying in New Zealand (both first year and later year students) scored particularly low for the student-staff interactions phenomenon (van de Meer & Comer, 2011, pp. 29, 33) as shown in **Table 2**. In addition, both full-time and part-time New Zealand students gave very low rating for the student-staff interactions with four specific questions (Kranenburg, 2011, pp. 57, 64) as listed in **Table 3**. Like all other student

engagement surveys, the scores shown in **Tables 1**, **2** and **3** are rated out of 100. Hence, New Zealand students have experienced poor student-staff interactions with academics since 2010. ¹⁷

Table 2: Student-staff interactions amongst New Zealand domestic and international students (both first year and later year students) in 2010-11 (van de Meer & Comer, 2011, pp. 29, 33).

Student-staff interaction components	First-year students	Later year students		
1. Worked with teaching staff on other activities	10.4	11.1		
2. Discussed ideas from classes with teaching staff	9.9	5.7		
3. Discussed grades with teaching staff	5.8	4.7		
4. Talked about career plans	6.1	3.2		

Table 3: Student-staff interactions ratings on four specific questions by New Zealand in 2010-11 (Kranenburg, 2011, pp. 57, 64).

Questions on student-staff interactions	Part time students	Full time students		
1. Discussed ideas from your classes with teachers	21.4	20.8		
2. Discussed grades with teachers	26.1	25.3		
3. Talked with teachers or advisors about career plans	17.5	20.7		
4. Worked with teachers on other activities	10.9	11.1		

Another New Zealand study which took place from 2007 to 2009 also showed the student-staff interactions remained the **lowest ranking** in student engagement surveys (Byrnes, 2011, p. 25). A large-scale study undertaken by Massey University in 2008 on 9 HEIs (Zepke et al., 2009) showed HEIs were underperforming in engaging with their students and that most institutions did not engage their students at an optimal level, particularly in relational interactions between academics and students.

The above studies point to the low satisfaction rate of students in engaging with academics beyond the classroom. Less effort is expended by academics in interacting with undergraduate students as teaching (student interactions) yield fewer personal and departmental rewards relative to research outputs due to the way in which research is funded (Tipples et al., 2007). Given the personal rewards associated with research, there is much to gain for academics by prioritising research over teaching and administrative tasks thus intensifying the pressures on academics to perform (Allan, Lafferty, & Burgess, 2007; Winefield & Jarrett, 2001). This has led to tensions of which academics need to choose in order to retain their employment.

Tensions for Academics

There are multitudes of ways in which teaching and learning, research and administrative roles undertaken by academics may conflict with each other. First, there is the tension for time for research versus time for teaching. Second, the quality of teaching versus quantity and quality of research outputs. Third, the tensions related to achieving SAC

All eight New Zealand universities participated in the research using the AUSSE survey methodology. For further information on how the student engagement surveys were conducted in New Zealand HEIs, see Radloff, A. (Ed.). (2011). Student Engagement in New Zealand's Universities. Wellington: Ako Aotearoa, AUSSE and ACER, p vii - xiii.

outcomes (which is passing more than 80 percent of the number of students enrolled in New Zealand universities) (Tertiary Education Commission, 2012). Fourth, managing the multiple expectations from stakeholders such as funding agencies, faculty management, accreditation bodies, employers and students.

The most obvious conflict between the educator (teaching and learning) role and the researcher role is that of time. The more time academics spend on the education role, the less time there is for research. Academics who spend more time on their teaching role do so at the expense of fewer research outputs, especially high-quality ones (Langfeldt & Kyvik, 2011).

New Zealand academics are implicitly expected to achieve a success/completion rate of 80 percent for the courses that they teach.¹⁸ If they do not, their university employer risks losing up to 5 percent of future SAC funding (see **Appendix III**). Faculty managers are given the task in ensuring that courses taught comply with this requirement.

In addition, academics have to spend time ensuring the courses taught align with the requirements of accreditation bodies, funding agencies, employer requirements and students. For example, at the author's university, the Taxation module must adhere with the body of knowledge and technical content required by the three professional and accreditation bodies which are the CA (Australia and New Zealand), Certified Practising Accountant (CPA) Australia and the Association of Certified Chartered Accountants (ACCA). Further, the university's advisory and faculty boards expect academics to be teaching courses which are relevant to employers and students.

