**Business, Innovation and Skills Committee Inquiry: Assessing the Quality of Higher Education**

1. The Royal Society of Biology (RSB) is a single unified voice for biology: advising Government and influencing policy; advancing education and professional development; supporting our members, and engaging and encouraging public interest in the life sciences. The Society represents a diverse membership of individuals, learned societies and other organisations. Individual members include practising scientists, students at all levels, professionals in academia, industry and education, and non-professionals with an interest in biology. We have had contributions for this consultation from our individual members, other bioscience based learned societies (our member organisations) and special interest groups including the Heads of University Biosciences and the Biology Education Research Group.
2. The RSB are providers of a number of initiatives that support higher education institutions, their staff and students. We recognise excellence in bioscience teaching with our annual Higher Education Bioscience Teacher of the Year Award[[1]](#footnote-1). We offer our members who are active in teaching the opportunity to join the Chartered Science Teacher (CSciTeach) professional register[[2]](#footnote-2). To maintain their registration teachers must demonstrate their continued commitment to engaging with professional development[[3]](#footnote-3) and reflecting upon their practice. We offer training and events that support teachers in higher education including a yearly residential conference co-ordinated by our special interest group the Heads of University Biosciences which focuses on teaching and learning[[4]](#footnote-4).Through our degree accreditation[[5]](#footnote-5) processes the RSB ensures that accredited programmes enable students to develop the skills needed by employers alongside strong academic knowledge and practical skills.
3. **What issues with quality assessment in Higher Education was HEFCE’s Quality Assurance review seeking to address?**
4. The RSB felt that the review into quality assessment was trying to address a number of issues within higher education that all fall under the heading of comparability of standards across universities and their programmes. It is important that there is transparency and that students understand what they can expect to receive in terms of personal development, transferable skills and graduate attributes alongside subject-specific skills and knowledge that will prepare them for future employment and being part of society.
5. The review raised questions about the awarding of degrees, predominantly over whether the increase in First and Upper Second Class grades awarded is due to improvements in knowledge and skill or due to grade inflation. There are implications for employability as the class of degree awarded is used as a threshold level for choosing employees. For example, are 2:1 degrees awarded in different institutions comparable?
6. As student numbers increase and a higher percentage of the population attend university, the student cohort has become more diverse. There is also an increased diversity in providers of tertiary education. The HEFCE review suggested that a “one size fits all” approach can no longer feasibly apply and that the processes used in external assessments (including how external examiners are used) must be reconsidered.
7. **Will the proposed changes to the quality assurance process in universities, as outlined by HEFCE in its consultation, improve quality in Higher Education?**
8. The Royal Society of Biology agrees with the general principles that will be used to underpin the approach to quality assessment within providers of higher education. There is potential for the changes to have a positive impact on the quality of higher education, for example raising the status of teaching with better recognition for excellent teachers, but some aspects require careful consideration.

1. Increases in the numbers of students achieving first class degrees may be due to more effective teaching, use of innovative teaching techniques, differences in the curriculum, students working more effectively, rather than grade inflation. The Teaching Excellence Framework (TEF) could provide a means to capture the assessment criteria information that degree class is based upon, to help ensure comparability across institutions. This information could enable employers to better understand the skills and competencies that a graduate should be able to demonstrate. It would also be beneficial to be able to demonstrate the value added for students.

1. We are supportive of the suggestion for external examiners practice to be standardised, however additional training requirements for external examiners may put pressure on subjects which already have a shortage of examiners. If the suggested changes resulted in a greater demand on staff time to take part in review processes, within their own department and again outside their institution as an external examiner this would impact on time available to spend with students and would also incur additional financial costs.

1. If the arrangements made to regulate this system are not implemented well, this could have serious repercussions for the students’ experience.
2. **What should be the objectives of a Teaching Excellence Framework (‘TEF’)?**
3. **How should a TEF benefit students?**
4. The main objective of the Teaching Excellence Framework should be for it to recognise excellence in teaching. It should support improvement in teaching within higher education by sharing and enhancing the good practice that already goes on across the country and in doing so improve the outcomes for students, teachers and society.
5. The TEF could increase information available for students, helping them to differentiate between universities and courses on the basis of their assessed teaching performance. We would hope that the TEF could lead to more consistent high quality teaching for students across courses and universities.
6. The TEF should recognise the importance of programmes offering a variety of teaching, learning and assessment techniques and strategies to meet the needs of diverse student cohorts.
7. In bioscience degree programmes it is vital that students have the opportunity to gain practical experience. This could be in the form of practical demonstrations, participation in practical workshops, working on experimental design or conducting investigative work in the laboratory or the field. These experiences enable students to develop their practical skills as well as logical reasoning, numeracy, analytical, research, communication, and team work skills that are all highly valued by employers.
8. For practical subjects such as the biosciences the TEF should also give information on the quality, integration and application of practical teaching in the laboratory and the field, both within the university and during external placements alongside the teaching of theory. Good teaching, of course, requires proper facilities that in the life sciences must be available to support practical study in the laboratory, and also in the field, as appropriate to the subject. Access by students to up to date practical study and the required facilities should be integral to the TEF.
9. The continued development of curricula, reflecting on its impact and considering how they will be taught and assessed is vital in ensuring an excellent teaching and learning experience for students. The TEF should work alongside degree accreditation processes that are already in place to ensure that programmes have solid academic foundations and prepare students’ for life after university supporting them to develop the skills which employers value.

