

IOP Institute of Physics

Submission to the Department for Business, Innovation and Skills Technical Consultation for Year Two of the Teaching Excellence Framework

Question 1 (Chapter 1)

Do you agree with the criteria proposed in Figure 4?

Yes No Not sure

Please outline your reasons and suggest any alternatives or additions.

The three criteria outlined in the consultation document – Teaching Quality, Learning Environment and Student Outcomes and Learning gain can be said to cover much of the student experience with regards to teaching. It is welcome that Teaching Quality includes the encouragement of students to engage, as the degree to which students engage with the material can be crucial for their experience and outcomes of higher education. It is also welcome to see that the process recognises those departments that already reward teachers that deliver excellent teaching. Rewarding efforts to provide and promote continuing professional development (CPD) should help improve teaching standards. Under Learning Environment, we also welcome the emphasis on the “linkages between teaching and scholarship, research or professional practice”. However, it is important to ensure that they are not seen as separate exercises, but that each is there to inform the other – both in terms of content and pedagogy.

More important than the criteria will be how the criteria are measured and assessed. This will depend on the success and quality of the evidence that is used to support that assessment, and in the metrics and data available to provide support. The Government recognises in its white paper “that metrics alone cannot tell the whole story”.¹ However, the core metrics as proposed as evidence for the TEF in its first few years remain the same as those proposed in the green paper in November 2016.² Significantly, the metrics as proposed do not measure teaching quality; at best they act as rather awkward proxies for teaching quality.

The TEF metrics for Year Two are largely unchanged from the green paper. As such, they embody the same limitations as they did then, including: limitations as to the accuracy and representativeness of NSS data, as well as possible challenges to providing non-standard teaching; that the way that retention data is included must not do anything that could make it better to reduce the intake of students from disadvantaged backgrounds; and that 6 month DLHE outcomes data is unable to effectively represent the destinations of students from physics (and STEM subjects in general), many of whom, for example, will be in further study. The recent piloting of a combination of longer-term employment data with HMRC data provides perhaps

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523396/bis-16-265-success-as-a-knowledge-economy.pdf

² <https://www.gov.uk/government/consultations/higher-education-teaching-excellence-social-mobility-and-student-choice>

a better metric than using DLHE data.³ The Longitudinal Educational Outcomes (LEO) data being released alongside the TEF could be a useful start.

There are further questions over the sources of some of the metrics. Both DLHE and the NSS are currently going through their own, independent, technical reviews. We would be interested to see how any potential changes will likely impact on the TEF, and if their reviews are being tied into the process – it may not be sensible to place such a focus on these metrics ahead of the conclusion of the reviews. In addition, the Office for National Statistics assessment of the proposed metrics suggests that discipline level assessments will not be possible with existing metrics e.g. NSS and DLHE, as the numbers involved are too small to break down.⁴ In addition, there is a danger that the reduced reliability of the data will not be understood by the user. This is also in contrast to the white paper which says that “TEF core metrics will be broken down to include those from disadvantaged backgrounds”. It is hard to see how this will be done within the limits of data protection.

Question 2 (Chapter 3)

A) How should we include a highly skilled employment metric as part of the TEF?

We maintain serious concerns regarding the usage of 6 month outcomes data from the Destinations of Leavers of Higher Education survey both as an effective measure of employment outcomes of graduates in physics (and more widely of STEM disciplines) and as a proxy for teaching excellence. A high proportion of physics graduates, particularly those who may be among the highest performers, will, 6 months from graduation, either be in further study or preparing for further study. This means that the landscape for physics students will appear distorted in any analysis using this data.

If the proposed highly-skilled employment metric similarly looks at outcomes 6 months from graduation, it will suffer from the same limitations as 6 month DLHE data. Physics students have a high level of employability⁵ – the skills that they learn are in high demand in a number of occupations. However, this may not be immediately reflected in initial employment statistics. The recently published review of employability in STEM by Prof William Wakeham confirmed this – finding that there was a “below average proportion [of physics graduates] in non-graduate roles overall” and that “there is no immediate or large scale cause for concern specific [to physics]”.⁶ If the highly-skilled employment metric fails to reflect this, it will not fairly represent the discipline.

