PBRF UPDATE 2010

Additional information that further clarifies Research Outputs have been included in the 2012 PBRF Guidelines, these are minor and have been highlighted in purple.

WHAT ARE RESEARCH OUTPUTS

Research Outputs are the most important of the 3 assessment components of the Evidence Portfolio. This component measures the quality of research through focusing on an assessment of research outputs.

Output of research as defined for the purposes of the PBRF:

- Research is original investigation undertaken in order to contribute to knowledge and understanding and, in the case of some disciplines, cultural innovation or aesthetic refinement.

- It typically involves enquiry of an experiment or critical nature driven by hypotheses or intellectual positions capable of rigorous assessment by experts in a given discipline.

- It is an independent (independent should not be construed to exclude collaborative work) creative, cumulative and often long-term activity conducted by people with specialist knowledge about the theories, methods and information concerning their field of enquiry. Its findings must be open to scrutiny and formal evaluation by others in the field, and this may be achieved through publication or public presentation.

- In some disciplines, the investigation and its results may be embodied in the form of artistic works, designs or performance.

- Research includes contributions to the intellectual infrastructure of subjects and disciplines (eg dictionaries and scholarly editions). It also includes the experimental development of design or construction solutions, as well as investigation that leads to new or substantially improved materials, devices, products or processes.

Activities that are Excluded from the Definition of Research

The following activities are excluded from the Definition of Research except where they are used primarily for the support, or as part, of research and experimental developing activities:

- Preparation for teaching;
- The provision of advice or opinion, (except where it is consistent with the PBRF Definition of Research);
- Scientific and technical information services;
- General purpose or routine data-collection;
• Standardisation and routine testing (but not including standards development);
• Feasibility studies (except into research and experimental development projects);
• Specialised routine medical care;
• The commercial, legal and administrative aspects of patenting, copyrighting or licensing activities;
• Routine computer programming, systems work or software maintenance (but NOTE that research into and experimental development of, for example, applications software, new programming languages and new operating systems is included);
• Any other routine professional practice, eg in arts, architecture or business) that does not comply with the Definition of Research (but NOTE clinical trials, evaluations and similar activities will be included, where they are consistent with the Definition of Research).

**Types of Research Outputs**

**NRO’s** Each Evidence Portfolio should contain up to **FOUR (4)** Nominated Research Outputs (NRO’s). A NRO is an output nominated by the PBRF-eligible staff member as one of their best research outputs produced during the assessment period.

Staff members may include fewer than FOUR (4) Nominated Research Outputs provided that:

• The Evidence Portfolio contains at least **ONE (1)** Nominated Research Output (this is a minimum requirement before an Evidence Portfolio can be submitted to the TEC);

• The reason for there being fewer than FOUR (4) is given in the Other Comments or Special Circumstances field of the Evidence Portfolio. Comments should only be included in the Special Circumstances field where the staff member meets the criteria for special circumstances.

**NOTE:** Where a panel concludes there is insufficient reason for fewer than FOUR (4) Nominated Research Outputs, this may be reflected in the Final Quality Category assigned to the Evidence Portfolio.

**RO’s** Each Evidence Portfolio can include **up to 30** Other Research Outputs (RO’s) that meet the criteria for inclusion.

**Factors influencing the quantity of Research Outputs**
The number of research outputs that a full-time staff member can produce may be influenced by a variety of factors such as:

• Special Circumstances;
• The subject area or sub-area;
• The type of research outputs produced;
• The extent to which outputs are sole or multi-authored;
• The career stage of the staff member (eg. new and emerging researcher);
• Whether the staff member has been research active over the entire assessment period.

**NOTE:** Both quality-assured and non-quality-assured research outputs may be included as NRO or as RO’s.
NOTE: The number of NRO’s and RO’s required for the 2012 assessment round have not yet been identified by TEC.

Selecting the Research Output Type

Research Outputs are classified according to a number of defined types, as listed immediately below. Each research output included in an Evidence Portfolio must be classified under one of these types.

The staff member should select the research output type that best matches each one of their (up to) 34 outputs.

For example, a performance may be recorded on a video but the research output type would be Performance (not Video). Similarly, where a journal article listed as a research output is published on the internet, the appropriate research output type would be Journal Article, not Other Form of Assessable Output (ie: internet publication).

Research Outputs include:
- Published academic work (such as books, journal articles, conference proceedings, and masters or doctoral theses);
- Work presented in non-print media (such as films, videos/CDs and recordings);
- Other types of outputs (such as intellectual property, materials, products, performances and exhibitions).

List of Research Output Types

For further information concerning Academic Outputs go to [http://aod.massey.ac.nz/](http://aod.massey.ac.nz/). Alternatively, go to [http://www.massey.ac.nz](http://www.massey.ac.nz) > click on the Research Tab on the Selection Ribbon (top of page) > click on Academic Outputs (drop down box) > click on Output Categories (left of screen).