**How should a TEF benefit Academics?**

1. For teachers within higher education to be invested in the TEF they need to have ownership of it and be involved in its development.
2. The TEF should recognise excellence in teaching and should establish that excellence in teaching is as valuable and important as excellence in research. Including metrics such as the numbers of teaching academics with teaching qualifications and recognitions such as CSciTeach would be a positive step in supporting this.
3. TEF should help to identify and share good teaching practice within disciplines by building on the existing peer review process, both within and across institutions. This would include innovative teaching strategies and approaches, and course content. The framework may provide academics with evidence that can help to facilitate career progression on a teaching pathway, thereby embedding and reinforcing the value of teaching within promotion criteria.
4. It could reward academics for research into teaching and pedagogy as well as their own subject area.
5. It should require that universities put in place appropriate support and training for their teaching staff, and the time to engage with it. The TEF could help to ensure that external figures (e.g. industrial experts) and post-doctoral researchers have access to the same professional development opportunities as university academics to support their teaching. It could also help postgraduates and post-doctoral researchers by recognising and rewarding their teaching skills.
6. It could encourage greater career freedom to allow transitions between research and teaching or industry and academia at various career points.

**How should a TEF benefit Universities?**

1. TEF could provide universities with metrics and case studies that can be used to promote their institution to potential students. It has been suggested that if institutions are able to demonstrate that they provide excellent teaching, they will be able to increase tuition fees; but this may have unfortunate repercussions that are discussed later.
2. RSB believe that the TEF should provide information at both a university and subject level as excellent teaching in one subject may not be reflected in other subjects. The former may cover university wide teaching policy and initiatives, overall student feedback and the general support in place teaching staff. The more detailed information at a subject specific level should link to support and resources directly related to the subject area for example excellent bioscience courses may have wet laboratories, computer laboratories, field sites etc to support practical aspects of learning.
3. **What are the institutional behaviours a TEF should drive? How can a system be designed to avoid unintended consequences?**
4. Through TEF, the status and value of teaching at higher education institutions could be raised. There may be an increase in the numbers of teaching academics with additional teaching qualifications.
5. Excellence in teaching could be more easily included as part of promotion criteria, which may result in the promotion of more teaching academics.
6. It could encourage the sharing of good practice across departments, schools and institutions. We would not want implementation of what are effectively competitive measures in this area to reduce collaborative working. There is the danger that TEF could stifle creativity, incentivising teachers to use tried and tested safe options to meet criteria rather than experimenting with new teaching techniques and strategies. TEF should be supportive of innovative practice, encouraging an appropriate level of risk-taking. There is an issue that, in trying to meet the “criteria” for the TEF, institutions could become mechanistic and too focused in their approach, ignoring the generic qualities that ultimately result in improved teaching and improved student outcomes.
7. We want the TEF to encourage cutting edge research-led teaching. There should be more opportunities for all-round research and scholarship, with expertise in both teaching pedagogy and subject specific research rather than forcing staff to specialise. For universities that are not conducting research within a subject area, the TEF may encourage collaboration across institutions to support research-led teaching. Equally for research intensive institutions collaborations with institutions which are conducting pedagogic research would be beneficial.
8. Accreditation of degree programmes, through learned societies and by professional bodies recognise features of excellent teaching and will complement the work of the TEF. The RSB Degree Accreditation and Advanced Accreditation schemes rigorously and independently assess programmes to ensure that programmes have a solid academic foundation in biological knowledge and skills and prepares the graduates for the needs of the employers. The TEF may want to take into account the numbers of courses at an institution which have been accredited.
9. **How should the effectiveness of the TEF be judged?**
10. If the TEF has a positive effect the student satisfaction scores may in part reflect this: for example drop out levels may reduce. But care is needed with this (see below).
11. If students begin requesting data regarding the standard of teaching (as measured by the TEF), this could imply that the TEF results are regarded as valuable information. Ultimately one could predict that institutions or programmes that are recognised as providing excellent teaching would receive higher applicant numbers and/or see the rate of applications grow at a greater rate compared to other HEIs who perform less well.
12. It may be possible to establish whether employers perceive an improvement in graduate quality and correlate this with improvements in teaching.
13. If TEF is successful or effective we may also begin to see the status of teaching in higher education institutions rise. This may in part be reflected through the numbers of academics promoted on the basis of their teaching. It may also be reflected in the numbers of teaching academics holding teaching qualifications. The RSB supports a competency based approach for recognising teaching excellence through the Chartered Science Teacher Register.