This metric may also create disincentives for universities to recruit mature students and returners. Mature students may be studying for reasons other than, primarily, employment outcomes and already have careers and commitments to which they intend to return. Thus their post-university employment is likely to be much more highly dependent on the employment they were in before they enrolled. Universities

³ <http://www.ifs.org.uk/publications/8233>

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523291/bis-16-269-teaching-excellence-framework-review-of-data-sources-interim-report.pdf

⁵ <https://www.gov.uk/government/publications/stem-degree-provision-and-graduate-employability-wakeham-review>

⁶ Wakeham Review

with high numbers of mature students would likely be adversely impacted by this metric. Similarly, the local economy may affect the success of graduates who remain in their local area obtaining highly-skilled roles.

B) If included as a core metric, should we adopt employment in Standard Occupational Classification (SOC) groups 1-3 as a measure of graduates entering highly skilled jobs?

Yes No Not sure

C) Do you agree with our proposal to include all graduates in the calculation of the employment/destination metrics?

Yes No Not sure

Please outline your reasons and suggest any alternatives.

Question 3 (Chapter 3)

A) Do you agree with the proposed approach for setting benchmarks?

Yes No Not sure

Benchmarks are useful to give an idea of the relative performance of an institution or department with regards to particular demographics. The proposed benchmarks appear to be comprehensive enough to meet their aims. However, we would be concerned that, in the initial years of the TEF at institutional level, benchmarks and their associated flags would not reflect difference between departments. Those departments which do not perform as well with certain benchmarks may lead an institution to be flagged which could have negative implications for the department in question. For example, although there has been a lot of work to encourage women to enter into physics, women still only represent around 20% of physics undergraduates. This is however, broadly reflective of the proportion of girls taking A-level physics, and while there is much work being done to improve the representativeness of both A-levels and physics departments, it cannot be reasonable to penalise physics departments for their undergraduate gender ratio not being 50:50. The flags should thus take account of the relative performance of similar departments, rather than compare different departments' performance. This will be easier with discipline level assessment in later TEFs, although more subject to statistical variations.

B) Do you agree with the proposed approach for flagging significant differences between indicator and benchmark (where differences exceed 2 standard deviations and 2 percentage points)?

Yes No Not sure

Please outline your reasons if you disagree.

Please outline your reasons and suggest alternatives.

Yes; it will be useful see the performance of institutions by different demographics. However, gender/sex is a significant omission to the proposed characteristics and should also be included. Splitting characterises in this way may, however, provide challenges when it comes to breaking down characteristics at departmental level in a future discipline-level TEF. These challenges must be addressed now if any discipline-level assessment is to be informed by metrics.

The approach to releasing data broken down in this way must, however, always be mindful about the trade-off between accuracy and precision and the impact on the students' understanding of the data.

Question 6 (Chapter 3)

Do you agree with the contextual information that will be used to support TEF assessments proposed above?

Yes No Not sure

Please outline your reasons and suggest any alternatives or additions.

Complementary information on provider's research operations and performance could be useful for providers. In particular, the number of staff on academic contracts, broken down by those on teaching contracts and those on teaching and research contracts, and the provider's REF scores and information. Research data will help to inform the related assessment and position of teaching, and will be useful to ensure the full context of a provider's operations are considered in the provider submission.

Question 7 (Chapter 3)

A) Do you agree with the proposed approach for the provider submission?

Yes No Not sure

The focus for assessment should be on the provider submission. We believe that instead of quantitative metrics, university information – context and mission – should form the central part of assessment. The TEF must focus on an assessment of whether an institution is achieving what it sets out to do through its degree programmes, not directly comparing them against other institutions which may have different missions, aims and objectives. A university is best able to do this within a provider submission. Similarly, in future years of assessment, when the TEF is assessed at discipline level, it will be even more important to ensure that departments are being assessed on what they set out to achieve, not compared against departments with similar names. For example, a mathematical physics department will be attempting to do very different things than an applied physics department – with different aims, methods and results – but this need to be set in context. The future provider submission may best be provided at the departmental level to ensure that this can be effectively communicated – though will necessarily need to be shorter in length.

