

PBRF 2012 and the Nature of Degree Teaching

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ABSTRACT

For the Performance Based Research Funding Exercise of 2012, two principles for eligibility were enunciated by the New Zealand Tertiary Education Commission, whereby those submitted were firstly expected to contribute to the learning environment at the degree level and/or secondly make a substantive contribution to research activity. The accompanying eligibility guidelines defined how these principles were to be realized by participating Tertiary Education Organizations. However the interpretation of the teaching eligibility guidelines appears to have been widely inconsistent between institutions. This has raised considerable debate relating to inclusion/exclusion of researchers and reporting of quality scores. For the non University participants it also raises concerns for equity of treatment, and significant questions around the definition of degree level teaching.

Keywords

PBRF, Degree teaching, Teaching-Research Nexus.

1. INTRODUCTION

A range of reasons were put forward for the introduction in 2003 of a performance based research funding approach for the New Zealand tertiary education sector [1, 2]. Among these were concerns that the implicit research 'top up' embedded in the previous EFTs based funding was being directed to research inactive providers and diluting the limited pool available to support activity in the research intensive institutions.

"There was considerable anecdotal evidence that many providers, especially, but not exclusively, those accredited by the New Zealand Qualifications Authority, were in breach of section 254" [namely that their degrees were not being taught 'mainly by people engaged in research'] [2, p.21].

This year 2012, has seen the conduct of the third PBRF evaluation round since the scheme was instituted. The guidelines provided by TEC for this 2012 PBRF round, made more explicit the requirements for eligibility, with a list tightly defining exclusion and inclusion criteria, in an attempt to counter what some had viewed as gaming of the system in the 2006 round. It was perceived that in the 2006 round some participating institutions (TEOs) had found ways to 'hide' researchers who would have ranked as 'research inactive' in the PBRF round, by defining them as ineligible. Through this device TEOs avoided such inactive researchers inflating the denominator upon which the average quality score (AQS) was calculated, ("because unfunded Quality Categories reduce the reported AQS, and by extension the 'ranking' of TEOs, subject areas, and nominated academic units")

[3, p.8]. Thus TEOs could maximize their comparative scores and the accompanying reputational benefits,

This of course accords well with the views of Burton Clark who views Universities as "what economists would call 'prestige maximisers': their bottom line is prestige rather than monetary profit" [4].

2. PROGRESS OF THE 2012 PBRF ROUND

However as the 2012 PBRF round has unfolded, as a result of an audit report conducted by KPMG, TEC has had to cope with a hugely inconsistent set of responses on the part of TEOs to the interpretation of the eligibility criteria. Excerpts from the TEC report are given below.

"The first stage of the audit process has indicated that there appears to be differences in Human Resource practices across TEOs. In particular, differences in the way in which TEOs are applying the staff eligibility criteria in relation to staff whose EPs [evidence portfolios] are not likely to meet the standard for a funded Quality Category" [3, p.8].

"The extent of these differences indicates that there is potential for these practices to affect the credibility of the published results of the 2012 Quality Evaluation, including the way in which TEOs are ranked (at both the overall organisational level, and by subject areas), and for the reporting of the relative quality of research by panel, subject area, and nominated academic unit generally" [3, p9].

"In addition, the TEC has received information from TEOs which indicates that the overall number of PBRF-eligible staff whose EPs are unlikely to meet the standards for a funded Quality Category has declined significantly between 2006 and 2012. As a result, there may be merit in considering changes to the reporting framework that take account of this reduction" [3, p.9].

