

Response to the Green Paper: ‘Fulfilling our Potential – Teaching Excellence, Social Mobility and Student Choice’, on behalf of the UK Association of National Teaching Fellows

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This response is submitted on behalf of members of the UK National Teaching Fellows community as represented by the Committee of the Association of National Teaching Fellows (CANTF): all NTFs have had a chance to participate in preparing this response in person and by email. We have chosen particularly to respond to questions 2-11, as being the ones on which we are best placed to comment.

National Teaching Fellowships are awarded to higher education teachers who have been recognised at a national level as excellent university practitioners through a competitive, peer-evaluated process and are therefore uniquely placed to comment on teaching excellence. The scheme started in 2000 and each university and all FE colleges that meet certain criteria can submit up to three applications per year. Originally 20, and now up to a total of 55 university academics and professionals who support HE learning from England, Northern Ireland and Wales are awarded National Teaching Fellowships annually. From 2015, universities in Scotland were also able to nominate potential NTFs. The National Teaching Fellowship community comprises around 650 members who are represented by the Committee of the Association for National Teaching Fellows.

This response draws on responses from 150+ individuals who have contributed to discussions at a NTF TEF consultation event in Oxford, at two open NTF meetings in Leeds (Dec 2015) and Plymouth (Jan 2016), by email and through conversations with the chair and deputy chair of CANTF.

Summary

National Teaching Fellows are delighted that the government is aiming to recognise the importance of excellent teaching and acknowledge the value of professionalism, giving teaching equal status with research in universities. While it is necessary to rely principally on existing metrics in the first year, we argue that measuring teaching excellence is not a simple or straightforward task. There are widespread and genuine worries that insufficient detail is provided in the Green Paper on the metrics for a teaching excellence framework. We argue that establishing the right metrics through the technical consultation is crucial in ensuring that the framework is valid and acceptable to all

stakeholders. We are keen that any measures used to recognise excellent teaching accurately evidence improvements which add value to the student experience, brought about by interactions between HEI teachers and students, rather than extraneous factors representing existing differences in the level of advantage of the student body in different institutions. National Teaching Fellows and CANTF as their representatives are a body of expert practitioners who can usefully contribute both to the technical consultation and to the expert panels proposed for phase two of the process.

We offer here some over-arching comments and then address questions 2 to 11, which are those around which the National Teaching Fellowship community feel best placed to comment.

Introduction

National Teaching Fellows recognise that the TEF can be a means by which individual and collective teaching excellence is recognised in universities and other institutions offering higher education, including private providers and Further Education Colleges, affording equivalent status to teaching to that accorded to research. We are also aware that in recent years there has been an imbalance in esteem, caused largely by HEIs over-focusing on the Research Excellence Framework, thereby giving perverse incentives for HEIs to overlook the importance of teaching.

Representatives of the National Teaching Fellowship community will have confidence that the TEF is trustworthy if outcomes are based on evidence rather than historic reputations, and if the means by which judgments of teaching excellence are made are transparent and demonstrably fair.

Since there are significant variations between the performances of different departments within any university, we propose that measures of teaching excellence should be at a subject rather than an institutional level, recognising the importance of subject differences and signature pedagogies (Shulman, 2005a).

We are keen that the TEF should be multi-dimensional, using data already available to universities as far as possible, enhanced in phase two by evidence at a more granular level of genuine excellence in teaching and learning practice. We recognise that there is a trade-off between reducing the burden of the TEF process and achieving outcomes that genuinely recognise and reward excellent teaching.

Detailed comments on questions two to eleven

Question 2: How can information from the TEF be used to better inform student and employer decision making?

In the context of better-informing student and employer decision-making, we raise questions over aggregation, and the concept of a whole university rating of TEF at levels 1, 2, 3 and 4. We would like to see different areas of provision (disciplines/subject groupings) get different ratings as is currently achieved with the REF, to allow students to get better information about departments and programmes. We argue that if TEF ratings are to be linked to fees, they should be granular rather than at a whole institution level. This could be by broad subject area as in the REF or in smaller groupings, for example, Arts and Humanities; Health and Allied Professions; Medicine and Dentistry; Science, Technology, Engineering and Maths (STEM); Social Sciences and Education; and Business and Law.

Question 3: Do you agree that the ambition for TEF should be that it is open to all HE providers, all disciplines, all modes of delivery and all levels?

