House of Lords Select Committee on Science and Technology

Inquiry into international STEM students

Evidence from the Russell Group

1. Summary

- If we are to maintain our place in the premier league of global higher education, it is crucial our visa system continues to support the efforts of our leading universities to attract the very best students, academics and researchers from around the world.

- The provision of highly-skilled STEM graduates and postgraduates is vitally important to the prosperity of the UK, helping to generate innovation and new technologies, and to drive future economic growth. Russell Group universities play a vital role, training around 30% of the UK's science and engineering graduates and more than 80% of UK graduates in medicine and dentistry.

- International STEM student numbers at Russell Group universities rose by 4% in 2012-13, with further increases predicted for 2013-14. This demonstrates the continuing demand for the high-quality teaching and research experience that our world-leading universities provide. By producing an increasing number of international STEM graduates each year, Russell Group universities are making an extremely valuable contribution to the UK economy.

- Meanwhile, international STEM student numbers across UK universities as a whole have declined for two consecutive years, by 10% in total between 2010-11 and 2012-13, and by 15% at postgraduate taught level.

- Although international STEM student numbers at Russell Group universities have continued to increase, the overall numbers mask differences between individual institutions. International STEM student numbers fell across several Russell Group institutions in 2012-13, and by 21% at one institution. We are concerned about possible future declines, particularly as further restrictions to immigration are introduced.

- The Government must make sure its immigration policies facilitate the UK's international competitiveness in higher education in order to maximise potential for growth. Provisions affecting international students and staff contained in the Immigration Bill are unhelpful in this regard.

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- The proportion of non-UK nationality academic staff is around 33% at Russell Group universities compared to an average of 19% for all UK HEIs.[4]

2.5 If we are to maintain our place in the premier league of global higher education, it is crucial our visa system continues to support the efforts of our leading universities to attract the very best students, academics and researchers from around the world.

2.6 We welcome the opportunity to contribute evidence to the inquiry into international STEM students from the Lords Select Committee on Science and Technology. It is appropriate for the Committee to consider the extent to which changes to the immigration regime have impacted on the international competitiveness of UK universities in general, and the recruitment of international STEM students in particular. The inquiry is timely as the Immigration Bill currently passing through the House of Lords aims to introduce regulations which are likely to have a further negative impact on the attractiveness of the UK to international students.

2.7 It is widely acknowledged that the provision of STEM graduates is critical to industry in the UK, and will help to rebalance the economy. Various estimates have been made of the increas

international STEM students in the UK, 48% are studying at Russell Group universities.[7]

3.3 The below table outlines recent trends in first year international STEM student

taught students, rising by 12%, followed by undergraduate students, rising by 10%. Postgraduate research student numbers are estimated to fall by 5%.

3.6 We estimate that international enrolments at Russell Group universities in 2013-14 have increased in the following subject areas compared to the previous year: medicine and dentistry, biological sciences, physical sciences, mathematical sciences, computer science, engineering and technology, and architecture, building and planning.

3.7 International STEM student numbers at Russell Group universities rose by 4% in 2012-13, with further increases predicted for 2013-14. This demonstrates the continuing demand for the high-quality teaching and research experience that our world-leading universities provide. By producing an increasing number of international STEM graduates each year, Russell Group universities are making an extremely valuable contribution to the UK economy.

3.8 Meanwhile, international STEM student numbers across UK universities as a whole have declined for two consecutive years, by 10% in total between 2010-11 and 2012-13, and by 15% at postgraduate taught level.

3.9 The decline in STEM numbers will have a negative impact on some universities and some courses in particular. There has been a particular decline in subjects allied to medicine, computer science, and engineering and technology.

3.10 Falling international student enrolments present a particular problem for disciplines such as computer science and engineering and technology, as international students represent a high proportion of enrolments.

3.11 Although international STEM student numbers at Russell Group universities have continued to increase, the overall numbers mask differences between individual institutions. International STEM student numbers fell across several Russell Group institutions in 2012-13, and by 21% at one institution. We are concerned about possible future declines, particularly as further restrictions to immigration are introduced.