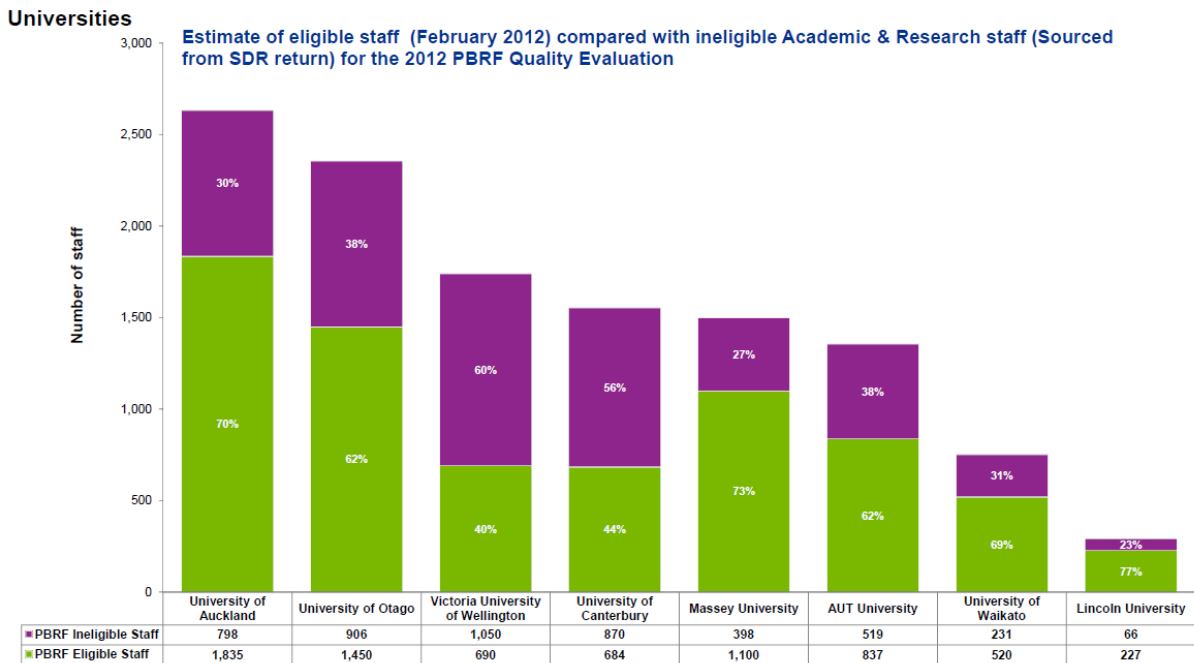
This has led to sectoral debate and a need for reconsideration of the validity of the average quality score when the distinction between eligible and research inactive researchers is highly variable across institutions. As one indicator of the level of variability, the table below shows the intensive use of the category (teaching/researching under 'strict supervision') by certain Universities to actively exclude researchers from the census [5, p.14].

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Table 1. Ineligible Staff due to supervised exclusions

Strict Supervision			
Number and proportion of staff estimated as ineligible to participate on the basis of supervised exclusions as reported by each University:			
University	Staff under strict supervision	Estimated Eligible Staff	% strict supervision to eligible staff
University of Otago	470	1450	32.4%
University of Auckland	355	1835	19.3%
University of Waikato	47	520	9.0%
AUT University	42	837	5.0%
University of Canterbury	26	684	3.8%
Lincoln University	9	227	4.0%
Victoria University of Wellington	10	690	1.4%
Massey University	5	1100	0.5%
Total	964	7343	13.1%

The chart below also indicates a major discrepancy in reporting by some Universities, between the number of Academic and Research staff identified in standard staffing returns, and those reported as eligible under the PBRF criteria [5, p.8]. For instance it seems odd that Victoria and Canterbury have less than 50% of their academic staff identified as researchers eligible for PBRF inclusion.



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Figure 2. Estimates of Eligible Staff – University Sector

(Note: this figure included for the purposes of critique under principle of fair use)

3. DEGREE TEACHING - CRITERIA AND EXCLUSIONS

Therefore if some categories of teachers/researchers can be excluded on the basis that they are under not eligible researchers or are working under 'strict supervision', what are the criteria that

indicate degree teaching? To answer that question, selected excerpts from the TEC evaluation guidelines related to degree teaching and eligibility are given below:

“They were employed or otherwise contracted for a minimum of one day a week on average, or 0.2 FTE, calculated over the period of the entire year AND · Their employment or service

contract functions include research and/or degree-level teaching AND · Their contribution to research and/or degree-level teaching meets the requirements of the substantiveness test [6, p.38].

