

**Lord Stern's review of the
Research Excellence Framework :
RSE Young Academy of Scotland Response**



Royal Society of Edinburgh Young Academy of Scotland

YAS has 141 members, drawn from all disciplines and areas in academia, business, third sector organisations and public life. This response is separate from the response of the RSE, but has been shared with the RSE's policy officers. The response was compiled by a REF subpanel member (UoA27).

This response was led by Young Academy member Faye Hammill.

1. What changes to existing processes could more efficiently or more accurately assess the outputs, impacts and contexts of research in order to allocate QR? Should the definition of impact be broadened or refined? Is there scope for more or different use of metrics in any areas?

The **metrics** used in REF2014 were valuable as a way of informing expert judgement (not as a proxy for it). They included data on research income and PhD completions (for all subpanels), together with citation data that could only be used when it could have a positive influence on the score for an output (mostly in subjects covered by Main Panels A and B). These metrics should be retained in any future REF, but there is no case for extending the use of metrics.

There is a perception that researchers in arts, humanities and social science disciplines are more strongly opposed to the use of metrics than those in other fields. This is not necessarily the case: even at institutions primarily oriented towards science, engineering and business (in Scotland, these include Heriot-Watt and Strathclyde), there is widespread agreement that the value and credibility of the REF process depends on expert peer review. The conclusion of the "Metric Tide" report (that no metric can provide a replacement for REF peer review) are very widely known and accepted.

At the same time, we emphasise that citation metrics and journal impact factors are much less useful in the arts and humanities than in other subject areas. These disciplines produce many outputs for which citation data is not captured (books and scholarly editions; creative writing, practice-based work; performance, websites etc). Journal articles – the form of publication most amenable to bibliometric analysis – represented only around a third of submissions to most of the Main Panel D subpanels, and the citation data for these is currently not reliable. Because of the much slower cycles of publication in humanities journals, citations usually do not appear at all until several years after the original publication has come out, and even then, are only selectively recorded because not all journals are currently indexed in the main databases.

HEIs have invested substantially in systems for REF preparation and research audit. Major **process change** would have major costs in terms of realignment with new expectations. It would mean that time, effort and resource, in the coming years, would

have to be spent on understanding a new system, rather than on improving research quality.

The requirement that research should cause definable change, or alter behaviour, rather than simply take ideas to audiences beyond universities, was a restrictive element of the **definition of impact**. It led to an undervaluing of a type of knowledge exchange (achieved via public lectures, media engagement etc) that features in most disciplinary areas, but is particularly important for those whose expertise relates to current affairs, arts and culture, science communication, etc. The requirement to prove causation imposed a large burden on researchers and HEIs, detracting from time available for the actual engagement activity, and excluding potential case studies for which concrete evidence of causation is harder to access. A more generously framed definition, that values public engagement rather than insisting that it does not constitute impact, could enable a more creative approach to case studies.

- 2. If REF is mainly a tool to allocate QR at institutional level, what is the benefit of organising an exercise over as many Units of Assessment as in REF 2014, or in having returns linking outputs to particular investigators? Would there be advantages in reporting on some dimensions of the REF (e.g. impact and/or environment) at a more aggregate or institutional level?**

Please tell us your thoughts in no more than 500 words:

Assessment by specialists is the only way to achieve accurate and credible quality assessment. There is a strong case for retaining the current set of **specialist panels**. Indeed, they are already less specialised than most people could wish. Some of the new aggregated sub-panels in REF2014 covered an enormously broad field (e.g. Allied Health, Clinical Medicine, Modern Languages or Area Studies) and this led to thin coverage across the panel, and in some cases, a large number of cross-referrals. There was not necessarily any saving in effort here – rather, work was simply shifted around. Further aggregation would definitely introduce new problems and reduce the trust of subject communities. At the moment, the REF can raise esteem for British research, not only in the UK but in disciplinary communities in around the world. This is an advantage that we should hold on to.

In addition, the retention of the current panel structure would much better enable measurement of change over time in the performance of submitting units, HEIs or subject areas. It is simply too soon to alter this again.

In terms of **aggregation** at institutional level, there are some aspects of research environment which apply across a whole university, but in most respects, an environment that enabled high quality research in computer science, for instance, would be very unlike one that worked for biology or sociology. It is clear from the REF results that weak and strong research environments can coexist within an institution, and an overly generic assessment of this would simply average out scores and reduce the granularity, and hence the usefulness, of the results.

