

Study pathways of international students in Australia, 2002 to 2004

Introduction

Study pathways are a unique feature of the Australian education system, with many international students following study pathways rather than limiting their study to a particular sector or level of the education system. These pathways are based on the system of inter-sectoral linkages available through the Australian Qualification Framework (AQF), but also incorporate ELICOS, Foundation Studies and other areas of study which are currently outside the AQF.

To date, however, very little has been known about the nature of these pathways and the number of international students undertaking them.

AEI has examined what pathways international students take within the framework of Australian education. This analysis highlights broad trends in study pathways. The uptake of various pathway options reflects the value students place on articulated progression through the educational sectors. The examination of international student pathways is based on data from PRISMS, the source of the Student Enrolments Database and, therefore, is limited only to pathways of international students studying in Australia on a student visa. Nevertheless, it gives a useful picture of student movements and linkages within the Australian education system

Methodology

Two datasets were created and examined in this analysis. The first contained the full population of international students studying in Australia for the period 1 January 2002 to 31 December 2004. The second dataset covered the same three year period to the end of 2004 but only included a cohort of students who commenced study in Australia for the first time in the year 2002.

The full set of data of all students studying in Australia was investigated in order to provide a general picture of international students in Australia and the types of educational pathways undertaken by them. However, it should be noted that this cohort includes international students already in the education system before the start of the year 2002. This data also provides some context to the main analysis which focuses on the second cohort of international students who commenced study in Australia in the year 2002. However, as data for this second cohort is restricted to the years 2002 to 2004, it is yet to yield the full pathways picture for the population. This will not be fully realised until we have a longer reference period to capture the full extent of international students' pathways.

It should be noted that for both datasets, there were instances of simultaneous multiple sector enrolments, mainly involving the ELICOS sector. These instances, although not separately identified due to the complexities with extracting the information from PRISMS, were nonetheless of some interest as they contributed to the mix of pathways for international students.

All international students studying in Australia, 2002-04

This section focuses on the full population of international students studying in Australia in the period 1 January 2002 to 31 December 2004. Therefore, it should be noted that no distinction was made between new students into the system and those continuing their studies in Australia.

Sector

Of the 429,022 international students recorded in the Australian education system in the period 2002 to 2004, more than one-third (38.6%) were single sector students enrolled in Higher Education. This was followed by the ELICOS (13.5%) and Other¹ (10.7%) sectors.

Almost one-quarter (23.7%) of all international students were multiple sector students in the three year period (*refer Table 1 below*).

Table 1.

<i>Sector studied in</i>	<i>Number of students</i>	<i>Prop of all students (%)</i>
Higher Education	165,791	38.6
ELICOS	57,825	13.5
Other	45,869	10.7
VET	36,364	8.5
Schools	21,629	5.0
Total sole-sector	327,478	76.3
Total multiple sector	101,544	23.7
Total international students	429,022	100.0

Sector pathways

Of the 101,544 multiple sector students, one in four (25.9%) recorded an ELICOS-Higher Education pathway, followed by ELICOS-VET (16.0%) and VET-Higher Education (11.4%) (*refer Table 2 below*).

Table 2. Top 10 sector pathways

<i>Sector pathways</i>	<i>Number of students</i>	<i>Prop of all multiple sector students (%)</i>
ELICOS-Higher Education	26,280	25.9
ELICOS-VET	16,259	16.0
VET-Higher Education	11,526	11.4
ELICOS-Schools	9,964	9.8
Other-Higher Education	7,458	7.3
Schools-Higher Education	5,089	5.0
ELICOS-VET-Higher Education	3,116	3.1
Higher Education-VET	2,402	2.4
ELICOS-Other-Higher Education	2,094	2.1
ELICOS-Other	1,948	1.9

Nationalities

One-third (33.3%) of all multiple sector students were from China. Students from Hong Kong, Thailand and South Korea combined contributed a further 25.0% (9.7%, 7.9% and 7.4% respectively).

The most common sectoral pathway for Chinese students was ELICOS-Higher Education, with just over one-third (34.3%), and a further 18.5% with ELICOS-Schools. The most common pathway for students from Hong Kong was Other-Higher Education (17.7%) and VET-Higher Education (16.7%). Most Thai and South Korean students' sectoral pathways were ELICOS-Higher Education and ELICOS-VET, and just under one-quarter of Indonesian students recorded an ELICOS-Higher Education pathway (*refer Table 3 below*).

¹ Comprises Non-award courses such as 'Study Abroad', Foundation studies and Enabling courses.

