

Stakeholder Feedback June 2015

PBRF SRG Consultation Paper #3 - Research Contribution component

The information below is a summary of the Performance-Based Research Fund (PBRF) Sector Reference Groups (SRG's) third consultation paper on the operational framework for the Research Contribution component. Where the organisation is not identified in the comment, the TEC has not attributed those comments to any organisation. Each line of commentary denotes a separate response from an organisation or individual.

Number	Organisation name
1	Individual
2	Auckland University of Technology
3	Christchurch Polytechnic Institute Of Technology
4	University of Waikato
5	University of Otago
6	Tertiary Education Union Te Hautū Kahurangi o Aotearoa
7	University of Canterbury
8	Massey University
9	Lincoln University
10	New Zealand Tertiary Council for Physical Activity, Sport and Exercise (NZTCPASE)
11	University of Auckland
12	Otago Polytechnic
13	Open Polytechnic
14	Victoria University of Wellington
15	Individual
16	Individual
17	Te Whare Wananga o Awanuiarangi

A. Proposed definition of Research Contribution

Does the proposed definition accurately describe the intent of the Research Contribution component and how it contributes to the assessment of the Evidence Portfolio (EP)?

Yes

No. We believe the current definition is not balanced in how it presents the three dimensions. It currently focuses primarily on research impact to the detriment of the other two dimensions of esteem and contribution to the research environment.

A suggested definition that balances the three dimensions is provide here:

The Research Contribution (and Esteem) component of an Evidence Portfolio is concerned with the contribution and acknowledgement of a staff member's research and research activities. Outcomes sought by the PBRF include a vital high quality research environment, researchers held in high esteem by their peers, and research that contributes significant impact or benefit beyond the academic environment. The level and quality of contributions and acknowledgement will be considered in the local, national and international context.

Comprising three dimensions, 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 and benefit that their research has had outside academia.

The label for this component should more accurately reflect the dimensions it covers, hence the term

'Research Contributions and Esteem' or

'Research Contributions and Recognition' or

'Research Contributions, Distinctions and Impact' (drawing on the MSI CV for terminology sections 1f and 2c).

Any of the above labels preferable as they're self-explanatory and more accurately reflect what is sought in this component.

Needs to include well-being (which is used elsewhere), health and professional practice.

The University of Waikato agrees with the TEC's proposed definition for the new Research Contribution component. Nevertheless, it has two enhancement suggestions.

- the Research Contribution is an amalgamation of the PE and CRE components therefore it would be appropriate to reference all three components of the amalgamated areas within the definition's first sentence (i.e. the actual research-related activity leading to the vibrant environment, the peer esteem, and the impact). Currently the TEC only reference the impact component in the first sentence of their definition.
- In the first sentence the TEC list economic, social cultural and environmental benefits. Our University believes the word 'academic' should be inserted at the beginning of this list of benefits

We are generally in agreement with the definition, but would like to offer the following additions (in bold italics):

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, ***as well as its contribution to knowledge creation, training of the next generation of scholars and development of their disciplines***. 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, ***non-governmental organizations***, 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.

It is understood that individuals will differ in the distribution of their accomplishments across these three areas and the 12 Research Contribution categories.

The TEU would like to recommend rewording and adding to the statement as follows:

“In the PBRF, the Research Contribution component of an EP allows staff members to highlight the social, cultural, environmental and economic benefits that their research has had in a national and international context.”

“The Research Contribution component also provides an opportunity for staff members to demonstrate how their research has contributed to fulfilling the role of critic and conscience accepted by institutions.”

Yes, but it could be simplified. We suggest:

The Research Contribution component of an Evidence Portfolio describes the contribution and acknowledgement of a staff member’s research and research activities. Contributions and acknowledgement will be considered in the local, national and international context.

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.
-

We are concerned that the proposed definition leads the reader to assume that the element has a heavy emphasis on impact which is only one of the categories of the proposed research contribution items. The way the definition is current constructed does not reflect two of the bullet points regarding peer esteem and contribution to the research environment but rather the ‘impact’ the research has had on economic, social, cultural and environmental benefits. It should also be clear that these are three distinct aspects and that a portfolio making a contribution to all three areas is not reviewed differently than a portfolio which indicates an outstanding contribution to one area (i.e. and/or). A greater inclusion of the previous descriptors of PE and CRE would be beneficial. During discussions it was also noted that exemplars of ‘impact’ and how different types/modes/outcomes might be assessed has not yet been made clear.

The inclusion of indicators of outcomes/benefits while most welcome is problematic in its measurement and weighting within the overall list:

- It is not clear how outcomes (as opposed to outputs) will be measured; the consultation document suggesting it is only to be measured by narrow indicators. Page 13 of the consultation document indicates that research ‘impact ... outside of academia’ is to now be one of three overarching dimensions of ‘research contribution’. Much of the re-framed component integrates previous elements from peer esteem and contribution to the research environment criterion from previous PBRF assessments - but the specific focus on research impact appears uneven in its treatment as it is only one of twelve potential category indicators.

The earlier SRG - Consultation Paper #1- Approach to the design of the 2018 Quality Evaluation, lists (at para 7: pg2) the Objectives of the PBRF are, among others, to increase the quality of pure and applied research, and in so doing:

- 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.

Given these objectives and purposes, we believe that the impact measures, included in Appendix 3: Category 12 (Uptake and impact) in the research contribution component, does not do justice to the revised requirement of the PBRF assessment exercise. Some alternative options are presented at the end of our submission (general comments)

From our various discussions with academic colleagues there are also concerns that:

- individual measures will benefit some disciplines over others; this unevenness is contrary to PBRF processes;
- there is no indication of whether any ‘weighting’ might be given formally or informally to different component categories; and
- there is no indication as to whether there might be an expectation of entries in all categories, or sets of categories, across different career ‘grades’. For example, are “CNE” and “C” assessed researchers expected to have an entry for each of the twelve categories?

We acknowledge that such clarifications might come later in the guidelines announcements, but at present there is significant uncertainty as presented.

The definition attempts to amalgamate three distinct fields—peer esteem, contribution to the research environment, and impact of research outside academia—under the umbrella of national and international economic, social, cultural and environmental benefits. Neither peer esteem nor contribution to the research environment need necessarily have the benefits sought by the definition. This will raise questions for:

- i) academics working through the 12 categories, and
- ii) assessment panels with regard to interpreting and weighting the components.

The definition should remain broad, to ‘allow staff members to highlight the significance of their research both nationally and internationally’, and to acknowledge that breadth allows academics to demonstrate the often quite different ways that they contribute to research (i.e. not everyone will be equally strong across the twelve categories).

The proposed definition does not accurately describe the intent of the Research Contribution (RC) component. Indeed, it appears to completely change both the intent of the Research Contribution component and the purpose of the PBRF, by focusing on impact.

The proposed definition solely defines impact external to the research environment, which is explicitly outside of the scope of this component, given RC is a merger of Contribution to the Research Environment (CRE) and (Researcher) Peer Esteem (PE).

The University of Auckland strongly recommends not just a change of focus for the proposed definition but the exclusion of any new or additional assessment of external impact from the PBRF. While the University recognises the high importance of external research impact, and external impact is mentioned as an expected outcome of the PBRF, it is not one of the PBRF's primary objectives, and transforming it into a funding influence via the PBRF Quality Evaluation is inappropriate. This is because:

1. The PBRF QE is designed to measure research quality and not external research impact. In previous rounds, Peer Esteem was "concerned with the recognition of the staff member's research by their peers" and Contribution to the Research Environment were defined as "Contributions that the staff member had made to a vital, high-quality research environment". CRE was included in the PBRF assessment for the purpose of alleviating concerns that the PBRF would incentivise self-regarding activity by individuals, such as seeking only to boost their own research profile without consideration of colleagues or students. The PE component was introduced as a non-Research Output indication of research quality; for example, without it, it could be difficult to assess the quality of the work of someone who is co-author of a large number of multi-author research outputs.

The original PBRF working group's report stated that "Some stakeholders have questioned whether the focus on the evaluation of individuals' outputs might discourage collaborative research and collegiality. Although the PBRF quality evaluation will involve the direct assessment of outputs in some cases, it is designed to evaluate a number of activities and contributions to an academic unit's research environment. These include collaborative activities and work." The report also notes that "the [PBRF] assessment is not solely related to research outputs, but is an assessment of the overall contribution of a staff member to tertiary education research and the transfer of this research to teaching and learning."

The proposed RC definition clearly departs from these earlier definitions and purposes to focus on impact, and thus violates many of the PBRF redesign principles, including consistency and continuity, credibility, and simplifying the TEO compliance burden and the audit burden.

2. Assessment of impact requires specialised, fit-for-purpose assessment mechanisms and non-academic assessors. To give but one example, researcher contribution to external research impact is best assessed at the level of the group and not the individual, as acknowledged by the expert advisory panel for the PBRF review.

3. Linking funding levels to impact assessment is highly problematic and controversial as:

(i) impact is notoriously difficult to comprehensively identify and assess (a mixture of qualitative narrative and quantitative measures is usually used overseas)

(ii) attribution of impact to different research teams is also difficult to assess

(iii) timeframes between research and impact are variable, from a few months to a few decades (putting newer research institutions at a disadvantage)

(iv) ensuring impact (as opposed to outreach and knowledge transfer) is almost always out of the hands of the researcher and their institution, and is partially the responsibility of external end-users and other stakeholders.

4. Having to prove that the impact of earlier research happened within the PBRF assessment period (as per paragraph 49 p12 of the SRG consultation paper) violates the redesign principles of simplifying the TEO compliance burden and the audit burden, and flies in the face of international experience regarding appropriate mechanisms for assessment of research impact.

Australian and UK experience of assessing impact indicates:

- It is difficult to know what material to collect as evidence and how to collect it

- Attribution for various impacts can be difficult

- Using a funding tool to incentivise impact can be counter-productive to collaboration

- Academics are not necessarily the best people to gather evidence of their own impact; they know their research outputs, but not all the "afterlives" of their research outputs in the wider world

- Impact is reliant on the acceptance and support of end-users and stakeholders as well as academics communicating their research, so it is not a pure measure of academic effectiveness

- Transaction costs are extremely high for production of case studies, and there are no widely accepted metrics that are likely to provide a satisfactory alternative.