There is one change that would be useful. Several REF panel members whom we consulted would advocate the integration of the **Environment with the Impact**

template, so that just one template was required per submitting unit. This would recognise that mechanisms to support KE and the development of impact are an integral part of the research environment, and that research projects now include these considerations from the start.

3. What use is made of the information gathered through REF in decision making and strategic planning in your organisation? What information could be more useful? Does REF information duplicate or take priority over other management information?

Data gathered through REF is not very extensively used in the Royal Society of Edinburgh's Young Academy of Scotland (YAS). However, some types of REF data have indeed been useful. YAS is particularly interested in areas such as policy impact, community engagement, and the public understanding of science, and the published REF Impact case studies have been highly valuable in helping the Working Groups within YAS to identify excellent projects, groups and individuals working in these areas, and to initiate collaborations. We welcome the full publication of submissions.

4. What data should REF collect to be of greater support to Government and research funders in driving research excellence and productivity?

Data enabling **international comparison** would be particularly useful. The international input was an ineffective aspect of REF2014. International assessors occasionally sat in on meetings, but did not gain any holistic sense of the process or contribute in a structured way. It would be better if international assessors were full panel members (as in the Australian ERA process). This might be feasible via the appointment of panellists who have recently taken up posts in the UK after a career overseas, or by the use of skype to allow overseas panellists to take part in all meetings and in the full assessment process. The benefit would be that the REF would become more outward-looking, and that a more robust judgement of the key criteria of 'internationally leading' or 'internationally excellent' could be achieved.

Several of the Scottish universities advocate the **inclusion of all staff** on research and teaching contracts in REF. There are clear merits to this, as it would provide a much more accurate picture of the state of UK research. (It would also remove one element of the game-playing, relating to the way that staff numbers are often fixed in relation to thresholds for the number of impact case studies required. And it would remove one major part of the burden of preparation: staff selection.)

An **interoperable reporting system**, so that research data need not be reported separately to HEIs, RCUK and REF, would be invaluable. With the Orcid researcher ID system beginning to be properly usable, this looks somewhat more possible. Such a system could then connect UK research more firmly to international platforms and databases.

One data return that could usefully be required in a future REF would be audited figures for the money invested by each HEI in **REF preparation** (e.g. through the appointment of support staff, the running of mock-REFs, and payment to external assessors, consultants or impact experts). Perhaps, as in parliamentary elections, a

cap should be placed on what any institution can spend. (This is also relevant to section 4, on 'game-playing'.)

5. How might the REF be further refined or used by Government to incentivise constructive and creative behaviours such as promoting interdisciplinary research, collaboration between universities, and/or collaboration between universities and other public or private sector bodies?

Please tell us your thoughts in no more than 500 words:

In Scotland, **joint submissions** between HEIs made to REF2014, for instance, in Chemistry, were logistically challenging, particularly in terms of the submission software. In addition, in the reporting of results, the institutions were separated out, and were scored individually in some league tables. These are probably two of the reasons why, apparently, other subject areas are not following suit and combining forces in planning for future REFs. This is unfortunate, since Scotland provides an ideal context for such collaboration. The SFC has shown strong support for "research pooling", and the RCUK doctoral training consortia have wide reach. For instance, the AHRC Scottish Graduate School includes 16 universities and can claim to be the world's first national graduate school in the arts and humanities.

The submission of **case studies** based on the same impact by more than one submitting unit was permitted in REF2014, but there was not extensive awareness of, or use made, of this opportunity. It should be overtly encouraged and rewarded, to increase interinstitutional cooperation.

Co-authorship is still not the norm in humanities disciplines, yet collaboration with international co-authors is a proxy for research quality in many international ranking systems. This practice could be stimulated by encouragement and reward via REF. At the moment, too many humanities researchers believe that they may get a lower score if they submit jointly-authored outputs.

In terms of **collaboration with public/private sector bodies**, the REF cycle is considered by YAS members as too short, especially in the context of the generation of impact. It would be productive to allow submitting units to develop 2014 case studies for resubmission in a future REF, if the impact has been substantially extended. This will support researchers and HEIs in developing long-term relationships with industry, community organisations and other partners.

We have identified a problem regarding collaboration with **small businesses**. YAS members, e.g. in soft materials and formulation science (among other areas) have been involved in supporting start-ups by applying knowledge of their field, but their contributions are often incremental on a scientific level and not easily publishable. These researchers therefore have to prioritise working with multinationals whose scientists require more advanced academic input which is more publishable. Also, multinationals can provide more impressive metrics for the market in which impact is delivered. Yet small businesses account for 99.3% of private sector businesses and SMEs account for 60% of UK employment. This inadvertent prioritising of work with

multinationals could be mitigated by easing the requirement for case studies to be based on 2* publications rather than, perhaps, reports or web-based outputs.

