

HEFCE consultation on student numbers and teaching funding

Part 1: Student number control and teaching funding: policy, priorities and principles

1. We have proposed a set of principles (listed in paragraph 94) to inform our approach. Do you agree with the principles we have outlined?

The RAS agrees with the principles set out in the consultation document. In particular, we endorse the need to support high-cost and vulnerable subjects, of which physics, geophysics and astronomy are key examples (the content of undergraduate degrees in 'astronomy' or 'astrophysics' usually includes a large component of that found in physics degrees).

2. Do you have any comments on the impacts, positive or negative, that the proposals in this consultation might have on equality and diversity?

Astronomy and geophysics are subjects that act as 'STEM attractors' i.e. they encourage prospective undergraduates to study science. Evidence from the Institute of Physics report "Particle Physics: it matters" indicates that between 53% and 73% of physics undergraduates cite an interest in astrophysics as a reason for their course of study.

At postgraduate level, the recent RAS Demographic Survey of Astronomy and Geophysics found that women make up a third of PhD astronomy and geophysics students, a significantly greater proportion than for physics as a whole and than the 20% of girls who choose to study physics at A level.

As the proposals are developed, HEFCE should bear in mind that the STEM attractor role and positive impact on gender equality of astronomy and geophysics depends on adequate resources for their respective undergraduate programmes.

Part 2: Student number controls

5. Do you agree that we should consider making adjustments to providers' number controls, where necessary, to take account of changes in their average course duration?

Four year MSci courses designed to better prepare students for careers in research are commonplace in physics departments across England and are offered on undergraduate programmes including those with components of astronomy and / or geophysics. We would not wish to see an adjustment to number controls that would harm recruitment to these programmes.

Part 3: Proposals for funding teaching from 2013-14 onwards

High-cost subjects

7. Do you have any comments about our proposed approach to supporting high-cost subjects?

Without support from HEFCE in addition to income from student fees, relatively expensive courses in the physical sciences (including astronomy) would be at risk of closure in many

institutions. The HEFCE assumed cost per student in this area (£10,619) may also be an underestimate, with RAS Fellows at different institutions citing costs of between £11,000 and £16,000. In this context, the additional support from HEFCE is welcome and absolutely necessary for the continued provision of these programmes.

Geophysics teaching is currently classed within the Earth sciences area. HEFCE includes these programmes in Band B, alongside physical sciences but at a lower level of support as the estimated costs per student are £10,138 compared with £10,619. The Society believes that as geophysics graduates are in high demand by industry (reports from HEIs suggest that all their graduates move into relevant employment), that this is a physics-based programme and that student costs are comparable to other physical sciences, this course should be in the physical sciences group.

8. Do you agree that we should provide funding support for postgraduate provision including for price group C, as a transitional approach together with further development of the evidence base for future investment?

The research councils responsible for astronomy and geophysics (STFC and NERC respectively) no longer offer studentships for taught MSc courses in these disciplines. In their absence, UK and EU students usually need to apply for Career and Personal Development Loans offered on much less generous terms than those available to undergraduates and where repayments begin within two months of completing the course. Coupled with the large debts now accrued by undergraduates by the time they complete their first degrees (perhaps £60k for a four year course), this could deter students from pursuing postgraduate study.

The RAS therefore agrees that HEFCE should provide funding support for taught postgraduate courses at the previously provided level. To further encourage participation, we believe that HEFCE should also work with the Government to support MSc courses of strategic importance through an extension of the undergraduate loans scheme or similar low-cost financial support, particularly in areas such as geophysics where graduates are in high demand by industry.

Flexible learning: part-time and alternative modes of study

10. Do you have any comments on our proposal to provide an allocation for part-time undergraduate provision from 2013-14 which for new-regime students will only apply if they are in high-cost subjects?

As in question 7, we again wish to emphasise that in the new regime, provision of high-cost subjects such as astronomy and geophysics will depend on both fee income and additional support from HEFCE. A large number of students at the Open University are choosing to pursue courses in this area through a flexible part-time route and we would not wish to see changes to HEFCE support that would threaten either the quality of course provision (for example lab facilities) or result in an even greater share of costs being placed on students.

Allocation to recognise costs of London providers

12. Do you agree with our proposed approach to contribute to the additional costs of operating for London-based providers?

The Society agrees with this approach. There are several institutions in or near London that are world class providers of astronomy and geophysics courses that will need the additional support required in what is one of the most expensive cities in Europe.

Student Opportunity

13. Do you have any comments on our proposal that the role of HEFCE funding for student opportunity should be to enable providers to underpin their continued commitment to widening participation and student retention and success and to contribute to further national progress on social mobility?

Astronomy in particular is recognised for its role in bringing students into STEM education and careers (see our answer to question 2). Some projects in this area are central to efforts to widen participation. A good example is the National Schools Observatory based at Liverpool John Moores University that has an excellent long-standing record of raising attainment and aspirations in a diverse range of schools. Provided that the funding for student opportunity remains flexible enough to support initiatives of this kind, the Society endorses the HEFCE proposal.

Strategically important and vulnerable subjects

17. We have been asked by Government to consider a new approach to strategically important and vulnerable subjects (SIVS) and whether any subjects may require support to avoid undesirable reductions in the scale of provision. Do you have any comments on our proposed new approach to supporting this area through recurrent funding?

The RAS welcomes the commitment by HEFCE to work with the relevant STEM subject bodies to promote demand for SIVS. The Society would certainly be willing to advise HEFCE on issues affecting the SIVS disciplines that align with our interests, for example in supplying evidence or in soliciting the views of UK academics working in astronomy and geophysics.

On the proposed principles, we agree that decisions should be on the basis of robust evidence and refer HEFCE to work carried out by the RAS and others that demonstrates the strategic value of astronomy and geophysics in the UK.

We also again refer to our answer to question 7 and emphasise that astronomy and geophysics are both SIVS and also high-cost subjects that require financial support from HEFCE in addition to income from student fees.