

Reform of higher education research assessment and funding

Consultation Response Form

The closing date for this consultation is: 13
October 2006

Your comments must reach us by that date.

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education and skills

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The information you provide in your response will be subject to the Freedom of Information Act 2000 and Environmental Information Regulations, which allow public access to information held by the Department. This does not necessarily mean that your response can be made available to the public as there are exemptions relating to information provided in confidence and information to which the Data Protection Act 1998 applies. You may request confidentiality by ticking the box provided, but you should note that neither this, nor an automatically-generated e-mail confidentiality statement, will necessarily exclude the public right of access.

Please tick if you want us to keep your response confidential.

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If your enquiry is related to the policy content of the consultation you can contact Jim Cutshall on:

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e-mail: james.cutshall@dfes.gsi.gov.uk

If you have a query relating to the consultation process you can contact the Consultation Unit on:

Telephone: 01928 794888

Fax: 01928 794 311

e-mail: consultation.unit@dfes.gsi.gov.uk

Please place an x in the box below that best describes you as a respondent

<input type="checkbox"/> higher education institutions	<input type="checkbox"/> university teachers	<input type="checkbox"/> university administrators
<input type="checkbox"/> higher education representative bodies	<input checked="" type="checkbox"/> Other (Please specify)	

<p>Please Specify:</p> <p>Professional Body and Learned Society</p>

Summary

- The link between QR and research income is crude and unresponsive: none of the methods proposed in the consultation are suitable for STEM, or any other, subjects;
- The RSC believes that no one metric alone is suitable for measuring research quality and that any system adopted must use peer review as a key measure of quality;
- The RAE 2008 should run unaltered;
- Focussing on one metric, e.g., research income, will badly skew the sector's activity;
- Post 2008 consideration should be given to a metric-informed peer review assessment;
- Metric informed peer review could allow a light-touch approach to future exercises. The results of the light touch review could identify the occasional need for fuller reviews;
- A basket of metrics should be used, the exact details of which should be agreed at the unit of assessment level.

1 Which, if any, of the RAE 2008 panels might adopt a greater or wholly metrics-based approach?

Comments:

The Royal Society of Chemistry would not wish to see any changes to the published procedures for the 2008 RAE panels. The RSC is confident that the criteria already laid down and published for the 2008 RAE will result in a sound assessment of research that will provide a basis from which a metrics-informed peer review mechanism can emerge.

In other words, the Royal Society of Chemistry believes that, whilst metrics can play a part in the assessment of research, the RAE 2008 chemistry sub-panel, or indeed any other sub-panel, should not adopt a greater or wholly metrics-based approach.

The RSC believes that the current consultation attempts to lead respondent to comment on a small number of proposed unsatisfactory systems. The RSC does not believe that any of the proposed systems, nor indeed any system solely based on input metrics, is suitable for assessing research quality.

As stated above, the RSC believes that it is wrong solely to use input measures to judge research quality. The RSC believes that the any system of research assessment should include an element of peer review. A package of metrics including output and input measures, as well as activity (or volume) measures, could have a role in supplementing peer review.

A strong criticism of the use of an input metrics such as research funding alone is that for institutions with less research funding the correlation between funding and research quality as measured by the last RAE is weak.

Having noted particular issues with the use of input measures, output measures such as citations are not by themselves necessarily a good measure of measuring quality. Different sub-disciplines of subjects display different publication and citation behaviour. At a simple level the citation rate depends on the size of a community: the larger the

community the greater the citation rates observed. This underlines the need to use a package of metrics, supplemented by peer review, as the main quality measure in any research quality assessment process.

In a similar way that citation behaviours vary, different sub-disciplines within chemistry require different levels of financial support. Consequently, if research income were the main measure of research quality, a small department which has research mainly in a cheaper chemistry sub-discipline will apparently have lower quality research than one which concentrates on a more expensive sub-discipline.

Additionally, if any system is to be imposed then that system must be imposed across the whole spectrum of subjects and not just onto some subjects: every subject must be assessed using the same basic system.

