

### **Performance-Based Research Fund**

Sector Reference Group – Consultation Paper #3

Developing Evidence Portfolios – operational guidance for the Research Contribution component

### **Contents**

Purpose 3
Design principles for the 2018 Quality Evaluation3
Background to the Research Contribution component3
Ministry of Education review of the PBRF4
Operational guidance on the Research Contribution component5
What is Research Contribution?5
Research Contribution categories6
Information on Research Contribution to be included in an EP7
Presentation of Research Contribution items9
Allowing items outside the assessment period9
Evidence and audit
Scoring the Research Contribution component
Other points of note
Providing feedback
Appendix 1: Objectives and principles of the PBRF14
Appendix 2: 2012 Quality Evaluation Guidelines for completing the Peer Esteem and Contribution to the Research Environment components16
Appendix 3: Proposed Research Contribution component categories and descriptions for the 2018 Quality Evaluation
Appendix 4: 2012 Quality Evaluation Guidelines for scoring Peer Esteem and Contribution to the Research Environment components29
Appendix 5: Links to relevant papers32

Name	Status	Distribution
Developing Evidence Portfolios – operational guidance for the Research Contribution component	CONSULTATION PAPER	Tertiary education sector and other stakeholders
		Online feedback to: www.surveymonkey.com/s/XC3HBSJ
		Other feedback and questions to:
		PBRFSRG@tec.govt.nz
		Closing date: 5pm, Wednesday 11 February 2015

### **Purpose**

- 1. This paper has been prepared as part of the consultation for the design of the Performance-Based Research Fund (PBRF) 2018 Quality Evaluation. Specifically it:
  - provides information about the review of the PBRF by the Ministry of Education and the decisions made by Cabinet in relation to the establishment of the Research Contribution component;
  - provides information about the background and purpose of the Peer Esteem (PE) and Contribution to the Research Environment (CRE) components;
  - sets out the proposed operational framework for the submission of items of Research Contribution in the 2018 Quality Evaluation; and
  - invites feedback on the proposals set out in this paper; and
  - invites feedback on any other matters relating to the Research Contribution component not covered in this paper.
- 2. This paper also introduces and seeks feedback on options for the assessment and scoring of the Research Contribution component. More detailed information about changes to assessment and scoring will be included in the paper on the assessment framework.

### **Design principles for the 2018 Quality Evaluation**

- 3. The work of the Sector Reference Group (SRG) in the design of the 2018 Quality Evaluation is based on the following principles and considerations:
  - upholding the objectives and aims of the PBRF set out in Appendix 1;
  - drawing on the lessons learned as part of the previous Quality Evaluations;
  - accessing relevant experience and expertise across the SRG and the wider tertiary education sector;
  - ensuring that any proposed changes are exposed to rigorous sector and expert scrutiny;
  - achieving a level of consensus regarding how the 2018 Quality Evaluation should be conducted; and
  - avoiding changes that result in unreasonable compliance or high costs unless there is a robust rationale that indicates changes will result in significant improvements.

#### **Background to the Research Contribution component**

- 4. In the 2003, 2006 and the 2012 Quality Evaluation, the Evidence Portfolios (EPs) submitted by a tertiary education organisation (TEO) for their eligible staff members consisted of three components:
  - The Research Output component which consisted of up to four nominated research outputs (NROs) and up to 30 other research outputs (OROs). The

purpose of this component was to highlight the quality of the staff member's research, through the NROs, along with reflecting the breadth and/or depth of their research activity through their overall platform of research (both the NROs and OROs). This component accounted for 70% of the total score available.

- The Peer Esteem (PE) component which consisted of up to 30 items of esteem. In the context of PBRF, this is used as an indicator of the quality of the staff member's research. It was concerned with the recognition of the staff member's research by their peers, rather than esteem for the staff member's other activities within the TEO, their subject area, or the academic community. This component accounted for 15% of the total score available.
- The Contribution to the Research Environment (CRE) which consisted of up to 30 items of the contributions that the staff member had made to a vital, high-quality research environment. This component accounted for 15% of the total score available.
- 5. The operational details for the submission of PE and CRE items as part of the 2012 Quality Evaluation was detailed in the *PBRF Quality Evaluation Guidelines 2012* ("2012 Guidelines"). This information has been included in this paper as Appendix 2.

### Ministry of Education review of the PBRF

- 6. During 2012/2013 the Ministry of Education undertook a review of the PBRF in collaboration with the Ministry of Business, Innovation and Employment and the Tertiary Education Commission (TEC).
- 7. This review sought to build on the existing performance of the PBRF to identify how it could be improved. It included a specific focus on what changes could be considered to increase the efficiency and effectiveness of the PBRF through the simplification of the Quality Evaluation process.
- 8. Between August and October 2013, public feedback was sought on a range of the proposed changes. One of these changes was the proposal to merge the PE and CRE components of an EP into a single component that would reflect the esteem and contributions that a staff member's research had within and outside of academia. It was also proposed to significantly reduce the number of items submitted in the new component from 60 down to eight.<sup>1</sup>
- 9. The rationale for this proposal was that developing items for EPs can be time-consuming for individual academics, and while the assessment of these items is based on the quality, there was a perception in the sector that quantity was a significant factor in the assessment and scoring. Another factor influencing this proposal was that following the 2012 Quality Evaluation, the peer review panels expressed concern about the quality of PE and CRE items and the unnecessary duplication between these components. As a result, it was believed that combining the two components would remove duplication, reduce transaction costs, increase the quality of entries, and create an opportunity for the guidelines to encourage a range of items to be submitted, including items of research contribution outside academia.

4

<sup>&</sup>lt;sup>1</sup> Ministry of Education, Review of the Performance-Based Research Fund Consultation Document, August, 2013, p.19.

- 10. The feedback received by the Ministry of Education indicated general support for the proposal to merge the two components, with reservations regarding the fact that the two components reflect distinct dimensions of a researcher's activity. This is also mirrored by the assessment which uses one as a proxy for quality, while the other is used to measure the contribution the researcher makes to an overarching PBRF goal. There were mixed views within the sector regarding the reduction in the number of items that could be included, with the majority of respondents understanding the rationale for the reductions but concerned that a reduction to eight items would make the assessment of this component difficult.<sup>2</sup>
- 11. In February 2014, Cabinet decided that the PE and CRE components would be merged into the single Research Contribution component consisting of up to 15 items, and confirmed that operational guidance on the Research Contribution component would clarify what examples from inside and outside of academia could be included.