We agree that TEF should be open to all providers. It is essential that the technical consultation is undertaken promptly and with expert pedagogic input, to ensure that TEF measures proactively foster pedagogic creativity and student-centred approaches. The TEF must accurately represent the achievements of the whole sector, recognising mission differences and excellence within all disciplines and among diverse providers (including private providers and FE colleges where HE is offered), as well as for all levels and modes of taught provision. Additionally, the quality of support offered to international students and that offered to redress disadvantage for disabled and other disadvantaged students should form part of the metrics.

We need to ensure that the TEF does not foster an excessively conservative approach to teaching. Good university teaching thrives on experimentation and stretching students beyond their comfort zones (with appropriate support) and this can lead to periods of struggle and introspection for students who do not always immediately value particular teaching and learning approaches (notably, for example, group work). Evaluations undertaken during study, for example the NSS, do not appropriately recognise the longer term benefits of such approaches which might not be apparent until graduates are in employment.

There is significant further work to be undertaken to achieve consensus on learning gain: using it as a metric is regarded by the NTF community as problematic until further clarity is achieved. The proposed metrics including A level grades on entry, grade-point averages, self-reporting surveys, standardised tests, and qualitative measures like reflective diaries and mixed methods can provide baseline data for measurement of excellence. However, richer evidence from, for example, from case studies would be necessary if the metrics are to inspire confidence. We argue that institutional-

level metrics could be very damaging to the reputations of UK HE providers internationally, since they would be likely to further narrow choices of applicants to a small pool of universities and colleges, that do not offer the full range of disciplines and subjects. We argue that no institution provides universal excellence in teaching, and that pedagogic excellence can be found in a wide variety of institutions, including FE colleges where HE is offered.

Question 4: Where relevant, should an approved Access Agreement be a pre-requisite for a TEF award? What other mechanism might be used for different types of providers?

We welcome universities being required to demonstrate widening participation through approved Access agreements, but argue that this is not an indication of teaching excellence and that only indicators that relate directly to teaching should be used for the TEF. Measures of progression and added value for students from disadvantaged backgrounds achieving degrees and other HE awards can be a good indicator of excellent teaching but other factors are likely to be involved. As the Prime Minister acknowledged in his 2015 Conservative Party conference speech, inequalities and prejudices impact on student recruitment processes and these in turn impact upon graduate employment outcomes.

If approved Access Agreements are to be included in the diet of metrics, we argue that these must be benchmarked against specific criteria and must recognise subject and mission difference as well as cohort profiles. If we are to compare, for example, retention rates or student satisfaction between providers, some have higher proportions of disadvantaged students and there are regional and national differences. Additionally, some subject areas tend to receive higher or lower than average scores, for example, NSS scores are lower on average in Arts and Humanities subjects than in STEM subjects (Yorke, Orr and Blair, 2014).

We argue strongly that metrics used in TEF must be risk-assessed to ensure that there are no perverse disincentives that might encourage HEIs to avoid admitting 'high risk' students from non-traditional backgrounds as identified by Yorke and Longden (2004), some of whom may be more liable to drop out or fail. There is ample evidence that retention and achievement rates not only vary between subjects but also reflect patterns of social and economic inequality.

Question 5: Do you agree with the proposals on: a) what would constitute a 'successful' QA review b) the incentives that should be open to alternative providers for the first year of the TEF c) the proposal to move to differentiated levels of TEF from year two?

(a) Yes, since given the short timescale for phase one, using previous QAA reviews is an appropriate and pragmatic option: the QAA Code of practice element on 'Driving up the quality of student outcomes' already includes a commitment to continuing enhancement which we endorse.

(b) The NTF community argue that incentives should be open to all providers in the first year of TEF, including private providers, distance and online learning providers and HE in FE.

(c) NTFs expressed diverse views on how many levels should be differentiated in year two, arguing that 'standing' is a more useful term than 'level', which might have unwanted outcomes in terms of international perceptions of HE provision. Whether two, three or four levels are adopted, we commend the approach used in the 'Athena Swan' awards: Bronze, Silver and Gold awards are given, (Athena Swan, 2016), which link the awards to achievement against specific criteria.

We feel it is critically important to benchmark universities, to take account of regional variations in intake, social diversity and the mix of disciplines, with recognition of standing at a disciplinary/subject group rather than an institutional level.