As stipulated in the teaching related criteria then, staff must be employed on contractual terms that require them to teach at degree level, and that contribution must surpass a threshold of both employment and contribution to be deemed substantial. As elaborated in the criteria below, a major role in degree teaching must be played:

“To meet the requirements of the substantiveness test, staff must:

EITHER fulfil a ‘major role’ in the teaching and assessment of at least one degree-level course or equivalent

A ‘major role’ in the teaching and assessment of at least one degree-level course or equivalent means an individual contributes at least 25% of the delivery of the course and corresponding working time to the design of the course and/or the design of the assessment process

When assessing staff contribution to a course, TEOs must consider all aspects of teaching, design of the course and/or the design of the assessment process that the individual is involved in regardless of the component of the course being delivered (i.e. lectures, workshops, tutorials)” [6, p.40]

Thus the criteria indicate that academic staff must play a substantial role in the design, delivery and assessment of the course. However the criteria allow for a lesser level of teaching contribution under ‘strict supervision’, as outlined below:

“Staff members who are working under the strict supervision of another staff member while teaching, and who do not meet the substantiveness test for research, may be designated as PBRF-ineligible. The job descriptions and duties for such staff will be explicit about the nature of their supervised work and will be subject to audit.

Delivery of a course, or part of a course, that potentially contributes to a degree implies that the teaching is research-led or research-informed and that the person delivering the course brings to his/her teaching the appropriate level of scholarship and experience in order to work without close supervision. When testing the “strict supervision” criterion, these factors are more significant than the job title given to a supervised (or potentially supervised) staff member, such as assistant lecturer, tutor, teaching fellow, technician, laboratory demonstrator, research assistant, or assistant research fellow. Designation of a staff member under one of these or other similar job titles will not be sufficient to make them PBRF-ineligible” [6, p.41].

As is evident from table 1 above, Otago and Auckland have taken sizable advantage of this clause to exclude respectively some 32% and some 19% of their academic staff. Does this large proportion of academic staff reflect: a number of research assistants working under supervision in research teams (as may well be the case in a highly research intensive organisation); or a high proportion of academic staff employed on tutor or teaching fellow contracts; or perhaps a high contribution to teaching by PhD students employed on more than a 0.2 contract?

4. TEC RESPONSE

Faced with this inconsistent approach to eligibility across the participating TEOs and sectors, the risk to credibility of any published average quality scores based on this data was significant. TEC has therefore determined that:

“The main change to the reporting of results for 2012 will be how the AQS is calculated and reported. Only staff who receive a funded Quality Category (“A”, “B”, “C” or “C(NE)”) will be included in the calculation of the AQS. This means that any staff whose evidence portfolios (EPs) were assigned the “R” or “R(NE)” Quality Categories by their TEO or by the TEC will be excluded from the calculation of the AQS at all levels...

Using additional metrics to report results

The TEC may also report other information in the final report to ensure that the results of the 2012 PBRF Quality Evaluation are fully contextualised and transparent” [4, p.1].

Thus the onus is no longer on TEOs to exclude researchers from the census, but more on deciding who to return – for instance an institution who returns only those researchers it deems likely to achieve an ‘A’ or ‘B’ rating (which are weighted higher in the formula), may be able to improve their AQS on this basis of calculation, but at the cost of reducing their funding over the six year period. Thus some institutions may have to weigh up reputational impacts against foregone funding. The outcomes of the new formula are likely to be variable across levels of reporting, and smaller institutions with particular strengths in niche areas may now rate highly in terms of their AQS. So comparisons based on size of institution may be more sensible. An illustrative tabulation of the projected impact for the computing related disciplines across University and Institutes of Technology and Polytechnic (ITP) sectors is given in table 2 below:

Table 2 2006 PBRF Data Comparisons – Average Quality Scores for CS, IT, IS Disciplines by Institution new vs. old Formula

2006 Data Comparisons - University Sector (CS, IT, IS)						
	AQS Old		AQS New (Excl R & RNE)			
	Rank		Rank	Rank Diff	% incr	
AUT	3.14	7.00	4.40	3.00	4.00	40.00
Lincoln	2.93	8.00	3.23	8.00	0.00	10.26
Massey	3.54	6.00	3.81	7.00	-1.00	7.68
Auckland	4.25	2.00	4.71	2.00	0.00	10.97
Canterbury	4.12	3.00	4.12	6.00	-3.00	0.00
Otago	3.61	5.00	4.40	3.00	2.00	22.03
Waikato	4.92	1.00	4.92	1.00	0.00	0.00
Victoria	3.92	4.00	4.32	5.00	-1.00	10.08
					0.13	12.63 Mean
2006 Data Comparisons - ITP Sector (CS, IT, IS)						
	AQS Old		AQS New (Excl R & RNE)			
	Rank		Rank	Rank Diff	% incr	
CPIT	0.38	14.00	2.00	11.00	3.00	428.67
EIT	0.77	10.00	2.00	11.00	-1.00	160.00
MIT	0.08	17.00	2.00	11.00	6.00	2340.00
NMIT	0.24	16.00	2.00	17.00	-1.00	738.00
Northland Poly	0.00	18.00				
Open Poly	0.53	13.00	2.00	11.00	2.00	277.14
Otago Poly	0.73	11.00	2.00	11.00	0.00	175.00
Unitec	1.54	9.00	2.75	10.00	-1.00	78.75
WinTec	0.25	15.00	2.00	11.00	4.00	710.00
Other?*	0.62	12.00	6.00	1.00	11.00	875.00
					2.56	642.51 Mean

As can be seen, substantial changes in rankings across institutions, sectors and subjects will result from the new formula. Acknowledging then, the problematic nature of the reporting, and the obvious absurdities likely to be thrown up by the simple league table rankings of scores so loved by newspapers and politicians, TEC has had to consider what approach it may take to maintain credibility. The details of the final reporting by TEC to

enable legitimate comparison between participants in the exercise thus remain unfinished.

5. DEFINING DEGREE TEACHING

As this exercise has demonstrated, defining degree teaching is now becoming somewhat fraught. As noted in [2] New Zealand degrees are by law required to be taught by “people mainly engaged in research” as stipulated by s.254 of the Education Act. If our universities have sizable proportions of their academic staff apparently ineligible for PBRF on whatever grounds, and large proportions of their degree level teaching appears to be being conducted by staff under ‘strict supervision’, how does this demonstrably meet the legal test?

In comparison with the ITP sector where the academics typically are solely responsible for the design of the courses and the assessments, supervision and conduct of lab and tutorial sessions, and do all the marking, how is there equity in defining such academics as eligible for the PBRF, while their strictly supervised counterparts doing very similar work are not.

In an analysis conducted in 2000 Baer [7] classified educational partnerships involving different combinations of shared responsibility for seven educational functions comprising:

1. technology
2. administrative services
3. promotion and marketing
4. content development
5. instruction
6. awarding credits
7. overall quality control

It would normally be agreed that items 4 and 5; 6 (if we consider marking assessments as part of that); and 7 at a broader level, might comprise core activities of degree level teaching. Technology intensive modes of course delivery (which often fully separate design from delivery functions) bring challenges to the definition of teaching. Baer noted that this disaggregation of functions was becoming more typical in private and for-profit models of online distance education provision [7], but similar pressures are also facing public institutions. In a sense the teaching under ‘strict supervision’ represents such a model where academic work is compartmentalized and segregated, with greater prestige and reward being associated with certain duties and lesser with others. Ironically in the undergraduate context, roles closer to the student seem to attach lower value and those more removed (such as the course design and course delivery in a remote transmission model such as a mass lecture), higher prestige. This is of course in direct contrast to the closer relationship between student and professor normally evident in the higher degree supervision model, which rather begs the question of the academy’s valuing of undergraduate degree teaching.

