Funding for Equivalent or Lower Qualifications (ELQs)

Institute of Physics response to a House of Commons Innovation, Universities and Skills Committee Inquiry

A full list of the IOP’s responses and submissions to consultations can be found at www.iop.org

14 January 2008
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Clerk to the Committee
Innovation, Universities and Skills
Committee Office
House of Commons
7 Millbank
London SW1P 3JA

Dear Sir/Madam

The Institute of Physics (IOP) is a scientific membership organisation devoted to increasing the understanding and application of physics. It has an extensive worldwide membership and is a leading communicator of physics with all audiences from specialists through government to the general public. Its publishing company, IOP Publishing, is a world leader in scientific publishing and the electronic dissemination of physics.

The IOP welcomes the opportunity to submit evidence to the House of Commons Innovation, Universities and Skills Committee Inquiry on the funding of equivalent or lower qualifications.

The attached annex highlights the key issues of concern to the IOP.

If you need any further information on the points raised, please do not hesitate to contact me.

Yours faithfully

Professor Peter Main
Director, Education and Science
Key recommendations:

The proposed support for strategically important subjects, including physics, is insufficient and lacks coherence with other government policies. The government should make it clear to HEFCE that a full and permanent exemption is required for all learners in these subjects.

The proposed funding withdrawal will have a disproportionate impact on the Open University (OU), which is the only UK institution offering specialist part time, distance learning physics. Further, the proposed support for strategically important subjects cannot be applied effectively to the OU, due to its unique system where students do not register for a degree programme at the start of their studies.

Introduction:

1. The IOP is concerned at the government’s proposal to withdraw funding for the majority of students in England and Northern Ireland who are studying for equivalent or lower qualifications (ELQs). We oppose the proposal for the negative impact it will have on a range of individuals, higher education institutions (HEIs) and employers. ELQ learners represent a relatively small part of the student cohort, and are already exempt from receiving statutory student financial support for their course fees and living expenses, regardless of their household income. The stated aim of the withdrawal is to raise skills and widen participation in HE, but it is difficult to see how the financial saving, amounting to 0.2% of HE funding, will actually open up new opportunities or encourage more non-ELQ learners or first-time entrants to HE.

2. There may be an argument for charging leisure learners the full cost for their education, but it is not clear that targeting those studying for an ELQ will achieve this, as there is no evidence to suggest that the majority of ELQ learners do not make use of their degrees. A better fit to the category of ‘leisure learners’ might be found by considering programmes of study rather than individual student circumstances. Many studies have looked at the issue of ‘over-qualification’ of graduates. For example, one study found that 23% of the 1997 graduate cohort was in jobs for which they are over-qualified, compared to only 21% of natural science graduates and 14% of mathematics and computing graduates¹. Arguments have been made elsewhere for exempting programmes recognised by professional bodies from the funding withdrawal, where that body determines to some extent the course content or level. This may be a valid improvement to the current proposals, and would apply to IOP Accredited undergraduate degrees².

² For details of IOP Accreditation, please refer to our website: www.iop.org/activity/policy/Degree_Accreditation/index.html
3. Birkbeck University is also advocating an alternative approach to target “leisure learners” more effectively: exempting from the funding withdrawal those students returning to study an ELQ five years or more after their original qualification. This does not entirely make sense, since the earlier in an individual’s career a qualification is taken, the greater potential use can be made of it. An alternative approach might be to withdraw funding from students who are currently retired, or those close to retirement age. Another alternative could be to withdraw funding only from learners who are studying at a pace slower than half that of full time students; or those taking a second, rather than a first ELQ, since these candidates may be less likely to make use of their qualification.

4. If a case could be made that a funding cut is really required, the IOP would support amendments to the funding withdrawal which would, based on clear evidence, support ELQ learning while targeting leisure learners more effectively.

Strategically important subjects:

5. More specifically with relation to the physical sciences, the proposed allocation for strategically important and vulnerable subjects (SIVSs) is both quantitatively and qualitatively insufficient.

6. A number of influential meetings and reports, including the Lisbon Strategy\(^3\), the government’s own *Next Steps*\(^4\) document, the Leitch Review\(^5\) and the recent Sainsbury Review\(^6\) have identified the need for more physical scientists, engineers and mathematicians, as well as noting the shortage in other strategically important areas. Of particular importance is the shortage of sufficiently qualified physics specialist teachers and of people with an adequate knowledge base to train as a specialist teacher.

7. HEFCE has funded a number of programmes to encourage more HE students in SIVSs. The IOP’s own *Stimulating Physics*\(^7\) project falls into this category as do others in mathematics, engineering, chemistry and modern languages. In addition, the Open University (OU) is heavily involved with initiatives attempting to recruit more scientists and linguists. All of these projects are intended to increase, rather than maintain, student numbers, as is urgently demanded by the current UK skills shortage.

