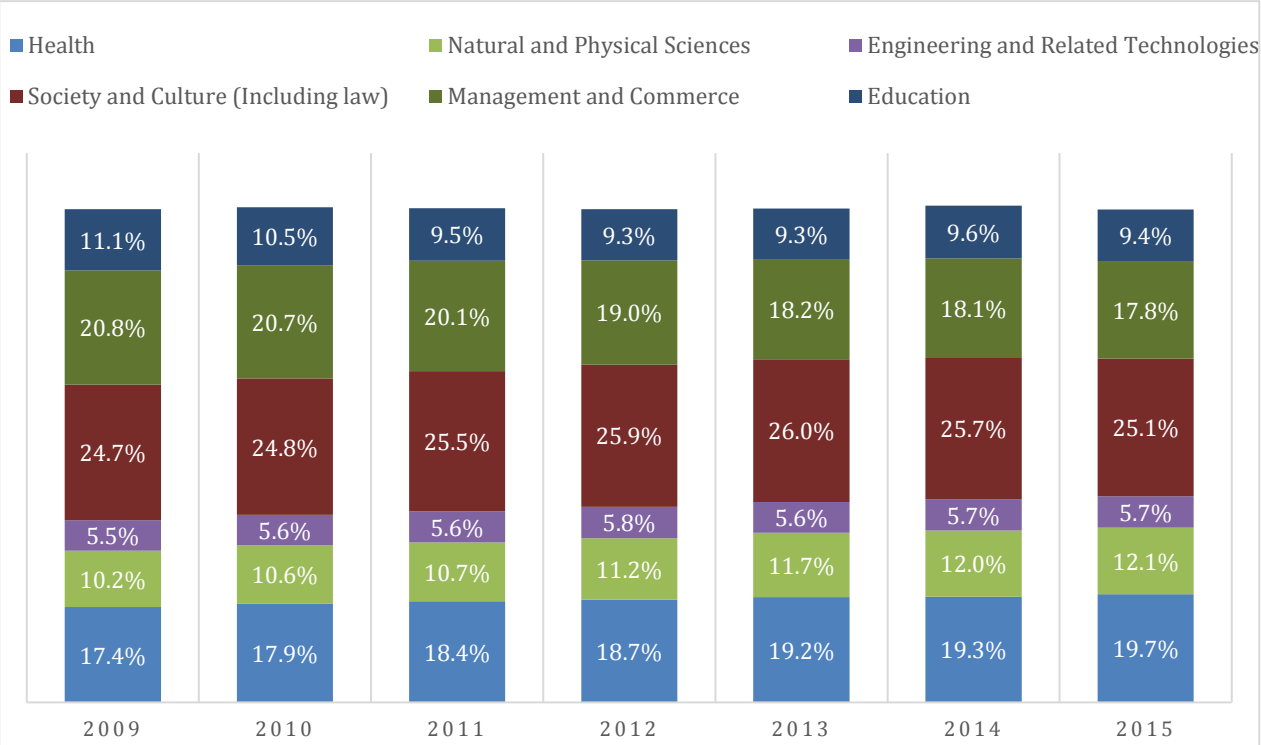
Impact of More Students at University – Part 1

As we mark the fifth anniversary of the demand driven system, the data continues to show the positive benefits of a model steered by student agency and university commitment to access.

The IRU regularly monitors data on the discipline choice of students. We now have sufficient figures on course completions to extend the analysis. The latest data confirms 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.

This has changed the balance of students by discipline (**Figure One**). Graduates in Natural and Physical Sciences have increased from 10% to 12% of all graduates since 2009. Health graduates have grown from 17% to 20%. Education graduates have fallen to 9% from 11% over the same period. The change in the balance across disciplines has raised the apparent funding per student although the funding rates have not increased.

Figure One: Percentage of Student Completions by Discipline



Data sourced from uCube, Department of education on 04/04/2017

This growth trend is evidence of the demand driven system working effectively. The data shows the system is not imbalanced and is not creating perverse outcomes. There is growth in STEM as a discipline choice with more students completing those degrees.