4. The impact of changes to the immigration regime

4.1 The report of the Committee into STEM subjects in 2012 touched on the concern that changes to the immigration rules, for example, the closure of the post-study work route, could affect the competitiveness of the UK in attracting international students to study here.[10]

4.2 As outlined above, international STEM student numbers at Russell Group universities increased by 4% in 2012-13, while numbers across UK HEIs as a whole declined. This pattern is replicated for international student numbers across all disciplines. Whilst international student numbers across all UK HEIs declined by 1% for the first time in 2012-13, they increased by 4.6% at Russell Group universities.[11]

[10] Lords Select Committee on Science and Technology, 'Higher Education in Science, Technology, Engineering and Mathematics (STEM) subjects' (2012)
[11] HESA 2012-13

months to stay in the country post-graduation in order to find work, and the US offering 29 months for STEM graduates.

4.9 The cost of a basic student visa in the UK is also much higher than in many of our key competitor countries. The average cost of a student visa across nine of our top competitor countries is £145. The current cost of a Tier 4 student visa in the UK is more than twice as expensive at £298, and will be increased by 4% to £310 in April this year.

4.10

- Reduce the cost of a student visa to ensure parity with key competitor markets
- Remove students from the net migration target

5. Restrictions on international student numbers in medicine and dentistry

5.1 Currently, the number of international students studying medicine and dentistry in the UK is restricted by tight caps imposed by the Department of Health, meaning that our universities cannot take advantage of overseas demand for UK courses in these disciplines.[18]

5.2 Removing, or at least lifting, these caps would provide security for universities, particularly given the recent cuts to home student intake. It would also drive economic growth through increased export earnings and boost the UK's overseas influence, exporting medical and dental knowledge and expertise to countries that need it.

5.3 For medical students, the change can be facilitated by moving the point of registration to the point of graduation, as recommended in the recent Shape of Training Review.[19] However, this will require primary legislation to change the 1950 Medical Act.

5.4 There are some other practicalities to address in making that change, but the Government could facilitate the move by putting forward a Health Bill or adding the proposal to a Cabinet Office deregulation Bill for the next session of Parliament. This would allow more flexibility to be introduced for the 2015-16 intake and would still leave a number of years for other issues around the point of registration to be resolved before that cohort graduates

5.5 As long as there are sufficient financial safeguards in place to cover both educational, clinical training and health service costs then our world-class universities should not be restricted in the number of international medical and dental students they can take.

5.6 The Government should prioritise removing caps on international student numbers in medicine and dentistry. This would help to drive economic growth, boost the UK's overseas influence, provide security for universities and create a pool of UK-trained healthcare professionals the NHS could call on if needed to meet future demand.

6. The cost of STEM subject provision

6.1 In our previous submission to the inquiry on STEM subjects, the Russell Group highlighted the cost of teaching subjects such as medicine, engineering, chemistry and physics, which are so important to the future success of the UK's economy. Teaching costs in these subjects are significantly higher than others because of the requirement for expensive laboratories, consumables and equipment and additional costs associated with training and supervision of students in their use. There are also

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[18] International dental students are currently capped at 5% of a school's intake and international medical students at 7.5%.

[19] 'Securing the future of excellent patient care: Final report of the independent review led by Professor David Greenaway' (2013)

particular cost pressures associated with maintaining and up-grading facilities such provision in world-class research-intensive universities requires.

6.2 Given the overall decline in international STEM student numbers across UK HEIs, the continued contribution of Russell Group universities in producing an increasing number of international STEM graduates, as well as a high proportion of home STEM graduates, is vital to the UK economy – and becoming even more critical with time.

6.3 We welcome the commitment contained in Autumn Statement 2013 for extra funding of £185m over four years for teaching vital science subjects, starting in 2015-16. It is essential for a high proportion of this new money to be allocated for increased funding per student for existing STEM places. High quality provision of STEM subjects is extremely costly, as outlined above, and cannot be met by tuition fee income alone.

6.4 Alongside welcoming the best and brightest international STEM students, t he Government must ensure that STEM provision is sustainable and has sufficient funding. This is particularly important for the UK's world- class research-intensive universities who produce such a high proportion of STEM graduates.

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