Another tension for the academic is brought about by meeting the requirements of accreditation bodies and the SAC funding criteria. Accreditation bodies require assessment of technical competency and skills such as critical thinking, problem solving and effective written and oral communication skills. Having to meet this assessment requirement, as well as the 80 percent quota for SAC funding, can give rise to conflicts particularly if students have been admitted with lower entry requirements. The entry requirements are not determined by academics teaching the course, but rather by faculty management. The tension of managing and balancing the educator, administrative and research roles is compounded by the way research is funded in New Zealand.

Greater accountability for research funding in New Zealand was reinforced in 2003 by Steve Maharey, the Associate Minister of Education at the time. He stated that there was a 'greater degree of accountability for research funding (Tertiary Education Commission, 2004, p. vii), and that 'the funding will ensure that resources follow demonstrated research performance' (Tertiary Education Commission, 2004, p. viii). Currently, TEC administers a fund to encourage and reward research excellence in HEIs. This entails assessing the research performance of HEIs and funding them according to three elements of quality research evaluation, research degree completions and external research income. The performance-linked research funding criteria reinforces the importance of an individual academic's performance in their research role, and not their teaching or administrative roles. Overall, the tensions continue to arise with the multiple roles that academics undertake due to the various and sometimes conflicting demands from stakeholders.

The 80 percent requirement is for course completion. The average qualification completion for all New Zealand universities was 75 percent and 80 percent in 2011 and 2012 respectively.

Responses from Academics and University Management

There can be several responses from academics, regarding the above tensions. First, is for the academics to do nothing. Second, is for the academics to react negatively and complain about the changes. Third, academics may perceive the changes as opportunities to do something positive. The findings should also inform HEI management that the market-driven systems do have flaws and, therefore,, ought to be used with some caution. The results of the first two options may cause academics to be complacent, inflexible and unable to respond to changes in the present funding climate. By doing so, they face potential redundancy as they are not sustainable in the long run, a 'case of publish or perish!'(L' Huillier, 2012).

In the opinion of the author, it would be beneficial to academics to embrace the third option. Changes should be viewed positively as changes demand actions to be taken including acquiring, developing and refining skills relating to teaching, research and administration. This suggests that academics should be flexible, teachable and be willing to learn new things. In doing so, they remain "relevant", productive and of service to the students and organisations that they represent. Finally, academics also need to consider collaborating, synthesising and streamlining their knowledge, building synergy, and reassessing their areas of learning and research interests in order to respond to external demands and conditions.

CONCLUSION AND FUTURE RESEARCH AGENDA

NPM has dramatically changed the roles and expectations of HEIs, bringing with it many benefits including new measures for accountability, efficiency and market-service orientations. Faculty managers will continue to expect academics to be rational, calculating subjects and to take on the challenges of self-management and risk taking. Unfortunately, NPM reforms have also produced some unintended human costs including stress, fear and uncertainty amongst academics. In order to mitigate fear, stress and uncertainty amongst academics, HEI management as suggested by Smith (2011) needs to inform academic staff of changes in the funding regime and to provide adequate and relevant support.

Under NPM, the role of academics has been commodified and increasingly expanding (Pollitt, 2013; Sinclair, 1991; Tahar & Boutellier, 2013). Most would agree that academics are better teachers if they are also researchers, as research informs teaching (Barrett & Milbourne, 2012; Burke & Rau, 2010). Consequently, academics have been transformed from an educator to a blend of educator-researcher-administrator role. In order to manage these changes, academics need to proactively seek professional development to fulfil their roles. In addition, they need to adopt a positive, flexible and embracing attitude towards these changes with good time management skills. The wave of change under NPM is a blessing in disguise for academics, as without it, academics may remain complacent, outdated and less useful to their organisations. Resistance to change can be detrimental to academics in terms of being denied promotion and/or face redundancy.

This study uses Australian and New Zealand HEIs as they are well-established tertiary education systems which have undergone significant changes over the last thirty years. The study describes how market and government pressures have shaped the way in which HEIs have responded. The future picture for academic's teaching role includes: continued expansion, with intense competition for domestic and international students and

growth in market-related education; and the possible demise of non-research academics teaching on degree programs. On the other hand, the future picture for academic's research role includes: a greater distinction between research active and research inactive staff; promotion for academics with impressive research track records; and potential demotion and penalties for research staff with low or no journal publications or research activities.