Table 3. Top 5 Nationalities and most common pathways

<i>Sector pathway</i>	<i>China</i>	<i>Hong Kong</i>	<i>Thailand</i>	<i>South Korea</i>	<i>Indonesia</i>
<i>Proportion of students within each nationality (%)</i>					
ELICOS-Higher Education	34.3	9.0	40.3	21.1	22.6
ELICOS-VET	2.9	12.7	29.1	23.1	9.9
VET-Higher Education	5.9	16.7	5.6	11.3	20.7
ELICOS-Schools	18.5	7.5	2.6	17.9	3.4
Other-Higher Education	2.2	17.7	1.5	1.7	14.7
Schools-Higher Education	8.6	3.7	1.3	3.4	5.1
ELICOS-VET-Higher Education	2.4	5.8	4.1	3.7	3.5
Higher Education-VET	1.3	1.7	1.9	1.5	3.9
ELICOS-Other-Higher Education	1.4	6.4	1.0	1.8	2.4
ELICOS-Other	0.9	3.6	0.8	2.2	1.9
Schools-VET	2.4	1.5	0.7	1.3	1.6
ELICOS-Schools-Higher Education	3.4	0.7	0.0	0.1	0.1
<i>Proportion of all multisector students</i>	33.3	9.7	7.9	7.4	6.9

Students who commenced study in Australia in 2002

This section discusses the analysis of data for the 2002 to 2004 period of the cohort of students who commenced study in Australia for the first time in the year 2002.

Number of sectors

Of the 100,450 international students who commenced study in Australia in 2002, two-thirds (67.8%) were enrolled in a single sector in the three years to the end of 2004. A further one-quarter (26.4%) were enrolled in two sectors and only a small proportion of students (5.8%) were in three or more sectors (refer Table 4 below).

Table 4. Student numbers and number of sectors

<i>Number of sectors</i>	<i>Number of students</i>	<i>Prop of students (%)</i>
1	68,100	67.8
2	26,516	26.4
3	5,506	5.5
4	324	0.3
5	4	0.0
<i>Sub-total (2-5 sectors)</i>	32,350	32.2
Total	100,450	100.0

Sector enrolment of single sector students

A large proportion (46.9%) of all 2002 commencing single-sector students were in Higher Education. The number of students in this sector was two and a half times that of the Other sector (18.7%), which had the next highest sector enrolment. The ELICOS sector accounted for 17.2% of students and the Schools sector for only 6.8% (refer Table 5 below).

Table 5. Single sector type and student numbers

<i>Sector type</i>	<i>Number of students</i>	<i>Prop of students (%)</i>
Higher Education	31,962	46.9
Other	12,767	18.7
ELICOS	11,738	17.2
VET	7,013	10.3
Schools	4,620	6.8
Total	68,100	100.0

Multiple sector student pathways

Of the 32,350 multiple sector students, the largest proportion (22.5%) recorded an ELICOS-Higher Education pathway, followed by ELICOS-VET (17.3%) and VET-Higher Education (11.8%). The next most common pathways were ELICOS-Schools and Other-Higher Education (9.9% and 8.4% respectively) (refer Table 6 below).

These five most common pathways for the 2002 commencement cohort are the same as those recorded for the full dataset of all international students in Australia.

Table 6. Top 20 sector pathways

<i>Sector pathway</i>	<i>Number of students</i>	<i>Prop of students (%)</i>
ELICOS-Higher Education	7,273	22.5
ELICOS-VET	5,608	17.3
VET-Higher Education	3,830	11.8
ELICOS-Schools	3,194	9.9
Other-Higher Education	2,711	8.4
ELICOS-VET-Higher Education	1,849	5.7
Schools-Higher Education	1,020	3.2
ELICOS-Other-Higher Education	924	2.9
ELICOS-Schools-VET	528	1.6
ELICOS-Schools-Higher Education	472	1.5
Schools-VET	463	1.4
Higher Education-VET	438	1.4
ELICOS-Other	295	0.9
Other-VET	228	0.7
ELICOS-Higher Education-VET	211	0.7
ELICOS-Other-VET	197	0.6
Other-VET-Higher Education	190	0.6
ELICOS-Schools-ELICOS	170	0.5
ELICOS-VET-ELICOS	168	0.5
Other-Schools	158	0.5
Total	32,350	100.0

Note: Sector pathways shown in the table above may indicate simultaneous multiple sector enrolments which are not separately identifiable.

Nationalities

The largest group of 2002 student commencements were from China, accounting for 15.6% of students in all sectors. Students from the USA, Japan, Malaysia and Hong Kong accounted for between 6.0% and 9.2% of students per nationality.

Single sector nationality

Of the 68,100 students enrolled in a single sector, 13.4% were from the USA. A significant proportion of these students are in Australia in the Study Abroad program. The next largest groups of students were those from Malaysia (8.4%), China (8.1%) and Japan (7.6%). Most Malaysian and Chinese students were in the Higher Education sector (87.5% and 62.7% respectively), and most Japanese students were in the ELICOS sector (59.5%) (*refer Table 7 below*).

Table 7. Single sector students - Top 10 nationalities by sector

Nationality	Sector					Total
	Higher Education	ELICOS	Other	VET	Schools	
United States of America	1,313	4	7,172	510	93	9,092
Malaysia	5,010	34	124	356	200	5,724
China	3,456	387	41	267	1,362	5,513
Japan	514	3,069	355	744	477	5,159
Singapore	3,761	1	118	132	141	4,153
India	3,263	3	20	275	21	3,582
South Korea	571	1,993	95	242	408	3,309
Indonesia	2,088	114	42	395	180	2,819
Hong Kong	1,392	214	100	370	278	2,354
Thailand	673	943	65	258	187	2,126

Multiple sector nationality

The most common nationalities amongst the 32,350 multiple sector students were China (31.3%), Hong Kong (11.3%), Thailand (8.7%) and Indonesia (7.8%). The most common sector pathways of multiple sector students differed for each nationality.