It undermines the constant assumption that demand driven funding has or will favour expansion only in low cost high charge courses such as law and business.

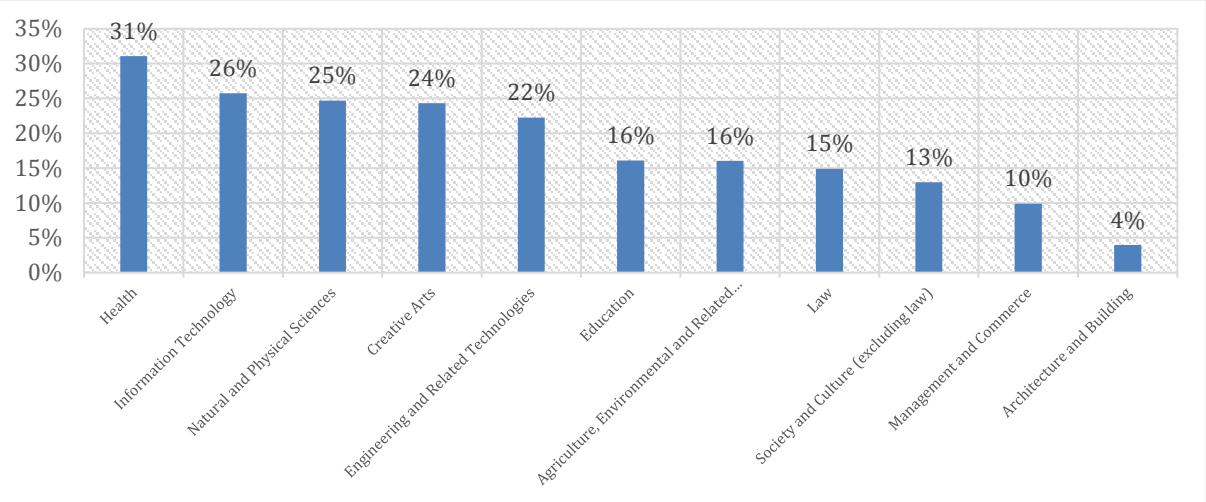
A leading example was Jennifer Westacott, CEO of the Business Council of Australia who argued to the Universities Australia conference (28 February 2013) that that the demand driven system, would lead universities to avoid high cost courses areas like agriculture and science. Others have continued to be alarmist, despite the strong, consistent, contrary evidence.

Student enrolments

Against an overall 19% growth in undergraduate students from 2010 to 2015, STEM disciplines show higher than average growth (**Figure Two** and **Figure Three**) with:

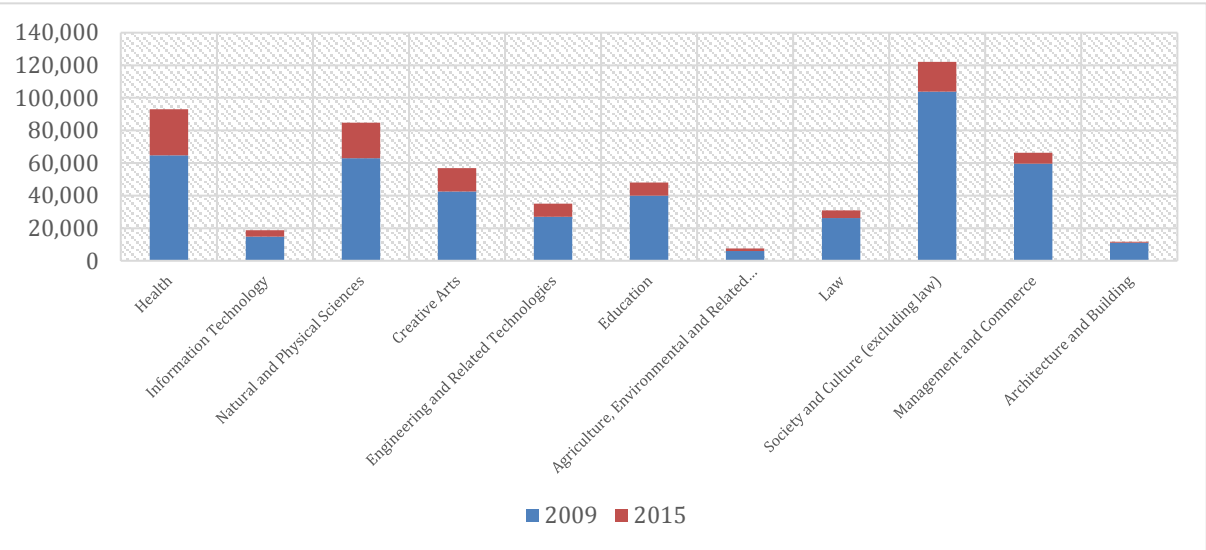
- Health enrolments increasing by 31%, or 22,000 additional enrolled students;
- Natural and physical sciences increased from 68,000 to just under 85,000 or by 25%;
- Engineering a 22% increase, rising to 35,000 through an extra 6,500 students; and
- IT also shows a large increase of 4000 students to rise to19,000, a 26% increase.

