

Research Paper

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International School Student Movement Post-School Education

Introduction

Many international students follow study pathways¹ through the Australian education system rather than limiting their studies to a particular sector or level of education. These study pathways are based largely on the system of inter-sectoral linkages available through the Australian Qualification Framework (AQF) but also include English Language Intensive Courses for Overseas Students (ELICOS) as well as foundation and non award studies, which are currently outside the AQF. Australian Education International (AEI) has conducted analyses of these pathways annually and published research papers that highlighted broad trends in international student movement within the Australian education system. These research papers are available at AEI website at: http://aei.dest.gov.au/AEI/PublicationsAndResearch/Research/Papers/Default.htm.

This research paper examines the movement of international students as they further their education within the Australian education system after concluding their studies in the Schools sector. These post-school pathways include the higher education, the vocational education and training (VET) and the 'Other' sectors.

This analysis is based on data from the Provider Registration and International Student Management System (PRISMS), the source of AEI International Student Data. Therefore, it is limited to international students studying in Australia on a student visa.

Three cohorts of international students who studied in the Schools sector and subsequently went on to further their education within the Australian education system, will be examined. The first cohort consists of those students who concluded their schools studies in 2002, the second cohort in 2004 and the third cohort in 2006. The cohort completing schools studies in 2007 will not be included in this analysis as these students may not have enrolled in any further education courses at the time of this analysis. Please note that these cohorts of international students do not include students who complete their studies in the Australian education system at school level.

The definition of 'concluding' their studies in the Schools sector is taken as the students' last enrolment dates in this sector as stated in PRISMS. These enrolments only indicate that the students have completed some study in schools but did not necessarily indicate that they have been awarded a Senior Secondary Certificate of Education, currently referred to with different titles at state and territory level. Details of these titles can be obtained from the AQF website at http://www.agf.edu.au/senior.htm.

For robustness and consistency in analysis (comparison between the different cohort years), unless stated otherwise, details of the students' further education are taken as their first enrolment in the higher education, VET or 'Other' sectors immediately after their last enrolment period in the Schools sector.

¹ A student's 'study pathway' is defined as the route taken as he/she progress through his/her education in Australia.

 $^{^2}$ The 'Other' sector comprises study abroad, foundation, enabling and other non-award courses that do not lead to a qualification under the AQF

Key findings

- 1. In the period between 2002 and 2006, 48,477 international students completed their schools education, of which 28,547 (or 59%) continued further education within the Australian education system
- 2. For international students completing school in 2002 and 2004 and continuing further education, over 80% went to study in the higher education sector in Australia, either immediately or via a pathway.
- 3. The most recent data about international students completing school in 2006 shows that over 55% commenced higher education directly following school, while the remainder studied in the VET or 'Other' sectors before commencing higher education. On average, international students moving from school to higher education in Australia represented about eight per cent of all international higher education commencements.
- 4. For those completing school in 2006, 88.5% furthered their education within their 'home' state or territory. New South Wales (96.0%) and Victoria (93.8%) retained the highest proportion of their international students beyond school while Tasmania (45.2%) and Northern Territory (35.0%) retained the least. International students who pursued higher education courses after school study are most likely to move interstate (13.9%) while those who pursued VET courses are least likely (7.2%).
- 5. Despite the differences in the concentration of nationalities across the states and territories, the general trends of international students (furthering their education beyond school) found in this research paper, are similar for all the major nationalities.

International students furthering their education in their 'home' state or territory after school completion

In the period between 2002 and 2006, 48,477 international students completed their schools education, of which 28,547 (or 59%) continued further education within the Australian education system⁴. Table 1 shows the numbers and proportion of international students furthering their education in their 'home' state or territory upon completing schools education for the three cohorts.

Table 1: International students furthering their education in 'home' state or territory