Students from China were most likely to take the ELICOS-Higher Education and ELICOS-Schools pathways. Together, more than half (51.2%) of all Chinese multiple sector students recorded these pathways.

The most common pathways for students from Hong Kong were Other-Higher Education (19.1%), VET-Higher Education (18.3%), and ELICOS-VET (14.6%). The more common pathways for Thai students were ELICOS-Higher Education and ELICOS-VET, undertaken by almost three-quarters (72.7%) of students. Indonesian students were most likely to take the VET-Higher Education and ELICOS-Higher Education pathways (24.4% and 17.8% respectively) (*refer Table 8 below*).

Table 8. Multiple sector students - Top 8 nationalities and most common pathways

<i>Nationality and sector pathway</i>	<i>% of total for each nationality</i>
<i>China</i>	
ELICOS-Higher Education	31.7
ELICOS-Schools	19.5
Schools-Higher Education	6.1
<i>Hong Kong</i>	
Other-Higher Education	19.1
VET-Higher Education	18.3
ELICOS-VET	14.6
<i>Thailand</i>	
ELICOS-Higher Education	42.7
ELICOS-VET	30.0
ELICOS-VET-Higher Education	5.1
<i>Indonesia</i>	
VET-Higher Education	24.4
ELICOS-Higher Education	17.8
Other-Higher Education	14.3
<i>Japan</i>	
ELICOS-VET	46.3
ELICOS-Higher Education	14.4
ELICOS-Schools	6.5
<i>South Korea</i>	
ELICOS-VET	24.7
ELICOS-Schools	21.7
ELICOS-Higher Education	21.2
<i>Taiwan</i>	
ELICOS-Higher Education	35.6
ELICOS-VET	17.7
ELICOS-VET-Higher Education	10.7
<i>Malaysia</i>	
Other-Higher Education	36.4
VET-Higher Education	25.6
Schools-Higher Education	9.3

Sector of first enrolment

With the exception of the ELICOS sector, the majority of students across all sectors remained in the sector of their first enrolment (i.e. were single sector students).

Higher Education

Almost all (98.2%) students first enrolled in the Higher Education sector were single sector students. This is likely to be, in part, an artefact of the three year period covered by the dataset from which this analysis is based as first degree courses are typically three years in length.

ELICOS

For multiple sector students whose first enrolment was in ELICOS, their most common pathways to another sector were:

- ELICOS-Higher Education (21.5%);
- ELICOS-VET (16.5%);
- ELICOS-Schools (9.4%);

- ELICOS-VET-Higher Education (5.5%); and
- ELICOS-Other-Higher Education (2.7%).

Just over one-third (34.6%) of students whose sector of first enrolment was ELICOS were ELICOS-only students.

VET, Schools and Other

The majority of students first enrolled in the VET, Schools and Other sectors remained in-sector. Of the students who first enrolled in VET, 62.7% were single sector students; for the Schools sector, this was 70.3%; and in the Other sector, 78.6%.

The large proportion of single sector students in the Schools sector is also, in part, an artefact of the three year period of the dataset used in this analysis as school studies are at least similar in length.

The Other sector, with courses typically not leading to a qualification but are non-award or serve as enabling courses for other areas of study, is dominated by students from the USA. These students, in the non-award Study Abroad program, made up 55.2% of single sector students in the Other sector.

For students who first enrolled in the VET, Schools and Other sectors and moved to another sector, most moved to the Higher Education sector.

Single sector students and level of study pathways

As highlighted earlier, most (46.9%) single sector students were in Higher Education. Of these Higher Education students, the largest proportions were undertaking a Bachelor Degree (56.0%) and Masters Coursework (28.8%). Other levels of study included Graduate Diploma (3.5%) and Doctor of Philosophy (3.3%).

Higher Education

The most common levels of study pathways of Higher Education students undertaking more than one level are Bachelor Degree-Masters Coursework (2.4%) and Graduate Diploma-Masters Coursework (1.7%).

VET

The level of study undertaken by a large proportion of VET students was a Diploma (43.3%). This was just over three times the next highest level, Certificate III (14.3%) and four times that for an Advanced Diploma (10.4%).

The most common levels of study pathways of VET students undertaking more than one level are Diploma-Advanced Diploma (3.5%) and Certificate IV-Diploma (3.1%).

ELICOS

Students in the ELICOS sector were most likely to enrol in a Non-Award course (94.4%) or an Enabling course (2.6%). A significant proportion of students in the Other sector were in a Non-Award course (95.5%), followed by a much smaller proportion in Foundation Studies (4.4%).

Schools

Just under two-thirds (62.8%) of students in the Schools sector were in Senior Secondary Studies, followed by smaller proportions in Primary School Studies and Junior Secondary Studies (13.8% and 13.7% respectively).

The most common level of study pathway of Schools students undertaking more than one level was Junior Secondary Studies- Senior Secondary Studies (6.5%).