



# Performance-based Research Fund Summary Report: Process Assurance

**Tertiary Education Commission**

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# 1. Introduction

## Objective

The Audit Methodology for the Performance-Based Research Fund (PBRF) 2018 Quality Evaluation includes two phases:

1. Process Assurance
2. Data Evaluation

This report presents a summary of our findings from the first phase 'Process Assurance'. The objectives of this phase are to:

- Provide assurance to the Tertiary Education Commission (TEC) that the Performance-Based Research Fund guidelines (PBRF guidelines) for Tertiary Education Organisations (TEOs) participating in the 2018 Quality Evaluation are being consistently and correctly applied by all participating TEOs.
- Ensure TEOs have adequate systems and controls in place to participate in the Quality Evaluation.

## Scope

In May 2017, we issued an audit questionnaire to all TEOs (48) eligible to participate in the Quality Evaluation. The questionnaire sought to understand whether each TEO intended to participate. TEOs that intended to participate were asked to estimate their number of participating staff and to describe the processes they had established or were expecting to establish to conform to the PBRF guidelines.

Each participating TEO was subject to a site visit or a remote audit. The number of participating staff estimated by the TEO in the audit questionnaire determined whether audit procedures were conducted onsite. We visited all TEOs expecting to have greater than 110 participating staff. Appendix 1 sets out the list of participating TEOs and whether they were subject to a site visit or a remote audit.

The nature of audit work conducted for site visits or remote audits is mostly the same. More detailed process interviews and testing of larger samples of staff was completed during site visits.

## Approach

Phase 1 involved assessing the processes each TEO has in place to conform to the PBRF guidelines. This was based on the results of the audit questionnaire, interviews, and observations from either site visits or remote audits. We also reviewed a limited amount of documentation on a sample basis to assess whether the PBRF guidelines were being correctly applied. Our audit was undertaken between 27 July and 17 November 2017.

## 2. Overall assessment

Overall, all TEOs have implemented adequate processes to implement the PBRF guidelines consistently and correctly. Minor inconsistencies were identified in some areas and these are discussed in Section 3 - Themes from the process assurance phase. We have made recommendations to each of the affected TEOs to address these inconsistencies.

All TEOs have implemented appropriate systems and controls to participate in the Quality Evaluation.

- Universities are generally very well prepared for the Quality Evaluation, and approach the PBRF as business-as-usual.
- Smaller TEOs are typically less prepared than Universities. However, we consider the level of preparation to be appropriate given the smaller number of staff submitting Evidence Portfolios (EPs). TEOs with fewer participating staff are able to more closely manage the collection of staff eligibility data and the preparation of EPs.
- Larger TEOs, with a greater number of staff, typically take a systems-based approach to assessing the eligibility of their staff. The systems-based approach requires greater preparation to bring together data and build rules to apply the PBRF guidelines to this data but is generally an efficient and effective approach.
- Many of the staff responsible for coordinating TEO PBRF submissions have previously participated in the PBRF, which has helped to ensure knowledge around the PBRF is maintained internally, and support TEO preparations.
- We did not identify any instances where TEOs had engaged in practices that could be considered inconsistent with the spirit and principles of the PBRF.

## 3. Themes from the process assurance phase

There were three main themes from our audit which are discussed in this section. We have indicated in brackets in each sub-heading the number of TEOs impacted by this theme.

### **New and emerging researcher criteria (all TEOs)**

There is new criteria for determining new and emerging researcher status. This is a result of a relatively high rate of errors in the application of the 2012 criteria and policy changes which have increased the financial incentives for new and emerging researchers that receive the C(NE) Quality Category.

All TEOs have found it time-consuming and difficult to apply the new and emerging researcher criteria. The new and emerging researcher status is specifically for staff members who started their research career in the 2018 Quality Evaluation assessment period (1 January 2012 – 31 December 2017). The purpose is to allow these staff members, who are starting to build a platform of research outputs, but have had limited opportunities to engage in research contribution activities, to be recognised and funded under the PBRF (refer to PBRF TEO guidelines, October 2017 page 19).

### **Estimates of the proportion of staff likely to be new and emerging**

Across the sector, TEOs expect an average of 15% of their staff submitting EPs to be classified as new and emerging. The average varies across the universities between 8% and 20%.