Figure Two: Growth in Student Enrolments by Discipline, 2010 to 2015 (Percent)



Sourced from Department of Education Student Data 2015 and earlier, Table(s) 4.5

Figure Three: Growth in Student Enrolments by Discipline (EFTSL)



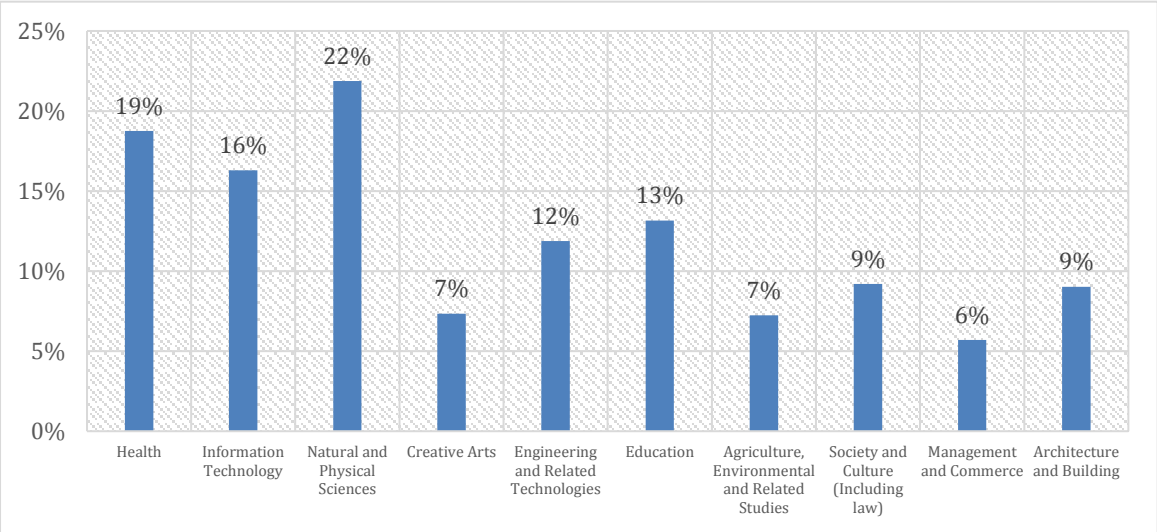
Sourced from Department of Education Student Data 2015 and earlier, Table(s) 4.5

Graduates

Student completions show a similar pattern with a 13% increase in overall completions between 2012 and 2015 (**Figure Four** and **Figure Five**). 2012 is used as the base year, with graduates from 2013 increasingly likely to have enrolled following the announcement of demand driven funding.

