

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation, Science, Research and Tertiary Education Portfolio
Budget Estimates Hearing 2012-13
28 and 29 May 2012

AGENCY/DEPARTMENT: DEPARTMENT OF INDUSTRY, INNOVATION, SCIENCE, RESEARCH AND TERTIARY EDUCATION

TOPIC: Agricultural Education

REFERENCE: Written Question – Senator Edwards

QUESTION No.: BI-113

1. Are there incentives contained in the budget 2012-13 for more Australian students and graduates to fill this shortfall between graduates and job advertisements?
2. Is there a program available to foreign science students coming to this country that isn't available to Australian students or vice versa?
3. What specific measures have you identified in the 2012-13 budget to try and attract co-investment in agricultural and related sciences from industry here in Australia and from abroad?
4. What changes in funding have been taking place over the last 3 years to help achieve this? What incentives would you suggest? What do they do overseas to improve this figure?
5. Have you been involved with Roseworthy Campus and the Waite Institute at the University of Adelaide in an effort to increase the number of science graduates?
6. Has your involvement included the re-focus on broadening science availability?
7. Have you been involved in similar discussions with other universities?
8. Is there currently any work being done by your office to promote apprenticeships based on science, maths and engineering as a means to help Australia redress its skills shortages and achieve its potential?
9. Do we benchmark internationally to see which countries are producing the best food and agricultural science graduates?
10. Are we looking to compete with them and do we have the resources to do so?
11. Does the so called "Melbourne Model" (three year generalist undergraduate degree and two year specialist masters degree) of tertiary education provide a better way of achieving the goals of your office?
12. Is this model in any way similar to the US model where they get such strong outcomes?
13. Are state and federal food innovation and agriculture ministers engaged with your office in trying to increase the number of graduates in these sciences?

ANSWERS

1. The Office of the Chief Scientist (OCS) is not aware of any specific measures in the 2012-13 budget. The Health of Australian Science (HAS) report¹ was not released until 23 May 2012.
2. The Australia Awards, a Commonwealth funded scholarship program, aims to promote knowledge, education links and enduring ties between Australia and our neighbours. These are comprised of two streams: an achievement stream that targets the best and brightest students,

¹ Office of the Chief Scientist 2012, Health of Australian Science. Australian Government, Canberra, <http://www.chiefscientist.gov.au/wp-content/uploads/Report-for-web.pdf>

researchers and professionals to come to Australia and for Australians to do the same offshore; and a development stream that builds capacity in developing countries.

3. The OCS has not investigated this issue.
4. The OCS has not investigated this issue.
5. No.
6. Not applicable.
7. The OCS has been addressing the issue of science graduates and what an education in science means. This has been taken up with the Deans of Science and others as appropriate. \$54 million was allocated in the 2012-13 budget for this and other related purposes. This funding was related to advice that the OCS sent to the Prime Minister in March 2012. The OCS is involved with the Department of Industry, Innovation, Science, Research and Tertiary Education in establishing the processes by which the funds will be allocated.

Recommendation 13 of the Mathematics, Engineering & Science in the National Interest report² prepared by the Office of the Chief Scientist proposes that government: “Offer research scholarships to students as part of the new Joint Research Engagement Engineering Cadetship scheme to attract students and demonstrate employment pathways for Mathematics, Engineering and Science graduates.”

8. The OCS is unaware of a national benchmarking system, however individual universities may conduct a bench-marking system independently. This is an issue that could be raised by the Chief Scientist with the Deans of Agriculture.
9. Our focus should be on developing graduates in Australia equal to the best in the world in order to create a pool of expertise.
10. The Melbourne Model offers another study option for students. Diversity of offerings in our education system is good.
11. High quality education and research meets the goals of the Office, but achieving them depends on the universities of Australia.
12. There is not a single US model, nor a single Australian model of education. Both systems have their strengths and weaknesses. Australia gets strong outcomes in many fields from its universities and our graduates from many of the universities can take their place alongside US and other international peers in graduate programs and in the workplaces around the world.
13. No.

² Office of the Chief Scientist 2012, Mathematics, Engineering & Science in the National Interest, Australian Government, Canberra, <http://www.chiefscientist.gov.au/wp-content/uploads/Office-of-the-Chief-Scientist-MES-Report-8-May-2012.pdf>