Institutes of Technology, Polytechnics, Wānanga and Private Training Establishments vary in their estimates but expect 28% of all staff submitting EPs to be new and emerging. The variation in the number of new and emerging staff at these TEOs is likely due to the:

- Smaller number of staff at these TEOs,
- Promotion of courses to degree-level in some TEOs, and a corresponding expectation that staff teaching these courses begin to undertake research.

### **Application of the criteria**

The new and emerging researcher criteria now requires TEOs to have a much greater understanding of the employment and research history of each staff member.

Throughout the process assurance phase, we have observed substantial variation in how TEOs apply these criteria, and the quality of evidence available to support decisions made by TEOs. We have worked with each TEO to ensure a consistent approach to how they assess each staff member against these PBRF guidelines, and worked with the TEC to clarify the criteria and prepare a decision-tree to support TEOs with their assessments (PBRF TEO guidelines, October 2017 pages 19 - 22 and 30).

For each new and emerging staff member, TEOs must follow the approach described below:

- Obtain a Curriculum Vitae (CV) either from existing records the TEO holds or directly from the researcher.
- Review CVs to assess whether the staff member met the substantiveness test for research for the first time on or after 1 January 2012. TEOs must review each researcher's role before 1 January 2012 that may have involved the design of research activity or academic supervision of graduate research students.
- Review each researcher's history of research outputs before 1 January 2012 to identify any that meet the PBRF definition of research (PBRF TEO guidelines, October 2017 page 14).
- Understand whether the staff member was PBRF-eligible in any of the previous Quality Evaluations. TEOs can send the NSN and name of their staff to [pbrfhelp@tec.govt.nz](mailto:pbrfhelp@tec.govt.nz) to determine whether the staff have been PBRF-eligible in the 2003 and 2006 Quality Evaluations or whether they submitted an EP in the 2012 Quality Evaluation.  
In the 2012 Quality Evaluation, the TEC did not collect data on whether staff were PBRF-eligible but did not submit an EP. TEOs will need to review their internal records (where relevant) and the staff member's CV to determine whether they were eligible in 2012.
- The review of CVs should be supplemented by searches of public records and data held internally by the TEO to confirm information within the CV is complete.

- Any roles or research outputs identified from the review of the researcher's CV and other records should then be assessed against the allowable exclusions. For example, research was not independent, research was undertaken in a supervised or support role.
- The results of the assessment of the above points should be documented on the CV or in a file note. See Appendix 2 for an example of the documentation we expect to be retained.

### Calculation of a full-time equivalent (28 of 35 TEOs)

In previous Quality Evaluations, one full-time equivalent (FTE) was not defined in the PBRF guidelines, and there were inconsistencies in how participating TEOs determined an FTE. The 2018 PBRF guidelines clarified the definition of one FTE to be 37.5 hours per week. The calculation of FTE was a major focus area during the process assurance phase. We noted three issues with how TEOs calculate the FTE of their staff:

1. **Incorrect calculation of FTE for staff with multiple contracts (15 of 35 TEOs):** In the 2012 Quality Evaluation, the most common error identified in the audit related to the calculation of FTE. The error was most common for staff who had more than one employment agreement (either concurrent or consecutive) during the staff eligibility period. This continues to be a challenge for many TEOs ahead of the 2018 Quality Evaluation. The most common errors related to:
  - TEOs recording the FTE of a single contract in their staff data files (rather than determining an average FTE across all contracts), or
  - TEOs being provided FTE data by Human Resources which was not calculated according to the requirements in the PBRF guidelines.
2. **Insufficient documentation on what constitutes one FTE (13 of 35 TEOs):** The expected working hours were not specified in employee contracts at some TEOs. It was therefore difficult to confirm that the FTE calculated is correct. In these circumstances, we obtained extracts from the TEO's Human Resources (HR) system (which confirmed the hours per day or week on which leave is calculated) and/or memorandums from the HR Director to confirm the denominator used in FTE calculations.
3. **Incorrect denominator (6 of 35 TEOs):** Individual or collective employment agreements at some TEOs stated that one FTE was considered to be fewer or greater than 37.5 hours, for example, 36 or 40 hours per week. Consequently, the affected TEOs were incorrectly calculating the FTE of their staff (for PBRF purposes). The PBRF guidelines require that 37.5 hours per week be used as the denominator in all circumstances. This has the effect of slightly reducing the FTE of full-time staff at TEOs where full-time staff are expected to work 36 hours per week. For example, an employee working 36 hours per week is recorded as 0.96 FTE ( $36/37.5$ ) in the PBRF staff data file.