While grade-point averages have been experimented with alongside traditional degree classifications in a number of HEIs, including Oxford Brookes University, GPAs in the UK are not regarded by the NTFs community as sufficiently mature as metrics to be used within the TEF, without considerable further work being undertaken to assure equivalence of grading against UK standards.

6: Do you agree with the proposed approach, including timing, assessment panels and process?

Approach

The NTF community endorses an approach that recognises and rewards teaching excellence at a subject group/ disciplinary rather than an institutional level. As indicated we argue for it to be based on readily-accessible and fairly measured data, which recognise diverse missions and student cohorts.

Timing

While recognising that the TEF could benefit Universities and the wider higher education community, the NTF community have strong reservations about the rapid implementation of the TEF. In particular, we are concerned that the technical consultation will have high impact on the approach ultimately adopted, and we are concerned that the timescale and scope of this are as yet unknown to the HE community. We would hope to see enhancements within phase two that build on both the experience of implementing phase one and evidence-led advice from pedagogic experts.

A well-designed TEF could potentially be valuable in providing more information to prospective students and other stakeholders about the quality of teaching in any institution, including parents and carers who frequently financially support students, but only if metrics were recognised by all stakeholders as reliable, valid and well-supported by evidence. HEIs whose overall teaching excellence was rated highly might then attract more students, and potentially, more academically-able ones, to apply to study with them. Through high emphasis on reliably-measured teaching excellence, HEIs that make student learning central to their missions could be rewarded, which in turn could encourage institutions to integrate within HR processes a system of reward and recognition for teaching excellence.

However, we have strong concerns over inappropriate usage of readily-available metrics, particularly in the first stages of the implementation of the TEF. As Gibbs argues in HEPI (2016)

“If, as a short-term stopgap, readily available outcomes measures are used, this will simply reinforce the existing reputation-based hierarchy. It will become clear to institutions that they will do better trying to improve their reputation than their teaching.”

We comment on further metrics in our response to question 11

Assessment panels

The TEF must recognise that discipline-specific approaches to teaching, sometimes described as signature pedagogies, (Shulman, 2005b) vary substantially, so evaluation of teaching excellence must be undertaken by those with relevant expertise.

The NTFS represents a well-established, nationally endorsed, and commonly understood scheme for the identification and demonstration of teaching excellence. We argue that National Teaching Fellows have undergone an established and robust selection process which recognises individual excellence as assured by their own institutions and the HEA selection panel and hence should be included in TEF assessment panels. The HEA’s 2013 data report on the National Teaching Fellowship awards demonstrates that NTF awards are already well distributed across all disciplines, and embrace a breadth of expertise in pedagogy. The Association of National Teaching Fellows would welcome opportunities to nominate representatives for panels as well as to contribute to the technical consultation on the implementation of the TEF

Such panels could also include:

- Representatives of those Professional, Statutory and Regulatory Bodies that already have expertise in recognising teaching excellence;

- Professors appointed within their universities on the basis of their teaching excellence (HEA, 2013) and championing of the student experience;
- Senior staff in universities such as pro-Vice-Chancellors for Learning and Teaching;
- Researchers recognised for their expertise in higher education pedagogy.

Linking excellent teaching to institutional finances

We are wary of the statement that ‘We will reward excellent teaching with reputational and financial incentives’ (Green Paper, 2015: p.8). There are too many flaws in the proposed system of measuring excellence to link it to financial reward for institutions at present. Additionally, there seems to be little incentive to capture individual teaching excellence and hence to make a difference to HE teachers on the ground, since metrics are currently mainly framed around institutional imperatives. We suggest that even if student numbers rise due to enhanced institutional reputation post-TEF, this could mean more students to teach for any institution, without necessarily resulting in an enhancement to the ‘unit of resource’. It was noted that higher fees might have more effect on already disadvantaged students, though the present policy of the withdrawal of some funding for those with disabilities was probably more of a disadvantage than higher fees.

Furthermore, we fear that linking of fees with teaching excellence could actually result in those universities offering TEF-recognised excellent teaching only being available to students who can afford them. NSS scores and other core metrics could be skewed by students not wishing to disadvantage their successors who might then incur higher fees. Nor would they conversely want financial penalties for their own institutions to result from low scores.