### **Operational guidance on the Research Contribution component**

- 12. The 2012 Guidelines provided the sector with advice on what could be included within EPs. The guidelines for the 2018 Quality Evaluation ("2018 Guidelines") will similarly provide operational details on developing the Research Contribution component of an EP.
- 13. The SRG has worked on the following assumptions when developing the operational guidance for the Research Contribution component proposals:
  - The 2018 Quality Evaluation will operate on an assessment period of 1 January 2012 to 31 December 2017.
  - In order for items to be eligible for inclusion in EPs submitted to the 2018 Quality Evaluation, they must have been realised within the assessment period.
  - The provisions for new and emerging researchers, which ensures they are not disadvantaged when being assessed for the "C(NE)" Quality Category if they provide no or limited evidence in the PE and CRE components, remains in place and relevant to the Research Contribution component.
  - The character limit of 1024 remains in place for each example included in an (Evidence Portfolio) EP.
  - The component will account for 30% of the total score available.

#### What is Research Contribution?

14. The previous Quality Evaluation guidelines have defined the PE and CRE components in terms of what they are and how they contribute to the assessment of the EP. For example, peer esteem in the context of the PBRF is defined as "an indicator of the quality of the staff member's research. It is concerned with the recognition of the staff member's research by their peers (rather than esteem for the staff member's other activities within the TEO, their subject area, or the academic community)"<sup>3</sup>, while the

<sup>&</sup>lt;sup>2</sup> Ministry of Education, Review of the Performance-Based Research Fund, Summary of Submissions received on the Review of the Performance-Based Research Fund Consultation Document, March, 2014, pp. 44-49.

<sup>&</sup>lt;sup>3</sup> TEC, PBRF: Quality Evaluation Guidelines 2012, May 2013, p.69.

CRE component is defined as "the staff member's contribution to a vital, high-quality research environment". 4

- 15. As the Research Contribution component is an amalgamation of the PE and CRE components, it is important that the definition of the new component reflect these aspects but also ensures that it is broad enough to encompass items of a researcher's contribution outside academia.
- 16. The principle that sits behind this definition is that the Research Contribution component should reflect the broad range of activities and outcomes that are undertaken and/or achieved by a researcher relative to opportunity, and be appropriate to an individual's research discipline.
- 17. Based on this principle, the SRG proposes the following definition for the Research Contribution component and how it will contribute to the assessment of the EP.

In the PBRF, the Research Contribution component of an Evidence Portfolio allows staff members to highlight the economic, social, cultural, and environmental benefits that their research has had in a national and international context. These benefits can include the advancement of Mātauranga Māori as well as supporting technology and knowledge transfer to national and international businesses and communities, iwi, government and society.

The Research Contribution component provides staff members with an opportunity to demonstrate:

- the esteem in which their peers, within and outside of TEOs, hold their research
- their role, and the contributions they make, in creating a vital, high-quality research environment, and
- the impact that their research has had outside academia.
- 18. The SRG seeks feedback on the proposed definition and whether it accurately describes the intent of the Research Contribution component and how it contributes to the assessment of the EP.

#### Research Contribution categories

- 19. As part of previous Quality Evaluations, staff members were required to categorise their research-related activities in accordance with the nine different types of PE and the nine types of CRE.<sup>5</sup>
- 20. As noted previously, the peer review panels in the 2012 Quality Evaluation identified significant duplication between items submitted in both PE and CRE components. The new Research Contribution component creates the opportunity to consolidate the previous categories and develop new categories to provide a better reflection of the range of researcher activities, regardless of the specific discipline or career stage.
- 21. The SRG proposes 12 Research Contribution categories which aggregates the previous 18 PE and CRE categories and introduces two new categories that allow researchers to include evidence-based examples of the contributions they make to the wider community in New Zealand and internationally; and uptake and impact of their research outside of academia.

-

<sup>&</sup>lt;sup>4</sup> TEC, PBRF: Quality Evaluation Guidelines 2012, May 2013, p.73.

<sup>&</sup>lt;sup>5</sup> More information on these can be found in Appendix 2.

- 22. The SRG has also developed a descriptor, with indicators that include but are not limited to the examples set out in the descriptor, for each of the categories. The purpose of the description and the indicators are to assist researchers to categorise their activities for PBRF purposes. There are activities that may be considered as more than one category. In these cases, staff members would need to decide which category best suits the activity. The range of examples has been developed to include activities that are likely to be relevant to new and emerging researchers as well as a variety of disciplines.
- 23. Full details of the categories can be found in Appendix 3 and the SRG welcomes feedback on all information set out in the table, but specifically:
  - Do the 12 proposed categories cover all aspects of esteem, contribution and impact that could be expected in the context of PBRF?
  - Are there any activities not covered by these categories?
  - Is the category description useful?
  - Are there better or more relevant examples of activities that should be included as indicators for the categories?

#### Information on Research Contribution to be included in an EP

- 24. For the 2012 Quality Evaluation, staff members were able to submit up to 30 items in the PE and CRE components, with a total of 60 items in all. The 2012 Guidelines required staff members to complete the PE and CRE descriptions with details of the example or activity, relevant dates, and other organisations involved within a 1024 maximum character limit.
- 25. For the 2018 Quality Evaluation, staff members will be allowed to submit up to 15 items of Research Contribution. Each example will need to contain sufficient information to ensure that the TEC can identify that the example is eligible in terms of the assessment period, as well as allowing peer review panels to determine an appropriate score for the component.
- 26. The SRG proposes that the status quo be maintained for the most part, however the SRG proposes including information in a tabular form for some categories, for example supervision of students and research funding. This would mean a summary table of quantitative data that is supported by a narrative would be presented in the EP.
- 27. In the case of information on the supervision of students, the name of the supervised student would not be required and the narrative information would focus on the staff member's role in the supervision. Information could be presented in the EP in a tabular format as shown below.

Student su	upervision in the PE	BRF period (20	)12 – 2017)				
Status	Туре	Senior or sole supervisor	Co- supervisor	Associate or assistant supervisor	Total	Maori	Pacifica
In	PhD						
progress	Masters (Research)						
	Honours, PGDip or Taught Master Projects						
	Summer researcher/intern						
	Visiting researcher						
	Postdoctoral fellow						
Complete	PhD						
	Masters (Research)						
	Honours, PGDip or Taught Master Projects						
	Summer researcher/intern						
	Visiting researcher						
	Postdoctoral fellow						

28. The table would also reflect the different types of programmes supervised (Post Graduate and Graduate Diplomas, Honours, international interns, post-doctoral fellows etc). In order to ensure consistency across EPs, the 2018 Guidelines would include more detailed definitions of each of these categories. The 2018 Guidelines would also set out the narrative information required that would provide an appropriate level of granularity, e.g. details on the stage of the supervision (completed vs. in progress), the role in the supervision (chief supervisor or other supervisor).

- 29. The SRG seeks feedback on the inclusion of summary qualitative data for examples of supervision of students and research funding, as well as whether there are other categories where information could be provided in a table.
- 30. In the 2012 Quality Evaluation, it was common practice with some PE and CRE categories to list a number of similar activities within the one entry. With the reduction in the number of entries the SRG has considered whether the 1024 character limit of should be extended or maintained. The SRG proposes to maintain the character limit for the narrative supplied for each item (any data included as a summary table would be excluded from the character count) but seeks feedback on whether this is appropriate.

