ACCESS ECONOMICS Pty Limited

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# The Australian education sector and the economic contribution of international students

Report by Access Economics Pty Limited for

## Australian Council for Private Education and Training

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# EXECUTIVE SUMMARY

This report outlines the economic contribution of trade in education services to the Australian economy. It features three main components: (1) the economic contribution of students and the associated flow-on effects; (2) an analysis of the domestic education sector; and, (3) an overview of Australia's standing in the international education market.

## Share of exports

Education services ranks as the third largest export category earner for the year 2007-08 (see Table A), behind coal and iron ore. Education services include expenditure by students in Australia ($13.7 billion) and exports from other education operations ($438 million).

**TABLE A: AUSTRALIA'S TOP TEN EXPORTS BY VALUE, 2007-08**

| | $M |
|---|---|
| Coal | 24,866 |
| Iron ore | 21,302 |
| Education services | 14,164 |
| Gold | 12,272 |
| Personal travel (excl education) services | 11,994 |
| Crude petroleum | 9,610 |
| Professional, technical & other business services | 5,963 |
| Aluminium ores & conc. (incl. alumina) | 5,903 |
| Natural gas | 5,854 |
| Aluminium | 5,465 |
| Total Exports | 234,308 |

Source: DFAT 2008.

Education services ranks ahead of services categories of personal travel and professional services and merchandise trade categories of gold, crude petroleum and aluminium.

## Contribution

Each international student (including their friend and family visitors) contributes an average of $28,921 in value added to the Australian economy and generates 0.29 in full-time equivalent (FTE) workers (Table B). Overall, this sees international students, and the associated visitation from friends and family contribute $12.6 billion in value-added. This is based on student expenditure of $13.7 billion and visiting friends and family expenditure of $365.8 million.

**TABLE B: ECONOMIC CONTRIBUTION OF INTERNATIONAL STUDENTS**

| | Total contribution $M 2007-08 | Per-student contribution $2007-08 |
|---|---|---|
| Expenditure | 14,092 | 32,376 |
| Value added | 12,588 | 28,921 |
| Total employment (FTE) | 126,240 | 0.29 |

Source: Access Economics' estimates. Includes expenditure by visiting friends and family. Assumes constant expenditure figures for students and visiting friends and family.

The share of education-related travel services has increased from around one per cent of total services exports in the early 1970's to 27 per cent in 2007-08. Education-related tourists also contribute more in expenditure than leisure travellers, who spend $12.0 billion.

Students spent 46.7 per cent of total expenditure, or $6.4 billion, on education, but they also spend money on other items like food and accommodation. Given the total economy-wide value-added of $12.3 billion, this suggests that every dollar spent on education by an international student has the flow-on effect of $1.91 in economy wide value-added, base on their expenditure on other items.

International student expenditure in Australia contributes to employment in the Australian economy. It is estimated to have generated just over 122,000 FTE positions in the Australian economy in 2007-08, with 33,482 of these being in the education sector. Total student-related expenditure (spending by students and visiting friends and relatives) generates a total of 126,240 FTE positions. At the state level, NSW accrues the largest share of value added with $4.8 billion, followed by Victoria at just below $4.0 billion.

A recent study by Tourism Research Australia suggests that for every two formal students, one friend or relative visited Australia during the students' stay in Australia. This class of traveller is estimated to contribute $314.7 million to the Australia economy in value-added (Table B), comprising labour income of $179.7 million and gross operating surplus (GOS) of $135.0 million.

## Illustrative demand shocks

The report also estimates the impact an illustrative demand shock to demonstrate the effects on the sector's economic contribution of a five per cent increase or decrease in student (and visiting friends and family) activity.

If we assume constant expenditure per student an illustrative five per cent drop in student numbers reduces spending by students and visiting friends and relatives falls from $14.1 to $13.4 billion. This has the effect of reducing the total value-added contribution from $12.6 to just under $12.0 billion; employment decreases from 126,240 to 119,928 FTE workers.

Under comparable assumptions, if student numbers increase by 5 per cent, value-added increases from $12.6 billion to $13.2 billion and employment increases from 126,240 FTE to about 132,552.

