1. Introduction

The Working Party was established by the Research Committee to look at a framework for introducing an assessment of research quality at the school level to maximise the impact of UWA’s research.

An extract from the Research Committee’s meeting of 14 August 2003 outlines the background:

"(f) Assessment of Research Quality

The current volume-based measures of research output used in the UWA budget model have been a source of concern for some years, and there is now general recognition that quality drivers needs to be introduced to maximise the impact of UWA’s research.

Towards this the University has undergone an exercise in international benchmarking of research quality using a version of the UK Research Assessment Exercise (RAE). An outline of the approach taken is attached... The correlation between the UK and Australian assessors used in the assessment of five (former) UWA departments is good and augers well for the more systematic adoption of the RAE method for the assessment of research quality across the whole institution. The practicality of using the RAE method for the assessment of research publications in school reviews and factoring it into the University budget model will be investigated by a Working Party of the Research Committee..."

The report and recommendations of the Research Quality Working Party are expected to be forwarded to the Research Committee for consideration, then to the Academic Board and the Planning and Budget Committee.

The Working Party met on two occasions to discuss the issues and formulate its recommendations. Members were assisted in their consideration by a number of background papers:

- A report on the UWA Research Quality International Benchmarking Project – April 2003 (This outlines a project to examine the quality of publications in five UWA schools/departments using a process similar to the UK RAE)

- A summary of the feedback from the five UWA schools/departments who participated in the UWA research quality benchmarking project (de-identified responses to a questionnaire)

- The executive summary of a report by Sir Gareth Roberts reviewing the UK RAE – May 2003 (The full review report is available at www.ra-review.ac.uk)

- A report of the New Zealand Performance-Based Research Fund Working Group – Dec 2002 (This outlines a proposed national funding model, used in NZ in 2003, which incorporates research quality – full details are available at www.tec.govt.nz/funding/pb_rf/guidelines.htm)

2. General approach

The Working Party noted that some quality measures exist at present in the UWA budget model, for example the staff distinction component. The research output component, however, is predominantly quantity-based, and this has been a cause of concern for some time.

Members were aware that the national budget model was likely to change in the future to include a quality component. They considered, nonetheless, that rather than waiting for a DEST model to be imposed, UWA would do better to take a pro-active approach, at the same time not deviating too far from any likely national initiatives.
Discussion centred on an approach involving an initial one-off exercise to assess research quality for each school, followed by incorporation of the quality rating into the University’s budget model. Research quality assessments could thereafter be embedded in the school review process. It was agreed that ultimately the rationale for introducing quality assessment was to influence behaviour at UWA in a manner likely to maximise the impact of UWA’s research.

Members acknowledged that there would inevitably be challenges in finding a fair and equitable means of assessing research quality, perhaps especially in large schools with a wide range of disciplines. It was recognised that any approach to assessing research quality would have imperfections. The aim was to focus on an approach which improved on the current process.

**Recommendation 1** – UWA should move towards a method of assessing research quality at the school level, which can be used to incorporate quality drivers into the UWA budget model, in order to maximise the impact of UWA’s research.

**Recommendation 2** – An initial assessment of research quality, coordinated by the PVCRI, should be conducted in the first half of 2004 to provide a quality rating for each school, and thereafter the assessment of research quality should become part of the school review process.

3. **What should be assessed?**

In considering what UWA should assess the Working Party kept in mind the purpose of assessing research quality – to influence behaviour by incorporating a greater quality dimension into some of UWA’s processes, such as resource allocation. Some dimensions of research quality (eg staff distinction) were already incorporated into the University’s funding model and sometimes formed part of a school’s review documentation, at the school’s discretion. Other dimensions of research quality (eg thesis distinction) were recorded by the University but were not part of the funding model. Others (eg publication quality above a basic minimum) were not currently captured on a central basis. It was felt that at a minimum the University should assess research output quality.

3.1 **Thesis distinction**

On the question of thesis distinction, it was agreed to suggest to the Board of the Postgraduate Research School that they may wish to discuss the issue and consider whether to recommend to the Planning and Budget Committee that the funding formula for the research training component of the UWA budget should be modified to take this into account.

3.2 **Peer Esteem**

The Working Party considered the inclusion of peer esteem as an indicator of research quality. A number of aspects of esteem, such as learned society membership, invited keynote lectures, editorial contributions to peer reviewed journals, chairing a conference were discussed. It was noted that evidence of esteem was one of the quality measures used in both the UK RAE and the New Zealand performance-based research funding model. Examination of the UK esteem guidelines for several different areas indicated that while there was overlap, significant differences from discipline to discipline were apparent. The issue of comparing degrees of esteem across disciplines was non-trivial. The Working Party concluded that this aspect of research quality would be better left for the longer term, once national directions were known.

**Recommendation 3** – While there may be merit in including peer esteem as an indicator of research quality, this should not be considered at present, but should be kept under review for the future and considered in the light of any national funding model changes.

3.3 **Research output quality**

The Working Party was unanimous in its view that research output quality should be assessed through the school review process to yield a quality index for incorporation into a revised budget model. Discussion focused on exactly which output should be included, how this should be assessed and how it might be factored into the UWA budget model.
It was agreed that a subset of each school's research output should be peer reviewed by experts in the discipline as this approach had the general confidence of the academic community. While in the UK and NZ research output from all universities is assessed by a panel of senior academics in the discipline, the Working Party recognised that this was obviously not an option for UWA. Instead it was considered that the items of output could be assessed by appropriate discipline experts selected in the same way as for school reviews. In multi-discipline schools where more than one external expert reviewer would be selected for the review process, the school could determine which of the selected experts should assess each output item submitted. The possibility of paying the experts an honorarium where appropriate could be considered.