Finally, one of the drivers for the consideration of a metric-based research assessment system was the burden imposed by the current system (both time and financial). There is no clear evidence that any of the proposed systems will cost less than the current system

In summary the RSC believes that the 2008 RAE should run as currently defined. Once we have data from the 2008 exercise we can look at how best to adapt that system perhaps by incorporating the use of a package of metrics.

2 Have we identified all the important metrics? Bearing in mind the need to avoid increasing the overall burden of data collection on institutions, are there other indicators that we should consider?

Comments:

The RSC believes that no one metric alone is suitable for measuring research quality and that any system adopted must use peer review as a key measure of quality.

A number of metrics have been identified in the consultation document but the models put forward in detail have used research income alone and the use of this metric is, we believe, based on a flawed analysis.

More specifically, the RSC believes that an input measure such as research income alone is not a suitable measure of research quality (see answer to Q1).

Having noted that, there is a role for the use of a package of metrics in either light touch approaches that might be used between full peer reviewed based, or metric informed peer reviewed based exercises, or as a trigger for a more detailed review.

It is likely that different subjects, or groups of subjects, would be better suited to different mixes of metrics, but rather like the system in place for the 2008 RAE, panels and sub-panels, in consultation with their respective communities, should have the flexibility to define their own package of metrics as long as all panels are working to the same general principles. The exact mix of metrics chosen must be balanced between

inputs and outputs and “activity” measures.

As in the system for 2008, the use of panels and sub-panels will allow choices of different mixes of metrics to not only look inwards to a single discipline and also to look across related disciplines and interdisciplinary areas.

Any system designed to measure research quality where research quality is a main financial driver will have behavioural consequences. It is therefore very difficult to measure the full impact, or to estimate the costs, of a system before it is implemented. For example, some of the behavioural consequences of the current system are well documented like the so-called transfer market in academics which occurs as the census date for each exercise approaches. It should be noted though that this transfer market may have had some unexpected consequences such as the early promotion of some staff which will have consequences in the future in terms of staff costs, and reduced opportunities for other staff to be promoted: in fact this may well also have indirectly affected diversity.

3 Which of the alternative models described in this chapter do you consider to be the most suitable for STEM subjects? Are there alternative models or refinements of these models that you would want to propose?

Comments:

The RSC does not believe that any of the proposed models is suitable for STEM subjects and therefore the RSC is unable to say that one model is more suitable than another.

As referred to earlier, the models are based on the erroneous assumption that there is a good correlation between research income and research quality. Whilst observing that research proposals are peer reviewed, but noting that that peer review acts in effect as a minimum quality filter, detailed analysis of the correlations illustrated in charts 4.1 and 4.2 respectively in the “Next Steps” document for the medium and small institutions shows that for these institutions the correlation is very weak.

However, as stated in the answers to Qs 1 and 2, the RSC believes that RAEs after 2008 might incorporate the use of a package of metrics.

The metrics used need to be carefully considered and should be based on evidence from the RAE 2008 outcomes. The RSC advises an evolutionary process based on evidence to mitigate against potential high risks of a sudden transition to an untested metrics-only system which does not reflect reality or command sector support.

As has already been stated, the fundamental problem with all the models is the assumption that there is a strong correlation between research income and quality. However, there is also a philosophical problem with the proposed systems in that they rely on an input measure (income) rather than on the quality of output. In extremis some areas of academic work may produce high quality outputs with very little research income and such areas will be unfairly treated in any model based solely on research income.

Another factor missing from the proposed models, and to some degree from all metrics based models, are academic activities associated with research that are unrelated to funding. Such esteem indicators are captured currently in the RAE process.

In summary, the RSC is opposed to the use of any of the models proposed. The RSC believes that the only way to assess research quality is to use a peer review process supplemented where appropriate by an appropriate package of metrics.

4 What, in your view, would be an appropriate and workable basis for assessing and funding research in non-STEM subjects?