This process does, however, need to be carefully structured, with clear guidance of required detail and scope of information, and make sure not to create undue workload for staff in institutions or for panels. Although quite rightly the provider submission should not be a checklist, there should be clear areas identified which universities must respond under – allowing for consistency for assessors. There is a risk that a focus on mission statements may be set as a low bar to ensure success, but publishing such statements, for example, on an institution’s website, and associating clear targets and proposed ‘measurables’ would help to guard against this. To support this, institutional strategies and mechanisms to monitor, improve, innovate and incorporate new educational research in teaching could also be assessed.

There would also need to be a process of verification with regards to provider submissions. Providers should be required to provide as much evidence as possible to substantiate claims, and the sources for these claims should be as accessible and externally verifiable as possible to avoid the need for panels to follow-up and investigate. However, there should be the means, where necessary, for panels to follow-up and investigate claims either with visits or requests to providers.

B) Do you agree with the proposed 15 page limit?

Yes No Not sure

Please explain your reasons and outline any alternative suggestions.

The TEF should place much greater focus on the provider submission over quantitative metrics. As such, the proposed 15 page limit may be too restrictive to effectively communicate all that might be communicated – everything from widening participation actions to accreditation and from links to industry to explanations of poor performance in specific metrics, as well as, in the interim, covering a huge range of subject areas and the variation between them. As such, a more sensible limit may be around 30 pages.

Question 8 (Chapter 3)

Without the list becoming exhaustive or prescriptive, we are keen to ensure that the examples of additional evidence included in Figure 6 reflect a diversity of approaches to delivery. Do you agree with the examples?

Yes No Not sure

Please outline your reasons and suggest any additions or alternatives?

The proposed list of additional evidence to inform the provider submission is exhaustive. In particular we welcome the suggestion of the importance of accreditation by professional regulatory or statutory bodies. In his recent review of employability of STEM degrees, Prof William Wakeham highlighted the importance of accreditation and recommended that “Good practice from existing, well-established systems of degree course accreditation should be highlighted and disseminated where it may be of interest to those STEM disciplines without an

accreditation framework or where an accreditation framework is emerging.”⁷ Some statistics, such as the fraction of degrees that are accredited out of all that can be, should be included. Professional bodies, where they exist for each subject, should be able to provide this information to inform submissions.

We agree that access agreements must be an essential and significant prerequisite for any TEF grading. In any future discipline level assessment, discipline-level access agreements must be applied and programmes such as the IOP’s Project Juno⁸ and Athena Swan⁹ should be a ‘necessary but not sufficient’ aspect of such assessments and included within providers submissions. Consideration should be given to how departments approach the known effects of unconscious bias, for example students have been shown to downgrade female lecturers compared to equally performing male lecturers.¹⁰ An unintended consequence of reliance on student survey results could lead to further widening of gender (or other) inequality in the sector, and the provider submission could be used to address and contextualise this.

One other area which may need to be taken into account is the degree to which universities are solely to be judged on what is or what has been, or whether the provider statement can also take into account what will be – as in, future strategies and plans. Providers could then be assessed in future iterations of the TEF on their ability to fulfil the ambitions set out in these proposals.

Question 9 (Chapter 4)

A) Do you think the TEF should issue commendations?

Yes No Not sure

No; commendations may certainly provide incentives to universities to excel at certain specific areas and work towards them. However, while this may be useful for students, it may also serve as a distraction from the aim of improving standards across the board, which universities should be aiming towards.

B) If so, do you agree with the areas identified above?

Yes No Not sure

Please indicate if you have any additional or alternative suggestions for areas that might be covered by commendations.

Question 10 (Chapter 4)

Do you agree with the assessment process proposed?

Yes No Not sure

⁷ Wakeham Review

⁸ <http://www.iop.org/policy/diversity/initiatives/juno/index.html>

⁹ <http://www.ecu.ac.uk/equality-charters/athena-swan/>

¹⁰ <http://econpapers.repec.org/paper/fcedoctra/1513.htm>

Please outline your reasons and any alternative suggestions. The proposed process is set within a relatively tight timescale, reflected in the key dates included in Annex B. Responses should be framed within this context.