#### Presentation of Research Contribution items

- 31. The 2012 Quality Evaluation guidelines allowed PE and CRE items to be ordered in accordance with the staff member's preference and this order was retained when the panel member viewed the EP. Staff members were also advised to concentrate on providing the most significant items where they had more than the 30 items allowed for each component.
- 32. Some TEOs submitting EPs to the 2012 Quality Evaluation clustered items by the PE and CRE category, while others did not. Feedback from some peer review panels was for a greater level of consistency in the presentation of this information. The SRG seeks feedback on the following options for presenting Research Contribution examples:
  - Option 1: Maintain the status quo.
  - Option 2: Require all Research Contribution items to be clustered by category (this is the SRG's preferred option).
  - Option 3: Provide advice on the standardised ordering of Research Contribution categories in the panel-specific guidelines.

#### Allowing items outside the assessment period

- 33. In previous Quality Evaluation rounds provision has been made to allow staff members to include PE and CRE items from outside the assessment period under certain conditions.
- 34. In the 2012 Quality Evaluation the guidelines advised that for PE, staff members could include research related major prizes and awards from outside the assessment period but the panel would give primary weight to those peer esteem items that have been gained within the assessment period. Staff members could also include items of CRE from outside the assessment period if the contribution was outstanding or of particular significance.
- 35. Peer review panel members raised concerns with the TEC during the assessment process regarding the validity of items in the PE and CRE component. As a result of discussions between the submitting TEO and the TEC, a number of PE and CRE were removed from EPs due to the items being outside the assessment period and not fulfilling the exception provisions. The TEC identified, at the time, that the lack of definition regarding what could be considered a 'major prize or award' or what contributions could be considered 'outstanding or of particular significance' resulted in a lack of clarity and consistency in the application of the provision.

36. The SRG proposes to remove the exceptions provisions for the Research Contribution component and seeks feedback on this proposal.

#### Evidence and audit

- 37. In previous Quality Evaluations, the PE and CRE components have not required evidence to support the validity of the items provided in the EP. These components were not subject to the same level of audit as the research output component, in particularly the four nominated research outputs. The factors in the decisions not to audit were, primarily, the volume of items and the relatively low weighting of the PE and CRE components in comparison to the Research Output component.
- 38. As noted above, the TEC did follow up panellist concerns regarding the eligibility of items outside the period, along with other items that did not appear to be legitimate or duplicated other items. The TEC either partially or entirely removed 67 items from 8 EPs; however it is likely that this duplication was more prevalent as evidenced by the feedback from the peer review panels.
- 39. The lack of a formalised approach to checking of PE and CRE items means that there is potential for inequitable assessment of EPs. With the reduction in the number of items allowed and the combined weighting for the component, invalid items within an EP could have a significant impact on the final Quality Category result. However, the inclusion of additional evidence to support these items has the potential to increase the compliance burden for staff members and the submitting TEOs.
- 40. In light of this, the SRG seeks feedback on whether or not the items in this component should be included in the audit process. The SRG has identified three options for consideration, however feedback is welcome on other options:
  - Option 1: No evidence required in the EP and no formal audit requirements but panel members can raise concerns which the TEC will follow up with the TEO (status quo)
  - Option 2: No evidence required in the EP but the component included in the TEO audit process, and TEOs may be required to provide evidence if requested (this is the SRG's preferred option).
  - Option 3: Evidence provided in the EP and the component included in the TEO audit process.

#### Scoring the Research Contribution component

Scoring scale

- 41. In the 2012 Quality Evaluation, the three components of an EP were each scored by peer review panellists on a scale of 0 7 with '7' being the highest point on the scale and '0' the lowest. A score of '0' would reflect that no evidence has been provided in the EP for the component. Only whole scores could be allocated and the scores of '6', '4' and '2' were used as tie-points. A descriptor for each of the tie-points, which encapsulate the standard expected for that score, was used to assist with the scoring.
- 42. The scoring system was also weighted with the Research Output component weighted at 70% of the total score, with the remaining 30% of the total score split equally between the other two components. The scoring system effectively means that the PE and CRE

components combined equated to 14 points as shown in the scoring grid below for all except new and emerging researchers.

		RO Score						
Combined CRE & PE score	0	1	2	3	4	5	6	7
0	0	70	140	210	280	350	420	490
1	15	85	155	225	295	365	435	505
2	30	100	170	240	310	380	450	520
3	45	115	185	255	325	395	465	535
4	60	130	200	270	340	410	480	550
5	75	145	215	285	355	425	495	565
6	90	160	230	300	370	440	510	580
7	105	175	245	315	385	455	525	595
8	120	190	260	330	400	470	540	610
9	135	205	275	345	415	485	555	625
10	150	220	290	360	430	500	570	640
11	165	235	305	375	445	515	585	655
12	180	250	320	390	460	530	600	670
13	195	265	335	405	475	545	615	685
14	210	280	350	420	490	560	630	700
Quality Category	F	₹	С		В			A

- 43. This scoring system also allowed panellists to differentiate scores for EPs which had, for example, strong PE but limited CRE or vice versa.
- 44. The SRG has considered alternatives to the 0-7 point scoring scale, such as a 0-14 point scale for the Research Contribution component or allowing half points across the scoring of the EP, however these are not considered practical.
- 45. The SRG proposes to retain the 0-7 point scoring scale for the Research Contribution component but seeks feedback on this proposal and whether there is another alternative scoring scale that should be considered.

#### Weighting of Research Contribution component categories

46. The previous Quality Evaluation processes have not weighted any of the PE or CRE categories, or provided any advice through the main or panel-specific guidelines on the balance of categories within an EP that could reasonably expect to receive a higher or lower score. Advice of this nature was provided regarding the Research Output component:

Research outputs will be assessed primarily on their quality:

- All research activity, whether basic, fundamental, strategic, artistic or applied, will be assessed against the same broad indicators of quality
- All types of research outputs will be considered on their merits. No particular research output will be considered to be of higher quality than any other simply because of their type
- Although formal processes of academic peer review or other forms of quality assurance may provide the peer review panel with some assurance about quality, the absence of such review or other formal mechanisms of quality assurance will not in itself be taken to imply lower quality.<sup>6</sup>

Research output scores are likely to be higher where the platform of research in an EP shows evidence of a greater breadth and/or depth of research activity. <sup>7</sup>

47. With the merging of the PE and CRE components, the SRG proposes to provide specific advice (similar to that provided above for the Research Output component) in the 2018 Guidelines to ensure that all categories of Research Contribution are considered on their merits. The SRG seeks feedback on this proposal.