Invalid/imprecise metrics

We are concerned about adopting presage/input and product/outcome metrics over process/environment metrics. Input metrics such as institutional funding/resources, staff-student ratios, research performance and reputation are not valid measures of teaching excellence. One input variable we believe *should* be included in quantitative metrics as a reflection of high quality teaching is the *teaching qualifications and professional accreditation of staff* (e.g. PG Cert HE, the UK Professional Standards Framework (UKPSF) level of recognition, NTF standing and other HESA recognised teaching qualifications). There will be a link here between input variable and process and we know that students highly rate staff training in teaching (e.g. Nasr, et al., 1996; HEPI-HEA Student Academic Experience Survey, 2015). A recent survey undertaken by The Student Room (September 2015, n=500) found that 77% of the students surveyed said it was important to them that their lecturers have some form of teaching qualifications and that lecturers’ qualifications should be made

publicly available, ideally on the university website and in prospectuses. One in five of the sampled students said this information would 'definitely' affect their university choice. Moreover, more than 90% of students rated teaching skills as the most important feature of a good quality learning and teaching when assessed by the NUS/QAA (2012a). Likewise, the number and quality of pedagogic publications might act as a proxy for teaching quality, combined with teaching qualifications/accreditation.

Product measures such as student performance/grades, submitted work, graduate destination/employability information, retention and progression data are related more closely to social capital than to teaching excellence and they are also closely related to disciplines. We argue that it is inappropriate to use such data to measure teaching quality without factoring in a host of caveats. The largest single determinant of educational outcome is social class (Sullivan, 2001) and the resulting quality of students entering an institution, and this also affects other potential metrics, such as student employment and salary data.

Among measures we would not find useful, as they represent existing advantage among students on entry are metrics which take into account salaries on graduation, as they implicitly advantage certain subject areas and disciplines as well as enforcing differences that are implicit at entry. For example, some high-paying blue chip employers only recruit from a very limited pool of universities. Some disciplines like art and design rarely produce graduates with immediate high incomes, whereas others such as banking, finance and accounting are more likely to lead to initial high salaries.

If graduate salaries and first destinations are to be regarded as a metric, these should relate to *five* years after graduation rather than within six months, when many graduates are travelling or finding their first jobs. The metrics must be context-contingent and granular, and also need to take into account socio-economic factors. Where metrics do not represent learning enhancement experienced while students are at a university, we do not feel they should be included. A metric that shows how many students stayed within their field of study could be useful, especially if value added/learning gain is important, but it might be problematic in disciplines like Art and Design. A graduate's destination in a high paid job in a different discipline could skew the value of that department, as it may have little to do with the learning the student actually achieved there.

Equally, educational or learning gain, measured via grades, self-reporting surveys, standardised tests, other qualitative methods and mixed methods (see McGrath et al., 2015), is difficult to gauge in the UK using current national data collection instruments (e.g. comparing entry points with final degree classification). We are concerned that including measures of student performance might well promote grade inflation, while the use of graduate earnings in measuring standards could potentially

devalue subjects where students are oriented towards less remunerative but socially important professions like Nursing and Teaching. Additionally, including retention measures could foster the lowering of standards to enhance progression.

Process variables that capture excellent pedagogies are optimum, but these variables do not relate to individual contact hours, independent study hours, overall teaching intensity, class size, rapidity and amount of feedback, and student satisfaction (e.g. NSS) scores. Class contact hours, for example, have very little to do with educational quality independently of what happens in these hours. The relationship between contact hours and independent study hours is important as are the pedagogies and support in place for students (See NUS/QAA 2012b).

With regard to NSS scores, there is no necessary link between 'satisfaction' and 'quality'. Indeed, there is evidence that university students evaluate their teachers more positively when they learn less (Carrell & West, 2010; Braga et al., 2014). Measuring levels of student satisfaction might lead to lowering of intellectual challenge in courses. Overall, using student evaluations to assess universities is likely to be misleading, potentially resulting in reduced funding for precisely those courses that contribute most to student ability and graduate contributions to the economy.

We need integrated process measures that link together coherently to deliver meaningful results at a granular scale. Suitable measures need to highlight departmental and institutional cultures that promote intellectual challenge and pedagogic practices/approaches that engender student collaboration and active engagement in their learning, assessment and curriculum development (see NUS/QAA 2012a), hence bringing the focus back on students. Such pedagogic approaches tend to follow the seven principles of good practice in undergraduate education (Chickering & Gamson, 1987). Pascarella et al. (2008) list a number of studies demonstrating that if these seven principles are acted upon, then student outcomes will be improved. Thus, suitable process variables should capture how ongoing quality enhancement is converted in real terms to HE teachers' practice and hence into valuing, developing and rewarding inclusive teaching. The TEF should also lead to greater opportunities for students to engage meaningfully in quality assurance and enhancement.