8. In response to the government’s decision on ELQs, HEFCE has proposed to tackle this issue with a targeted funding allocation for SIVSs, rather than a full exemption, as is the case for courses such as teacher training or foundation degrees. This funding allocation would be based on historic student numbers, which does not allow for any organic or institution-led growth in SIVS ELQ student numbers. Further, it is not clear that HEFCE will provide this allocation on an ongoing basis; the fund is proposed only to cover the first two years of the ELQ funding withdrawal. The government should make it clear to

\(^3\) The EU’s Lisbon Strategy: http://ec.europa.eu/growthandjobs/index_en.htm
\(^6\) Lord Sainsbury of Turville’s *Race to the top: a review of Government’s Science and Innovation Policies*, October 2007
\(^7\) See the project website for more details: www.stimulatingphysics.org/
HEFCE that a full and permanent exemption from the proposed withdrawal is required for all SIVSs.

9. The cost of such an exemption would not be that great. Other than medicine, the subject areas which would create the most substantial savings under the withdrawal are business and administrative studies and creative arts and design. Physical sciences, for example, represent only around 3% of the total cost.

**Student choice:**

10. Not only would the proposed support for SIVSs prevent growth in those subjects, but it could also prevent mature students from reskilling in those areas.

11. The proposed ELQ policy is apparently based on the assumption that the first of two ‘equivalent’ qualifications studied by an individual is likely to be more valuable than the second. This is unlikely to be the case. One of the key recommendations of the Sainsbury Review was that STEM careers advice must be improved, and there is much evidence that careers advice is generally weak in this area. Further to this, the UK education system encourages specialisation at an earlier stage than in many other countries. Given these circumstances, the withdrawal of funding from ELQs is likely to disadvantage those subjects which are useful in society and the economy, but unpopular amongst 16-18 year olds. It removes an important opportunity for those whose needs have not yet been met by the education system.

12. The IOP’s report, *The economic benefits of Higher Education Qualifications* showed that on average a physics degree adds 30% to an individual’s lifetime earnings, compared to other degrees including biology and history which add only 16%.

13. There is no reason to suppose that employers would be able to sponsor candidates through these qualifications, particularly when highly numerate and skilled graduates are available internationally, and the effected candidates are likely to be looking for a career change.

14. While the government cannot provide every secondary student a specialist physics teacher and accurate careers advice about the benefits of a physics education, it would be unfair to deny those who enter other areas of study the opportunity to reskill at a later stage.

15. HEFCE’s current proposals for SIVSs are aimed only at supporting provision, rather than enabling ELQ learners to study these subjects. It is explicitly stated in the implementation plan that HEIs may chose to use the SIVSs targeted funding to support new entrants to HE.

16. In contrast to this, John Denham, the Secretary of State for Innovation Universities and Skills, has implied during the recent House of Commons debate on HE, on the 8th January, that ELQ learners would be able to study

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8 Produced jointly with the Royal Society of Chemistry by PriceWaterhouseCoopers, *The economic benefits of Higher Education Qualifications*, 2005

9 Hansard, volume 470, part 27, 8 Jan 2008, column 233
science and other SIVSs; however, this is not in line with HEFCE’s proposed implementation. The IOP would support a policy which ensured every student would be funded to study a SIVS, regardless of the level of their previous qualifications.

17. The proposed support for SIVSs is clearly insufficient. It is hard to see any coherence of policy in trying to encourage more graduates in these areas, while limiting funding to allow people to change their career paths appropriately.

**Science teachers:**

18. Perhaps the strongest case in support of a full and permanent exemption from the new ELQ policy for physics is that of the shortage of specialist teachers. While the government has requested that Initial Teacher Training (ITT) will be exempt from the funding withdrawal, any subject-related courses taken prior to, or after, ITT will not be.

19. There is an urgent need to increase not only the numbers of physics specialists embarking on ITT, but also the number of candidates eligible, or likely, to do so. The government has recognised that the shortage of physics teachers is very severe and has set in place a number of initiatives to ameliorate the situation, some of which are in partnership with the IOP. Next Steps	extsuperscript{10} set out a target of 25% of science teachers having a physics specialism by 2014, and while DCSF is responsible for keeping annual figures on target, joined up thinking is clearly required between DIUS and DCSF in order to achieve this.

20. With fewer than 3000 UK physics graduates a year, it will not be possible to remedy the 5000+ shortage of physics specialists via that route	extsuperscript{11}. For this reason it has often been acknowledged that re-skilling of both mature candidates and new graduates in other disciplines is required.