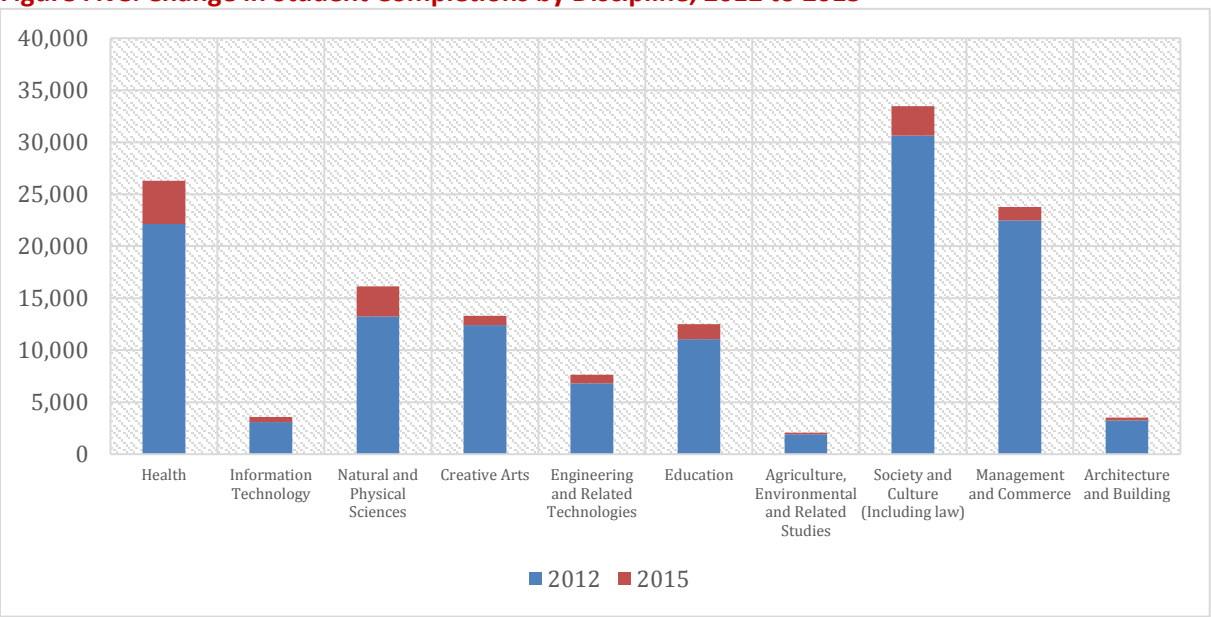
- Health graduates increased by 4,000 or 19%.
- Natural and Physical sciences had a 22% increase, larger than any other, rising from 13,200 completions to over 16,000.
- Engineering had a 12% increase, or 800 additional students completing degrees.
- Information Technology went from 3,000 completions to just over 3,500, an increase of 16%.

Figure Four: Change in Student Completions by Discipline, 2012 to 2015 (Percent)



Data sourced from uCube, Department of education on 04/04/2017

Figure Five: Change in Student Completions by Discipline, 2012 to 2015



Data sourced from uCube, Department of education on 04/04/2017

By contrast, the courses where the previous funding system encouraged additional enrolments the growth, since demand driven funding was introduced, is modest.

- Society and Culture (Including Law) had a 9% increase in student completions.
- Management and Commerce had a low rate of 6% additional completions.

The change is easing, now that the backlog of interest has been met, with growth in 2014 and 2015 more even across disciplines.

Overall, the enrolment and completion data suggest that the demand driven approach has worked well to support student interest across all discipline areas. This is important since we need Australians to follow their aspirations and graduate across all disciplines to be ready for the challenges ahead.

