



**METODIKA**

# Effective PRFS: principles and practice

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# Introducing myself...



- **Head of research policy at HEFCE, 2003 to 2013: advising on the design of assessment systems and their use in allocating “block grant” funding to Universities in England**
- **Assisted in design of RAE 1992; RAE Manager 1996; led HEFCE input to a major review of UK assessment approach leading up to RAE 2014 and chaired the RAE steering committee**

# Effective PRFS: principles and practice



- **Why should we assess quality, and why link performance to funding?**
- **Principles: what makes a strong assessment system? and choosing our assessment approach**
- **Practice: disciplines and research units**
- **Practice: information and indicators**
- **Practice: management and communication**
- **Assessment and funding**
- **A few thoughts to conclude**



# Why assess quality?

By assessing quality we can “look back to look forward”, and make plans based on a good understanding of where we are starting from

Effective quality assessment can:

- tell us how good a national system, institution or research group is - providing public information and accountability for funding
- identify strengths and weaknesses
- encourage and inform action to raise standards

# Why link performance to funding?



**Assessment linked to funding does all of these and in addition it provides:**

- **a much stronger incentive to push up standards, and strengthens the hand of research leaders and managers**
- **better targeting of funding following policy aims**
- **stronger accountability for money spent**

# What makes a strong assessment system?



- **Objectivity and transparency:** seen to be fair and well informed
- **Consistency:** all disciplines are assessed on similar criteria and datasets and common standards of excellence
- **Fitness for purpose:** the system is well designed to achieve our policy goals
- **Fit to our national system and culture:** there is no one size that fits all and the best system for one country may not be the best for another
- **Timeliness and repetition:** evaluation updated periodically, and learning from experience to refine our approach
- **Credibility:** The funders, the researchers and others accept that the system is producing good outcomes

# Choosing our assessment and funding approach (1)



**What do we want to know and what are we trying to achieve?**

- **A clear overview strengths and weaknesses will help in deciding policy for improvement and possibly for targeted funding**
- **Identifying areas of strength, and paying particular attention to identifying the societal impacts of the research submitted for assessment, can help to ensure that the research base is fully supporting the national economy**

# Choosing our assessment and funding approach (2)



The main available assessment approaches are:

- **Self evaluation**
- **Assessment using statistics (“indicators” or “metrics”)**
- **Peer review**



# Self evaluation



- **Enables researchers and units to ensure that their strengths are seen and appreciated in full**
- **Encourages reflection and strategy-building in research units**
- **But if used as a major element in assessment or funding raises inevitable questions of credibility and reliability**



# Assessment using statistics

- **Is objective and based in facts, not easily open to manipulation or bias**
- **Is relatively simple and cheap to operate and can be repeated at will**
- **But works better for some disciplines than others and better for larger units or groups than for smaller ones**
- **And quantitative information cannot tell us everything about a research unit, and the chosen statistical approach and interpretation of the data will be hotly contested.**



# Peer review

- **A well established method, largely accepted by the research community**
- **Peer judgments are only as good as the information on which they are based and the expertise of the reviewers. Good system design, and validation against international standards of excellence, are essential to success.**
- **Securing a strong input from international assessors will be helpful by ensuring that the outcomes are validated against international standards and in keeping possible conflicts of interest to a minimum**

# So - choosing our assessment approach



- **The best approach to producing well rounded quality judgements across all disciplines, and at the level of individual institutions or units, is peer review informed by carefully selected and interpreted contextual and statistical information. This must include giving research organisations and units the opportunity to say what they think are their significant strengths.**
- **An assessment approach combining clear, broad criteria for excellence with ratings against several assessment criteria rather than only a single “score” can best capture the full range of diversity of research methods and outcomes across the academic spectrum.**

# Practice: disciplines and research units (1)



- **How to split the work between discipline units, and how to define a research unit on the ground, are key decisions**
- **We need to ensure that the evaluation is conducted at the right level of detail to recognise differing approaches across disciplines and also to inform policy decisions**