YAS members working in **practice-led research** fields suggest that REF could work more effectively to encourage creativity in these areas. The option to submit, for instance, performance-based outputs was welcomed, but as these were relatively few in number, criteria for their evaluation remain rather poorly defined, and confidence among researchers about their submission remains low. It would help if more practice-based researchers were appointed to subpanels, and if more detailed assessment criteria were published.

6. **In your view how does the REF process influence, positively or negatively, the choices of individual researchers and / or higher education institutions? What are the reasons for this and what are the effects? How do such effects of the REF compare with effects of other drivers in the system (e.g. success for individuals in international career markets, or for universities in global rankings)? What suggestions would you have to restrict gaming the system?**

Please tell us your thoughts in no more than 500 words:

REF influences researchers' choices in constructive and in damaging ways. Clearly, it stimulates productivity and external collaboration. But among the worst effects is **short-termism**: the avoidance of larger, more ambitious projects, for which outputs and impact are not immediately guaranteed. This is eroding research excellence in many fields. One example would be ethnography, and related fields where longitudinal studies are important. Another damaging effect is the avoidance of pedagogically-oriented research, now in decline across many subject areas.

Staff recruitment is one of the most important aspects of 'game-playing'. The recruitment of researchers on **fixed term contracts** to coincide with REF submission should be strongly discouraged. A requirement for contracts to extend for a certain period beyond the REF submission date – perhaps 6 or 9 months – would be an improvement.

Early career scholars are of particular interest for YAS. They must immediately start thinking about REF and impact, which distracts them from establishing sustainable, longer-term research trajectories. Also, the date of obtaining the PhD, in relation to REF cycles, has knock-on effects. Scholars in humanities subjects must prioritise getting a first book published. If this happens just before a REF deadline, the person will then be late in the cycle with the second book, and constantly working under pressure from REF. A longer assessment cycle (10 years, for instance) would help here, and mitigate the wider problem of short-termism.

In addition to age and career stage, other aspects of equality and **diversity** deserve urgent attention. A longer REF cycle would be particularly helpful to those who take periods of maternity, parental, or caring leave, and then struggle to catch up in terms of REF productivity. (We consider that this situation can affect hiring decisions, particularly in relation to younger women.) The gendered implications of the impact agenda, both in terms of who can achieve impact and in terms of the risks for women

with high public profiles, also concern us:
www.timeshighereducation.com/comment/opinion/the-dark-side-of-the-impact-agenda/2017299.article In addition, while noting the progress made since 2008, YAS members were concerned by Hefce's finding, in *Selection of Staff for Inclusion in the REF 2014*, that academics with black or Asian ethnicity were less likely to be selected than their white colleagues, even when other factors were controlled for. More research on the reasons for this, and continued reform, are needed, so that REF supports equal opportunity rights that are enshrined in law.

REF can reduce **international engagement**, by limiting UK researchers to projects, publications and collaborations that will be valued in REF terms. This inhibits the UK's ability to be a world leader in research. Members of YAS who have moved to, or from, jobs abroad emphasise that REF requirements often prevent overseas academics from collaborating with those in the UK, while many researchers leave either academia or the UK as a result of REF pressures. In the current cycle, researchers are restricted to journals offering OA or allowing deposit in repositories. Many leading overseas journals do not permit these options, and this situation will limit the international influence of UK research.

7. In your view how does the REF process influence the development of academic disciplines or impact upon other areas of scholarly activity relative to other factors? What changes would create or sustain positive influences in the future?

The REF documentation did encourage interdisciplinary research, but many researchers still read the UoA descriptors as somewhat narrow, and they may discourage submission of outputs at the boundaries of UoAs. Feedback from panels suggests that interdisciplinary research was valued and rewarded, but a further effort is needed in future to ensure that units producing high-quality interdisciplinary work feel confident in submitting all of it. Needs to be done to reassure HEIs to submit these outputs. The option for submitting units to request cross-referral of individual outputs to a specific panel might be used to help mitigate this.

8. How can the REF better address the future plans of institutions and how they will utilise QR funding obtained through the exercise?

YAS has no response for this question.

9. Are there additional issues you would like to bring to the attention of the Review?

No.

YAS operates within the organisational form of a Scottish Charitable Incorporated Organisation, the RSE Scotland SCIO (SC043194).