We believe that peer review/expert judgement of institutional practice or collated evidence should be encouraged, as we recognise the shortfalls of metrics alone (see Wilsdon et al., 2015). Such a process will allow the diversity inherent within 'high quality teaching' to be recognised, appropriate to context, and will also allow enrichment or extra-curricular activities (often building affective emotional competencies that are hard to measure) to be conveyed beyond their simple statement in the Higher Education Achievement Report (HEAR).

Student support mechanisms over the entire student journey could also be highlighted within the TEF. This would allow the value of teaching and learning within institutions to be examined by assessing frameworks for excellence such as promotional pathways linked to teaching, proportions of Professors promoted via a pedagogic rather than just a research route, activities and outputs of Teaching and Learning Centres, encouragement of pedagogic research through institutional incentives and quality enhancement procedures designed to improve the student experience. Such a review process should also be inclusive of *all* staff. This might lessen the development of currently less prestigious, teaching-only contracts (most often awarded to women and BME individuals) and academic casualisation.

We argue for the adoption of criteria that are valid, reliable and can measure what is really important, that is, improvements that add value to the student experience, not merely those that lend themselves readily to measurement. Gibbs' (2010) *Dimensions of Quality*, produced for the HEA, usefully evaluates the validity of diverse indicators of educational quality.

Question 7: How can we minimise any administrative burdens on institutions? Please provide any evidence relating to the potential administrative costs and benefits to Institutions of the proposals set out in this document.

We argue that the TEF and any new quality assurance regime must be manageable, in that data prepared and presented by any HEIs should only be required to be presented once. This means that systems must articulate fully, and arguably form part of a single cohesive system, whilst acknowledging the distinctions between quality assurance and the recognition of teaching excellence. National Teaching Fellows would not wish to see an approach that mirrors former QAA Subject Review, which was arduous, time consuming and subject to gaming. Nor would we wish to see over-simplistic approaches that use only currently publicly available data which could not accurately reflect the nuanced dimensions of excellence for which we argue.

A TEF that is meaningful and trusted is likely to rely on measures that go beyond data currently held by HEIs. We argue for the involvement of practitioners in the genuine peer review processes, and for the usefulness of case-studies as a means of evidencing good practice. Readily available case studies of excellent peer reviewed teaching are currently held in many HEIs in the form of submissions to the HEA for National Teaching Fellowships. Case studies of excellence in sustained and strategic leadership of teaching are extant in the form of successful applications for Principal Fellowship of the Higher Education Academy.

We would not propose that TEF assessment visits of the kind involved in QAA periodic Subject Review should form part of the process.

Question 8: Do you agree with the proposed approach to differentiation and award as TEF develops over time? Please give reasons for your answer.

Over time, it should be possible, using the approaches we endorse, to achieve reasonable confidence that metrics can accurately represent differentiated levels of teaching excellence across the range of HEI providers. It will be important to ensure that metrics for later phases of the TEF are designed to avoid the potential for 'gaming' results. Again the technical consultation is crucial here.

We recognise the value of some aspects of the approach to performance monitoring as proposed by the Royal Statistical Society (2005) including their emphasis on detailed protocols, clearly specified objectives, methodological rigour, cost effectiveness, independent scrutiny, the recognition of ethical dimensions and a reflexive approach to the process of evaluation, with implications for continuous improvement. In particular, we regarded as apposite their proposal that: "Individuals and/or institutions monitored should have substantial input to the development of a performance management procedure".

Question 9: Do you agree with the proposed approach to incentives for the different types of provider? Please give reasons for your answer.

Private providers of higher education and FE colleges where HE is provided must be evaluated on an equivalent basis to other HEIs. We argue that any metrics must be universally applied, including especially those related to the training, accreditation, recognition and support of HE teachers.

Currently there is lack of clarity about specific incentives for different providers. On the different types of providers, we consider it important that all providers should be measured in the same way. As with any measure that is linked to financial incentives, there is likely to be high enthusiasm across the sector from those who perceive themselves as to be likely beneficiaries, and less from those who feel the system will disadvantage them and their students. It is important that the technical consultation ensures that diverse voices across the sector, including different mission groups and types of provider, are heard, and that metrics are capable of recognising diversity.