Finally, like all research endeavours, this study is not without limitations. Among them is the use of secondary data. The rationale for using secondary data was largely to capture past changes in HEIs which have occurred since the 1980s. Further, this study remains exploratory for further discussion and debate among academics. The purpose is not to determine whether academics are satisfied with the changed expectations of their roles, but rather, awareness to be gained and possible lessons to be learnt from this wave of change under NPM. Future studies could be conducted to account for the views of academics, faculty managers and students in response to the changes in the public tertiary education sector. Considering that this change is here to stay in tertiary education, it would be beneficial for academics to accept it and to develop their skills strategically to remain relevant to their universities, stakeholders and society as a whole.

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APPENDIX I: AUSSE survey instrument measuring scales of key educational phenomena

The AUSSE is important because it provides an indication of students' engagement in activities and their experiences of HEIs (AUSSE, 2012). Student engagement is an idea focused on students and their interactions with their institutions. It rests on the premise that learning is influenced by how an individual participates in educationally purposeful activities, and how institutions and staff generate conditions to stimulate involvement (AUSSE, 2012).

The survey instrument used by AUSSE contains items that tap a range of key educational phenomena. A selection of these are grouped together psychometrically to measure these summary scales (AUSSE, 2012):

Key educational phenomena	What does it entail?
Academic challenge	Extent to which expectations and assessments challenge students to learn
Active learning	Students' efforts to actively construct their knowledge
Student and staff interactions	Level and nature of students' contact with teaching staff
Enriching Educational Experiences	Participation in broadening educational activities
Supportive Learning Environment	Feelings of legitimation within the institution
Work Integrated Learning	Integration of employment-focused work experiences into study

A total of 207,976 students at 31 HEIs in Australia and New Zealand were invited to take part in the 2012 AUSSE through mail and email surveys. In 2012, a total of 46,854 usable responses were received prior to the production of the final data file with a response rate of 22.5% (Australian Council for Educational Research, 2013, p. 11).

Appendix II: AUSSE survey instrument results of key educational phenomena from the first year and later year Australasian students from 2009 to 2012 (scale scores in percentages rated out of 100)

	2012 -FY	LY	All students	2011 -FY	LY	All students	2010 -FY	LY	All students	2009 -FY	LY	All students
Student and staff interactions	25	29	27	24	27	25	22	25	23	20	27	23
Enriching educational experiences	24	28	26	23	28	26	25	29	27	22	28	25
Academic Challenge	49	51	50	48	50	49	48	51	49	46	50	48
Active Learning	40	41	40	39	41	40	38	42	40	35	42	38
Career Readiness	37	42	39	39	44	42	37	44	40	34	42	38
Work Integrated Learning	44	54	49	42	54	48	40	51	45	39	50	44
Overall Satisfaction	73	70	72	72	69	71	71	68	70	73	69	71

Source: Australian Council for Educational Research, Australasian Survey of Student Engagement 2012 Institution Report (2013) 77.

Abbreviations FY: First Year LY: Later Year

Appendix III: Student Achievement Component (SAC) funding for New Zealand universities in 2011

There were 120,951 and 117,928 EFTs in 2010 and 2011 respectively in universities. Universities achieved 84% and 86% course completion/credit achievement rates in 2010 and 2011 and 67% and 75% qualification completion/credit-weighted program completion in 2010 and 2011 respectively (Tertiary Education Commission, 2012, p. 32). Further details of the performance of the eight universities in terms of SAC funding in 2011 is shown below.

New Zealand Universities	Number of students: Participation	Course completion	Qualification completed	
Total	117928	86%	75%	
University of Auckland	28865	88%	88%	
University of Otago	17653	89%	81%	
Massey University	16798	80%	49%	
Victoria University	15578	85%	77%	
AUT University	15056	83%	66%	
University of Canterbury	12523	88%	76%	
University of Waikato	8660	87%	78%	
Lincoln University	2797	82%	65%	

All New Zealand universities fulfilled the 80 percent course completion rate in 2011 to avoid the 5 percent penalty in the following year's SAC funding. The more established universities, including the University of Auckland, University of Otago, University of Canterbury and University of Waikato, had above average course completion rates in 2011.