| | 2002 cohort | | 2004 | 2004 cohort | | 2006 cohort | |
|----------------|-------------|---------------|------------|---------------|------------|---------------|--|
| Sector | Students | In 'home' | Students | In 'home' | Students | In 'home' | |
| | furthering | S/T^ | furthering | S/T^ | furthering | S/T^ | |
| | education# | | education# | | education# | | |
| NSW | 1,337 | 1,273 (95.2%) | 2,358 | 2,251 (95.5%) | 1,780 | 1,708 (96.0%) | |
| VIC | 1,475 | 1,379 (93.5%) | 2,307 | 2,110 (91.5%) | 1,722 | 1,616 (93.8%) | |
| QLD | 499 | 381 (76.4%) | 744 | 600 (80.6%) | 686 | 516 (75.2%) | |
| WA | 567 | 464 (81.8%) | 708 | 576 (81.4%) | 531 | 455 (85.7%) | |
| SA | 230 | 163 (70.9%) | 446 | 331 (74.2%) | 449 | 342 (76.2%) | |
| ACT | 75 | 58 (77.3%) | 153 | 102 (66.7%) | 109 | 78 (71.6%) | |
| TAS | 69 | 29 (42.0%) | 99 | 52 (52.5%) | 84 | 38 (45.2%) | |
| NT | 38 | 11 (28.9%) | 32 | 13 (40.6%) | 20 | 7 (35.0%) | |
| Total students | 4,290 | 3,758 (87.6%) | 6,847 | 6,035 (88.1%) | 5,381 | 4,760 (88.5%) | |

^{# –} Includes only students who conclude their studies in the Schools sector and proceed to further education in Australia.

^{^ –} The number and percentage of international students furthering their education in their 'home' state or territory.

 $^{^3}$ – 'home' state or territory is defined as the state or territory that the student had completed their schools education.

⁴ – Research Snapshot 41 'Transition to Further Education by International School Students' available on the AEI website at > http://aei.gov.au/AEI/PublicationsAndResearch/Snapshots/41SS08_pdf.pdf

From Table 1, it can be seen that about seven in eight students chose to further their education in the state or territory that they completed their school education. Over time, there is a small, but gradual, increase in the proportion of this group of students, increasing from 87.6% in 2002 to 88.1% in 2004 and 88.5% in 2006.

Even though on average about seven in eight students chose to further their education in their 'home' state or territory, the spread across the various states and territories are very different. Larger states⁵ such as New South Wales and Victoria, are able to retain between 91% and 96% of their students beyond schools level for all cohort groups whereas moderate sized states or territories such as Queensland, Western Australia and South Australia are able to retain between 70% and 86% of their school students. In contrast, for smaller states or territories such as Tasmania and Northern Territory, the corresponding rates are below 50%. A likely reason for this is that the type of courses that these students pursue may not always be available in their 'home' state or territory. For example, New South Wales and Victoria have a larger number of institutions providing a larger range of courses than Tasmania and Northern Territory.

International students sector of studies post schools education

This section examines the sector of studies international students chose in furthering their studies after completing schools education. As stated earlier, details of the students' further education are taken as their first enrolment immediately after their last enrolments in the Schools sector. This enrolment may be an intermediate course of study that leads to higher qualifications (e.g. enrolment in the certificate courses in the VET sector or the foundation courses in the 'Other' sector, before transferring to the higher education sector).

Table 2 shows, in addition to the first sector of enrolments, all sectors of enrolments these students have since completing school education.

Table 2: International students' sector of enrolments post schools education

| | 2002 cohort | | 2004 cohort | | 2006 cohort | |
|------------------|-----------------------------|-----------------|-----------------------------|-----------------|-----------------------------|-----------------|
| | First enrolment post school | | First enrolment post school | | First enrolment post school | |
| Sector | Student no. | Prop. of cohort | Student no. | Prop. of cohort | Student no. | Prop. of cohort |
| Higher education | 2,481 | 57.8% | 4,475 | 65.4% | 3,160 | 58.7% |
| VET | 1,219 | 28.4% | 1,804 | 26.3% | 1,789 | 33.2% |
| 'Other' | 590 | 13.8% | 568 | 8.3% | 432 | 8.0% |
| Total students | 4,290 | 100.0% | 6,847 | 100.0% | 5,381 | 100.0% |

| | 2002 cohort | | 2004 cohort | | 2006 cohort | |
|------------------|----------------------------|-----------------|----------------------------|-----------------|----------------------------|-----------------|
| | All enrolments post school | | All enrolments post school | | All enrolments post school | |
| Sector | Student no. | Prop. of cohort | Student no. | Prop. of cohort | Student no. | Prop. of cohort |
| Higher education | 3,588 | 83.6% | 5,667 | 82.8% | 3,470 | 64.5% |
| VET | 1,622 | 37.8% | 2,402 | 35.1% | 1,931 | 35.9% |
| 'Other' | 626 | 14.6% | 612 | 8.9% | 455 | 8.5% |

Note: For 'all enrolments post school' related columns: i) the proportion of students in each sector is based on their respective cohorts' population (4,290 for 2002 cohort, 6,847 for 2004 cohort and 5,381 for 2006 cohort); and ii) the total international students for each cohort is less than the sum of components as students can study in more than one sector.