### Teaching and/or research expectations (4 of 35 TEOs)

All staff participating in the Quality Evaluation must have employment or service contract functions that include research or 'degree or postgraduate-level teaching', or both.

Typically these teaching and research functions are captured in the staff member's employment agreement or job description. We identified several instances where these functions were not documented. This needs to be addressed before these staff are eligible to participate in the Quality Evaluation.

We refer TEOs with staff in this position to page 24 of the PBRF guidelines, which describes a broad range of documents where teaching and research functions may be described. This section also allows for TEOs to address such discrepancies ahead of the 2018 Quality Evaluation.

### Staff who are not resident in New Zealand (1 of 35 TEOs, but likely to affect most large TEOs)

Only staff members considered to be based in New Zealand are eligible to participate in the 2018 Quality Evaluation. The PBRF guidelines prescribe how to determine whether a staff member is based in New Zealand. This considers the amount of time they are 'actually living in New Zealand' and their FTE with the submitting TEO.

We identified errors in the application of the PBRF guidelines for 14 staff not exclusively based in New Zealand during the 2012 audit. This error is also present in our process assurance work for the 2018 Quality Evaluation. We continue to identify instances where TEOs were not aware that a staff member expected to submit an EP was not resident in New Zealand.

All TEOs need to perform a thorough assessment of the residency of their staff employed for less than 0.5 FTE. This is particularly important where there are indicators that a staff member may spend time overseas. Common indicators may include:

- roles with overseas universities
- titles such as Visiting or Emeritus Professor
- a foreign address in the HR system and /or employment contract.

### **The verification of research activity within EPs (19 of 35 TEOs)**

We sought to understand the procedures established by TEOs to ensure the accuracy of research outputs and research contribution items.

#### **Research outputs**

Some TEOs have not yet implemented robust procedures to check the accuracy of research outputs and we continue to identify fundamental and serious errors in research outputs (these are defined in the PBRF TEO guidelines, October 2017 pages 103 and 104). We strongly recommend that all TEOs ensure all research outputs are verified (using a consistent methodology) to confirm that outputs exist, were published in the correct period to be considered eligible and are accurately recorded.

#### **Research contributions**

Research contribution items will be audited for the first time in 2018. We do not expect the same standard of verification as with research outputs. However, we expect TEOs to perform a limited review of research contributions to ensure that sufficient supporting documents are available to confirm the validity of claims and that the contribution occurred within the eligible period. Where possible, we encourage TEOs to ensure that centrally held information is used to populate research contribution items that relate to research grants received and supervision arrangements as this reduces the opportunity for error.

Our sampling approach will seek to audit research contributions likely to have the greatest impact on an EP. Queries will only be raised with TEOs in the event of significant discrepancies.

## 4. Clarifications to the PBRF guidelines

Based on observations from across the audit programme and questions raised by participating TEOs, we provided recommendations to the TEC around areas where additional clarifications to the PBRF guidelines would be helpful. These changes were published in October 2017 and covered the following areas:

- Clarifying the strengthened substantiveness test for non-TEO staff to provide guidance to TEOs on how to apply the term 'three years-bridging the staff eligibility date' (PBRF TEO guidelines, October 2017 page 19).
- Clarifying the new and emerging researcher eligibility criteria to remove a footnote that provided an exemption for certain staff. The footnote was inconsistent with the other criteria and was therefore removed (PBRF TEO guidelines, October 2017 page 20).
- Clarifying the methodologies allowed to be used by TEOs to calculate average FTE. Monthly, weekly or daily averaging is acceptable, providing a TEO is consistent across all staff (PBRF TEO guidelines, October 2017 page 25).
- Clarifying the definition of secondments to exclude secondments between TEOs or other external organisations (PBRF TEO guidelines, October 2017 page 26).
- Developing a decision-tree to support TEOs with the application of the new and emerging criteria (PBRF TEO guidelines, October 2017 pages 29 & 30).