Question 10: Do you agree with the focus on teaching quality, learning environment, student outcomes and learning gain? Please give reasons for your answer.

Teaching quality: we support fully the contention that ‘Outstanding teachers should enjoy the same professional recognition and opportunities for career and pay progression as great researchers’ (Green Paper, 2015: p. 18). We do not believe this is the case equally across the sector currently and until this disparity is addressed there are not currently incentives for individual HE teachers to strive for excellence in promoting learning and, more importantly, in their relationships with students. It is debatable whether the proposals in their current form are capable of achieving the aim.

Learning environment

The quality of the learning environment in which students are engaged is crucial to their capacity to learn effectively. Considerable research exists, to which NTFs have made a significant contribution (Healey, 2005, Jenkins, Healey and Zetter, 2007, Healey, Jordan, Pell and Short, 2010, Brew, 2003) which demonstrates the importance of teaching being underpinned and informed by research and scholarship, and highlights the links between practitioners’ commitment to advancing their scholarship of teaching (Boyer, 1990). We propose that the relationship and mutual benefits between teaching, scholarship and research can be strengthened by a climate that fosters pedagogic enquiry, for example, by offering institutional funding for teaching projects, support for publishing on HE teaching and learning and encouragement of doctoral and post-doctoral research on learning and teaching. National Teaching Fellows, who include learning support staff, librarians and those involved in student support and guidance as well as academics argue that physical and virtual learning environments have high impact on success in study. Hence we would suggest that metrics of teaching excellence should include the quality of provision of learning resources, libraries and virtual environments.

Student outcomes and learning gain

We have concerns over how metrics concerned with employment and destinations (which will vary significantly with any University’s portfolio) are used. Universities delivering large numbers of vocational/professionally-related subjects may fare rather better than those focusing more on arts, humanities, and some other disciplines, irrespective of teaching quality. Indicators such as first destination of students on graduation can be valuable but are notoriously hard to collect from students who choose not to keep in touch with their universities, and such indicators are therefore innately inaccurate. Furthermore, destination data tends to be aligned to local economic factors and students’ socio-economic backgrounds. Anecdotal evidence suggests that some universities ‘massage’ graduate employment data by offering internships to unemployed graduates just before the census date or by contacting graduates about their employment status starting with the highest achieving students.

Graduate salaries do not, we argue, provide a valid indicator of excellent teaching since these are significantly influenced by subject, geographical location and pre-existing advantage.

Retention data used as metrics should be for each level of undergraduate degree programmes, for Masters programmes, and for PhD completions within reasonable periods.

We suggest the need to widen some of the possible metrics relating to teaching, including the time spent in class, the time spent designing and conducting assessment and providing feedback to students, the time spent on curriculum development and evaluation, and the time spent leading junior colleagues. 'Teaching intensity' is regarded as too crude a measure of teaching quality. We question how much independent study may be generated from a 'contact hour', proposing that 'learning gain' does not just depend on contact time.

It is a highly complex matter to evaluate learning gain, for example comparing A level equivalent scores (and other admission data) on entry with awards achieved at graduation, since multiple factors impact on ipsative development, of which the quality of teaching is only one. Before learning gain is included as a TEF metric, consensus must be achieved on what it comprises

Question 11: Do you agree with the proposed approach to the evidence used to make TEF assessments - common metrics derived from the national databases supported by evidence from the provider?

National Teaching Fellows agree strongly that to win the confidence of the university teaching community, it is important that metrics are valid, robust, comprehensive, credible and current. We propose that metrics which are readily available to HEIs that could be used within the TEF could include:

1. Evidence of the extent to which HEI recognises and rewards excellent teaching, e.g. by supporting accreditation through the UKPSF run by the Higher Education Academy, which offers 4 categories of Fellowship, and by promoting a cadre of promoted staff on the grounds of their excellent teaching (in some HEIs these are termed Teacher Fellows);
2. An indication of the proportion of Professors who have achieved this status on the basis of their outstanding teaching, with the potential of strengthening the research-teaching nexus;
3. Evidence that all new-to-HE staff are trained and supported through their early years of teaching (linked to probation) on Postgraduate Certificates in Higher Education Teaching or Postgraduate Certificates in Academic Practice or similar. These have been a normal