⁵ – Size of state or territory is defined in terms of both the local resident and the international student population. There is a high positive correlation between both population.

From Table 2, it can be seen that more than four in five students in the cohort years 2002 and 2004 have enrolments in courses in the higher education sector at some point, representing on average, about eight per cent of total commencements in the sector. Of which, three in five students have enrolled immediately after completing schools education while another one in five students enrolled after completing some studies in the VET and/or 'Other' sectors. This is consistent with other analyses of international student's study pathways⁶, showing that students commonly enrolled in VET and 'Other' courses as study pathways towards obtaining higher education degrees. The lower corresponding figure for enrolments in higher education courses for the 2006 cohort (64.5%) is likely to be due to some of this student cohort still undergoing studies in other sectors which may eventually lead to studies in the higher education sector.

The proportion of VET sector enrolments (first enrolment post school) is higher for the 2006 cohort than those from the 2002 and 2004 cohorts while the corresponding figure for higher education and 'Other' sectors are lower. This is consistent with recent trends of high VET enrolments growth⁷.

International student movement post schools education as a function of sector of studies

As shown in Table 1, 4,760 or 11.5% of international students for the cohort year 2006 moved interstate to further their education upon completing their school education. Table 3 shows the number and proportion of these outgoing students for each state and territory.

Table 3: International students (2006 cohort) furthering their education interstate by sector of enrolment

| | Higher education | | VET | | 'Other' | |
|----------------|------------------|----------|-------------|----------|-------------|----------|
| State/ | Outgoing/ | % of | Outgoing/ | % of | Outgoing/ | % of |
| Territory | All Student | Outgoing | All Student | Outgoing | All Student | Outgoing |
| | Numbers | Students | Numbers | Students | Numbers | Students |
| NSW | 43 / 765 | 5.6% | 22 / 827 | 2.7% | 7 / 188 | 3.7% |
| VIC | 86 / 1,175 | 7.3% | 13 / 444 | 2.9% | 7 / 103 | 6.8% |
| QLD | 134 / 390 | 34.4% | 18 / 225 | 8.0% | 18 / 71 | 25.4% |
| WA | 55 / 412 | 13.3% | 14 / 88 | 15.9% | 7/31 | 22.6% |
| SA | 71 / 283 | 25.1% | 30 / 142 | 21.1% | 6 / 24 | 25.0% |
| ACT | 12 / 69 | 17.4% | 14 / 33 | 42.4% | 5/7 | 71.4% |
| TAS | 32 / 58 | 55.2% | 13 / 22 | 59.1% | 1 / 4 | 25.0% |
| NT | 7/8 | 87.5% | 4/8 | 50.0% | 2/4 | 50.0% |
| Total students | 440 / 3,160 | 13.9% | 128 / 1,789 | 7.2% | 53 / 432 | 12.3% |

Overall, higher proportion of students who chose to further their education in courses in the higher education (13.9%) or the 'Other' (12.3%) sectors moved interstate than those who chose VET courses (7.2%). However, this distribution is not consistent across the various states and territories. New South Wales and Victoria are able to retain more than nine in ten of their international students regardless of sector of further education while the corresponding figures for other states and territories vary between 8% and 88%.

A larger proportion of Queensland former school students leave for interstate to further their education in the higher education sector (compared to other sectors) while in contrast, students from the Australian Capital Territory pursuing higher education courses are less likely to move interstate. Likewise, Tasmanian students are more likely to move interstate to further their education in the VET sector (compared to other sectors) while their Queensland counterparts prefer to stay in Queensland to pursue VET courses.

⁶ – Research Papers (Issue 2007/1) on 'Study Pathways of International Students in Australia' available on the AEI website at > http://aei.dest.gov.au/AEI/PublicationsAndResearch/Research/Papers/2007 1 pdf.htm

⁷ – Summary of International Student Enrolment Data for December 2007 available on the AEI website at > http://aei.dest.gov.au/AEI/MIP/Statistics/StudentEnrolmentAndVisaStatistics/2007/Monthyly Sum December pdf.pdf

Comparison between international and domestic school student movements

For domestic students, a total of 5,189 Year 12 interstate students accepted offers into courses in the higher education sector in 2007⁸. This represents 5.9% of all Year 12 students who accepted offers into courses in the higher education sector in 2007. The corresponding figure for international students is 13.9% for the 2006 cohort (see Table 3), i.e. international students are more likely to move interstate to pursue higher education courses.

Table 4 shows the destination of international and domestics students who chose to pursue higher education courses interstate.