## The international education market

For a relatively small country, Australia hosts a high proportion of the world's international students. Of the almost 2.8 million tertiary students studying abroad in 2006, just over 207,000 studied in Australia – 7.5 per cent of all international tertiary students studying worldwide (Table C). The United States of America and the United Kingdom host the largest numbers of foreign higher education students, accounting for 21.2 and 12.0 per cent of total higher education international students, respectively, in 2006.

**TABLE C: AUSTRALIA AND THE INTERNATIONAL HIGHER EDUCATION MARKET, 2006**

| Host country or territory | Number | Per cent |
|---|---|---|
| Arab States | 80,009 | 2.9 |
| Central and Eastern Europe | 208,101 | 7.6 |
| Central Asia | 51,174 | 1.9 |
| East Asia and the Pacific | 507,193 | 18.4 |
| *Australia* | 207,264 | 7.5 |
| Latin American and the Caribbean | 36,803 | 1.3 |
| North America and Western Europe | 1,798,299 | 65.3 |
| South and West Asia | 10,620 | 0.4 |
| Sub-Saharan Africa | 62,174 | 2.3 |
| World | 2,754,373 | 100.0 |

Source: UNESCO

As discussed in the report, China and India have the largest levels of expenditure in 2007-08, with $3.1 billion and $2.0 billion respectively.

## Private sector

Overall, the international enrolments of private sector providers grew by 92.6% from 2006 to 2007. The highest growth was experienced in Victoria, with the sector increasing by almost 250 per cent—from around 2,500 to 8,750 enrolments. New South Wales increased by about 130 per cent, from 8,441 to 19,402 students attending private higher education providers.

## International student activity by education sector

Relative to other parts of the sector, higher education has experienced relatively slow growth over recent years, with enrolments expanding by 7.7 per cent between 2006 and 2008. This suggests that the sector has reached a mature growth phase compared with other sectors of the education market. Conversely, ELICOS and the VET sectors have experienced an upsurge in growth over the same period, with enrolments increasing by 63.7 and 112.6 per cent, respectively. Both the schools sector and 'other (including non-award)' have experienced relatively flat growth over the whole period.

## Residency

The international education sector also contributes to the Australian economy through augmenting the migration of skilled labour. In 2007-08, 21,421 students (while in Australia) were granted residency under various visa class applications; representing just below 20 per cent of all economic migration program residency grants for 2007-08.

## *Access Economics*

April 2009

# 1. BACKGROUND

The Australian Council for Private Education and Training (ACPET) commissioned Access Economics to undertake an economic analysis of salient features of the Australian education sector including:

- The economic contribution of the Australian export education market;
- Australia's standing in the international education export market;
- The characteristics of the domestic education sector; and
- The success rates of international students in attaining Australian residency and citizenship.

The report uses a number of data sources including government agencies such as the Department of Education, Employment and Workplace Relations (DEEWR), the Department of Immigration and Citizenship (DIAC), the National Centre for Vocational Education Research (NCVER) and the Australian Education International (AEI).

While these sources provide a wide array of useful information, without a centralised, up-to-date data repository, assumptions have had to be made in compiling the data. These assumptions are discussed throughout the report.

Other Australian Government agencies publish useful information on education, including the Australian Bureau of Statistics (ABS) and Tourism Research Australia (TRA). The ABS publishes information on education-related exports for the whole education sector, which includes expenditure by students while they are studying in Australia. This information is used by the AEI to publish a snapshot of education exports, and is also drawn upon in this report.

TRA publish numbers of student travellers and their expenditure in Australia within the scope of their quarterly publication, the International Visitor Survey. TRA data were used in this report to apportion total ABS-defined education export figures to industry classifications in the national Input-Output tables. TRA also publish a number of reports on special topics relevant to the export of education services, of which one in particular, *Profile of International Visitors Who Studied in Australia*, was used to assess the impact of visiting friends and family members.

# 2. THE ECONOMIC CONTRIBUTION OF INTERNATIONAL STUDENTS

This section analyses the contribution of international students to the Australian economy for the financial year 2007-08. The economic contribution is measured by the impact of international student activity on national value-added and employment. Activity is in turn measured by the expenditure of international students while studying in Australia.

## 2.1 FRAMEWORK OF ANALYSIS

There are several measures of economic activity, each of which describes a different aspect of an industry's economic contribution. The two measures addressed here are value-added and employment.