#### Other points of note

- 48. Concerns have been raised regarding the inclusion of examples of research impact and the timing in relation to the assessment period, as well as Research Contribution items where evidence may be more difficult to provide due to confidentiality.
- 49. The SRG expects that where examples of research impact are submitted in an EP for the 2018 Quality Evaluation, the impact must have occurred within the assessment period (1 January 2012 to 31 December 2017). However, the research that the impact relates to does not need to have been completed within the same assessment period or be part of the Research Output component of the EP.
- 50. The Quality Evaluation process has always allowed for confidential research to be included in EPs, provided the submitting TEO can arrange all necessary permissions and make any other arrangements for members of peer review panels to access those research outputs if required. The SRG will ensure that an appropriate process for managing any confidential Research Contribution items will be set out in the 2018 Guidelines once a decision has been made regarding evidence and audit of this component.

<sup>&</sup>lt;sup>6</sup> TEC, PBRF: Quality Evaluation Guidelines 2012, May 2013, p.52.

<sup>&</sup>lt;sup>7</sup> TEC, PBRF: Quality Evaluation Guidelines 2012, May 2013, p.118.

### **Providing feedback**

- 51. Feedback is sought from the sector and other key stakeholders on the information outlined in this paper, as well as the options for consideration.
- 52. The SRG also welcomes feedback on any other matters not included in this paper that relate to the Research Contribution component.
- 53. Feedback can be completed:
  - online: https://www.surveymonkey.com/s/XC3HBSJ
  - or via email using the template provided on the TEC website, with completed templates being emailed to <a href="PBRFSRG@tec.govt.nz">PBRFSRG@tec.govt.nz</a>.
- 54. All feedback would be appreciated as soon as possible, but no later than 5pm, Wednesday 11 February 2015.

### **Appendix 1: Objectives and principles of the PBRF**

#### Objectives of the PBRF

The primary objectives of the PBRF are to:

- increase the quality of basic and applied research at New Zealand's degree granting TEOs;
- support world-leading research-led teaching and learning at degree and postgraduate levels;
- assist New Zealand's TEOs to maintain and lift their competitive rankings relative to their international peers; and
- provide robust public information to stakeholders about research performance within and across TEOs.

### In doing so the PBRF will also:

- support the development of postgraduate student researchers and new and emerging researchers;
- support research activities that provide economic, social, cultural and environmental benefits to New Zealand, including the advancement of Mātauranga Māori; and
- support technology and knowledge transfer to New Zealand businesses, iwi and communities.

#### Principles of the PBRF

The PBRF is governed by the following principles:

- Comprehensiveness: the PBRF should appropriately measure the quality of the full range of original investigative activity that occurs within the sector, regardless of its type, form, or place of output;
- Respect for academic traditions: the PBRF should operate in a manner that is consistent with academic freedom and institutional autonomy;
- Consistency: evaluations of quality made through the PBRF should be consistent across the different subject areas and in the calibration of quality ratings against international standards of excellence:
- Continuity: changes to the PBRF process should only be made where they can bring demonstrable improvements that outweigh the cost of implementing them;
- *Differentiation*: the PBRF should allow stakeholders and the government to differentiate between providers and their units on the basis of their relative quality;
- Credibility: the methodology, format and processes employed in the PBRF must be credible to those being assessed;

<sup>&</sup>lt;sup>8</sup> The objectives were revised as a part of the Ministry of Education's review of the PBRF and agreed by Cabinet in February 2014.

- *Efficiency*: administrative and compliance costs should be kept to the minimum consistent with a robust and credible process;
- Transparency: decisions and decision-making processes must be explained openly, except where there is a need to preserve confidentiality and privacy;
- Complementarity: the PBRF should be integrated with new and existing policies, such as charters and profiles, and quality assurance systems for degrees and degree providers; and
- Cultural inclusiveness: the PBRF should reflect the bicultural nature of New Zealand and the special role and status of the Treaty of Waitangi, and should appropriately reflect and include the full diversity of New Zealand's population.

<sup>9</sup> These principles were first enunciated by the Working Group on the PBRF. See <u>Investing in Excellence</u>, pp.8-9.

15

### Appendix 2: 2012 Quality Evaluation Guidelines for completing the Peer Esteem and Contribution to the Research Environment components

#### What is Peer Esteem?

Peer esteem as indicator of quality

In the PBRF, peer esteem is used as an indicator of the quality of the staff member's research. It is concerned with the recognition of the staff member's research by their peers (rather than esteem for the staff member's other activities within the TEO, their subject area, or the academic community).

### Peer-esteem indicators

Indicators of peer esteem include:

- Research-related fellowships, prizes, awards, invitations to share research knowledge at academic and end-user conferences and events
- The staff member's ability to attract graduate students or to sponsor students into higher-level research qualifications, positions or opportunities because of their research reputation
- Research-related citations and favourable review. In considering the former,
  please **note** that the number of citations is not necessarily an indication of
  high esteem. Some research work may be cited frequently because it is
  considered to be an example of poor research. Emphasis should be given to
  evidence of positive review and citation. If panels consider it necessary, the
  panel-specific guidelines will provide further advice regarding citation rates
- Participation in editorial boards.

### **Peer Esteem Types**

#### Nine types

Evidence of peer esteem can be included in the EP under the following peer esteem types:

- Research-related fellowships, prizes and awards
- Fellows and/or restricted or elected membership of learned societies or academies
- Participation in editorial boards and/or refereeing (egg. for journals)
- Invitations to provide conference addresses or similar
- Favourable reviews and/or commendations
- Appointments to key discipline-based, research, industry, professional, community, or government bodies
- Esteem factors associated with students
- Research-related favourable citations
- Other evidence of peer esteem.

These types are discussed in more detail below.

### Prizes and awards

Prizes and awards include any prize or award attached to a specific research output, activity or finding. It may also include a prize or award that reflects on the overall quality and productivity of a staff member rather than one attached to a specific research output, activity or finding.

The research fellowships under this type are those associated with research institutions. The research institution may be within New Zealand or elsewhere.

### Fellows/ memberships

Fellowships/memberships may be of professional or learned societies or academies, in New Zealand or elsewhere, with restricted or elected admission. The expectation is that the esteem with which the staff member's research activities is held would be a key component of the appointment to a fellowship or restricted/elected membership of the cited societies, academies or professional organisations.

### Editorial/ refereeing

Editorial/refereeing includes editorship or membership of editorial panels of journals within New Zealand or elsewhere, and reviewing and/or refereeing journal submissions and book proposals.

### Conference addresses

Conference addresses include invitations as a speaker to conferences/ events in New Zealand or internationally. Conferences and events may be discipline-based or academic, or they may focus on a substantive area of applied knowledge.

### Favourable reviews

Favourable reviews may include review articles or professional comments, letters of commendation, etc.

#### **Appointments**

Appointments may include appointment, either in New Zealand or internationally, to advisory bodies to industry or to professional, community or government bodies or invited membership of company boards of directors. They may also include appointment to research-selection and funding bodies or committees, selection to kiwi boards, associations, and preparation of claims to the Waitangi Tribunal. Appointment to statutory or non-statutory boards may also be relevant.

#### **Student factors**

Student factors may include examples of the staff member's ability to attract graduate and/or overseas students or to mentor students into higher-level research qualifications, positions or opportunities.