Assessment needs to prioritise five criteria:

- balance (in terms of workload and between metrics and provider submission);
- fairness (in its application to all departments and institutions);
- robustness (in terms of the system's ability to adapt, address challenges);
- validity (in terms of its results reflecting the reality of teaching in higher education); and
- effectiveness (in its application).

The process as proposed on paper is appropriate, but its success in meeting the above criteria will very much depend on its implementation.

The three challenges in implementation are the degree to which provider submissions are prioritised, the level of workload for panels, and the timescale in which this is anticipated to be delivered.

We believe that priority in assessment should be given to the provider submission, as this can better reflect the complexity and performance of an institution, with metrics able to substantiate, back-up or inform the submission. If the weighting is in the opposite direction, this will impair the fairness and validity of the process.

Assessor and panel work will likely be time consuming, and we acknowledge more of a focus on the provider submission will contribute to this. It will be a challenge to ensure the sector is adequately represented on panels, including student representation (where a significant challenge may be encountered in trying to ensure a range of student voices are represented), and all efforts should be made to ensure that panels are supported as far as possible in their preparations and operations to reduce burden. This will include providing clear and detailed guidance, and in later years, examples of what to look for and good practice, and reducing the need as far as possible for panels to require further evidence from institutions.

The proposed timeline, as acknowledged above, is ambitious. We would caution against a strict adherence to the timescale if pilots and lessons learned exercises take longer to complete or prove inconclusive – the process should have built into it both agility and flexibility in the need to adapt and review to ensure it remains robust. A slower, longer, and more pensive process will result in a more effective TEF than one that is rushed and does not effectively learn as it goes along.

It would also be welcome to see the diversity of the higher education sector represented as much as possible within TEF panels – this looks to be the intention with regards to expertise, but efforts should also be made to represent the demographics of the sector, wherever possible.

Question 11 (Chapter 4)

Do you agree that in the case of providers with less than three years of core metrics, the duration of the award should reflect the number of years of core metrics available?

Yes No Not sure

Please outline your reasons.

No; although the principle is sound, this would be inadvisable for two reasons. Firstly, it would create significant burdens on the TEF process for both providers, in needing to submit multiple times, and assessors in needing to assess different institutions multiple times in quick succession and at different intervals. Secondly, all providers should be reviewed on an equal footing. If a provider is unable to meet the qualification needed to enter the TEF, it should wait until it has the ability to do so. The benefit of assessing providers across three years of information allows for a better representation of performance, assessing some providers at one or two years would lose this. This may also give new providers an unfair advantage in being able to respond with greater ease to TEF findings to make improvements, rather than other institutions that must wait longer.

Question 12 (Chapter 5)

Do you agree with the descriptions of the different TEF ratings proposed in Figure 9?

Yes No Not sure

Please outline your reasons and any alternative suggestions.

We agree with the approach that any measure of teaching excellence must be founded on effective quality assurance, and also that 'bandings' rather than full rankings are the better option for levels of assessment. As such we welcome the reduction in different TEF ratings from the green paper from four to three, and the intention to clearly band institutions. However, we have serious misgivings about all three ratings.

Firstly, if the TEF is to strive for teaching excellence, a rating of "Meets Expectations" sends the wrong message. By definition, providers submitting to TEF have achieved the 'high baseline standards'. If the TEF is to ensure that the UK retains its high reputation for higher education excellence, like the Research Excellence Framework, it should be acknowledged that ratings reflect that institutions are providing at least a "Good" level of teaching. As such, the baseline category should be "Good". However, if this is to be the case, provision would need to be made to give power and resources panels both to investigate the claims of providers when there is due cause to do so, and to follow up on serious allegations around poor teaching quality at a provider submitting to the TEF. Panels should then be able, in exceptional circumstances, to not award a provider a rating of "Good" and instead call them to address the issues highlighted and resubmit. This will provide insurance against a provider being awarded a "Good" rating who, while managing to pass baseline standards, is subsequently found on further inspection to have serious problems.

Secondly, the description and differentiation between “Excellent” and “Outstanding” ratings are substantively meaningless. These need to be fundamentally written to reflect and promote elements of good practice which will help better differentiate between the two ratings.

**For further information, please contact
Alex Connor, Head of Policy (alex.connor@iop.org)**