After discussion of various options, the Working Party decided that items of research output from all academic staff (research staff and teaching-and-research staff) should be assessed, rather than including output from a selected number of staff only. It was agreed that up to four items per person produced over the past 7-year period should be submitted for assessment. This period corresponded to the 7-year period between successive school reviews. Where an individual submitted less than four items, a score of zero would be given for the non-submitted items. All academic staff employed at UWA on the specified census date and holding an appointment at 0.5FTE or above would be deemed eligible and would be required to submit four items of output. Schools could choose whether or not to include output items from individuals whose appointment commenced within three years of the census. It was decided that eligible research output items should be those in the current UWA range collected in the annual publications exercise, as specified in the UWA Research Publications Manual.

The Working Party discussed various scales for assessing research output, including the 7-point scale used in the UK RAE, where the focus was on the proportion of output at attainable levels of international, national or sub-national excellence. Eventually the Working Party reached the view that each item of output submitted should be assessed on a simple 4-point scale to give a quality score for the item. Then an average for the school – the school output quality score, Q – should be obtained by summing the quality scores for all items and dividing by four times the school FTE for eligible academics. Where a school decided not to submit output from an academic whose appointment commenced within three years of the census date, the individual would not be included in the school FTE. The scale should be as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rating</th>
<th>Item Quality Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality equates to top 10% of research in the discipline</td>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>Quality equates to top third but not top 10% of research in the discipline</td>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>Quality equates to middle third of research in the discipline</td>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>Quality equates to bottom third of research in the discipline</td>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>Research output item not submitted</td>
<td>E</td>
<td>0</td>
</tr>
</tbody>
</table>

Thus Q for each school would be somewhere between 0 and 4.

Ways of factoring the quality score into the research output component of the UWA budget were considered. The Working Party favoured obtaining for each school an output quality score (Q) which would be multiplied by the school's research output quantity (ie UWA research output/publication points - P). Then each school's share of the total UWA funds available for research output/publications would be Q x P for the school divided by the sum of Q x P for all UWA schools, i.e. Qs Ps /∑UWAQP where Qs is the school output quality score and Ps is the school's research output/publication points.

**Recommendation 4** – The quality of the research output of all academic staff members in a school should be assessed by peer review of the selected output items.

**Recommendation 5** – Up to four items of research produced over the past 7-year period from all eligible academic staff members should be submitted by the school for peer review.

**Recommendation 6** – An eligible staff member should be defined as a research or teaching-and-research staff member who is employed by UWA on an academic contract on the specified census date and holds an appointment at 0.5FTE or above.
Recommendation 7 – Schools should be permitted to choose whether or not to include output items from eligible academics whose appointment commenced within three years of the census date; where the output is not included, the FTE of the academic should not be included in the school FTE.

Recommendation 8 – Eligible research output items should be those in the current UWA range collected in the annual publications exercise, as specified in the UWA Research Publications Manual.

Recommendation 9 – In the initial round, items of research output should be assessed by appropriate discipline experts selected in the same way as for school reviews. Once research output assessment is integrated into the school review process items of research output should be assessed by appropriate discipline experts selected by the school review panel. The school should determine which of the selected experts assesses each output item submitted.

Recommendation 10 – Each item of output submitted should be assessed on a simple 4-point scale to give a quality score for the item. An average for the school – the school output quality score, Q – should then be obtained by summing the quality scores for all items and dividing by four times the school FTE for eligible academics. Where a school decided not to submit output from an academic whose appointment commenced within three years of the census date, the individual should not be included in the school FTE.

The quality assessment scale should be as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rating</th>
<th>Item Quality Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality equates to top 10% of research in the discipline</td>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>Quality equates to top third but not top 10% of research in the discipline</td>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>Quality equates to middle third of research in the discipline</td>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>Quality equates to bottom third of research in the discipline</td>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>Research output item not submitted</td>
<td>E</td>
<td>0</td>
</tr>
</tbody>
</table>

Recommendation 11 – To factor a quality dimension into the research output component of the UWA budget, the output quality score (Q) for each school should be multiplied by the school’s research output quantity (ie UWA research output/publication points - P). Each school’s share of the total UWA funds available for research output/publications would thus be Q x P for the school divided by the sum of Q x P for all UWA schools, i.e. Q x P / ΣQ x P where Q is the school output quality score and P is the school’s research output/publication points.

The question of whether appeals should be allowed was discussed. The Working Party was of the view that appeals against the judgement of an expert assessor should not be permitted but a Head of School should be able to appeal to the PVCRI on procedural grounds.

Recommendation 12 – Appeals against the judgement of an expert assessor should not be permitted but a Head of School should be able to appeal to the PVCRI on procedural grounds.

In conclusion, the Working Party reiterated its recognition that any model for assessing research quality and incorporating it into the University’s processes would have imperfections. In proposing the approach above, the Working Party’s aim was to improve on the current situation and to lay the foundations for the further evolution of a system more sensitive to research quality.

1 November 2003

Research Quality Working Party:
Professor Colin MacLeod – Convenor
Professor Dennis Haskell
Professor Mel Sargent
Professor Gwido Stachowiak
A/Professor Alison Ward
Ms Lorna Robertson – Executive Officer