Indicators may include students whom the staff member has been able to sponsor into Doctoral scholarships or postdoctoral fellowships because of the staff member's research reputation. This may not be relevant for all subject areas.

### Favourable citations

Favourable citations include descriptions and bibliographic references for citations of particular research outputs or bodies of research work that demonstrate the esteem within which the staff member's work is held by other researchers. Such citations do not need to show agreement with the research findings, but should show that the research is regarded as credible and significant.

Staff members should provide an interpretation of any citation data.

### Other evidence of peer esteem

Other evidence of peer esteem may include other examples which are not included in the above types but which demonstrate esteem, recognition or acknowledgement of the staff member's research by peers and end users in the staff member's own TEO (within New Zealand and/or internationally).

Such evidence might include: an ability to attract esteemed researchers or decision makers to the staff member's TEO or New Zealand and/or host their visit; invitations to mentor; invitations to peer review; gaining competitive access to major national or international facilities and/or invitations to work in overseas institutions; acting in a quality-assurance role in relation to other research activities, processes or policies.

Where a staff member meets the criteria for a new and emerging researcher, the offer of a staff position can be included as an example of peer esteem.

### Information on Peer Esteem Required in the EP

### Up to 30 examples

Staff members are limited to providing 30 examples of peer esteem during the assessment period for their EP (but also see "Major prizes outside assessment period" below), classified under the types listed above. The examples do not need to fall across all the different types of peer esteem but could be concentrated in one or a few of the types.

Peer esteem examples may be ordered as the researcher wishes, and this order will be retained when the panel member views the EP.

Where a staff member has more than 30 examples of peer esteem, they should concentrate on providing the most significant examples and also those that best reflect the research-related esteem of their peers.

## Description of peer esteem examples

For every example of peer esteem included in the EP, the staff member should provide a description that includes the following information:

- Details of the esteem example (e.g. prize, award, favourable review, appointment) and the nature of the expertise involved
- Date(s), where relevant
- Organisation(s) involved.

# Major prizes outside assessment period

Staff members may include major prizes and awards from outside the assessment period where these are research related, but the panel will give primary weight to those peer esteem examples that have been gained within the assessment period.

Where the award or fellowship is on-going (e.g. fellowship of learned society), these can be included in the EP even though the appointment was outside the assessment period. For example, appointment as a Fellow of the Royal Society in 2000 can be included as a peer esteem example for the 2012 Quality Evaluation if the fellowship was held during the assessment period.

# New and emerging researchers

Evidence of peer esteem is **not** required for a new and emerging researcher's EP to be assigned a "C(NE)" Quality Category. However, new and emerging researchers who have completed a PhD and two quality-assured research outputs (i.e. are eligible for the award of the "C(NE)" Quality Category) will not be disadvantaged if they include evidence of peer esteem in their EPs. In fact, they are encouraged to complete the PE component of their EP, as this may allow the EP to be assigned a higher Quality Category. For the criteria for new and emerging researchers see New and Emerging Researchers on page 45.

#### What is Contribution to the Research Environment?

### The CRE component

The CRE component is concerned with the staff member's contribution to a vital, high-quality research environment. Active research environments are a key outcome sought from the PBRF, and EPs provide an opportunity for staff members to indicate their role and contributions in this respect.

### Includes but not limited to

The CRE component has a number of aspects including, but not limited to:

- Research and disciplinary leadership
- Contribution through students and emerging researchers
- Contribution to institutional vitality
- Contribution to research context and connectivity.

### Types of Contribution to the Research Environment

#### Nine types

Evidence of contribution to the research environment can be included in the EP under the following types:

- Membership of research collaborations and consortia
- · Contributions to the research discipline
- Facilitating discipline-based and research networks
- Contributions to the research environment within and outside the TEO
- Generation of externally funded research
- Contribution to researcher development
- · Supervision of student research
- Assisting student publishing, exhibiting or performance
- Other evidence of contribution to the research environment.

There is a particular emphasis on the contribution to and development of Māori and/or Pacific research capability.

These types are discussed in more detail below.

### Consortia membership

Consortia membership may include leadership or membership of research collaborations/consortia within the staff member's TEO (within New Zealand or internationally).

### Research discipline

Contribution to research discipline may be within the staff member's TEO (within New Zealand or internationally) or a contribution to the profession, business or sector (e.g. manufacturing).

### Facilitating networks

Examples of facilitating networks include: organising and/or hosting or chairing conferences, panels, seminars, workshops, journal clubs, or similar events; developing working relationships amongst researchers within and across institutions and subject areas; developing and maintaining strong links with end users of research, including active engagement with relevant communities and stakeholders, and dissemination of research outputs; the ability to engage profession, business or industry with the academic sector.

### Research environment

The research environment type includes the development of research infrastructure (facilities and otherwise) within the TEO and elsewhere in New Zealand.

# External research funding

The external research funding type includes the staff member's ability to contribute to a vital research environment and demonstrate a record of quality research through the attraction of funding external to the TEO. In exceptional cases, the research may not be funded but generated from external sources. The amount of funding received is not required as this is assessed for each participating TEO under the External Research Income (ERI) measure.

### Researcher development

Researcher development includes activities that contribute to the development of new researchers (such as those who have completed their degrees and are starting a research career) and to research capability.

### Student supervision

Student supervision includes the supervision of Masters or Doctoral-level students, including assistance to Māori students and Pacific students. Indicators may include students whom the staff member has supervised.

### Student assistance

Examples of contribution to student assistance include where the staff member has assisted a student under their supervision to publish, exhibit, participate in competitions (within New Zealand and overseas) or produce a research output, possibly in conjunction with academic staff.

# Other evidence of contribution to the research environment

Other evidence of contribution to the research environment may include examples which are not included in the above types but which demonstrate the staff member's contribution to research vitality in their own TEO (within New Zealand and/or internationally).

#### Information on Contribution to the Research Environment Required in the EP

### Up to 30 examples

Staff members are limited to providing 30 examples of contribution to the research environment during the assessment period for their EP (see also "Relation to assessment period" below), classified under the types listed above. The examples do not need to fall across all the different types but could be concentrated in one or a few of the types.

Contribution to the research environment examples may be ordered as the researcher wishes, and this order will be retained when the panel member views the EP.

Where a staff member has more than 30 examples of contribution to the research environment, they should concentrate on providing the most significant examples.

Descriptions required for examples of contribution to the research environment

For every example of contribution to the research environment included in the EP, the staff member should provide a description that includes the following information:

- Details of the activity
- Date(s), where relevant
- Organisation(s) involved
- Student numbers and the degree level (e.g. Masters, Doctoral), where relevant.

Relation to assessment period

Evidence of contribution to the research environment should relate to the assessment period.

However, a staff member may include examples of contribution to the research environment from outside the assessment period if such contributions are outstanding or of particular significance.

