Economics Legislation Committee ANSWERS TO QUESTIONS ON NOTICE<br>Industry, Innovation, Science, Research and Tertiary Education Portfolio<br>Additional Estimates Hearing 2012-13<br>13 February 2013

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

TOPIC: Demand driven funding and industry needs

REFERENCE: Written Question - Senator Rhiannon

QUESTION No.: AI-103

1. In October last year the Minister was reported as saying the student-demand driven system is not working because too many students are choosing courses that do not meet skills shortages or industry demand: What types of courses are showing high student demand and which courses are suffering from a lack of demand?
2. What trends are emerging with university applications and offers this year so far?
3. What is being considered to address this?

## ANSWER

1. Table 1 and Charts 1 and 2 show trends in eligible applications by field of education since 2001. Fields of education showing strong student demand over the period include Health (where eligible applications have increased by 84 per cent since 2001), Natural and Physical Sciences (up 54 per cent), Architecture and Building (up 49 per cent) and, Engineering and Related Technologies (up 44 per cent). Fields of education showing weaker student demand over the period include Information Technology (down 60 per cent), Agriculture, Environmental and Related Studies (down 18 per cent) and, Management and Commerce (down 15 per cent).
2. Changes in the number of applications for the main round from 2012 to 2013 are shown in Table 2 below. The fields of education showing strong growth in demand are Agricultural, Environmental and Related Studies (up 6.5 per cent), Natural and Physical Sciences (up 3.6 per cent), Information Technology (up 3.3 per cent) and Health (up 3.1 per cent). The fields of education showing weaker demand are Architecture and Building (down 10.1 per cent), Creative Arts (down 3.5 per cent), and Management and Commerce (down 2.2 per cent).

The changes in the number of offers for the main round from 2012 to 2013 are shown in Table 3. The fields of education showing strong growth are Agriculture, Environmental and Related Studies (up 10.4 per cent) and Natural and Physical Sciences (up 4.1 per cent). The fields of education showing a fall in growth are Architecture and Building (down 7.5 per cent) and Information Technology (down 2.4 per cent).
3. Research into influences of students' choices of courses suggests that students are most influenced by their personal interests with employment related factors generally ranking as the second strongest influence. In this context, the Government has limited ability to influence the choices students make regarding their course of study. The Government publishes information
regarding the employment outcomes and conditions for an extensive range of qualifications and occupations to inform student choice. Where there are industries experiencing areas of workforce need or skills shortage, it is in the best interest of these industries to promote their businesses in order to attract prospective students.

The department monitors the evolving change in demand for places as well as the number of places made available by universities for fields of education. The department is currently in the process of negotiating 2014-2016 Compacts with universities, which will include discussions with a focus on how universities are meeting community and industry needs.

Table 1: Eligible applications by field of education, 2001=100

| Fields of Education | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | 2011 | 2012 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O1 Natural and Physical <br> Sciences | 100 | 106 | 108 | 110 | 105 | 100 | 96 | 97 | 114 | 128 | 137 | 154 |
| O2 Information <br> Technology | 100 | 89 | 71 | 55 | 47 | 38 | 35 | 34 | 37 | 39 | 38 | 40 |
| 03 Engineering and <br> Related Technologies | 100 | 102 | 102 | 102 | 101 | 104 | 109 | 117 | 129 | 131 | 135 | 144 |
| 04 Architecture and <br> Building | 100 | 103 | 112 | 122 | 120 | 127 | 131 | 132 | 145 | 152 | 152 | 149 |
| 05 Agriculture, <br> Environmental and <br> Related Studies | 100 | 104 | 108 | 104 | 88 | 82 | 79 | 101 | 82 | 86 | 81 | 82 |
| 06 Health | 100 | 109 | 122 | 128 | 129 | 135 | 148 | 144 | 149 | 171 | 176 | 184 |
| 07 Education | 100 | 114 | 122 | 125 | 128 | 123 | 115 | 104 | 101 | 107 | 102 | 104 |
| 08 Management and <br> Commerce | 100 | 100 | 99 | 98 | 94 | 88 | 86 | 83 | 85 | 83 | 84 | 85 |
|  <br> 10 Creative Arts | 100 | 111 | 115 | 112 | 107 | 106 | 103 | 104 | 112 | 117 | 114 | 113 |
| TOTAL | 100 | 106 | 109 | 109 | 106 | 104 | 104 | 103 | 108 | 116 | 117 | 120 |

a - the fields of education of 11 Food Hospitality and Personal Sevices; and 12 Mixed Field Programs have been excluded due to the small number of students, the high volatiltiy of growth rates and the shorter time series which starts in 2005

Chart 1: Positive Growth in Eligible Applications Chart 2: Negative Growth in Eligible Applications


Table 2 Applications through Tertiary Admission Centres - main round data 2012 and 2013

| Field of education | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | \% change |
| :--- | ---: | ---: | ---: |
| 01 Natural and Physical Sciences | 22,752 | 23,578 | 3.6 |
| 02 Information Technology | 6,729 | 6,953 | 3.3 |
| 03 Engineering and Related Technologies | 17,924 | 18,133 | 1.2 |
| 04 Architecture and Building | 9,092 | 8,177 | -10.1 |
| 05 Agriculture, Environmental and Related Studies | 4,091 | 4,357 | 6.5 |
| 06 Health | 67,963 | $\mathbf{7 0 , 0 9 5}$ | 3.1 |
| 07 Education | 22,898 | 22,525 | -1.6 |
| 08 Management and Commerce | 34,391 | 33,630 | -2.2 |
| 09 Society and Culture | 53,539 | 53,831 | 0.5 |
| 10 Creative Arts | 26,035 | 25,120 | -3.5 |
| Total | $\mathbf{2 6 7 , 3 9 1}$ | $\mathbf{2 6 8 , 1 6 9}$ | $\mathbf{0 . 3}$ |

$b$ - the data in the table do not add to the totals as the Fields of Education of 11 Food Hospitality and Personal Sevices; and 12 Mixed Field Programs have been excluded

Table 3 Offers through Tertiary Admission Centres - main round data 2012 and 2013

| Field of education | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | \% change |
| :--- | ---: | ---: | ---: |
| O1 Natural and Physical Sciences | 21951 | 22860 | $4.1 \%$ |
| O2 Information Technology | 5,624 | 5,491 | $-2.4 \%$ |
| O3 Engineering and Related Technologies | 14,554 | 14,779 | $1.5 \%$ |
| 04 Architecture and Building | 6,181 | 5,718 | $-7.5 \%$ |
| 05 Agriculture, Environmental and Related Studies | 3,883 | 4,288 | $10.4 \%$ |
| 06 Health | 41,341 | 42,040 | $1.7 \%$ |
| 07 Education | 17,454 | 17,420 | $-0.2 \%$ |
| 08 Management and Commerce | 28,994 | 28,963 | $-0.1 \%$ |
| 09 Society and Culture | 45,176 | 46,059 | $2.0 \%$ |
| 10 Creative Arts | 17,742 | 17,679 | $-0.4 \%$ |
| Total | $\mathbf{2 0 4 , 8 3 6}$ | $\mathbf{2 0 7 , 0 9 4}$ | $\mathbf{1 . 1 \%}$ |

[^0]
[^0]:    $c$ - the data in the table do not add to the totals as the Fields of Education of 11 Food Hospitality and Personal Sevices; and 12 Mixed Field Programs have been excluded