# Appendix 1 – Participating TEOs & Audit Approach

TEO NAME	AUDIT TYPE
Ara Institute of Canterbury	Remote audit
Auckland Institute of Studies	Remote audit
Auckland University of Technology	Site visit
Bethlehem Tertiary Institute	Remote audit
Carey Baptist College	Remote audit
Eastern Institute of Technology	Remote audit
Good Shepherd College - Te Heparā Pai	Remote audit
ICL Graduate Business School	Remote audit
IPU New Zealand	Remote audit
Laidlaw College	Remote audit
Lincoln University	Site visit
Manukau Institute of Technology	Remote audit
Massey University	Site visit
Media Design School	Remote audit
Nelson Marlborough Institute of Technology	Remote audit
New Zealand College of Chiropractic	Remote audit
New Zealand Tertiary College	Remote audit
Northland Polytechnic	Remote audit
Open Polytechnic of New Zealand	Remote audit
Otago Polytechnic	Remote audit
Te Wānanga o Aotearoa	Remote audit
Te Whare Wānanga o Awanuiārangi	Remote audit
Toi Ohomai Institute of Technology	Remote audit
Toi Whakaari: New Zealand Drama School	Remote audit
UCOL	Remote audit
Unitec Institute of Technology	Site visit
University of Auckland	Site visit
University of Canterbury	Site visit
University of Otago	Site visit
University of Waikato	Site visit
Victoria University of Wellington	Site visit
Waikato Institute of Technology	Remote audit
Wellington Institute of Technology	Remote audit
Whitecliffe College of Art and Design	Remote audit
Whitireia Community Polytechnic	Remote audit

## Appendix 2 – Example documentation of new and emerging assessment

*The examples provided above are of a general nature and are not intended to address the circumstances of any particular staff member or TEO. Although we endeavour to provide accurate and timely information, this guidance is not intended to replace or override the requirements within the PBRF guidelines.*

Dr I M Auditor

Decision: New and Emerging

October 2017

### TERTIARY EDUCATION

2008 - 2013	University of New Zealand, Ph.D. Major: Financial accounting Supervisor: John Smith, Ph.D.
2005 – 2008	University of Australia, MCOM Major: Financial accounting
2001 - 2005	Studios College, BCOM Major: Auditing

### EMPLOYMENT HISTORY

August 2013 - Present  
Lecturer, Counting College

*This role started after 1 January 2012 and is therefore not relevant to the assessment.*

January 2011 - May 2013  
Research Officer, University of New Zealand  
Future Auditing project entitled: “Robotics and accounting – the rise of the bean-counting machines”.

*Research Officer role involved in data analysis only. No role in the design or preparation of the outputs and therefore did not meet the substantiveness test for research. The staff member was not named as a co-author or sole author while working in this role. Therefore, the substantiveness test was not met prior to 2012.*

September 2008 - Teaching Assistant, University of New Zealand  
December 2010

*This was a teaching only position with no research element. This duration of this position did not cross a PBRF eligibility year and therefore was not considered to be PBRF-eligible.*

September, 2005 - Accountant, ABC Accountants Limited  
March, 2008

*This was a professional role with no teaching or research responsibilities.*

## RESEARCH PUBLICATIONS

### JOURNAL ARTICLES

**Auditor, I. M.**, Smith, J, (2011). The future of accounting. *Journal of Robotics*.

*Output summarises findings from researcher's PhD, prepared under supervision of J Smith.*

### POSTER PRESENTATIONS

**Auditor, I. M.**, Bloggs, J, (2009). The capability of auditors to provide assurance over financial instruments. Poster presented at the *Young Accountants Guild Conference, Honolulu, USA*

*Output prepared as part of masters programme. Although the supervisor was not listed in the CV, we confirmed that this was produced under the supervision of J Bloggs. Additional supplementary information to support this is available.*

**Auditor, I. M.**, Accounting for Mannequins

*This is a textbook type publication that does not meet the PBRF definition of research.*

### Other considerations

Public record searches for this researcher did not identify any research outputs or relevant employment other than those listed here. Based on the analysis above, we conclude that the staff members meets the new and emerging criteria.

The TEC confirms that this staff member has not been PBRF-eligible in previous Quality Evaluations.

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