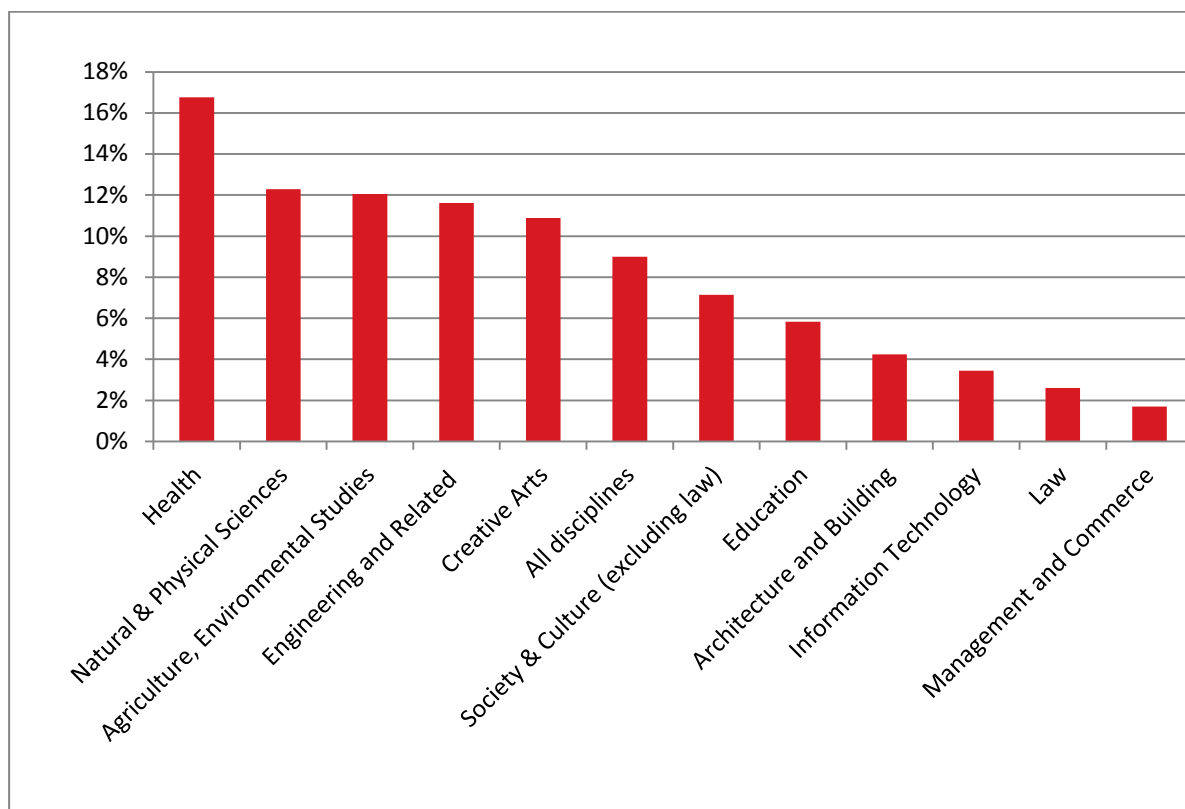


Demand driven system fuels growth in science and technology students

It is going unnoticed that the demand driven expansion of universities places is raising the number of students studying science and technology degrees and health profession degrees at a much higher rate than the growth in business, law and arts degrees.

The number of bachelor students in the natural and physical sciences was twelve per cent higher in 2011 than in 2009, growing from 63,000 equivalent full time students to nearly 71,000. Likewise in the smaller agriculture and environmental sciences the growth was twelve per cent, up to 6,600 full time equivalents. Engineering grew from 27,000 to 30,000 another 12per cent growth. The main science area not to grow ahead of the average is IT, which grew by three per cent to 2011.

In contrast society and culture, the heading that catches law and the array of generalist arts and related courses, grew only six per cent, while management and commerce grew a mere two per cent. Even education courses the subject of much frenzy at present for allegedly taking in large numbers of additional students whom the critics believe incompetent to teaching, has grown by a modest six per cent.



These data suggest that the demand driven is working quite well from a discipline perspective, with universities responding to demand and rebalancing provision accordingly.

That is counter to some people's economic theory but then universities do not usually act as conventional assumptions require. Jennifer Westacott, CEO of the Business Council of Australia argued the theoretical case to the Universities Australia conference (28 February 2013) stating that that the demand driven system, because it has no flexibility in student charges, would lead

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universities to avoid high cost courses areas like agriculture and science and focus on low cost like business and law. This is a supply driven analysis of the impact of a demand driven change.

It was the previous semi-controlled funding system that encouraged universities to grow law and commerce because universities would receive the full student contribution for enrolling over quota in those courses but not any Government subsidy. Since the Government subsidy is a small proportion of the revenue in commerce and law they were the courses to expand. That is not the case under the demand driven system where both Government and student contributions are received for all enrolled students.

The theoretical argument made is that the high cost courses are too underfunded to be worth expanding compared with other disciplines. The evidence suggests not, and the pressure for more medical schools indicates that universities would expand the very high cost medical places if they were brought into the demand driven arrangements.

Resourcing is a major issue but not strongly variable across the disciplines. The Base Funding Review of 2011 supported the case for additional investment across the board but with a particular focus on some discipline areas. These were both the very high cost like medicine and agriculture as well as the lower cost business courses where the impact of past growth had stretched resources.

The fiscal climate does not yet permit a response to the Review so universities remain under-resourced but the problem is fairly evenly spread across disciplines, with internal university allocations resolving remaining major tension points. The result is that the incentive for universities to enroll students, and their inclination to respond to demand, means that universities have responded effectively and not in the manner the theory might suggest.

Actual Student Load (EFTSL) for All Domestic bachelor Students by Broad Discipline Group

| Discipline Group | 2009 | 2010 | 2011 | % change 2009 to 2011 |
|--|---------------|---------------|---------------|--------------------------------------|
| Health | 64649 | 71041 | 75485 | 17% |
| Natural and Physical Sciences | 63029 | 67987 | 70773 | 12% |
| Agriculture, Environmental and Related Studies | 5909 | 6518 | 6621 | 12% |
| Engineering and Related Technologies | 26983 | 28741 | 30118 | 12% |
| Creative Arts | 42589 | 45685 | 47224 | 11% |
| Society and Culture (excluding law) | 103806 | 108091 | 111213 | 7% |
| Education | 39911 | 41445 | 42238 | 6% |
| Architecture and Building | 11151 | 11258 | 11624 | 4% |
| Information Technology | 14838 | 14974 | 15350 | 3% |
| Law | 26265 | 26893 | 26948 | 3% |
| Management and Commerce | 59524 | 60369 | 60531 | 2% |
| Food, Hospitality and Personal Services | 141 | 195 | 194 | 38% |
| Mixed Field Programs | 38 | 80 | 86 | 126% |
| TOTAL EFTSL | 458834 | 483315 | 498435 | 9% |

Based on DEEWR DIIRTE Annual Student Statistics table 4.5 All student load, 2009 2010 2011