- No matter what period is chosen, timeframes will be controversial

The University would welcome a national discussion about support of and encouragement for external research impact, for all participants and stakeholders (not just researchers); any such support should be fit-for-purpose and informed by international experience. Assessment of impact could be a useful, albeit partial, tool in this case - but only if it did not influence institutional research funding. This question was addressed in the University of Auckland submission to the Review of PBRF in March 2013 (excerpt in Appendix 1 of this submission) and in the University's submission to the draft National Statement of Science Investment in August 2014 (excerpt in Appendix 2).

As a replacement definition, the University recommends the following or similar (based on 2012 definitions of CRE and PE, and hence supporting the PBRF redesign principles listed above):

Research contribution is concerned with the staff member's contributions to a vital, high-quality research environment, and with the peer esteem and recognition they attract for their research. It is not concerned with the staff member's other activities within the TEO, their subject area, or the academic community.

In order to concentrate on evaluation of research activities, the following (and perhaps other items) need to be deleted:

- Proposed category 12 "uptake and impact"

- Mentions of external impact in guidelines for assessors (appendix 4 of the consultation paper). For example: "The ability to attract professional/ business/ manufacturing engagement.....invited memberships of company boards of directors/ advisory boards, invited engagement with industry focused organisations, e.g. NZTE" should be deleted.

1. The primary objectives of the PBRF as agreed by Cabinet 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." The next paragraph starts: "In doing so [emphasis added] 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."

2. PBRF Guidelines 2012 <http://www.tec.govt.nz/Documents/Publications/PBRF-Quality-Evaluation-Guidelines-2012.pdf>

3. The Report of the Performance-Based Research Fund Working Group (2002), pg 38. <http://www.beehive.govt.nz/Documents/Files/Investing%20in%20Excellence.pdf>

4. Ibid, pg 52.

5. "Expert Advisory Panel advice to inform the 2012/13 review of the Performance-Based Research Fund"

http://www.minedu.govt.nz/NZEducation/EducationPolicies/TertiaryEducation/PolicyAndStrategy/~/_media/MinEdu/Files/EducationSectors/TertiaryEducation/PBRF/ExpertAdvisoryPanelPBRFReport.pdf

6. See for example the Australian research impact assessment trial report "Excellence in Innovation: Research impacting our nation's future - assessing the benefits": <http://www.atn.edu.au/newsroom/Docs/2012/ATN-Go8-Report-web.pdf> and the findings from the UK research impact pilot for the Research Excellence Framework: <http://www.ref.ac.uk/background/pilot/>

OK, covers both academic and enterprise/applied

It accurately describes the intent.

Yes this is clear - and likely to mean people put an item in each category! The difficulty is that the description is not reflected in the scoring - the A category is overly emphasizing large international teams of research - work can be internationally recognised without needing a multidisciplinary team - this penalizes world leading research by an individual or single institution that is not in a multi-national consortium (i.e. when copying and pasting from 2012 - the emphasis has been overly put on the old CRE)

Yes.

Yes but I would like to see the word 'can' deleted in the second sentence so that it reads These benefits include..rather than can include

Additional comments

Nil.

Our rationale is to ensure that we include the important roles of research training, contributions to the discipline, work conducted in NGO's, and the fact that different scholars will differ in how they work within the 12 Research Contribution categories.

We recommend rewording the first part of the statement to ensure avoiding the perception that the primary purpose of all research is to provide economic benefits to our nation.

We recommend the addition of a reference to critic and conscience to reinforce that this is a central aspect of the role of TEIs who have accepted this function, along with their staff and students.

B. Research Contribution categories

Do the 12 proposed categories cover all aspects of esteem, contribution and impact that could be expected in the context of PBRF?

We believe the proposed categories suitably cover the previous categories and introduce two new categories of 'Impact' and 'Outreach and Engagement'.

1) Contribution to research discipline and environment -

- includes aspects which may be job related rather than an indication of research ability e.g. Head of Department, organising new equipment, director of a laboratory.

- If there are less contributions then "participating in departmental/institutional research seminars" and "membership of a research committee" is unlikely to be of sufficient merit to score well and the quality would be hard to assess e.g. everyone in the department may be a member. Being appointed Chair would be more appropriate. New and emerging researchers who may be at this level do not require Research Contribution.

2) Facilitation, networking and collaboration.

- It would be clearer not to have "invitations to present research or similar" in this category when it is also in the next.

- It should be broadened to explicitly include developing industry based research and developing community based projects (under #3).

3) Invitations to present research or similar - this shouldn't include developing community based projects as these are about developing research projects and should be in #2.

4) Other evidence of research contribution -

- a good catch all, but the examples may not be evidence of esteem but part of the job e.g. hosting esteemed decision makers, providing references.

- Producing reference material is a research output - being invited to do that or write a book would be better under (3).

7) Research and funding support -

- should exclude internal funding as each institution may manage funding in a different way.

- Funding from MBIE, HRC, should be given as examples not just Marsden.

8) Research prizes - should exclude mandated cultural leadership roles as it would be hard to provide evidence that the role was related to research reputation.

9) Student factors - include level 7 students. Positive employment outcomes seems outside the scope of contribution to research as it is likely to be the result of many factors.

12) Uptake and impact -

- providing expert advice should include guidelines, standards, tools.

- Improvement to professional practice should include health and education.

- contributing to economic prosperity ... environment and health should be included

The University of Waikato supports the TEC's 12 new Research Contribution categories set out in Appendix 3 of the consultation paper and agrees they adequately reflect the range of researcher activities that would normally be expected within the context of PBRF.

The categories appear to be useful to us.

Overall the TEU's view is that the categories appropriately cover all the aspects of esteem, contribution and impact. We have some comments/questions about specific details as noted below:

Page 23 - with reference to the descriptors in category 3 describing Māori and Pacific contributions. We recommend bullet points 4 and 9 have the wording merged, but are provided as two separate descriptions - one for Māori and one for Pacific.

Page 24 - with reference to category 4. Bullet point 4 refers to reference materials for encyclopaedias and the like. We recommend clarifying that this refers to shorter insertions, and not instances where an academic is responsible for an entire reference publication or a section of it (such as a dictionary). A larger-scale work would perhaps sit in category 1.

Page 25 - with reference to category 6. Given the debate about the effectiveness or otherwise of metrics as a tool for measuring research quality, we recommend placing this at the bottom of the list.

Recommend an additional bullet point after bullet point 6 "Acknowledgement and support by community stakeholders of contributions to community economic, social and cultural advancement."

Page 26 - with reference to category 8. We are unclear in bullet point 5 how "mandated iwi and Māori authority leadership roles" reflects research quality, unless such roles are connected to the academic's research expertise. Similarly, in bullet point 6, we are unclear how cultural leadership roles (Chair person, Church Minister, Honorary Chiefly title) relates to research expertise and esteem.

We recommend including "Appointments to government and NGO advisory boards"

Page 27 - with reference to category 10. Bullet point 6 we think refers more to researcher development.

With reference to category 11. Bullet point 1 we recommend removing "Attracting" - there are too many factors outside the control of an academic to be evaluated on their ability to attract students.

Bullet point 3 - we assume this refers to internships and the like?

Bullet points 5 and 6 - we recommend removing these as we believe these do not say anything about research contribution.

Yes.

Yes, we agree that the proposed categories will cover most of the items that would be expected to be included in the research contributions element of a portfolio.

Yes, the descriptions are useful, but still require clarity on weightings.

The categories appear comprehensive, although they do not appear to acknowledge the potential for cross-disciplinary impacts which is important in some areas such as Sport and Exercise Science

The 12 proposed categories cover all aspects that could be expected in the context of the PBRF - but also cover additional, superfluous or out-of-scope criteria (such as impact).

The University's recommended changes to the category descriptions are recorded below as amendments to a copy of the SRG table, and are based on the following principles (superscript numbers in the SRG table below refer back to these principles):

1. All descriptions and examples should be clearly research focussed. For example: external research impact should not be referred to (for the reasons outlined above in section A); being Head of Department does not necessarily entail research activities or research leadership - and if it does, these can be specified individually in each appropriate category; titles and invitations bestowed for non-research activities should not be taken into account.

2. A significant level of contribution or esteem should be demonstrated in the examples, so that they would warrant the assessors' attention and so that they give researchers an indication of the level and quality of contribution they should be aiming to make. Trivial and low-level examples should be removed. As New and Emerging researchers are not required to submit the Research Contribution component, the examples do not have to be small-scale or minimal merely to be inclusive of that group.

3. Each item's scale/scope should be specified (eg, national or international) to assist the assessors when they are judging the significance of a contribution.

4. Where possible, the categories should not overlap, in order to avoid confusion and increase clarity. For example 'mentoring' best fits Category 9, so has been removed from Category 1; invitations to present research to non-researchers best fits Category 5 so has been removed from Category 3. Research prizes etc should only appear once, and advice should be given to all as to whether such prizes should appear in category 3 or in category 8. Staff 'supervise' students, not other staff (as per category 9), unless that staff member is also a research student, in which case the supervision should be recorded in Category 11 "(research) student factors".

5. Where possible, the Research Contribution and Research Outputs EP components should not overlap either. This is in line with the rationale for including CRE and PE assessments in PBRF in the first place - their purposes are different from and complementary to the purposes of the Research Outputs assessment: as mentioned above, CRE incentivises collegial research practices and PE provides an indicator of research quality alternative to Research Outputs. Information about the reception of specific Nominated Research Outputs (for example, citations) should be included in the Research Outputs section of the EP, not in the Research Contribution section, as this indicates the quality of the output. Category 6 ('recognition of research outputs') should only be used for within-time recognition of research outputs which were published before the current assessment period, or which were not detailed in the NRO section.

6. In general, there should be no repetition.

[see appendix]

Yes these look fine

Yes.

Category 1 includes this indicators:

Fostering internal or external linkages, cooperation, collaborative research and development with other departments, institutions and/or organisations.

This is repeated in Category 2. It could be better to have it appear only once, by removing it from Category 1. This might help to clarify the difference between these first two categories.

Good to see Maori factors included in the categories. Will the extra recognition include the work of the Wananga previous PBRF rounds and extra funding for supporting Maori students and staff was only provided to the Universities and not Wananga

Are there any activities not covered by these categories?

No, each of the categories have suitably broad descriptors, and when combined they cover the breadth of activities expected.