New and emerging researchers

Evidence of contribution to the research environment is **not** required for a new and emerging researcher's EP to be assigned a "C(NE)" Quality Category. However, new and emerging researchers who have completed a PhD and two quality-assured research outputs (i.e. are eligible for the award of the "C(NE)" Quality Category) will not be disadvantaged if they include evidence of contribution to the research environment in their EPs. In fact, new and emerging researchers are encouraged to complete the Contribution to Research Environment component of their EP, as this may allow the EP to be assigned a higher Quality Category. For the criteria for new and emerging researchers see New and Emerging Researchers on page 45.

## Appendix 3: Proposed Research Contribution component categories and descriptions for the 2018 Quality Evaluation

Proposed Category (Title)	Draft Description	Previous PE/CRE categorisation	
Contribution to research discipline and	Contribution to research discipline and environment items should reflect the staff member's contribution to the general development of their discipline or	Contributions to the research discipline	CRE
environment	general improvements to research capability and/or the research environment inside and/or outside of academia.	Contributions to the research environment within	CRE
	Indicators of this contribution can include but are not limited to:	and outside the TEO	
	<ul> <li>Developing new discipline methodologies or knowledge.</li> </ul>		
	<ul> <li>Development of new laboratories, and/or organising new equipment.</li> </ul>		
	<ul> <li>Leadership positions that increase capability, for example:</li> </ul>		
	Director of a laboratory or research facility.		
	<ul> <li>Head, or Deputy Head, of School,         Department, Centre, or Research Group         with a focus on research development or         initiatives in that role.     </li> </ul>		
	<ul> <li>Initiatives to grow Mātauranga Māori and kaupapa Māori knowledge bases and capacity.</li> </ul>		
	<ul> <li>Initiatives to grow Pasifika knowledge bases and capacity, including those that build non-Pasifika researchers' knowledge and understanding of Pasifika research and paradigms.</li> </ul>		
	Membership of a Research or Postgraduate Committee.		
	Fostering internal or external linkages, cooperation, collaborative research and development with other departments, institutions and/or organisations.		
	Research mentoring.		
	<ul> <li>Organising and/or participating in departmental or institutional research seminars.</li> </ul>		
Facilitation, networking and collaboration	Facilitating, networking and collaborating items provide an indicator of the contribution the staff member makes to the research environment specifically through developing and supporting	Facilitation of discipline-based and research networks	CRE
	research networks and collaborations which develop their discipline or improve research capability inside and outside of academia.	Membership of research collaborations and	CRE
	Indicators of this contribution can include but are not limited to:	consortia	005
	<ul> <li>Facilitating or organising conferences or other formal networks such as, symposia, meetings, workshops, seminar series, hui, fono, wānanga,</li> </ul>	Contributions to the research discipline	CRE
	<ul><li>online forums, etc.</li><li>Participating as a Conference Chair, Track Chair</li></ul>	Contributions to the research environment within	CRE

Proposed Category (Title)	Draft Description	Previous PE/CRE categorisation	
3. Invitations to present research or similar	or Session Chair.  Partnering with iwi and Māori entities on shared research priorities.  Partnering with Pasifika entities and/or Pasifika organisations to increase research capability in Pacific research and/or researchers.  Membership of a Conference Programme Committee, Technical Programme Committee or Conference Panel.  Director of consortium or research group.  Member of collaborations and consortia.  Internal or external research collaboration.  Fostering internal or external linkages, cooperation, collaborative research and development with other departments or organisations.  Activities that improve research opportunities, such as working in collaborations or consortia are also indicators of these contributions.  Invited presentations to conferences or other formal networks may also appear under 'Invitations to present research or similar'  Invitations to present research or similar items should provide an indicator of the staff member's reputation within and outside of academia, and as such, these items are about invitations that are specifically based on the staff member's research reputation, including invitations to give keynote	Invitations to provide conference addresses or similar	PE
	<ul> <li>addresses, or other similar invitations.</li> <li>Indicators of this esteem can include but are not limited to:</li> <li>Keynote address, Plenary, Principal Speaker or Invited Speaker.</li> <li>Invited member of research advisory, strategy, reference or working group, task force, or steering committee for internal or external organisation.</li> <li>Invited to present research to professional groups or organisations.</li> <li>Invited to develop to iwi, Māori or Pasifika community-based projects.</li> <li>Invited to produce a journal article, review paper, chapter, or reprints specifically based on the staff member's research reputation.</li> <li>Invited to overseas organisations or events.</li> <li>Invited to work in an overseas institution.</li> <li>Invited or commissioned to create, perform, or produce creative work.</li> <li>Invited to contribute to Pasifika conferences, Pasifika development panels, Pasifika research</li> </ul>		

	oposed	Draft Description	Previous PE/CRE	
Ca	tegory (Title)		categorisation	
		fono and Pasifika advisory boards.		
		<ul> <li>Invitations to present research to other non- professional groups, community interest groups, ethnic and/or cultural representatives</li> </ul>		
		Some items could be listed under other categories for example, 'Research prizes, fellowships, awards and appointments'		
4.	Other evidence of	Other evidence of research contribution may include other items which are not included in the above	Other evidence of PE	PE
	research contribution	categories but demonstrate the contributions made, and/or esteem held, by a staff member and their research within or outside of academia.	Other evidence of CRE	CRE
		Indicators of this esteem and/or contribution can include but are not limited to:		
		<ul> <li>Hosting esteemed visiting researchers or decision-makers.</li> </ul>		
		<ul> <li>Requests to provide or providing tenure references.</li> </ul>		
		Consultancy based on research expertise.		
		<ul> <li>Producing reference materials such as encyclopaedia and dictionary entries.</li> </ul>		
5.	Outreach and engagement	Outreach and engagement items should reflect the contribution the staff member makes to the wider community in New Zealand and/or internationally through their research-based expertise.	New	N/A
		Indicators of this contribution can include but are not limited to:		
		Outreach activities.		
		Community engagement.		
		<ul> <li>Contributions to Māori social, economic and cultural advancement.</li> </ul>		
		<ul> <li>Contributions and impact to Pasifika social, economic and cultural advancement</li> </ul>		
		Contributions to public understanding.		
		"Critic and conscience" of society and debate in the discipline.		
		Media coverage of research.		
		<ul> <li>Presentation of research to professional groups or organisations.</li> </ul>		
		•		
6.	Recognition of research outputs	Recognition of research outputs items should reflect the esteem in which a staff member's specific research outputs are held by their peers and others.	Research-related favourable citations [metrics]	PE