# Practice: disciplines and research units (2)



- **Panels should be seen to assess research groups and units, not individuals**
- **Information about a specific, recognisable field or sub-field is more useful to managers and planners than broader judgments**
- **And we need to define field disciplines to reflect practice on the ground - how are researchers grouped and managed within our institutions?**
- **It is important that an assessment panel of workable size does not cover too wide a field to be credible**
- **The size of the system is relevant - panel workload should be manageable.**
- **Grouping field panels into broad discipline groups can be helpful in ensuring common standards**
- **The system must be seen to deal well with interdisciplinary research**

# Practice: information and indicators



- **We must collect enough information to give panels the full picture**
- **At the same time we must not swamp panels with information that they do not need or struggle to understand**
- **It is good to have a mixture of input and output data. Input data tell us what resources a unit has to work with; output data tell us what it has shown it can do with those resources. Both are good indicators of its capacity and potential to produce excellent research in the future.**
- **Quantitative indicators should be used to inform academic judgement: they should not simply feed through directly into the quality ratings**



# Indicators

**Ideally we need a basket of indicators that will help the assessment panel to understand:**

- what resources a unit has (showing its capacity and the commitment of its funders)**
- what external recognition (funding and other) its achievements have won**
- the full range and impact of its achievements**

**There can be a place for indicators of productivity, especially if this is a policy concern, though volume of work alone may not be an indicator of quality**



# Indicators: citation indices (bibliometrics)



**Citation indices are a strong indicator of research quality:**

- **in disciplines where publication in journals/ proceedings is the established norm**
- **in relation to reasonably substantial bodies of work and within fields of closely related activity**
- **where the indices are used with a clear understanding of context (comparisons within a subfield for which citation behaviour does not vary greatly are strong)**

# Indicators: citation indices (bibliometrics)



**Citation indices can also be valuable to assist peer review, including at the level of individual outputs, where the assessors understand the context and the publication and citation behaviours in a discipline.**



# Information: best outputs

**Asking units to identify their best outputs for review gives us a good picture of what they can do: the strength, depth and breadth of their work**

- It keeps the reviewers' workload to a manageable level**
- It focusses attention on the truly excellent work**
- It is important to recognise the diversity of forms of research output within and between disciplines**

# Practice: management and communication (1)



**Assessment and funding systems must be transparent and seen to be fair. It is helpful if:**

- **The assessment process and criteria for excellence are published in some detail in advance**
- **Research organisations feel that they have been allowed to demonstrate their strengths fully**
- **Evaluation panels are well supported by a secretariat and work together to ensure common standards**
- **Panels give summative and developmental feedback identifying both strengths and weaknesses**

# Practice: management and communication (2)



**We should also do what we can to discourage over-preparation and “games playing” by submitting research units. We should aim to build confidence that the assessment system will find excellence wherever it exists.**



# Assessment and funding (1)

**It is often best to conduct the assessment before finally deciding funding parameters:**

- **this reduces the pressure on the assessment panels**
- **it reduces the scope for games playing in submissions**
- **it makes it possible to tailor funding arrangements to the pattern of excellence that has been found**



# Assessment and funding (2)

- **It is highly desirable to have a clear view as to what volumes of research activity are being assessed, and funded, in individual research units and organisations.**
- **This requires some form of count of active researchers. A “feedback loop” can be created between funding and assessment to discourage over-counting.**
- **More direct measures of output volume are not available reliably across all disciplines.**



# A few thoughts to conclude

- **PRFS is a strong tool for delivering improved quality in the research base in keeping with policy aims and supporting research managers**
- **Periodic repetition of assessment allows the approach to be tuned to national needs and circumstances. There is no single best approach for all research systems.**
- **If the assessment approach appears complex and burdensome for submitting units, we might ask whether they are doing more to prepare than is really necessary**
- **A well designed system will not destabilise strong research units. The pace of any change will largely be determined by funding decisions.**
- **Transparency and good communication with researchers at all stages are essential**
- **There will be criticism and some measure of “games playing”. If the system is well designed and managed this does not invalidate the results: indeed, some measure of continuing debate is helpful.**





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