- separate uptake and impact into two categories
 - uptake could include prototypes and pilot plants
 - uptake include modification to a design, process or product as well as commercialisation or development of policy or practice
 - impact could be improvement in process, finances, more people employed,
-

It might be useful to include under Contribution to research discipline and environment, efforts undertaken to work across disciplines.

No.

Not any that are easily identifiable.

Appendix 3 is comprehensive but there is considerable information for researchers and Research Management staff to digest and integrate into statements. We believe the Sector should be able to comment again on the Research Contribution categories when SRG - Consultation Paper # 9 - Review of the assessment framework, is released (June 2015).

There are no activities which are not covered by the categories.

Not that I can think of.

None that I can think of.

They seem tightened up but yes covered adequately

Is the category description useful?

Yes. The first paragraph of each Category, the (draft) description, is useful and as far as possible differentiates that category from other categories. The examples provided further clarify what should be included in the category.

We would prefer that any Research Contribution examples provided for researchers, in the Guidelines or any other material, categorises that example to one category only and not offer categorisation options. For example, in the draft Categories 'Membership of funding committees' "can be listed" under two categories: "8. Research prizes, fellowships, awards and appointments" or "10. Reviewing, refereeing, judging, evaluating and examining". While accepting it's not always easy to categorise some activities allowing optional categorisation only confuses researchers and undermines the integrity of the categories themselves.

The University of Waikato finds the category description useful. However, it recommends removing any duplication from the draft descriptions as one of the stated purposes for combining the category types was to reduce this.

Duplication Example "Fostering internal or external linkages, cooperation, collaborative research and development with other departments or organisations."
This appears in both the 'Contribution to research discipline and environment' and 'Facilitation, networking and collaboration' sections.

The University of Waikato would find it helpful if the TEC displayed via an online forum, questions raised by TEOs about Research Contributions and any TEC response to these.

Yes.

Yes, it provides guidance to researchers on how to categorise/present their activities. The mapping is also useful to help PBRF-experienced researchers understand the new types and for upgrading IT systems.

Yes. The category descriptions are deemed comprehensive noting the comment below.

Yes, the descriptions are useful, but still require clarity on weightings.

Yes.

Very useful

Yes.

Yes.

Yes very helpful - although there may be questions to clarify wording eg category 11 last activity gain positive employment outcomes - can mean different things

Are there better or more relevant examples of activities that should be included as indicators for the categories?

For simplicity, comments are provided in the table below. [see appendix]

It would be useful to list as examples, activities that should not be included in a particular category, or any other category, when they have been (erroneously) included in the past. Examples could be sought from past panel members. The purpose behind this is to remove ambiguity on what is sought in the portfolio. A revision to a current example might be:

- Fostering internal or external linkages, cooperation, collaborative research and development with other departments, institutions and/or organisations. [Excludes development of linkages that are exclusively undergraduate teaching].

These appear to be clear and relevant.

Probably, but presumably these could be added to the Guidelines during drafting and feedback.

Memberships of CRI boards or industry related organisations should be included in the example in the description of Facilitation, networking and collaboration and Outreach and engagement.

Amendments to category descriptions and examples are suggested in the principles and table above.

These seem to cover a broad range

None that I can think of.

Additional comments

Minor thoughts:

- Requests to provide or providing tenure references? New Zealand does not have tenure. Thus is this intended to be international?
- I very strongly disagree with the comment that peer review is not essential. For all its faults, peer review is the foundation of quality. No better system has ever been established.

We appreciate the column headed 'Previous PE or CRE categorisation' in the Proposed Research Contribution category labels. This is helpful in understanding what comprises the new Category labels, and will help TEO's map existing data into the new proposed categories. It will be useful if this 'mapping' advice is continued through into the Guidelines proper to help TEOs, and researchers, transition from the current 2012 categories to the new categories.

Outreach needs to be better defined to minimise irrelevant material.

Clarify whether student factors relate to Level 7 students or only students doing Honours or post graduate research as many students do research projects within the degree.

As PBRF assessment is conducted at the scale of the individual researcher we believe the order in which the twelve categories are presented in an Evidence Portfolio should be determined by the individual researcher. This allows the individual researcher to focus on their strengths and achievements across disciplines and across career stages.

As noted above, are all the component categories valued equally, e.g. 'Research Prizes, fellowships, awards and appointments' versus 'Outreach and engagement' categories?

There appears to be confusion between point 23 and 25 on page 7. In point 23 the document refers to 12 proposed categories but in point 25, a researcher would be allowed to submit up to 15 items. Are these 15 activities within a Research Contribution statement or can the Researcher use a category more than once? Could a Researcher provide three statements using one category?

NZTCPASE welcomes the two new categories, 'Outreach and Engagement', and 'Uptake and Impact' which will be particularly helpful in Sport and Exercise Science. Sport and Exercise scientists are at the fore of public debates and knowledge concerning physical activity and inactivity, the role of exercise in medicine, physical activity as a social good, and so forth. They also play a significant role in New Zealand's national sporting successes which effect social cohesion and have economic benefits.

We are happy with these categories and definitions.

This is clear.

Categories 5 and 12 are useful new additions.

C. Information on Research Contribution to be included in an EP

Should a summary of qualitative data be provided for examples of supervision of students and research funding?

Answer Options	Response Percent	Response Count
Yes	69%	11
No	13%	2
Possibly	19%	3

Are there are other Research Contribution categories where information could be provided as a summary table?

Yes. Numbers of plenary presentations, international, national, local. Numbers of local, national and international invited seminars. Numbers of papers or grants reviewed, national, international. Numbers of grant panels, local/national/international

The consultation paper suggests supervision and funding are options for tabulating. Many other items could also be provided in a tabular format, examples include;

Editorial Board work, Conference Scientific Committee, and refereeing,

Research prizes, fellowships, keynotes.

Examples of possible tables: [see appendix]

As stated earlier in this section (C.) the general opinion is too not tabulate information. A concern is the potential extension of the tabulation approach to also summarise the Research Outputs section, something that would be in conflict with the notion of a quality assessment however much it might make the Panel's work easier. If the quantity of outputs or activity is a significant factor in the assessment and scoring process then this should be made more explicit in the Guidelines. The Health Panel specific guidelines took that approach in 2006 specifying the number of journal articles expected for a particular score (PBRF Guidelines 2006, pg 100).

The University of Waikato believes information on editorial positions held as well as information on journal article reviewing, lends itself to tabular recording.

Possibly research funding, editorial contributions, and invitations to make presentations.

Yes, research funding and, potentially, appointments, editorships and examinations could also be summarised. There has been some debate about including a summary of all outputs for the period by output type. This would provide more context for the portfolio, especially given the new limits to OROs. However, our conclusion was that this would shift the focus to quantity rather than quality (which would not be helpful for assessing portfolios) and would impact on transaction costs as the existence of outputs included in the summary should be verified.

Possibly editorial contributions and journal reviews as long as the table included information about the journal and the number of contributions/date range of participation.
For other aspects of Research Contribution we would not find any benefit from providing the information in summative form (i.e. the amount of citations does not indicate positive citations of work and may mislead a reviewers assessment without broader understanding)

Yes, a table might be useful for:

- academic reviews (for example, how many invited to do; how many completed for categories such as journal articles; book chapters; funding proposals; book proposals; grants etc.);
- funding, prizes/awards; and
- external grant information (for example, Role, Project title, Funder, total amount secured).

Yes, Category 3, Invitations to present research or similar

Conference invitations and/or participation could be tabulated, for example: name of conference, dates, location, numbers attending, whether the conference was national or international; whether participation was as invited keynote speaker or organiser or other.

To be fair for each category it should be all or none. It is human nature to focus on the category with additional information at the expense of others
Providing additional quantitative information in tables will highlight those particular categories over others. To be fair the table should extend to each category or none at all. The notion of quantities also works against TECs principals as it is not in itself a measure of quality.

Funding from international, national, industry and institutional sources could be tabulated

I don't think so.

Tables are good for making information at a glance clearer to readers in terms of numbers and there may be other areas where a table would be useful for eg category 3

Should the 1024 character limit be extended?		
Answer Options	Response Percent	Response Count
Yes	39%	5
No	62%	8
Other (please specify)		3

There is some concern that with the reduction of the number of research contributions to be included in the portfolio, maintaining the same character limit will introduce another requirement for staff to carefully describe the item (and therefore the associated time requirements to craft) to ensure the scale/scope of an activity is best presented for review. Understandably an increase in any character limit will also impact the assessment period for reviewers of a portfolio, so if any increase in character limit is introduced we would support no greater than a 512 character increase (therefore a 1536 character limit per item). We would support an increase with the understanding that all is not required to be completed, but is an option for those that require it (prefer an open opt-in process than an imposed limit) but understand the rationale for maintaining the current limit.

Extend the character limit to 1,500. Based on our experience in previous rounds the current 1024 Character limit could be too restrictive for some contribution category statements, e.g. Uptake and Impact.

Yes - this is where the researcher gets to present their case.

Comments

Re including a summary of qualitative data: Yes. A quantitative summary would also be helpful. How many dollars awarded in HRC or Marsden Fund Grants, as PI, or co-PI, or AI. How many dollars of MBIE funding. How many dollars of charitable funding (Lottery Health, AMRF, National Heart Foundation, CureKids).

Re character limit: It is OK at 1024 characters. On the one hand it is limiting for providing full details of some contributions, on the other hand it is limiting, 8-), that is to say, it keeps the document length manageable.

Re including a summary of qualitative data: In general we do not support providing a quantitative summary of information in the portfolio for a select group of activities. The reasons for this view are:

1. There is no reason presented for why some information should be tabulated. It will make the portfolio a longer document - tables plus 15 Research Contributions. If it is an issue of ensuring information is portrayed in a concise manner this is already addressed by the limit of items allowed - 15 and could be addressed by specifying a summary of information and then detail in each entry. This was encouraged with examples at this TEO.
2. It is inconsistent with the fundamental principal of assessing outputs and activities based on merit.
3. Not all activities are presented in a consistent format (i.e. free text). Tabulating particular data could present as an inconsistent approach to assessment.
4. Staff have been recording and collating activities in the format required from the last three PBRF assessments, a format generally consistent with a CV, the proposed format undermines that activity.
5. Systems developed for the last PBRF assessment will require significant re-development to adapt to such a change whereas the existing prevalent system (Symplectic's Research Elements) required only minor configuration for the changes proposed by the Minister.
6. It is unclear what substantive narrative would be required. The consultation paper suggests the textual narrative could be the "stage of the supervision (completed vs. in progress), the role in the supervision (chief supervisor or other supervisor)" however this information is already contained in the table suggested in the paper and would essentially be a duplication of the table.