Proposed Category (Title)	Draft Description	Previous PE/CRE categorisation	
	Indicators of this esteem can include but are not limited to:  Positive review of your research outputs.  Metrics such as: Citation counts (excluding self-citation) hindex (relevant to some science subjects)  Other metrics, for example those that relate to different forms of media such as social media, number of downloads, Google Analytics, etc.  Positive commendations and/or reviews for your research outputs.  Acknowledgment by iwi and Māori leaders, kaumatua and kuia of contributions to Māori economic, social and cultural advancement.  Acknowledgment and support by Pasifika stakeholders of contributions to Pasifika economic, social and cultural advancement.  Selected for important or esteemed public/private collection or performance venue.  Extended exhibition or performance dates due to demand.  Reprints of your research or repeated exhibitions or performances.	Favourable reviews and/or commentaries [narratives]	PE
7. Research funding and support	Research funding and support items can provide an indicator of the contribution the staff member makes to the research environment or reflect the staff member's esteem where the funding/support is competitive.  Indicators of this esteem and/or contribution can include but are not limited to:  Securing external contestable grants e.g. Marsden Fund.  Competitive funding from your own organisation.  Funding from external organisations.  Funding for research facilities or gaining competitive access to facilities, etc.  Travel grants etc.  Securing in-kind or pro-bono support to facilitate research including key people (including kaumatua and community engagement capability), resources, equipment and materials.	Generation of externally funded research	CRE
8. Research prizes, fellowships, awards and appointments	Research prizes, fellowships, awards and appointments items should indicate the staff member's research reputation within and outside of academia, and as such, these items are about selective memberships i.e. only elected/awarded	Research-related fellowships, prizes & awards	PE
αρμοιπιπιστικ	memberships, fellowships, awards, appointments, etc. should be included.  Indicators of this esteem can include but are not	Appointments to key discipline-based, research, industry,	PE

Proposed Category (Title)	Draft Description	Previous PE/CRE categorisation	
	<ul> <li>limited to:</li> <li>Best paper, poster or presentation.</li> <li>Awards and prizes for creative arts outputs.</li> <li>Adjunct appointment.</li> </ul>	professional, community, or government	
	<ul> <li>Adjunct appointment.</li> <li>Research fellowship.</li> <li>Mandated iwi and Māori authority leadership roles.</li> <li>Mandated cultural leadership roles (example; Chairperson, Church minister or Honorific chiefly title).</li> <li>Fellow of a professional body for example, the Institution of Professional Engineers New Zealand (IPENZ) or Fellow of the Royal Society of New Zealand.</li> <li>Member of a society or academy with restricted or elected admission, for example the British Society of Audiology.</li> </ul>	Fellows and/or restricted or elected membership of learned societies or academies	PE
	Activity as part of a standard membership of societies can be listed under 'Contribution to research discipline and environment'.  Membership of funding committees can be listed under 'Reviewing, refereeing, judging, evaluating and examining'.		
Researcher development	Researcher development items should reflect the staff member's contribution to the range of activities related to mentoring colleagues in relation to research development.  Indicators of this contribution can include but are not	Contribution to researcher development	CRE
	<ul> <li>Mentoring and supervising other staff members including 'new and emerging' researchers.</li> <li>Growing institutional support for, and the pool of, iwi and Māori researchers.</li> <li>Increasing institutional capacity for growing the pool of Pasifika researchers.</li> <li>Supervising Postdoctoral Fellows.</li> </ul>		
	<ul> <li>Head of department where there is a focus on researcher development activities while in the role.</li> </ul>		
10.Reviewing, refereeing, judging, evaluating and examining	Reviewing, refereeing, judging, evaluating and examining items provide an indicator of the esteem a staff member may have amongst their peers. Indictors of this esteem can include but are not limited to:  • Member of funding committee which reviews or evaluates funding proposals or grant applications.	Participation in editorial boards and/or refereeing	PE
	Member providing specialist or expert advice to a research advisory, strategy, reference, working group, task force, or steering group.		

Proposed Category (Title)	Draft Description	Previous PE/CRE categorisation	
	<ul> <li>Member of a committee providing specialist or expert advice to or for a relevant external organisation.</li> <li>Editorial Board member.</li> <li>Editor or Guest Editor.</li> <li>Invited to contribute to indigenous/first nation peoples development panels, boards and major programmes.</li> <li>Invited to be a member of a selection panel for awards and prizes.</li> <li>Reviewing a journal article, conference paper, book manuscript.</li> <li>Reviewing abstracts (as part of the selection of presenters) and conference proceedings (following selection).</li> <li>Peer reviewer for industrial, commercial, or Government organisations.</li> <li>Expert witness.</li> <li>External thesis examiner could be listed under 'Student factors'.</li> <li>Conference reviewing could be listed under 'Facilitation, networking and collaboration.</li> </ul>		
11.Student factors	Student factors items should reflect the staff member's contribution to student-related activity, as well as esteem factors associated you're your research students.	Supervision of student research	CRE
	Indicators of this esteem and/or contribution can include but are not limited to:  • Attracting, supervising and supporting students including but not limited to:	Assisting student publishing, exhibiting or performance	CRE
	<ul> <li>PhD, Masters, Honours research</li> <li>Māori and Pasifika students</li> <li>Summer research students and visiting research students</li> <li>Other high-quality postgraduate students</li> <li>Assisting student publishing, exhibiting or performance.</li> <li>Research student placements.</li> <li>Supporting Māori students to connect with their iwi through mutually beneficial research.</li> <li>Supporting students to gain scholarships, prizes or awards.</li> <li>Supporting students to gain positive employment outcomes.</li> </ul>	Esteem factors associated with students	PE
12.Uptake and impact	Uptake and impact items should provide an indication of the contribution the staff member's research has had outside of academia.  Indicators of this contribution can include but are not limited to:	New	N/A

Proposed Category (Title)	Draft Description	Previous PE/CRE categorisation
	Uptake/adoption of research by industry, iwi, Pasifika, community, or professional bodies' nationally and/or internationally as standard practice or policy.	
	Providing expert advice to the public sector, communities, and/or the private sector nationally and/or internationally which informed or influenced policy and/or practice.	
	<ul> <li>Improvements to existing practices, policy, law, businesses, process, or products.</li> </ul>	
	Commercialisation of research.	
	<ul> <li>Contributing to economic prosperity, social well- being, innovation and entrepreneurial activity through the design and delivery of new products, processes or services.</li> </ul>	
	<ul> <li>Contributing to Māori social, economic and cultural advancement.</li> </ul>	
	Other evidence that the knowledge generated by the research is in use outside academia.	
	Other technology and knowledge transfer.	

### Appendix 4: 2012 Quality Evaluation Guidelines for scoring Peer Esteem and Contribution to the Research Environment components

### **Scoring an EP: Allocating Points for Peer Esteem**

#### **Points Scale**

The following table provides a detailed description of the outputs to be assessed when assigning a score to the PE component of the EP.