Scroll down to your chosen Academic Output Category, where you will find a description of that research category, a Verification Checklist of Evidence Requirements and an Academic Outputs Coversheet for this category.

- Artefact/Object/Craftwork
- Authored Book
- Awarded Doctoral Thesis
- Awarded Research Masters Thesis
- Chapter in a Book
- Commissioned Report for an External Body
- Composition
- Conference Contribution:
  - Abstract
  - Full Conference Paper
  - Conference paper in published proceedings
  - Poster Presentation
  - Oral Presentation
  - Other
- Confidential Report for an External Body
• Discussion Paper
• Design Output
• Edited Book
• Exhibition
• Film/Video/CD
• Intellectual Property (eg. Patent, Trademark)
• Journal Article
• Literary translations, where these contain significant editorial work in the nature of research
• Monograph
• Oral Presentation
• Performance
• Scholarly Edition
• Software
• Technical Report
• Working Paper
• Other forms of Assessable Output (including but not limited to):
  o New Materials
  o Structures
  o Devices
  o Images
  o Products
  o Buildings
  o Food Products and Processes
  o Published geological and/or geomorphological maps
  o Explanatory Texts

Research Outputs with Similar Content

Some research outputs contain much material of a broadly similar, if not identical, nature to others. For example:

• A journal article may be a slightly revised version of an earlier refereed (or non-refereed conference paper.

• A book may draw heavily on material previously published by the author(s) in articles, chapters or other books or a thesis.

• Exactly the same output may be published separately in two or more languages.

When selecting their Nominated Research Output’s staff members should not include outputs that are identical, or virtually identical, in nature and content. However, they may include such outputs in their list of Research Output’s, although the general criterion of selecting their best work still applies.
Judgement on Merit

Research Outputs will be assessed primarily on their **QUALITY**.

- All research activity, whether basic, fundamental, strategic, artistic or applied, will be assessed against the same broad indicators of quality.

- All types of research outputs will be considered on their merits. No particular research output will be considered to be of a higher quality than any other simply because of their type.

- Although formal processes of academic peer review or other forms of quality assurance may provide the peer review panel with some assurance about quality, the absence of such review or other formal mechanisms of quality assurance will not be in itself be taken to imply lower quality.

Confidential Research Outputs

Some Research Outputs may be confidential for a variety of reasons. **Confidential Research Outputs** (ie outputs not in the public domain) **may be listed in an Evidence Portfolio if the employing TEO can arrange all necessary permissions and make any other arrangements for members of peer review panels to assess those research outputs if required.**

If confidential outputs are included in the list of ‘other’ research outputs, they **will not be called for examination by the panel** – but sufficient information has to be provided in the Evidence Portfolio to enable the TEC to independently verify the existence of each output (which may include sighting the report).

It will not be adequate, for example, to include a confidential research output with a title of ‘Confidential Report’ and/or with no location details. The onus is on the staff member to provide an Evidence Portfolio that can be assessed and verified, including any confidential Nominated Research Output’s in the Evidence Portfolio.

Are you submitting a Confidential output? If so, ensure that the Academic Output Coversheet clearly identifies your output as confidential, by completing (Box 3 Confidential?). Thank you.

Quality Assured Research Outputs

A quality-assured research output is defined as any research output that, prior to its publication (public dissemination, presentation, performance, or exhibition) **has successfully completed a FORMAL quality-assurance process.**

This means the output must have been subject to **formal, independent scrutiny** by those with the necessary expertise and/or skills to assess its quality (including, where relevant, its rigor, logic, clarity, originality, intellectual significance, impact, applications, artistic merit etc.)

**NOTE: Not Editing**
Each research output that is included in an Evidence Portfolio must be classified as quality-assured or non-quality-assured. Staff should use the definition above to guide them in classifying each of their research outputs included in their Evidence Portfolio.

**Formal quality-assurance** processes vary between different disciplinary areas. They include, **but are not limited to**:

- Blind peer-review or refereeing processes undertaken by journals and book publishers;
- Other review processes employed by editors, editorial committee or publishers;
- The refereeing of conference papers;
- Review processes undertaken by major galleries, museums and broadcasters;
- Review processes employed by users of commissioned or funded research.

A **non-quality-assured research output** is one that:

- Has not been subject to a quality-assurance process; or
- Is currently in the process of being quality-assured; or
- Has been unsuccessful in completing a formal quality-assurance process (ie it has been peer-reviewed and rejected, possibly two or more times).

**NOTE:** A non-quality-assured output that has been included as a Nominated Research Output is more likely to be requested for scrutiny by the panel than a quality-assured output is.