Opinion on this issue is mixed and if there is a move to quantify some information in the evidence portfolio the following is commentary should that approach be taken: [see appendix]

Re character limit: Strongly support that the character limit be unchanged and remain at 1024.

Re character limit: It should be extended as each contribution may be broader as the number of contributions has been reduced. This category will now cover relevance, impact and significance. The character limit needs to allow the activity and the impact to be adequately described.

Student supervision or marking theses should record the names of the students and dates so they can be audited if required.

Allowance should be made for data to be tabulated e.g. student supervision, research grants and not included in the character limit.

The University of Waikato supports the TEC's suggestion of including a table of quantitative data for student supervisions and funding which would then be supported by a narrative. Our University is uncertain why the inclusion of the suggested columns for Maori and Pacifica students. The Research Degree Completion component of PBRF already rewards TEOs with a weighting of 2 for each Masters and PhD completion for students of these ethnicities, and would appreciate more guidance on this second inclusion. The TEC propose allowing researchers to include funding information in tabular form which would then be accompanied by a narrative. The University of Waikato would be interested in viewing the TEC's recommended tabular format for this table.

The University of Waikato supports the TEC's suggestion of retaining the 1024 character count.

The University of Waikato strongly recommends the TEC liaise with Symplectic, the PBRF Portfolio providers/proposed providers for 7 of the 8 New Zealand Universities, to help ensure any PBRF portfolio requirements of the TEC are deliverable. Our University would be interested to know how the TEC envisaged the table would fit into the EP schema D. Presentation of Research

Re including a summary of qualitative data: Does this refer to the table proposed in item 27 (p. 8)? We welcome the inclusion of the table, and would like to see it constructed so that each student can be listed (without names), the percentage contribution to supervision included, and possibly somewhere the opportunity to comment on the nature of the contribution (perhaps in a footnote) for exceptional cases.

We also recommend that this information be provided in panel-specific guidelines in addition to (or instead of) overall guidelines, as various panels/disciplines may want to see different things.

Re character limit: Since the number of entries is being reduced from 60 to 15, we should allow more space for individuals to explain their contributions (we suggest 1500 characters).

Re including a summary of qualitative data: It is probably useful to provide a summary of this data - the tables should as much as possible match what institutions produce for this data collection.

With reference to the column for Māori and Pacific in the table on page 8 - is this referring to actual students who identify as Māori or Pacific and/or students who are conducting research using Māori and Pacific methodologies?

Re including a summary of qualitative data: Yes, although the student supervision table is overly complicated. Student types should not include visiting researchers or postdoctoral fellows (these aren't students) and could be limited to PhDs and Masters (Research) (i.e. thesis) degrees. The other supervision types could be described in the Student Factor or Researcher Development commentaries. Also, the Māori and Pacifica information does not need to be included in this summary and would be more meaningfully explained in a commentary.

Re character limit: Maintained. Any summary tables should be in addition to the commentary text limit.

Re including a summary of qualitative data: We agree in principle that the table structure could be beneficial for some examples of the Research Contribution like student supervision, however the role of the researcher needs to be clearly explicit in the table (i.e. primary or secondary supervisor). It could also be beneficial to have a summative table for examination roles.

For research income a summative area may be beneficial to gain an understanding of scale of income generated, however there still needs to be an area to provide a narrative description to the summative amount to explain the scope of the income (i.e. prestige of awarding organisation, partnering institutions, general success rates of fund). It is also noted that given the alignment of government funding to specific 'mission' oriented agenda, the quantum of available funding for specific subject areas would need to be addressed as a reference factor by the panel to avoid inappropriate discrimination.

Additional comments:

It may be beneficial to have the ability to select the inclusion of a summative table or providing a narrative rather than demanding a standard approach across all portfolios if this is easily achieved. The use of summative tables does lay the assessment process open to semi quantitative analysis and weightings with volume being measured in lieu of an examination of excellence and impact.

Re including a summary of qualitative data: This device has merit but the current example provides far too much detail.

While PhD, Masters, Hons/ PGDip/Taught Master supervisions work well in a numerical table format, the Summer Researcher/Intern, Visiting Researcher and Postdoctoral Fellows information would be better suited as part of a Research Contribution category description statement.

It should be noted there will be a TEO auditing cost to ensure accuracy of supervision numbers as only principal supervisor data are given to TEC via the SDR. We also seek reassurance that such data would not be used for other purposes.

RE: point 30 (page 9). The Supervision Summary table will need a character limit on the Summer Researcher/Intern, Visiting Researcher and Postdoctoral Fellows type statements, if this table remains unchanged.

Are publication/archiving 'data sets' to be acknowledged? Given significant international and national policy developments in this area this is going to be very important measure of research contribution in the future.

Re including a summary of qualitative data: Yes, this would undoubtedly facilitate the compilation of portfolios.
 With regard to research funding, and auditing of that funding, some academics have raised the issue of verifying:
 i) incomes and benefits, such as flights and accommodation paid from foreign budgets / grants, and
 ii) the status of an academic who appears as a co-investigator or consultant on a foreign grant.

Re extending character limit: NZTCPASE is of the view that multidisciplines such as Sport and Exercise Science are disadvantaged by 1024 characters which should be expanded to allow academics to inform assessors of the overall relevance of their discipline. 1,500 characters seem more realistic for all disciplines.

Regarding whether a summary of qualitative data be provided for examples of supervision of students and research funding: Yes, for both students and research funding. However, the University recommends amending the research student supervision table on pg 8 of the SRG consultation paper as per the changes in red on the next page, which include:

- Committing a different sub-row to each supervision, in order to add:
 ostart and end dates (which alleviates the need for an “in progress/complete status” column)
 ofull time or part time status
 oa column for prizes, scholarships and research outputs. This is optional, as this information could be included in a narrative. On the other hand, if this column is included, no narrative for any supervisions may be necessary at all.
- Deleting post-doctoral fellows and visiting researchers, as neither are students. Information about mentoring or other relevant research engagement with these colleagues should go into category 9, ‘researcher development’.
- Changing “PhD” to “doctorate” to include named doctorates, for example, Education Doctorates (EdDs)
- Adding other typical descriptive terms for types of supervision eg ‘primary’ supervisor.

The University is pleased to see the SRG acknowledges that detailed definitions of the type of students will be required. These definitions should include specifications of a minimum size of research for each supervision (for example, 90 points for a research Masters supervision; 45 points for a taught Masters; 30 points for an Honours or PG Dip dissertation supervision), as well as careful definitions of “in progress” and “completion” (neither status should include “withdrawn”; doctoral completion should clearly state whether this is the hand-in or the viva date).

The University would also appreciate the opportunity to comment on any draft research funding summary table for category 7 (research funding and support). We recommend a table including the following categories for all funding obtained: Status of EP researcher (ie, PI/AI); project name; funder; amount awarded; start year of funding made available; end year of funding made available.

It [the character limit] should be maintained.

Having summary data puts extra emphasis on this category thereby running counter to your principle of treating each category on its own merits - if you do this for one you should do it for all or not at all.
 Having to provide tables will add to the compliance cost and workload for staff. We are not in favour of these.

We like the idea of a summary table but thinks some proposed types need clarification - for instance, ‘visiting researcher’ needs to be specified. This could cover a broad range of levels of supervision.
 Examination activity, funding, collaborations, and scholarships could also be presented in table form.

We support retaining the 1024 character limit.

Summary table of student supervision is useful- some people listed every student separately last time others in a group. Limit of 1024 characters is low given the amount required to be included now- it is a double category now and an expanded limit would assist e.g. 2000 characters

On a summary of qualitative data be provided:
 This would be good, provided it was clear that the text provided in the Student Factors category should not duplicate this information.
 On whether the 1024 character limit be extended: I would prefer to maintain the character limit.

D. Presentation of Research Contribution items

Do you support:

Answer Options	Response Percent	Response Count
Option 1: Maintain the status quo.	12.5%	2
Option 2: Require all Research Contribution items to be clustered by category (SRG preferred option)	75.0%	12
Option 3: Provide advice on the standardised ordering of Research Contribution categories in the panel-specific guidelines.	12.5%	2

Comments

I support clustering by category to improve easy of comparison between portfolios

Strong preference for Option 2.

All portfolios should be as uniform as possible to ensure the panel members are assessing the quality of the content and are not confused by differences in ordering of items or layout of text.

We also suggest that the category types should have a fixed order, again for consistency of format for researchers and reviewers. Researchers being only able to order items within each category. A suggested order is:

1. Research prizes, fellowships, awards and appointments
2. Reviewing, refereeing, judging, evaluating and examining
3. Invitations to present research or similar
4. Recognition of research outputs
5. Research funding and support
6. Contribution to research discipline and environment
7. Facilitation, networking and collaboration
8. Researcher development
9. Student factors
10. Outreach and engagement
11. Uptake and impact
12. Other evidence of research contribution

This above list is order based firstly on grouping 'like' categories together which should assist scoring and identifying duplicate entries between categories and then on categories that are may be more influential on scoring of the Research Contribution component. This order may be influenced by the decision to tabulate certain categories.

Option 2 Custer by category but allow best to be presented first as someone may have lots of impact and few "prizes awards..".

Best category should be allowed to be presented first so best performance isn't relegated to the last point.

The University of Waikato agrees greater consistency is required in the presentation of the Research Contribution component.

Although our University would be comfortable grouping 'like' contributions together we recommend allowing TEOs the option of deciding the order Research Contribution category types will appear in within their staff portfolio's research contribution listing. This means the researcher can present the contents of their portfolio in a way they believe best showcases what they have been up to over the last 6 years.

The University of Waikato does not support this option [3]. Some staff have greater strength in a particular Research Contribution area than in others. If the TEC impose a category display order some academics might perceive they are being disadvantaged if their research contribution strengths are in categories further down the list. In addition, we urge caution, as introducing a Research Contribution order automatically introduces a 'proxy' weighting system.

In general, we support Option 3, but please see comments below.