Comments:

The RSC believes that the basic strategy for assessing all subjects should be the same. The systems proposed above by the RSC in the answers to previous questions should be used for the assessment of STEM and non-STEM subjects.

5 What are the possible undesirable behavioural consequences of the different models and how might the effects be mitigated?

Comments:

The major problem with all the models specifically proposed is that QR monies will depend on research income rather than the quality of the research output. The likely behavioural consequences are that institutions will put emphasis on their staff winning research contracts/grants rather than on writing up the research carried out. It is also possible that research managers will favour expensive research fields as these are likely to generate more QR funds and this will result in a flow of funds into expensive research. Such behaviours cannot be good for the standing of UK research.

High risk proposals are also likely to be discouraged as there will be increased emphasis on winning grants.

The use of a system incorporating peer review and a package of metrics will make it more difficult for there to be a significant shift in behaviour as behavioural changes to optimise one metric will not necessarily affect other metrics in a positive way.

6 In principle, do you believe that a metrics-based approach for assessment or funding can be used across all institutions?

Comments:

The RSC believes that introduction of a metrics-informed peer review system, with some freedom for individual panels and sub-panels to define the exact nature of the package of metrics that they use, could be used across all institutions.

7 Should the funding bodies receive and consider institutions' research plans as part of the assessment process?

Comments:

It is difficult to see how institutions' research plans can fundamentally add to any of the proposed models.

On the other hand, the use of research plans at the level of the unit of assessment does have a role in a peer-reviewed assessment system. In using these plans though there is a need to assess plans retrospectively against achievements.

8 How important do you feel it is for there to continue to be an independent assessment of UK higher education research quality for benchmarking purposes? Are there other ways in which this could be accomplished?

Comments:

The RSC believes that an independent assessment of UK higher education research quality for benchmarking purposes is desirable. The RAE has driven up research quality and introduced selectivity, which is what it set out to do. The RSC believes that having introduced a system of selectivity, it is necessary to continue to assess quality otherwise quality is likely to drop. Such a quality assessment should be used to inform the allocation of QR funding.

However, the RAE system is not stable. The present RAE system has become subject to legal pressure and challenge with attendant increases in cost. It is possible that appropriate sets of metrics may enhance and assist future evaluation processes, but we note that the choice of metrics is likely also to be subject to legal pressures and challenges.

The current system does have a number of disadvantages, but in the view of the RSC the models proposed in the consultation for a metrics-based approach have many more disadvantages.

The accountability implicit in RAEs is welcomed but its monitoring should be set at a level that is realistic, achievable and commensurate with an appropriate level of time and cost input. The RSC believes that we should work to improve the current system rather than to abandon the current approach and risk introducing a fundamentally flawed system instead.

Thank you for taking the time to let us have your views. We do not intend to acknowledge individual responses unless you place an 'X' in the box below.

Please acknowledge this reply

Here at the Department for Education and Skills we carry out our research on many different topics and consultations. As your views are valuable to us, would it be alright if we were to contact you again from time to time either for research or to send through consultation documents?

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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All UK national public consultations are required to conform to the following standards:

1. Consult widely throughout the process, allowing a minimum of 12 weeks for written consultation at least once during the development of the policy.
2. Be clear about what your proposals are, who may be affected, what questions are being asked and the timescale for responses.
3. Ensure that your consultation is clear, concise and widely accessible.
4. Give feedback regarding the responses received and how the consultation process influenced the policy.
5. Monitor your department's effectiveness at consultation, including through the use of a designated consultation co-ordinator.
6. Ensure your consultation follows better regulation best practice, including carrying out a Regulatory Impact Assessment if appropriate.

Further information on the Code of Practice can be accessed through the Cabinet Office Website: <http://www.cabinetoffice.gov.uk/regulation/consultation-guidance/content/introduction/index.asp>

Thank you for taking time to respond to this consultation.

Completed questionnaires and other responses should be sent to the address shown below by 13 October 2006

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