Where a research output has been produced (published, publicly disseminated, presented, performed, or exhibited) in the assessment period, **but has not been subject to a quality-assurance process in that period**, then it is eligible for inclusion as a non-quality-assured research output. **It must NOT be included as a quality-assured research output.** However, it will be eligible for inclusion in the Evidence Portfolio.

**Reviewed Research Outputs**

Quality-assurance processes are different from **review processes as used in the Peer Esteem component**. A research output may have been reviewed in the public arena after its publication or public dissemination. **Such reviews do NOT meet the definition of a quality-assured research output.** These reviews, however, may be included in the Evidence Portfolio under the Peer Esteem component.

**Outputs involving Joint Research**

Joint research is research resulting from the joint efforts of two or more researchers. A research output arising from joint research can be included as a research output in an Evidence Portfolio. Within the context of the PBRF, there are two types of joint research depending on the nature of the research output involved. These are:

- **Co-authorship** Describes a situation in which a research output has more than one author. The term Co-authorship applies to **written outputs** such as journal articles, books and conference papers.
Co-production  Describes a situation where more than one person produces a research output. The term Co-production applies to outputs that reflect creative and artistic works (such as a performance, composition, design, exhibition, film, building, etc).

Are you intending to submit a Joint Research Academic Output? Before submission please ensure that you check whether this output has already been entered by going to http://rims.massey.ac.nz/RMENet/ > click on Personnel (Ribbon at top of page) > click on Show My Profile (drop down box) > verify that this particular output has or has not already been entered. Thank you.

**General Principles applying to JOINT RESEARCH**

The principles guiding the PBRF approach to joint research are:

- The PBRF Quality Evaluation process assesses the work of the individual academics, regardless of whether or not they are the sole authors/producers.

- Only those joint research outputs for which there is assigned authorship (or equivalent) will be considered in the Quality Evaluation process.

- Joint research outputs will not be counted pro-rata (ie five authors will not be taken to imply that each person has contributed 20%)

- The contribution to a joint research output will not be assessed on the basis of the order in which co-authors or co-producers are listed. Order may be an indication of the importance of a contribution, but this is not necessarily the case.

- Panels will assess joint research on a qualitative basis. To enable this, the staff member should include information on their contribution (relative to other co-authors or equivalent) in the My Contribution field for any of their NRO’s that have been co-authored.

- The PBRF is not concerned with where the other co-authors/producers are based. It is solely concerned with the quality of the output and the relative contribution of the staff member.

**Inclusion of more than one Evidence Portfolio**

Two or more co-authors or co-producers of a research output can submit the same research output in their own Evidence Portfolio. The quality of the research output is evaluated in each case on the basis of each co-author’s or co-producer’s stated contribution.

**Basis of Judging Contribution to Joint Research**

The Quality Evaluation process will judge a staff member’s contribution to a research output based on information about co-authorship or co-production entered in the My Contribution field of the Evidence Portfolio.
Relevance to Nominated Research Outputs (NRO’s)
In nominating their NRO’s, staff members must be aware that only their relative contribution to co-authored or co-produced outputs will be considered. Staff members must decide the value of a co-authored or co-produced work relative to a sole-authored/produced work, when deciding on their NRO’s.

NOTE: Panels will recognise that in some disciplines co-authorship (or its equivalent) is the norm.

Details of Co-Authorship/Co-Production
The details of co-authorship/co-production required are:

- The names of the first (4) FOUR authors or producers as listed in the research output: AND
- A record of the number of other authors, where there are more than four co-authors or co-producers.

Information required in the MY CONTRIBUTION field for Nominated Research Outputs
The following information relating to the staff member’s contribution to an Nominated Research Output should be entered in the MY CONTRIBUTION field of the Evidence Portfolio.

- Brief comments on the significance of the staff member’s contribution to the output: for example, whether they took a leadership role or contributed in a major or less significant way. Comments may include a statement about the status of co-authors (e.g., where a co-author is a postgraduate student).
- Brief comments on the nature of the contribution, where this may help support the extent of the contribution made: for example, it might be helpful to include information about whether the contribution was by way of the conceptualisation and design of the research, the field work undertaken, the production of the article/output, or the supervision of other authors.

Joint Research Contribution STATEMENT EXAMPLES
Here are some examples of contribution statements relating to joint research outputs:

- Lead researcher in a multi-country study. Key input into the design of the study and application for funding assistance.
- Played a major, but not lead, role in the research-design and field work of the project.
- Had a minor role; contributed to the conceptualisation of the research and assisted with analysis of results.

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Now that you understand what Research Outputs are, we encourage you to submit your Academic Outputs to your Departmental Administrator or Research Management Services as soon as they are available.

Should you require further assistance contact your Departmental Administrator or go to http://aod.massey.ac.nz or type in AOD via your Massey Internet Explorer. Alternatively, go to http://www.massey.ac.nz > click on the Research Tab on the Selection Ribbon (top of page) > click on Academic Outputs > click on Contact Us.