With the reduction to 15 items in Research Contribution, it might be useful to allow individuals to indicate that they serve on the editorial boards of three journals as "one item" in their list as opposed to three. The tabular approach envisioned for students allows for this sort of aggregation. But otherwise, it would be useful to allow individuals to order their list in terms of what they feel are their most important contributions.

Is "research discipline" too restrictive a term? Might "research field" be more useful in some instances?

The TEU agrees that option 2 is probably the best approach. We would recommend trying to cluster categories under a few 'headlines' if possible - to avoid the perception by individuals and institutions that they must provide detail for every category.

This is UC's preferred option. It assists the panel to quickly identify which types are included in the portfolio and assess all examples of a particular type.

As the emphasis or value (actual or implied) on the different areas of the research contribution section can vary between disciplines and subjects, we strongly support the inclusion of guidance in panel-specific guidelines on the perceived 'value' of items which will therefore affect the ordering of items included in a portfolio (i.e. impact on government policy or businesses may have a greater weighting in a commerce or business related panel than in a science related panel who value academic citation higher).

We agree with the Status Quo.

As argued above, the researcher should have the right to decide the order of the Research Contribution categories.

NZTCPASE prefers this option as the most logical. NZTCPASE accepts that this option [2] would work.

The University agrees with the SRG that Option 2 is the best, as this makes it easier for panels to navigate through numerous EPs.

We prefer the status quo as it allows researchers to indicate which are more significant than other which then provides guidance to the SRG on the extent of impact

Helpful from a panel perspective.

E. Allowing items outside the assessment period

Should the exceptions provisions be removed for the Research Contribution component?

Answer Options	Response Percent	Response Count
Yes	80%	12
No	13%	2
Possibly	7%	1

Comments

No I believe that it should not. Many honours remain significant marker of peer esteem outside of the review period.

For example, should Fellowship of the Royal Society be included as evidence of peer esteem, even if it is awarded before the review period? I would say that it should be allowed on the basis that it is highly prestigious, and the total number of fellows is very limited. Typically 12 fellows are elected per year, and no more than 15. I.e. absolute max of 15 x 6 new fellows, more likely 12 x 6, but even if we allow existing fellows, no more than ~450 total. This is a small number for the whole country.

Strongly agree that the exceptions provision is removed. This simplifies the entry criteria and presumably affects few researchers.

Yes, except for impact where it may relate to work undertaken outside the period

The University of Waikato supports the TEC's proposal of removing the provision for items outside the PBRF assessment period being included in the Research Contribution component of a portfolio. We would however be comfortable with significant Research Contributions falling outside the assessment period being referenced in the general commentary section of the portfolio.

The University of Waikato were pleased the TEC confirmed that impact generated within the assessment period by items produced outside the period, is admissible within a 2018 portfolio.

If an individual was awarded a status outside the assessment period, but that status maintains during the assessment period (e.g., fellowship status in a society), then that status should be allowed to be included. Prizes and awards should have to be within the assessment period. Indices such as H-indices should be for life work as they represent the status the individuals currently hold with respect to their research, and the source of the H-index should be presented.

Yes - this places everyone in the same position, and is overall fairer.

Yes. Any major prizes could still be included in the portfolio in either the opening commentary or in the Research Contributions section as they may still be ongoing e.g. if you win a Nobel Prize before the assessment period you are still a Nobel Prize laureate in the assessment period.

We support the removal of items that are from outside the period.

Agreed - The focus should be on the activities/outcomes that occur within the current PBRF round.

Please note - significant endorsement such as enduring Fellowships should also be included.

Many academics will have long research histories that extend beyond six years and they should have the opportunity to convey this history particularly in those cases where awards are made for past achievements. However, six years is also a fair benchmark period to generate significant outputs.

The University supports the removal of the exceptions provisions. However, the University recommends the retention of the clause: "Where the award or fellowship is ongoing (eg. 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." (PBRF 2012 Guidelines, pg72)

We think these should be removed.

Yes- unless a major award is defined - it is difficult to know what is relevant to the research period

Yes. Exceptions create loopholes open to abuse, particularly when the criteria for the exceptions are ambiguous or subjective.

F. Evidence and Audit

Do you support:

Answer Options	Response Percent	Response Count
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)	63%	10
Option 2: No evidence required in the EP but the component included in the TEO audit process, so TEOs may be required to provide evidence if requested (SRG preferred option).	31%	5
Option 3: Evidence provided in the EP and the component included in the TEO audit process.	6%	1
Other (please specify)		0

Comments

This is my preferred option. Providing evidence for peer review etc would be extremely onerous. As an example, a senior professor might review > 50 papers or grants per year. Assuming they have an email trail it can be documented, but it is simply not worth it for an item that at most would barely count for 1/7.

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 (SRG preferred option).

Second best option. This could be significantly onerous, AND staff would be concerned that they would be likely to be asked for evidence and so invest much more time in to compiling documentation. A better option would be to specify the types of evidence that TEO is likely to want.

Option 3: Evidence provided in the EP and the component included in the TEO audit process.

Unacceptable burden on staff.

In the previous round I was concerned that some valid items were rejected. The standard of evidence was unclear, and I thought might potentially be actually unachievable. May I suggest that the standard of evidence that will be required should be documented better and that it should be achievable by a reasonable member of staff, without devoting an excessive amount of their time to documentation

Strongly support Option 1. Reasons are:

- Options 2 and 3 require TEOs to store evidence for every entry - Option 2 being an open-ended statement that implies TEOs 'may' have to provide evidence for a random number of entries resulting in evidence being required for all items.
- If either Option 2 or 3 is implemented it would require significant resource to return over the last four years (2012-2015) to collect evidence. Since such evidence is not routinely collected this would be a much more significant exercise than any evidence collection for publications.
- Researchers would be very hostile to any such request.
- Little evidence to suggest significant issue with the current state.

Option 3 Evidence provided - less contributions now and it is worth 30%.

Providing supporting evidence ensures that the citation is correct, rather than relying on memory.

The University of Waikato recommends the TEC aims to maintain the reputation and integrity of the PBRF exercise by ensuring TEOs uphold both the letter and the spirit of the PBRF guidelines during 2018. Although our University prefers there be comprehensive and robust auditing of the Research Contribution component as outlined in the above Options 2 and 3, we recognize the administrative and compliance costs for exercises such as these may be prohibitive. Therefore the University of Waikato supports Option 1.

Option 1 is preferred. The costs associated with Option 2 would be prohibitive. In 2012, there were 6311 funded staff participating in PBRF. Even with no increase in staff, this would equate to possibly up to 90,000 separate documentations. In 2012, only 8 EPs were identified as problematic.

We need to avoid adding another layer of evidence collection.

The TEU agrees with option 2 as the best approach.

This is UC's preferred option. This still implies an audit threat to encourage honesty.

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 (SRG preferred option).

This will increase compliance costs (during the audit and also be encouraging the practice of collecting evidence just in case). As this change would change TEO behaviour and PBRF preparation (i.e. evidence collection) this should not be implemented until after the current round, if at all.

Option 3: Evidence provided in the EP and the component included in the TEO audit process.

No - too complicated.

The requirement for the inclusion of evidence in the TEO audit process is deemed to be overly burdensome and at odds with the design principles for the 2018 Quality Evaluation (to avoid changes that result in unreasonable compliance or high costs). We support the option in which evidence can be requested by panel members if there is a questionable inclusion within a portfolio. It should be noted, that we support the request for evidence if this is required by a panel member assessing a portfolio, not part of the TEO audit sample by TEC.

In line with the general desire to reduce administration costs we agree with the general principle to make individual researchers responsible for evidence relating to Research Contributions. Failure to maintain adequate records in support of formal PBRF Evidence Portfolios should be seen as an internal disciplinary matter.

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 (SRG preferred option).

If this option were accepted, TEC auditors must give the TEO time to contact the researcher and collect the evidence. A one week minimum has been indicated by research staff. The repercussions for the Researcher not being able to produce the evidence should be stated in the new guidelines.

NZTCPASE prefers this option as the most logical

The University agrees with the SRG that Option 2 is the best, on the condition that the audit is very light, to avoid violating the principles of reducing compliance burden and audit burden. One option would be to suggest a cap on the extent of audit eg an intention to audit around 1% of all items (which would be one item every 6-7 EPs, and commensurate with the small number of anomalous items removed by the TEC during the 2012 audit process).

The University strongly recommends against option 3, as the potential benefit is not commensurate with the enormous compliance burden.

The University notes that this section is about evidence and audit of research contribution and looks forward to the opportunity to comment on other PBRF QE evidence and audit processes in future.

Regarding the audit of research student supervision, it would be useful to know what data needs to be kept by the TEOs: student name and/or TEO student number? National student number? The University would prefer that auditors request student names only, again, to minimise compliance burden. Most academic staff would have easy access to records of the names of students they have supervised, but not an identification number.

Not in favour of Option 2 but if this option was chosen we would need guidance of what kind of evidence would be acceptable for each item prior to the round so we could assess whether that can be provided should it be requested.

This is not a lot different than option 2 as we would still require staff to collect evidence prior to submission and we would need guidance of what kind of evidence would be acceptable for each item prior to the round. Option 3 would require the same amount of work as option 2 as we would still require staff to collect evidence in case we are audited.

Section F was the only section where we disagreed with the Sector Reference Groups proposed change, and instead preferred the status quo

A. Research Contribution: the Polytechnic supports the Proposed definition of Research Contribution.

B. Research contribution categories: the Polytechnic supports the proposed 12 categories.

C. Information on Research Contribution to be included in an EP: the Polytechnic supports the proposal of a summary of qualitative data being provided for examples of supervision of students and research funding, and the proposal that the 1024 character limit be maintained.

D. Presentation of Research Contribution items: the Polytechnic supports the proposal that items be clustered by category (Option 2).

E. Allowing items outside the assessment period: the Polytechnic supports the proposal for the removal of the exceptions provisions for the Research Contribution component.

F. Evidence and audit: the Polytechnic supports the status quo that there be 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 (Option 1)

G. Scoring the Research Contribution component: the Polytechnic supports the proposed retention of the 0-7 point scoring scale, and supports the proposal of specific advice being provided to ensure that all types of Research Contribution are considered on their merits.

We prefer option 1. Other options would be difficult to manage.