14. **How should the proposed Teaching Excellence Framework and new quality assurance regime fit together?**
15. The schemes will need to complement each other to minimise any unnecessary administrative burden and costs to the institutions.
16. We need to ensure that they do not produce contradictory outputs that will confuse students when deciding upon where they should study.
17. **What do you think will be the main challenges in implementing a Teaching Excellence Framework?**
18. A large challenge will be establishing the data and metrics that will be used to evidence teaching excellence. The question ultimately remains: how can excellence in teaching be measured?
19. Although many measures can be identified, it remains difficult to establish causation and determine if a metric measures what it claims to measure.
20. There will need to be an understanding of the context surrounding any data used, including aspects such as the universities’ student catchment and population characteristics.
21. External factors outside the universities’ control, such as a downturn in the economy that will impact on graduate employment should be accounted for within the TEF.
22. We would encourage the TEF to draw on a diverse range of metrics (but be mindful of limiting bureaucracy) as well as contextual qualitative data such as case studies and peer review processes.
23. In considering student satisfaction as a measure of teaching excellence there is a tension between what a university needs to provide for students and what the student may want. Student satisfaction (and corresponding positive National Student Survey results) are achieved in part by providing more defined curricula/questions and more complete support (references, online lectures, expected outcomes). Universities play a role in challenging students, “transforming” them into graduates ready to input into society, and this does not necessarily align with what makes students immediately happy. TEF should take into account parts of the Student Survey such as getting useful feedback and having good support structures but should be wary that it does not cover all educationally important aspects.
24. If drop-out rates are used as a measure, this may push universities towards only selecting students who can demonstrate dedication to their chosen subject, this may reduce the choices available for some students. It could negatively impact on the willingness of universities to run Foundation courses, often aimed at “hard to reach” communities and lower income families where drop-out rates are always higher.
25. The time for administration and the financial costs of the TEF must not be too great, effectively pulling resources away from the students in order to manage its implementation.
26. A lower rating through the TEF should not have such a punitive effect that prospective students abandon the institution causing funding to fall, preventing the institution from being able to improve. This is especially important at a programme level for specialist subjects that are not widely taught, and subjects which are already high cost (often practical based). Bioscience and life science degree courses require students to engage with a large quantity of practical work, and are expensive degree courses to run; finance can be a limiting factor. Linking the TEF results to fees set for courses could have a hugely detrimental impact on universities being able to fund these courses.
27. An additional consideration will need to be the time required for the implementation of the TEF within institutions and the support and guidance that will be required to enable it to be successful. Higher Education Institutions will need time to adjust to new procedures.
28. **How should the proposed connection between fee level and teaching quality be managed?**
29. **What should be the relationship between the Teaching Excellence Framework and fee level?**
30. Feedback from members of the RSB has raised a number of concerns regarding linking the Teaching Excellence Framework with the level of fees that a higher education institution can charge. The RSB would be opposed to the linking of tuition fees directly to the outcomes of the TEF.

**b. What are the benefits or risks of this approach to setting fees?**

1. Variable fees may dissuade applicants from low-income backgrounds from approaching institutions that are deemed to have excellent teachers. To make the greatest impact, materially disadvantaged students need access to the best teachers, and fee increases, would add another barrier. With a better outcome in the TEF universities could also decide to request higher entry requirements for students making the process more selective. If TEF enables the whole institution to raise fees when not all of its departments are of the same standard then students in the departments that have not got excellent teaching are penalised.
2. A better financial reward based upon performance in the TEF would be to allow additional funding to be ring-fenced for funding teaching initiatives that can improve the student experience.
3. The TEF should be seen as part of a roadmap to better teaching across the board. It sends a strong message about the value of teaching. It should evolve overtime, learning from an initial base of qualitative and quantitative metrics that are valuable but easy to implement, allowing universities themselves to be innovative, helping to inform future development of the TEF.

1. Higher Education Bioscience Teacher of the Year Award <http://www.rsb.org.uk/get-involved/awards-and-competitions/he-teacher-of-the-year> [↑](#footnote-ref-1)
2. Chartered status <http://www.rsb.org.uk/careers-and-cpd/registers/chartered> [↑](#footnote-ref-2)
3. Professional development <http://www.rsb.org.uk/careers-and-cpd/cpd>; <http://www.rsb.org.uk/images/RSB_learning_for_life.pdf> [↑](#footnote-ref-3)
4. Heads of University Biosciences events <http://www.rsb.org.uk/education/hubs/hubs-news-and-events> [↑](#footnote-ref-4)
5. Advanced Accreditation and Degree Accreditation <http://www.rsb.org.uk/education/accreditation> [↑](#footnote-ref-5)