**Note:** Scores of 6, 4 and 2 are tie-points; the descriptions alongside them are the tie-point descriptors.

COMPONI	ENT	PEER ESTEEM (PE)
Descripto	r	This component is concerned with recognition of the staff member's research by peers. Indicators of peer esteem include:
		Research-related fellowships, prizes, awards, invitations to share research knowledge at academic and end-user conferences and events
		The ability to attract graduate students or to sponsor students into higher-level research qualifications, positions or opportunities because of the staff member's research reputation
		Research-related citations and favourable review. In considering the former, it must be noted that the quantum of citations may be a poor proxy for esteem. Some research work may be cited frequently because it is considered to be an example of poor research. Consequently emphasis should be placed on evidence of positive review and citation
		Participation in editorial boards
		The ability to attract professional/ business/ manufacturing engagement, awards and scholarships, invited memberships of company boards of directors/ advisory boards, invited engagement with industry focused organisations, e.g. NZTE.
Scores	7	
	6	The EP would be expected to demonstrate that the staff member has attracted world-class recognition through their research. This could be reflected by some or all of the following: the receipt of prestigious prizes, or fellowships of leading learned societies/academies or prestigious institutions, or special status with professional or academic societies, or editorship, membership of editorial panels or refereeing of top-ranked journals, or awards for research as well as invited attendance, or examination of PhDs, or invited presentations at prestigious academic and industry conferences/events, or directorships, or advisory board membership. An ability to attract overseas/top research students and scholars as well as to mentor their own students into postdoctoral and other fellowships, scholarships and positions in centres of research excellence could be demonstrated in the EP. A consistent record of favourable citations of research should combine with strong evidence of positive research reviews, contribution to knowledge in the discipline (including overseas where relevant), and movement into creative practice.
	5	
	4	The EP shows that the staff member, through their research, is recognised within New Zealand or elsewhere and is esteemed beyond their own institution. The EP demonstrates peer esteem by providing evidence of some or all of the following: the
		receipt of prizes, membership of a professional society or similar with restricted or elected membership or honours or special status with professional or academic societies,

	editorship or membership(s) of editorial panels of reputable journals within New Zealand or elsewhere, research fellowships of esteemed institutions, reviewing of journal submissions and book proposals, PhD examination or advisory board memberships or invitations for keynote addresses for conferences/events that are at a middle level of excellence. A consistent record of research citation and positive reviews of specific research outputs and/or overall contribution to research knowledge in a discipline or substantive area of knowledge or practice can be expected. The EP could demonstrate graduate students moving into research scholarships or postdoctoral fellowships or junior lectureships in departments with good research ratings.
	rectareships in departments with good research ratings.
3	
2	The EP demonstrates a developing recognition among peers of the staff member's research contribution and developing rigour in the application of research techniques. This may be evidenced through attracting awards and invitations to present research to informed audiences, within and possibly beyond the applicant's immediate institution, as well as positive reviews and citations, or being asked to referee research outputs. Where the staff member has an involvement primarily in commissioned research outputs, reference to letters of commendation or other evidence of esteem by commissioning agents could be expected.
1	Minimal evidence of peer esteem generated through research activities.
0	No evidence of peer esteem generated through research activities.

### Scoring an EP: Allocating Points for Contribution to the Research Environment

#### **Points Scale**

The following table provides a detailed description of the outputs to be assessed when assigning a score to the CRE component of the EP.

**Note:** Scores of 6, 4 and 2 are tie-points; the descriptions alongside them are the tie-point descriptors.

	· · · · · · · · · · · · · · · · · · ·
COMPONENT	CONTRIBUTION TO THE RESEARCH ENVIRONMENT (CRE)
Descriptor	This is concerned with the contribution to the development of research students, to new and emerging researchers and to a vital, high-quality research environment.  This component has a number of aspects, including:
	Research and disciplinary leadership – including membership of research teams, and contributions to disciplinary development and debate and public understanding of the discipline
	Contribution through students and emerging researchers – supporting and mentoring students to achieve postgraduate qualifications and to develop as researchers
	Contribution to institutional vitality – supporting the development of research both within and across institutions (e.g. hosting visiting researchers). Attracting research funding may be an important contribution to institutional vitality, but the amount of research income in itself will not be taken into account
	Contribution to research context and connectivity - including factors such as the ability to engage profession/ business/industry with the academic sector,

		contribution to profession/business/manufacturing sector, membership of profession/ business/manufacturing bodies, etc.
Scores	7	
Scores	6	The EP would be expected to demonstrate a contribution to New Zealand and/or international research environments (for example, through extensive research networks and/or collaborations) in addition to a strong contribution to the research environment in their organisation(s). The EP may show a history of attracting renowned scholars to the TEO and/or New Zealand. Evidence of research and disciplinary leadership may include some or all of the following: membership(s) of renowned collaborative research teams; membership(s) of research selection panels in New Zealand and elsewhere; research leadership at the highest levels (e.g. leading/participating in major research consortia including researchers outside of New Zealand); organising and hosting world-class conferences; the development of research infrastructure, or significant contributions to research-focused conferences or stakeholder engagement or attracting funding. The EP is likely to show a strong and consistent history of successful supervision of students, particularly at PhD level, and could provide evidence of supporting research students to access and produce research outputs that are quality-assured (possibly in combination with academic staff). The EP could demonstrate contributions to developing new research capacity that go beyond student supervision, including among Māori researchers and Pacific researchers. Other contributions to debate in the discipline, both in New Zealand and beyond, and/or public understanding of developments in or implications for the discipline may be expected.
	5	
	4	The EP demonstrates research and disciplinary leadership within the broader discipline in addition to contributing to the individual's own TEO research environment. Research and disciplinary leadership may include some or all of the following: collaborative research across disciplinary boundaries or across organisations and/or membership(s) of research selection panels or leading research consortia within New Zealand; and/or show evidence of attracting researchers and scholars to the TEO, and/or stakeholder engagement and/or research funding; and/or organising and hosting conferences. The EP could show supervision of research activities of students and supporting them to produce research outputs, possibly in conjunction with academic staff. The EP could show a contribution to developing new researchers, including Māori researchers and Pacific researchers, or generating research opportunities (by attracting external funding as a research programme or project leader). Other contributions to debate in the discipline and/or public understanding of developments/implications in the discipline may be expected.
	3	
	2	The EP is likely to show contributions to the research environment primarily within the TEO or locality. Research and disciplinary leadership is likely to be reflected in participating in committees of organisational bodies or discipline-related bodies dealing with research matters. The EP could show contributions within the TEO, such as hosting of visiting researchers, organisation/hosting of conferences/seminars, and/or assisting in attracting research money, or as a named researcher in externally funded research programmes or projects. Other contributions to the discipline may be demonstrated such as successful supervision of Masters and PhD students, including Māori students and Pacific students.
	1	Minimal evidence of contribution to research environment.
	0	No evidence of contribution to research environment.
		THE CYNCETICS OF CONTRIBUTION TO RESCRICT CHYPOTHINGHIL.

### **Appendix 5: Links to relevant papers**

PBRF: Quality Evaluation Guidelines 2012, May 2013

Review of the Performance-Based Research Fund Consultation Document, August, 2013

Review of the Performance-Based Research Fund, Summary of Submissions received on the Review of the Performance-Based Research Fund Consultation Document, March, 2014

Investing in Excellence, 2002