Status quo- it would seem a large effort to gather all of the minor pieces of information required - with such a small amount of auditing required last time in this category - tracking all interns, every newspaper article etc is a huge burden for little reward.

One possible drawback with Option 2 is that if TEOs know they be asked for evidence, they may require staff to provide it when submitting their EPs for internal review. This will place a large burden on staff, when in most cases the evidence will never be asked for. I'm hoping that evidence will only be requested for unusual or dubious items, and these will be picked up during internal review.

G. Scoring the Research Contribution component

Should the 0 - 7 point scoring scale be retained for the Research Contribution component?

Answer Options	Response Percent	Response Count
Yes	92%	12
No	8%	1

Is there another alternative scoring scale that should be considered?

Yes. The University of Waikato recommends the TEC consider the feasibility of adopting an alternative scoring scale of 0 - 10 with accompanying new tie points. A 0-10 scales allows researchers to better understand their grading, e.g. they received a 50% or 90% for the component as opposed to a 4 or a 6 under the old system. A 0-10 scale would be easier for reviewers to apply consistently as academics are familiar with grading on this scale. The additional points on this scale allows for a more holistic assessment of the portfolio and would possibly deliver a more balanced evaluation of the quality of the research activities. In addition, this approach allows for a more equitable treatment for significant numbers of staff on the cusp of two grades. We recommend that the SRG evaluate this 0-10 scale to determine the cut off scores for each quality grade. Modelling of the distribution of grades from prior rounds can be used to ensure equivalent cut-offs to the prior PBRF rounds.

There are many possibilities here, but if the 0-14 scale is not maintained, then 0-7 is probably the best option as it allows for comparability to the RO scale.

Whilst the 0 - 7 point scoring scale is well known and understood the resulting calculation based on a combined assessment of research contributions may have particular impact on researcher who would previously been assessed on the cusp of grades. The introduction of a 0 - 14 point scoring system may help to mitigate this impact and should be considered as a possibility.

The University recommends retaining the current scoring scale of 0-7, as it is clear, readily understood and fit-for-purpose, and changing it may lead to unforeseen complications. This aligns with the PBRF redesign principles of consistency and continuity.

However, while the rationalisation of PE and CRE into RC is useful to reduce repetition, it remains important to take items in both of the former categories into account when ascertaining the quality of a researcher (as indicated in the discussion of the purpose of these components in Section A above). Therefore the PBRF will need a scoring system for Research Contribution that ensures that, to achieve a high score, an EP exhibits achievement in both peer esteem and contribution to the research environment.

The University recommends that this could be ensured through specifying that panels must take BOTH CRE and PE aspects into account when scoring EPs. The scoring descriptors would need to be revised to ensure this. For example, "7 = evidence of BOTH significant peer esteem and significant contribution to the research environment, 3 = evidence of reasonable peer esteem and reasonable contribution to the research environment OR evidence of significant achievement in one aspect but little to no achievement in the other"

Not that I'm aware of.

Should specific advice (similar to that provided for the Research Output component) be provided in the PBRF 2018 Quality Evaluation Guidelines to ensure that all types of Research Contribution be considered on their merits?

Answer Options	Response Percent	Response Count
Yes	83%	10
No	17%	2

Comments

On 0-7 point scoring scale: This worked well. More importantly, it is familiar to us all.

I am strongly against changing the scale, 8-). If TEO does, then a 10 point scale would be easy to understand.

On whether there should be specific advice provided: No. the advice is meaningless.

Support continuing with the 7 point scale. Reasons are consistency, simplicity and no apparent advantage in moving to another scale. A draft of the expected scoring table is provided below [see appendix]

Strongly support the provision of specific advice for how the Research Contribution items will be assessed considered for the as. Care will need to be taken with any quantified data to reinforce the notion of merit.

In the absence of professional and applied research experts reviewers who have more experience in fundamental research may not be able to assess the value from uptake or impact.

On there being a 7 point scoring scale retained: No. The University of Waikato has concerns about the impact of using the 0-7 scale for the much more condensed format of Research Contributions with only 15 items allowed per Evidence Portfolio. With only two components to be scored instead of three, the RC score will be important in setting the overall grade. Previously the 15 point increments associated with PE and CRE were key in moving the EP grade up or down. With each RC at 30 points, that level of precision for fine tuning the grades is not available to the panel. We recognise that the SRG has determined that a scale of 14 is not workable. However, we recommend that scoring each component out of 10 would provide the extra flexibility needed for this assessment. The University of Waikato would be interested in understanding what the 2012 PBRF results would have looked like if the PE and CRE components had been reduced by half i.e. assessed out of 7 rather than 14. On whether specific advice should be provided: The University of Waikato agrees with the TEC that all Research Contributions should be considered on their merits and that no particular Research Contribution should be considered to be of higher quality than any other simply because of their type.

Re scoring system: The 0-7 scale is an 8 point scale, and the 0-14 scale is a 15 point scale. Essentially, the 0 point is the same in both scales, and then the 1-14 scale allows for each point in the 1-7 scale to be “high or low”. That is, an 11 would be a “low 6” and a 12 would be a “high 6”. The question becomes whether this differential will matter in terms of the ultimate scores of A, B, C, and R. Under the old system, these differences are highly important. A score of 3 (out of 14) puts one into the R category with an RO score of 2. A score of 4 puts one into the C category with an RO score of 2. Both of these scores would be a 2 in a 0-7 system. New weightings for receiving A, B, C, and R would have to be determined if the 0-7 system were adopted.

The consequences of such a shift should be considered. Guidelines for panel members could be to start by making a rating on the 0-7 scale, and then determining whether that rating was a “high” rating or a “low” rating (high 6 or low 6), which could then be translated into an 11 or a 12 on the 0-14 scale.

Re specific advice: It’s a bit difficult to assess this without exemplars. In general, this would be a good idea, but perhaps another round of feedback on this once exemplars have been developed would be helpful.

We agree that the 0-7 point scoring scale should be retained for the Research Contribution component.

As panellists need to use the scoring system, their feedback will be most important in determining how the new scoring system should work. Any new system could be trialled using portfolios from the 2012 round.

We strongly support the inclusion of guidance and weighting information for research contributions similar to that provided for research outputs irrelevant of the scoring calculation to be used (if the 0 - 7 point scale is maintained than this will be of higher importance due to the impact of the tie points on the assessment of the portfolio). We also strongly support that the guidance and weighting is discipline/subject influenced to ensure staff are able to make the correct assessment about what items to include within a portfolio to provide sufficient information for assessment.

Re the scoring system: We see this as a problematic area. Many researchers are just coming to an understanding of the current scoring system, which if disclosed, can identify areas for future support and development.

To support stated objective of supporting the development of research careers, will the researchers receive good feedback for the 0-14 score for Research Contribution categories?

Additional comments: We have already raised the issue and the challenges of equal scoring of component categories.

To ensure the equal value of each Research contribution category, perhaps an individual score should be given to each category and then averaged. Otherwise some categories could be considered ‘more equal than others’.

Another alternative is that each individual panel issue panel specific commentary.

While NZTCPASE is of the view that members of the assessment panels are best positioned to comment on the scoring scale, members also note that the present system has the advantage of being simple to understand.

The University has no particular views on the provision of specific advice. It should be a fundamental principle of the entire PBRF process that all types of contributions (categories) are considered on their merits.

We think retaining the 0-7 point scoring is fine.

We don’t think that providing specific advice to panels in the guidelines would add much and don’t think it is necessary.

Yes.

It will be a difficult task for panellists to assign 12 output areas into 7 points.

H. Any other matters

Please describe and detail any areas or issues relating to the Research Contribution component that require our attention but have not already been included in the consultation paper.

The change to the Research Contributions is the most significant change to the assessment of evidence portfolios since the inception of the PBRF. The number of items able to be listed has reduced significantly and new items have been introduced. It is correct that the number of Research Contributions categories is less than the maximum number of 15 entries, this allows researchers to demonstrate the spread of their activities when applicable. Cognisant of the significant influence the PBRF has on research activity in New Zealand TEOs, and how such activity is articulated and measure, we appreciate the opportunity to provide commentary on this hugely influential component of the PBRF system.

Concerned that academics who work solely within academic circles may not value applied research so clear indicators are required. Details of scoring would need to be expanded to provide clear guidance. The Panel guidelines could also discuss impact and uptake.

The issue of dates for inclusion is key. E-publications need to be clearly explained for both ends of the assessment period. Even if choices taken are somewhat arbitrary, clarity is essential. This might impact reviews of articles, publications in the public media, etc.

Page 12, section 47. Training for panellists and information to institutions and staff should include discussion about the importance of understanding what an individual researcher regards as valuable may differ from the perceptions of others. For example, a researcher may seek for their work to be used and highly valued by a specific sector of the community, but the institution and sector may tend to celebrate more obvious achievements such as gaining external income or developing a partnership with a major business or industry.

The Guidelines should specify the level of detail required to support Research Contribution claims e.g. date, time, place, who, etc.
The term 'Research Contribution' be replaced by 'Research Contribution & Recognition' to make it more representative of what it includes.

Strongly agree that the timing of the 'impact' measure should be within the period but may relate to research concluded prior to the period but this needs to be clearly articulated and expressed within the Guidelines. We also consider it important to adopt the view that the 'research' to which the impact is related must have been considered in an assessment process (e.g. PBRF) and identified as 'excellent'. Also propose that a time limit on the work which can be referenced for this purpose (noting here for example the time limit used in the recent UK REF 1993-2013 for the proposed 'impact' and its underpinning research).
We support the introduction of the ability to classify research contributions as 'confidential' but the description of what a 'confidential' output is needs to be clearly defined.

While we welcome the intent of reducing the transaction costs for the integrated 'Research Contribution', we believe additional work is required to achieve a balanced outcome. Important considerations for the new configuration include: the weighting (if any) between categories; their order of presentation in an evidence portfolio; and achieving the government's desired attention to 'Uptake and Impact' components.
In our internal discussions our staff have put forward two additional options:
1. Could the 'Uptake and Impact' statement stand as a separate component outside the Research Contribution categories? It might, for example, be included at the level of the Summary Statement.
2. To give identifiable attention and focus the Research Contribution Categories could provide 20% and the 'Uptake and Impact' category 10% of the total mark.