- expectation for new staff in most UK HEIs for at least a decade. This metric should include graduate teaching assistants, sessional and fractional staff;
4. Evidence that career-wide continuing professional development is provided for all who teach, with take up of CPD monitored. Metrics could include average institutional (or departmental/school) expenditure per head on staff development concerning teaching, learning and assessment, together with average hours spent annually by staff engaging with pedagogic development.
 5. Evidence that scholarship and evidence-based practice are valued by the HEI, as indicated for example by the number and quality of peer-reviewed pedagogic publications about teaching, learning and assessment produced, including action-research and teaching-related consultancies.
 6. Data that show the number of staff at an HEI who have achieved National Teaching Fellowships over the 15 years the scheme has been running, and how the HEI engages them in enhancing the management of change in learning and teaching practices within and beyond their own institution. It is worth noting that not all UK nations have participated in the scheme from its outset, (only England and Northern Ireland in the earlier years) and that HEIs of whatever size can submit up to three nominations each per year, meaning that in some HEIs it is harder to be nominated than in others.
 7. Data on the spend per full-time equivalent student on learning environments, libraries and virtual resources for students. Such metrics must be mode-neutral between full-time and part time students, and should recognise that many programmes are managed through distance and blended learning.
 8. Evidence that students are satisfied with their learning experiences as indicated by a basket of measures, including NSS outcomes, Postgraduate Taught Experience Survey data and the International Student Barometer (but note caveats below).
 9. Evidence that outcomes for students are positive as indicated by benchmarked retention data at each level of undergraduate degree programmes, on Masters programmes and for PhD completions within reasonable periods.
 10. Evidence that HEIs demonstrate investment in student engagement, welfare and pastoral care through student recruitment policies, and throughout the student lifecycle, showing a commitment to inclusivity and redressing all kinds of disadvantage, particularly in terms of demonstrating and monitoring Fair Access and Widening Participation activities.

More complex data that could be considered includes the availability of academic staff for individual academic support, the number of contact teaching hours that are typically offered within different disciplines, the proportion of staff on casual employment contracts and the ratio of hours for assessment and preparation that individual academics are given within deployment models. While these are less readily available, their availability would add to the richness of the information considered within TEF. We argue that the approach that is used in the HEFCE's 'Transparent Approach to Costing of Teaching' (TRAC T) (HEFCE 2005) does not provide valuable or robust data that could be included in TEF as individual and institutional interpretations of the approach are highly variable.

Currently data held institutionally, by the HEA and by HESA is not ubiquitously accurate, and one potential benefit of the TEF is that it could incentivise improvements in data submission and accuracy.

If indicators such as NSS, first destination employment data and retention data are to be key elements of the TEF, each indicator must be benchmarked to take account of student characteristics, discipline-level differences and other factors such as the region in which a university is based. This could provide accurate measures of excellence within institutions, which have highly diverse profiles and missions, in a way that existing league tables fail to achieve.

Furthermore, we recognise that NSS and other survey data represent snapshots of student satisfaction, hence the need to look at longitudinal data that captures outcomes beyond the final year of a programme. We also argue that self-report surveys do not gauge engagement or learning gain and therefore constitute only one component of teaching. NSS questions asks students to rate *student satisfaction with quality of teaching* – as distinct from measuring the *actual quality of teaching*, which students are not qualified to evaluate. Student evaluations of teaching may be affected by factors other than the teaching itself (for example, Weinberg, Hashimoto, & Fleisher, 2009) and that such evaluation instruments can overlook important aspects of effective teaching (e.g. Onwuegbuzie *et al.*, 2007).

However, revisions to the National Student Survey for 2017 are expected to include new questions that aim to measure student engagement and can therefore potentially enhance the value of the data. HEFCE is also undertaking 12 pilot projects to explore how learning gain might be measured. The provisions of the Small Business, Enterprise and Employment Act, passed last year, should also provide more accurate data on graduate earning and employment.

Conclusions

The TEF has the potential to be a powerful tool to support student choice, redress the lack of parity of esteem between teaching and research and drive quality improvements by shaping institutional behaviours. National Teaching Fellows are keen actively to support the work of the technical consultation in ensuring it becomes a fit-for-purpose process to enhance the student experience and recognise and reward both excellent teachers and the institutions that employ them. In our consultations we recognised that working on the TEF is a unique opportunity for the NTF community to impact on the future of higher education in the UK and we are keen to participate in assessment panels in both phases, bringing scholarship, expertise and experience to the task. We welcome opportunities to participate further in shaping this influential and important process.

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