But similar tensions are being seen internationally, with the business school accreditation body AACSB International having recently issued a report [8] raising not merely the perennial tensions between teaching and research, but its implications for accreditation models in a globalised context with a wide diversity of institutions. One of the questions posed by the report was:

How are emerging models of teaching and research impacting assumptions related to business school quality? [8, p. 1]

In its enquiry the Blue Ribbon Committee was forced to address the growing tensions associated with accreditation standard 2, and

how the connections between teaching and research might be assured. The guideline:

“requires intellectual contributions to be produced by “a substantial cross-section of faculty by discipline.” Implicit in this guideline is an assumption that a person’s teaching qualifications are enhanced when that person generates intellectual contributions. The constraint is also, presumably, designed to prevent a situation where most or all of the intellectual contributions to satisfy Standard 2 are generated by a small fraction of the faculty who would interact only with a subset of students” [8, p. 1]

A further requirement is that teaching and research are connected through a set of student- faculty (*academic staff in US terminology*) interactions, the rationale for which is elaborated below:

The role of interaction in higher education makes it especially salient that faculty members have in-depth knowledge in their teaching fields. To receive high-quality education students must have access to substantive experts in the respective disciplines. Faculty members must be capable to respond to questions from a deep understanding of theoretical, empirical, and practical knowledge of the subject matter they teach.[8, p.3]

However the report notes several challenges to this requirement, among them:

1. “Increasing utilization of models in which faculty focus on teaching or research.
2. Increasing utilization of instructional models that unpack and redefine the teaching function.
3. The rise of programs that do not employ a core faculty of the organization(s) delivering the program.
4. The disciplinary bounds of research and teaching are blurring through, for example, multidisciplinary, cross-disciplinary, and interdisciplinary initiatives.
5. Overarching concerns about the overall quality and relevance of intellectual contributions, the sustainability of the research function, and that Standard (2) is decreasing in importance in favor of the faculty qualifications Standard (10) [8, pp.3-4]”.

These international trends are not unique to the Business disciplines, where the challenges for relevance and rigour, and finding ways to value substantial practitioner experience exist, just as they do in the computing disciplines. However, resource constraints in the ITP sector and increasing use of collaborative models bring their own additional pressures.

For instance in the case where an institution decides to offer a degree programme originally developed in another institution, under a collaborative provision model such as that promoted by the Tertiary Accord of New Zealand (TANZ) [9]. How does that impact on the definition of degree teaching? The host institution will have designed the curriculum and the assessments, so what scope does that leave for the partner institution adopting the same programme?

As a delivery partner are they always in a subsidiary role, which enables them to ride on the research coattails of the originator? Are their academics always limited merely to the roles of “instruction” and “awarding of credits” (5 & 6) of Baer’s [8] educational functions? Is this sufficient to demonstrate a full linkage between research and teaching? Or are the communities of practice which it is hoped will develop around such models new mechanisms for strengthening the research teaching nexus, by building joint experience and critical mass. From our differing and cross sectoral perspectives as degree monitor, accreditation panelist, Associate Dean Research and Head of School we certainly hope so.

6. CONCLUSION

This paper has reviewed the process of determining eligibility in New Zealand's latest (2012) Performance Based Funding Round, and the ensuing debates, analyses and adjustments when it became obvious that differing yardsticks were being applied. From the perspective of ITP sector and CITRENZ researchers it appears that a very uneven playing field has developed, based upon differing definitions of 'teaching on a degree programme'. However these tensions have also been shown to be not only global but local to the ITP and CITRENZ sector. They are simply part of the everyday challenges faced by institutions as they try to develop and deliver sound and credible degree level teaching, informed and strongly linked with the research missions of their institutions.

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