The discussion paper does not address the issue of allocating items in more than one of the 12 categories. Chairs of Panels probably need to ensure agreement among assessors about the need to convey their interpretations to academics prior to the compilation of portfolios.

The University of Auckland has identified no other current matters relating to the Research Contribution that need sector consultation, but would welcome the opportunity to comment further on any amendments the SRG makes to the Research Contribution definition, categories and table templates as a result of this current consultation.

Appendix 1. Extract from the University of Auckland submission to Review of PBRF by MoE, March 2013

Are there any changes that you think should be made to the PBRF to better recognise or encourage the application, utilisation and commercialisation of tertiary education research? If so, what are they and what benefits and challenges would they create?

This appears to be a question about whether PBRF should assess research impact. This needs extremely careful consideration. Recognising and encouraging research impact is completely different from recognising and encouraging research quality and quantity, which is PBRF's current core aim. If assessment of impact is desired, a completely separate assessment exercise would need to be designed.

A measurement add-on may look like the easiest option, but UK and Australian experience has shown that it may not work. Benefits to be gained must be clear.

Australian and UK experience indicates:

- It is difficult to know what material to collect as evidence and how to collect it
- Attribution for various impacts can be difficult
- Using a funding tool to incentivise impact can be counter-productive to collaborations
- Academics are not necessarily the best people to gather evidence of impact; they know their research outputs, but not all the "afterlives" of their research outputs in the wider world
- Impact is reliant on the acceptance and support of end-users and stakeholders as well as academics communicating their research, so it is not a pure measure of academic effectiveness
- Transaction costs are extremely high for production of case studies, and there are no widely accepted metrics that are likely to provide a satisfactory alternative.
- No matter what period is chosen, timeframes will be controversial

As per the key learnings of the Australian EIA Research Impact assessment trial: "Universities reported challenges in putting together case studies; specifically that the resources required in scaling up to a national impact assessment exercise would need to be considered. There were also logistical issues related to tracing information within the long lead time from research to impact and staff movements within those timeframes."

Appendix 2. Extracts from the University of Auckland submission to the draft National Statement of Science Investment, August 2014

[University of Auckland] Recommendation 9: Evaluation of impact should assess the impact of the New Zealand science system as a whole, over the long term (15+ years) rather than any less-effective measures focussing on individual projects or contracts.

Reasons:

- We support efforts to examine the effectiveness/ impact/ benchmarking of the whole system. The science system delivers enormous benefits for New Zealand and demonstrations of this are important. However, not every individual project will deliver impact in a foreseeable timeframe - if they do, then the balance of investment is wrong. For every major breakthrough, a number of risks need to be taken, otherwise only small incremental projects will be funded.
- Assessing potential impact of research at the beginning of individual projects is very difficult for most research. Research is by its very nature dealing in unknowns.
- It is possible to expend large amounts of resource on quantitative assessment of funding applications and still not spend money "more accurately". There is no perfect evaluation instrument, so resources should not be spent constantly trying to find one. The compliance costs of any potential changes to assessment, monitoring and evaluation must be realistically calculated and carefully considered to balance against the potential benefits of such changes.
- We would strongly discourage Government from any move which determines future funding at institutional level from past impact. As discovered in the UK and Australia pilot schemes, it is difficult to attribute the exact percentage of an impact to individual researchers or institutions, and impact can happen decades after the actual research. Evaluation of impact and funding accordingly can create perverse incentives such as discouraging collaboration, and is extremely expensive.

[...]

[University of Auckland] Recommendation 11: Government should consult widely and consider a variety of options as to how best to increase research impact before settling on a course of action.

Reasons:

- The draft Statement only suggests changing funded researcher behaviour, via assessment of potential impact of projects, whereas there is more than one place to make an intervention in the science system to improve impact and there are also other players to influence, such as pan-sector bodies, media, individual organisations and institutions. There are also other ways of changing behaviour to increase impact. For example, the ability to include dissemination activities as a budget line for project proposals (not just industry-relevant projects but also projects on health, education, community building etc) would be very welcome, and would greatly enhance the ability of researchers to participate in knowledge transfer.

See for example the Australian research impact assessment trial report "Excellence in Innovation: Research impacting our nation's future - assessing the benefits": <http://www.atn.edu.au/newsroom/Docs/2012/ATN-Go8-Report-web.pdf>

And the findings from the UK research impact pilot for the Research Excellence Framework: <http://www.ref.ac.uk/background/pilot/>

One of the ambiguous categories in invitations is invited speaker versus plenary etc - many conferences have invited speakers that do regular talks and plenary speakers but the category of sponsored speakers ignored- i.e. when airfares etc are paid by the organizing committee is not distinguished so this category is a grey area for assessment.
Some definition of what is what would be useful.

The proposed changes seem sensible to me, and are likely to produce a better organised and more efficient process for all parties.

APPENDIX

The information provided in this appendix is in addition to that provided in the summary due to the nature of the suggestions.

B. Research Contribution categories

Suggested changes to the questions: *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?*

Proposed Category (Title)	Draft Description
1. Contribution to research discipline and environment	<p>Contribution to research discipline and environment items should reflect the staff member's contribution to the general development of their discipline or general improvements to research capability and/or the research environment inside and/or outside of academia.</p> <p>Indicators of this contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • Developing new discipline methodologies or knowledge.² • Development of new laboratories, and/or organising new equipment. • Research¹ Leadership positions that increase capability, for example: <ul style="list-style-type: none"> o Director of a laboratory or research facility. o Head, or Deputy Head, of School, Department, Centre, or Research Centre or Group with a focus on research development or initiatives in that role.¹ • Initiatives to grow Mātauranga Māori and kaupapa Māori knowledge bases and capacity. • Initiatives to grow Pasifika knowledge bases and capacity, including those that build non-Pasifika researchers' knowledge and understanding of Pasifika research and paradigms. • 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.⁴ • Organising over a sustained period of time and/or participating in departmental or institutional research seminars.²
2. Facilitation, networking and collaboration	<p>Facilitating, networking and collaborating items in national and international arenas³ provide an indicator of the contribution the staff member makes to the research environment specifically through developing and supporting research networks and collaborations which develop their discipline or improve research capability inside and outside of academia.</p> <p>For all indicators, please specify the scope and scale of the item – is it national or international; how many researchers were involved, and so on.³</p> <p>Indicators of this contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • Facilitating or organising national or international³ conferences or other formal networks such as i symposia, meetings, workshops, seminar series, hui, fono, wānanga, online forums, etc. • Participating as a national or international³ Conference Chair, Track Chair or Session Chair where the position involved major preparation or a competitive selection process.² • 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 national or international³ Conference Programme Committee, Technical Programme Committee or Conference Panel. • Director of consortium or research group. • Member of collaborations and consortia.²

	<ul style="list-style-type: none"> • Internal or external research collaboration.² • Fostering internal, national or international or external³ 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.² Invited presentations to conferences or other formal networks may also appear under 'Invitations to present research or similar'⁴
3. Invitations to present research or similar	<p>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 addresses, or other similar invitations. For all indicators, please specify the scope and scale of the item – is it national or international; how many researchers attended, and so on.³</p> <p>Indicators of this esteem can include but are not limited to:</p> <ul style="list-style-type: none"> • Keynote address, Plenary, Principal Speaker or Invited Speaker. • Invited member of research advisory, strategy, reference or working group, task force, or steering committee for internal or external organisation. • Invited to present research to professional groups or organisations. • Invited to develop to iwi, Māori or Pasifika research based community-based projects.¹ • Invited to produce a journal article, review paper, chapter, or reprints specifically based on the staff member's research reputation.⁵ • Invited to overseas organisations or events.² • Invited to work in an overseas institution.² • Invited or commissioned to create, perform, or produce creative work. • Invited to contribute to research-based¹ Pasifika conferences, Pasifika development panels, Pasifika research fono and Pasifika advisory boards. • Invitations to present research to other non-professional groups, community interest groups, ethnic and/or cultural representatives⁴ Some items could be listed under other categories for example, 'Research prizes, fellowships, awards and appointments'⁴
4. Other evidence of research contribution	<p>Other evidence of research contribution may include other items which are not included in the above categories but demonstrate the contributions made, and/or esteem held, by a staff member and their research within or outside of academia. Indicators of this esteem and/or contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • Hosting highly esteemed, and world-leading visiting researchers with institutional support² or decision-makers.¹ • Requests to provide or providing tenure references.¹ • Consultancy based on research expertise. • Producing reference materials such as encyclopaedia and dictionary entries.
5. Outreach and engagement	<p>Research 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. The EP should make it clear how the staff member's research expertise is linked to the indicator.¹</p> <p>Indicators of this contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • Research Outreach activities.¹ • Community engagement regarding research.¹ • Research contributions to Māori social, economic and cultural advancement.¹ • Research contributions and impact to Pasifika social, economic and cultural advancement¹ • Contributions to public understanding of research.¹ • "Critic and conscience" of society and debate in the discipline. • Media coverage of research. • Presentation of research to professional groups or organisations.
6. Recognition of research outputs	<p>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.</p> <p>Recognition of Nominated Research Outputs should not be described here, but described in the NRO narrative field.⁵</p> <p>Indicators of this esteem can include but are not limited to:</p>