26 April 2017

Table One: Actual Student Load for all Domestic Bachelor Students by Discipline

Discipline Group	2009	2010	2011	2012	2013	2014	2015	Change 2010 to 2015	% Change 2010 - 2015
Health	64,649	71,041	75,485	80,436	84,583	88,631	93,105	22,064	31%
Information Technology	14,838	14,974	15,350	16,086	16,945	18,188	18,831	3,857	26%
Natural and Physical Sciences	63,029	67,987	70,773	75,837	80,936	83,513	84,777	16,790	25%
Creative Arts	42,589	45,685	47,224	49,884	54,040	56,996	56,791	11,106	24%
Engineering and Related Technologies	26,983	28,741	30,118	32,044	33,571	34,681	35,134	6,393	22%
Education	39,911	41,445	42,238	44,767	47,135	48,603	48,119	6,674	16%
Agriculture, Environmental and Related Studies	5,909	6,518	6,621	7,049	7,290	7,499	7,564	1,046	16%
Law	26,265	26,893	26,948	27,381	28,446	29,997	30,906	4,013	15%
Society and Culture (excluding law)	103,806	108,091	111,213	115,361	118,993	120,111	122,088	13,997	13%
Management and Commerce	59,524	60,369	60,531	62,005	64,152	65,286	66,349	5,980	10%
Architecture and Building	11,151	11,258	11,624	11,361	11,251	11,621	11,705	447	4%
Food, Hospitality and Personal Services	141	195	194	202	302	383	351	156	80%
Mixed Field Programs	38	80	86	80	266	422	334	254	318%
TOTAL EFTSL	**458,833**	**483,277**	**498,405**	**522,493**	**547,910**	**565,931**	**576,054**	**92,777**	**19%**

Source: Department of Education Student Data 2015 and earlier, Table(s) 4.5

Table two: Completions for students by Discipline group

	2012	2013	2014	2015	Change 2009 - 2015	% Change 2009 - 2015	Change 2012 - 2015	% Change 2012 - 2015
Health	22,145	24,016	24,937	26,299	7,126	37%	4,154	19%
Information Technology	3,088	3,174	3,322	3,591	551	18%	503	16%
Natural and Physical Sciences	13,237	14,623	15,590	16,133	4,831	43%	2,896	22%
Creative Arts	12,399	12,701	12,833	13,309	2,444	22%	910	7%
Engineering and Related Technologies	6,823	7,027	7,404	7,634	1,562	26%	811	12%
Education	11,059	11,608	12,463	12,514	284	2%	1,455	13%
Agriculture, Environmental and Related Studies	1,918	1,952	1,997	2,057	164	9%	139	7%
Society and Culture (Including law)	30,633	32,499	33,256	33,452	6,199	23%	2,819	9%
Management and Commerce	22,471	22,729	23,440	23,754	777	3%	1,283	6%
Architecture and Building	3,237	3,456	3,223	3,529	739	26%	292	9%
Food, Hospitality and Personal Services	11	6	6	6	-16	-73%	-5	-45%
Total Completions	**118,444**	**125,151**	**129,488**	**133,476**	**23,184**	**21%**	**15,032**	**13%**

Source: uCube, Department of education on 04/04/2017

Table Three: Percentage of Student Completions by Discipline Per Year

	2009	2010	2011	2012	2013	2014	2015
Health	17.4%	17.9%	18.4%	18.7%	19.2%	19.3%	19.7%
Information Technology	2.8%	2.6%	2.6%	2.6%	2.5%	2.6%	2.7%
Natural and Physical Sciences	10.2%	10.6%	10.7%	11.2%	11.7%	12.0%	12.1%
Creative Arts	9.9%	10.4%	10.3%	10.5%	10.1%	9.9%	10.0%
Engineering and Related Technologies	5.5%	5.6%	5.6%	5.8%	5.6%	5.7%	5.7%
Education	11.1%	10.5%	9.5%	9.3%	9.3%	9.6%	9.4%
Agriculture, Environmental and Related Studies	1.7%	1.7%	1.7%	1.6%	1.6%	1.5%	1.5%
Society and Culture (Including law)	24.7%	24.8%	25.5%	25.9%	26.0%	25.7%	25.1%
Management and Commerce	20.8%	20.7%	20.1%	19.0%	18.2%	18.1%	17.8%
Architecture and Building	2.5%	2.6%	2.6%	2.7%	2.8%	2.5%	2.6%
Food, Hospitality and Personal Services	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: uCube, Department of education on 04/04/2017