21. This may involve qualified teachers gaining a bachelors or lower level physics qualification (anecdotally, we know of working teachers who have done this, although there is no quantitative information available), or those with related degree subjects or experience in industry boosting their physics knowledge prior to undertaking ITT. An approach which has been commended by the IOP is the OU undergraduate level Certificate in Physics which offers sufficient preparation for a candidate to enter ITT as a physics specialist; this course is being marketed accordingly. In both of these situations, studying physics either prior to or after ITT, an ELQ would be required, and these routes into physics teaching would fall foul of the current proposals, unless physics courses are given a full exemption.

22. While candidates who have taken, for example, a masters’ qualification, will be supported by the government in taking a PGCE, a candidate holding a PGCE would not be supported in taking a masters’ degree. One strategy to aid the shortage of science teachers has been to encourage young science graduates to enter teaching for a few years on the basis that it would give

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	extsuperscript{10} See note 4

	extsuperscript{11} Based on estimates in *Physics in schools and colleges: teacher deployment and student outcomes*, Alan Smithers and Pamela Robinson, 2005
them valuable experience, despite not presenting an attractive life-long career. However, if taking a PGCE would effectively rule out any post graduate scientific or business-related study, candidates would be deterred from this career path.

Qualification level:

23. All of the above concerns raised so far would be addressed by a full and permanent exemption for physics, as a SIVS. However, the example of ELQs taken before or after ITT is representative of a wider concern, that courses may not be appropriately classified as ‘equivalent’ for the purposes of this policy. For example, there are several qualifications which conventionally and appropriately attract high numbers of ELQ learners, including the MBA and professional IT qualifications. Likewise, while it is intended that foundation degrees prepare the learner for further study, it is not clear that those graduating from these courses under the ELQ exemption would be entitled to continue to bachelors or masters level in their new subject area. A further concern is that bachelors’ students leaving their studies before completion can in many cases be offered a CertHE. Were this situation to arise for a student already holding a CertHE at the start of their bachelors course, it is not clear how the new regulations would allow that student’s learning to be given credit. These issues are largely beyond the concerns of the physics community, but could potentially impact in certain cases.

24. The Open University’s (currently the UK’s only distance learning and specialist part-time provision for physics) unique system presents a range of difficulties. Students currently register for courses (worth 30 or 60 credit accumulation and transfer scheme (CATS) points) rather than degree programmes (360 CATS points). For this reason it will not be clear until graduation whether or not a student’s programme of study can be classed as a SIVS. HEFCE’s proposal, to count programmes of study as SIVSs where half of the qualification aim is in a relevant subject, will be difficult to apply in the case of the OU. Many ELQ students will be using individual modules to boost their subject knowledge, as is the case with the Certificate in Physics, learners may put these modules together to form various qualifications, or study them alone.

25. At least 20% of current OU physics students are ELQ learners\(^\text{12}\). Since a part time degree can take many years to complete, current students’ exemption status must remain in place for several years, beyond HEFCE’s proposed 2010/11 review of the SIVSs allocation, in order to satisfy the government’s stated aim of not affecting current students.

Part-time provision:

26. According to HEFCE’s figures, while part time students represent around 16% of the total, around 71% of ELQ learners are part-time. Any policy targeting ELQs will clearly have an impact on part time provision. By withdrawing funding from ELQ learners, important provision for non-ELQ learners will be jeopardised. These problems have been addressed more extensively by other bodies; however, the impact of this is particularly crucial in the physical

\(^{12}\) Estimated figures from Professor Nick Braithwaite, Head of Physics and Astronomy Department, OU
sciences. Of the IOP accredited programmes, only two out of 687 specifically cater for part time students, and one of these is due to close. This will leave the OU as the only viable option for many of those who would wish to study physics part time while they are in employment. By withdrawing funding for ELQs, the government is disincentivising any potential increases in part time physics provision.

27. For some learners, part time study is their only opportunity for HE. By damaging part time study, the proposed policy will have a negative impact on mature, female returner, EU migrant worker and disabled students, and possibly other minority groups. It could also disadvantage female students overall, who are less likely than their male peers to take physics as a first degree. It is hard to see how a policy claiming to be motivated by ‘fairness’ and widening participation could risk excluding these groups even further. While HEFCE acknowledges the importance of part-time provision in widening participation, it is disappointing that no analysis has been presented of how the policy will affect these groups. In the absence of such an impact assessment it is difficult to see how these proposals meet the legal responsibilities set out under the various equality duties for public authorities to actively promote equality.

28. The viability of part time physics provision is a crucial reason why SIVS targeted funding based on historic numbers is inadequate, and a full exemption is required.
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