	<ul style="list-style-type: none"> • Formal² positive reviews of your research outputs. • Metrics such as: <ul style="list-style-type: none"> o Citation counts (excluding self-citation) <u>only when accompanied by the world average in the relevant discipline</u>³ o h index <u>only when accompanied by the world average in the relevant discipline</u>³ (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. • Formal² positive commendations and/or reviews⁶ for your research outputs. • Acknowledgment by iwi and Māori leaders, kaumatua and kuia of contributions to Māori economic, social and cultural advancement.⁴ • Acknowledgment and support by Pasifika stakeholders of contributions to Pasifika economic, social and cultural advancement.⁴ • Selected for important or esteemed public/private collection or performance venue. • Extended or repeated exhibition or performance season dates due to demand.⁶ • Numbers of monographs sold per edition and per reprint Reprints of your research² or repeated exhibitions or performances.⁶
7. Research funding and support	<p>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.</p> <p>Indicators of this esteem and/or contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • Securing external contestable research grants e.g. Marsden Fund.¹ • Competitive research funding from your own organisation.¹ • Funding from external organisations.^{1&6} • Funding for research facilities or gaining competitive access to facilities, etc. • Contestable external travel grants etc.² • Securing in-kind or pro-bono support to facilitate research including key people (including kaumatua and community engagement capability), resources, equipment and materials.
8. Research prizes, fellowships, awards and appointments	<p>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 memberships, fellowships, awards, appointments, etc. should be included.</p> <p>Indicators of this esteem can include but are not limited to:</p> <ul style="list-style-type: none"> • Best paper, poster or presentation. • Awards and prizes for creative arts outputs. • Adjunct appointment. • Research fellowship. • Mandated iwi and Māori authority research leadership roles.¹ • Mandated cultural leadership roles (example: Chairperson, Church minister or Honorary chiefly title).¹ • Fellow of a professional body for example, the Institution of Professional Engineers New Zealand (IPENZ) or Fellow of the Royal Society of New Zealand. • Member of a society or academy with restricted or elected admission, for example the British Society of Audiology. <p>Activity as part of a standard membership of societies can be listed under 'Contribution to research discipline and environment'.²</p> <p>Membership of funding committees can should be listed under 'Reviewing, refereeing, judging, evaluating and examining'.⁴</p>
9. Researcher development	<p>Researcher development items should reflect the staff member's contribution to the range of activities related to mentoring colleagues in relation to research development.</p> <p>Indicators of this contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • Formal² mentoring and supervising⁴ of other staff members including 'new and emerging' researchers and postdoctoral fellows with evidence of outcomes, such as joint publication or contestable funding secured for mentee as Principal Investigator and mentor as an Associate Investigator.²

	<ul style="list-style-type: none"> • Growing institutional support for, and the pool of, iwi and Māori researchers. • Increasing institutional capacity for growing the pool of Pasifika researchers. • Supervising Formal Mentoring Postdoctoral Fellows.⁶ • Head of department where there is a focus on Formal leadership of researcher development activities while in the role.¹
<p>10. Reviewing, refereeing, judging, evaluating and examining</p>	<p>Reviewing, refereeing, judging, evaluating and examining items provide an indicator of the esteem a staff member may have amongst their peers. For all indicators please specify whether the item is at national or international level.³</p> <p>Indicators of this esteem can include but are not limited to:</p> <ul style="list-style-type: none"> • Member of funding committee which reviews or evaluates funding proposals or grant applications for research¹ • Member providing specialist or expert advice to a research advisory, strategy, reference, working group, task force, or steering group. <ul style="list-style-type: none"> • Participation in editorial boards and/or refereeing • Member of a committee providing research-based¹ specialist or expert advice to or for a relevant external organisation. • Editorial Board member. • Editor or Guest Editor. • Invited to contribute Expert or specialist contributor to indigenous/first nation peoples development panels, boards and major programmes. (Item must be research related)¹ • Invited to be a Expert or specialist member of a selection panel for research-related awards and prizes.¹ • Formally reviewing a journal article, conference paper, book manuscript.² • Formally reviewing abstracts (as part of the selection of presenters) and conference proceedings (following selection)² • Peer reviewer for industrial, commercial, or Government research¹ organisations. • Expert witness.¹ <p>External thesis examiner should could be listed under 'Student factors'.⁴</p> <p>Conference reviewing should could be listed under 'Facilitation, networking and collaboration'.⁴</p>
<p>11. Research¹ student factors</p>	<p>Student factors items should reflect the staff member's contribution to research¹ student-related activity, as well as esteem factors associated [with] your research students.</p> <p>Indicators of this esteem and/or contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • Attracting, supervising and supporting research¹ students including but not limited to: <ul style="list-style-type: none"> o PhD-Doctoral, Masters, Honours research students o Māori and Pasifika students o Summer research students and visiting research students o Other high quality postgraduate students⁶ • Assisting student publishing, exhibiting or performance. • Research student placements. • Supporting Māori students to connect with their iwi through mutually beneficial research. • Supporting research¹ students to gain scholarships, prizes or awards. • Supporting research¹ students to gain positive employment outcomes, whether employed by TEOs, government, industry or others¹.
<p>12. Uptake and impact¹</p>	<p>Uptake and impact items should provide an indication of the contribution the staff member's research has had outside of academia-</p> <p>Indicators of this contribution can include but are not limited to:</p> <ul style="list-style-type: none"> • 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. • Improvements to existing practices, policy, law, businesses, process, or products.

	<ul style="list-style-type: none"> • Commercialisation of research. • Contributing to economic prosperity, social well-being, innovation and entrepreneurial activity through the design and delivery of new products, processes or services. • Contributing to Māori social, economic and cultural advancement. • Other evidence that the knowledge generated by the research is in use outside academia. • Other technology and knowledge transfer.
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Proposed Category Title	Comments on examples or indicators
1. Contribution to research discipline and environment	<p>Exclude 'Research mentoring' – move to 9. Researcher Development.</p> <p>Exclude 'Fostering internal or external linkages'. It is duplicated in 2. Facilitating networking.</p> <p>Revise 'Organising and/or participating in departmental or institutional research seminars' to include "excludes conferences".</p> <p>Include item: 'Creating new Journal, publication series or equivalent'.</p>
2. Facilitation, networking and collaboration	<p>Consider including 'Establish or manage web based research discussion platforms such as blogs or similar'.</p> <p>Revise 'Invited presentations to conferences Should be listed under 'Invitations to present research'.</p>
3. Invitations to present research or similar	<p>Revise 'Invited member of a research advisory, strategy etc' to include statement that 'Internal invites for these activities should be listed under 'Contribution to research ...'.</p> <p>Revise 'Invited or commissioned' So that commissioned work is listed under 'Research funding and support'.</p> <p>Include statement that 'general calls inviting attendance at a conference to present a paper are excluded as they are not considered invitations'.</p> <p>Clarify that Keynotes should be listed here and not listed in the Research Output section.</p>
4. Other evidence of research contribution	<p>Suggest including statement that items are listed only once.</p>
5. Outreach and engagement	<p>Clarify term 'wider community', assumption this is community beyond academia?</p> <p>Suggest including 'Dissemination or research through publication of research findings in professional or industry journals or other media outlets'. Is different from 'Media coverage' which can be interpreted as the media identifying research as opposed to researchers being active 'science communicators'.</p>
6. Recognition of research outputs	<p>Include: 'Translation into languages other than the original published language'.</p>

	<p>'Acquisition of work by reputable galleries or collectors'. 'Requests to show creative works already presented (e.g. re-screening of film, exhibitions and artefacts).</p>
7. Research funding and support	
8. Research prizes, fellowships, awards and appointments	Suggest including the term 'Excludes academic promotion or new appointments'
9. Researcher development	<p>Include: 'Supporting new researchers to publish to obtain grants' 'Development of workshops or seminars targeted at new researchers'</p>
10. Reviewing, refereeing, judging, evaluating and examining	<p>Include: 'Invited curator or jury member' [Exhibitions or creative works].</p>
11. Student factors	No comments.
12. Uptake and impact	Clarify that the uptake or impact must have occurred during the assessment period (2012-2017) but that the research from which the update or impact was generated may have occurred outside of the period (same principle as with citations).

Complete	researcher/ intern										
	Visiting researcher										
	Postdoctoral fellow										
	PhD										
	Masters (Research)										
	Honours, PG Dip or taught Masters projects										
	Summer researcher/ intern										
	Visiting researcher										
Postdoctoral fellow											

The example table presented in the consultation paper for supervision is consider far too detailed and should be aggregated, a revised example is suggested here:

		Primary or Co-supervisor	Associate or secondary supervisor	Maori or Pacific	Total
Completed	Doctorate				
	Masters (by research)				
	Other				
In Progress	Doctorate				
	Masters (by research)				
	Other				

There is no example of how research funding might be presented in a table. We provide two examples here and comment on the merits or otherwise of each:

The table below is one option for how research funding might be tabulated. The benefit is the level of detail provided although it omits duration other potential items of interest. The negative is that for some staff this may result in a relatively long drawn out list. It also suggests that the dollar value is important.

Funder	Funder Scheme	As: Principal Investigator	As: Associate Investigator	Total NZ\$
HRC	Project Grant	1		\$1,250,000
Royal Society	Marsden	1	1	\$1,300,000
Royal Society	James Cook Fellowship	1		\$220,000
ACC	Open Tender		1	\$56,500
Own University	Faculty Seed funding	1	2	\$26,500

An alternative option based on the ERI categories is outlined below. It would encourage a narrative due to the more aggregated level of information.

Funder Type	As: Principal Investigator	As: Associate Investigator	Total NZ\$
Government –competitive funding	1		\$1,250,000
Government – other funding		2	\$1,300,000
Non-government	1		\$220,000
Overseas based		1	\$56,500

Issues for both of the tables is the level of information sought, and whether all types of funding should be listed e.g. travel grants, internal competitive etc.

Are there are other Research Contribution categories where information could be provided as a summary table?

Response:

The consultation paper suggests supervision and funding are options for tabulating. Many other items could also be provided in a tabular format, examples include;

Editorial Board work, Conference Scientific Committee, and refereeing, Research prizes, fellowships, keynotes.

Examples of possible tables:

	Editor or Guest Editor	Editorial Board Membership/ Scientific Committee	Routine referee /reviewer	Ad-hoc referee /reviewer
Journal				
Conference Proceedings				
Conference Presentations	n/a			
Book				
Reports				

	International	National	Local	Other
Research Prizes, Awards				
Fellowships				
Conference Keynote				

G. Scoring the Research Contribution component

Suggested changes in response to the question: *Should the 0 – 7 point scoring scale be retained for the Research Contribution component?*

Support continuing with the 7 point scale. Reasons are consistency, simplicity and no apparent advantage in moving to another scale. A draft of the expected scoring table is provided below.

		Research Outputs (70)							
		0	1	2	3	4	5	6	7
	0	0	70	140	210	280	350	420	490
	1	30	100	170	240	310	380	450	520
Research	2	60	130	200	270	340	410	480	550
Contributions	3	90	160	230	300	370	440	510	580
(30)	4	120	190	260	330	400	470	540	610
	5	150	220	290	360	430	500	570	640
	6	180	250	320	390	460	530	600	670
	7	210	280	350	420	490	560	630	700
				R or R(NE)					
				C(NE) - Only. Score of 140-170					
				C(NE) 200-390					
				C 200-390					
				B 400-580					
				A 600-700					