Table 4: International and domestic school students' transition to higher education sector^

| | Domes | stic students | International students | | |
|----------------|-------------|-------------------|------------------------|-------------------|--|
| State/ | Incoming | Prop. of students | Incoming | Prop. of students | |
| Territory | student no. | moving interstate | student no. | moving interstate | |
| NSW/ACT | 1,174 | 22.6% | 216# | 49.1% | |
| VIC | 1,160 | 22.4% | 169 | 38.4% | |
| QLD | 2,219 | 42.8% | 29 | 6.6% | |
| WA | 169 | 3.3% | 6 | 1.4% | |
| SA | 345 | 6.6% | 20 | 4.5% | |
| TAS | 122 | 2.4% | 0 | 0.0% | |
| NT | * | * | 0 | 0.0% | |
| Total students | 5,189 | 100.0% | 440 | 100.0% | |

^{^ –} For domestic student data, incoming student number denotes the number of students accepting offers into courses in the higher education sector in 2007 while for international student data, it is the student cohort who completed school education in 2006.

Source: Domestic student data: Report on Applications for Undergraduate University Courses⁸; International student data: PRISMS.

In the higher education sector, New South Wales, Victoria and Australian Capital Territory are the only states or territories to have a net gain of international school students (incoming to outgoing student numbers for New South Wales is 147 to 43, 169 to 86 for Victoria and 69 to 12 for Australian Capital Territory). These three states and territories accounted for 87.5% of the 440 school students who moved interstate to pursue courses in the higher education sector. In contrast, the corresponding figure for domestic students is 45.0%.

Queensland has one of the highest net losses of their international school students (who pursue higher education courses) to interstate, with 29 incoming students to 134 outgoing students. These 29 incoming students accounts for 6.6% of the total students who moved interstate. This is in contrast to the domestic students where 42.8% moved to Queensland for higher education studies. Queensland also has the highest number of interstate applicants among domestic students at 4,546 (26.9% of all interstate applicants) with the highest rate of acceptance at 48.8% (compared to nationwide average of 30.7%)

^{* –} Data excludes Northern Territory.

^{# –} Of the 216 students, 147 moved to NSW while 69 moved to ACT.

^{8 –} Report on Applications for Undergraduate University Courses available on the Universities Australia website at > http://www.universitiesaustralia.edu.au/documents/publications/stats/unmet/AVCC-Report-2007-U-G-University-Course-Demand.pdf

International student movement as a function of nationalities

This section examines the movements of international students by nationality. Table 5 shows the top five nationalities for 2006 cohort group.

Table 5: Top five nationalities of the 2006 student cohort group

| Nationality | Students furthering their | Prop. studying in NSW, VIC and ACT | Further education in 'home' state or | Prop. moving to NSW, VIC and |
|-----------------------|---------------------------|---------------------------------------|---|------------------------------|
| | education# | schools | territory ^ | ACT for further |
| | | | · | education |
| China | 3,222 | 75.5% | 2,884 (89.5%) | 87.6% |
| Republic of Korea | 444 | 60.1% | 361 (81.3%) | 91.6% |
| Hong Kong | 391 | 48.6% | 342 (87.5%) | 75.5% |
| Malaysia | 235 | 44.3% | 204 (86.8%) | 80.6% |
| Vietnam | 232 | 82.3% | 219 (94.4%) | 66.7% |
| Other nationalities | 857 | 49.7% | 749 (87.4%) | 79.6% |
| Total students | 5,381 | 3,611 (or 67.1%) | 4,760 (88.5%) | 528 (or 85.0%) |

^{* –} The number of international students concluding their studies in the Schools sector and proceeding to further education within Australian education system.

59.9% of international school students in the 2006 cohort group are from China. Other major nationalities include the Republic of Korea (8.3% of student cohort), Hong Kong (7.3%), Malaysia (4.4%) and Vietnam (4.3%). The spread of the nationalities across the states and territories vary, with high concentrations of students from China and Vietnam in New South Wales, Victoria and Australian Capital Territory while students from Malaysia tend to be concentrated in Western Australia.

Despite the differences in the concentration of nationalities across the states and territories, upon completion of school education, students from all the major nationalities tend to further their education within their 'home' state or territory, with proportion ranging from 81.3% (the Republic of Korea) to 94.4% (Vietnam) with an average of 88.5%.

85.0% of students who chose to move interstate chose New South Wales, Victoria or Australian Capital Territory and this trend is consistent for all major nationalities, with proportion ranging from 66.7% (Vietnam) to 91.6% (the Republic of Korea).

^{^ –} The number and percentage of international students enrolling for further education in their 'home' state or territory.