The Institution of Environmental Sciences

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Joint Funding Bodies' Review of Research Assessment

Response of the Institution of Environmental Sciences

As an accrediting professional body with objectives to promote and support interdisciplinary research, learning and professional development the Institution of Environmental Sciences (IES) welcomes the opportunity to participate in the Joint Funding Bodies' Review of Research Assessment in Higher Education. We recognise a growing need for an interdisciplinary problem solving capability in all parts of society in order to address the challenges posed by sustainability. The IES believes that whatever method of research assessment is finally selected it must facilitate the creation of this capability.

The IES has debated the issues identified in the consultation paper in its Council and Education Committee.

The IES view is that research assessment in the form practised in 2001 is no longer appropriate or relevant for the needs of both the Higher Education sector and the UK. The IES accepts that some process of assessment is necessary in order to demonstrate the wise, responsible and relevant use of public investment in research activity. The IES also welcomes the acknowledgement that greater emphasis should be placed upon the relevance of the research, the interdisciplinary content, and in particular the needs of the end-user or the public good. There is limited convincing evidence to suggest that the RAE in 2001 achieved these outcomes, although as a major resource allocation process one might argue that this should have been very clear indeed. Thus the issues identified in paragraph 6 are very welcome.

The IES has considered the advantages and disadvantages of each of the approaches to assessment identified in paragraph 19. Each approach has distinct advantages and disadvantages and, in the case of algorithm and historical ratings, we consider the disadvantages to be substantial. We consider that expert review has marginal advantages over self-assessment, but when used together offer the best compromise. Thus the IES supports the continued use of expert review and self-assessment used in combination. However, accepting the broad principle does not lead us to accept the detailed level of scrutiny and the very large burden of administration that follows from a business-as-usual approach. Our favoured position is one of a light touch vested in the performance of individuals, not departments.

The primary performance indicators of research output should be publications or equivalent, and in order to recognise the importance of end-users, patents and reports should be given equal standing in the assessment process. Whatever package of performance indicators is agreed it is judged essential that the process of assessment undertaken by the expert reviewers is transparent, objective and conducted in the context of the new RAE assessment metric, and not within the cultural framework of the 2001 RAE. Thus, in order to ensure that the next RAE is able to deliver the funding bodies' ambitions for it, it is considered essential that the assessment culture is firmly grounded in the new reality.

The IES also wishes to bring to the attention of the Review Body its firm belief that research activity must underpin teaching and thus the quality of teaching programmes is intimately bound up with its relationship to research inputs to the teaching process.

Response to Specific Questions

Group 1: Expert Review

7.) Assessment should combine prospective and retrospective elements. It should apply to individuals and should be concerned with measures of outcome. The assessment should be organised around subject areas that are cognate and could follow the model of the LTSN centres.

Group 2: Algorithm

Whilst this offers some apparent administrative advantages there will be substantial disagreements over the measures and weightings to be applied. In particular, measures of reputation should be avoided. There are also concerns over the appropriateness of bibliometric measures.

The algorithm method could be satisfied by routine data capture activities of the funding councils. There is likely to be a degree of game playing associated with the metrics and their interpretation.

Group 3: Self-Assessment

Some element of self-assessment is welcomed, but it should be carefully controlled and subject to checks to control gamesmanship. Self- assessment is best considered as part of an assessment strategy combined with peer review. It could be combined with an algorithm, although this is not preferable.

Group 4: Historical Ratings

The proposal to allocate resources on the basis of historical ratings is not supported. The major weakness is the fossilisation of the allocations allied to the difficulty in recording and responding to changes in the research quality of HEIs in discrete subject areas.

Group 5: Crosscutting Themes

- 18a) Assessment is a measure of research quality and a mechanism to maintain standards. Funding bodies should use their existing information processes to generate a judgement of the capability on HEI to govern and conduct research. The RAE should be concerned with output, not process. Thus institutional audit could generate data on the governance processes and related issues.
- b) The interval between assessments should be consistent with the 'lighter touch' of regulation. It then follows that the interval is clearly specified, is not subject to future amendment and that the principles of operation agreed at the onset are adhered to. Without these basic issues being guaranteed, the historic comparison opportunity is lost and this opportunity to demonstrate improvements is clouded by methodological uncertainty. There is merit in considering a rolling programme of assessment. There is also merit in considering the use of broader panels than those that operated in 2001 and these may overlap with the scope/remit of the LTSN centres.
- c) Research is that activity which brings about objectively justified new knowledge; the discovery of new facts, information and theories. Research as a whole is a mechanism to expand the knowledge base about the Universe and everything in it. Quality of research relies on quality of theoretical/practical (conceptual) ideas coupled with sufficient infrastructural support for ideas/theories to be tested/validated. However, for ideas to translate into good quality research requires good quality of the researcher. A good researcher will be one with a good past record of achievement and one who, if given the opportunity (the funding), will be able to carry out the programme to completion.

Whilst one can distinguish between basic, fundamental, pure, blue-sky, paradigmatic research on the one hand and applied research (new methods, new treatments, new instruments, new gadgets, new drugs) on the other IES argues that this separation is false. Both are equally necessary in good measure and the distinction tells us nothing about which should be supported most. Both can be creative or innovative and both can represent a good base from which to train researchers to do research.

- d) The subject pot should be determined on the basis of the cost of the research and its relevance and importance to the UK. Any reliance on historical distributions as an allocation measure should be cautiously applied, as it will fossilise the UK research base into its current pattern.
- e) Peer review implies that you are judged by your equals, and the current approach does not capture the different levels of maturity within the sector. The exact form of replacement is less important at this stage; what matters is acknowledgement that a better system of comparison is needed. It is agreed that a "ladder of improvement" is needed.

f) There needs to be considerable debate about linkages between cognate areas in the assessment process. The operation of some panels has generated concern within the disciplinary communities and this is extremely damaging to the legitimacy of the outcome of the assessment process.

There is merit in considering a unified set of cognate subjects based upon the subjects covered by LTSN centres. These broader coverings will provide a flexible mix of disciplinary and interdisciplinary coverage.

- g) It is the outcome that is being sought that should dictate the procedures used in this instance. The outcome is one of factual information recording publications, PhD awards, research income etc. etc. An assessment exercise should cover the totality of research effort and, on balance, a more directed and rigid system is preferred.
- h) The RAE is discriminatory and that has always been its purpose. It discriminates between HEIs and uses the outcome to allocate resources. The major discriminatory feature is the inclusion or exclusion of individuals. Including all staff would reduce, in part, the personal discrimination without losing the resource allocation benefit.
- i) The three priority features of an assessment process are:
- Transparent
- Output orientated
- Resistant to game playing

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