**Value-added** measures the value of output (i.e., goods and services) generated by an entity's or sector's factors of production, in this case labour and capital. It can also be described as net output—the value of a firm's or sector's output less the value of produced inputs. It includes taxes on production less subsidies received to produce the output.

The sum of value-added across all entities in the economy equals gross domestic product (GDP). Given the relationship to GDP, the value-added measure can be thought of as an industry's contribution to economic welfare over a defined period of time.

Specifically, value-added is the sum of:

- **Gross operating surplus** (GOS), which represents the value of operating profit generated by the entity's capital inputs. GOS within the framework of analysis is captured by operating income less operating expenses. This is represented as the blue shaded area in Figure 2-1. GOS is similar to the earning before interest, tax, depreciation and amortisation (EBITDA) measure of profit.
- **Labour income**, which represents the value of output generated by the entity's labour inputs, as measured by the income to labour. This is depicted as the red shaded area in Figure 2-1.
- For completeness, value-added also includes **taxes on production less subsidies** provided for production. Given the framework of analysis employed in this report, both GOS and income to labour are pre-tax income flows; accordingly, tax does not need to be separately measured.

**Employment** is a fundamentally different measure of activity to those above. It measures the number of workers employed by an entity or sector (i.e., labour input) rather than the value of the workers' output.

## 2.2 METHODOLOGY

The methodology employed here assesses the income flow from expenditure by international students. This is achieved using the following steps:

1 assess the total expenditure by international students in Australia;

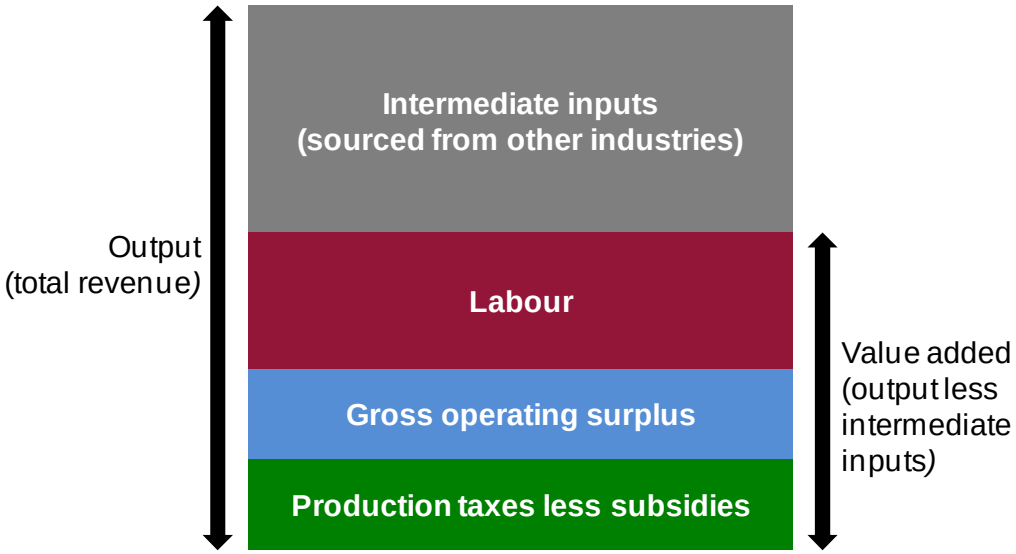
2 apportion spending into Input-Output (IO) table sectors of the economy; and

3 use an IO table framework to assess the income flows to capital owners and labour, as well as the employment contribution.

The last step is critical in assessing income flows because expenditure does not flow through exclusively to wages paid to employees or GOS to capital owners.

Figure 2-1 represents a stylised relationship between output (or expenditure) and value-added. This relationship holds when no imports are used as intermediate inputs.

**FIGURE 2-1: STYLISED ECONOMIC ACTIVITY ACCOUNTING FRAMEWORK**




*Source*: Access Economics.

Where imports are used for intermediate inputs, total value-added will be smaller than expenditure, since some GOS and labour income will flow to factors of production located outside Australia.

The IO table framework measures the imported component of intermediate inputs and adjusts value-added multiplier accordingly, (Table 2-1). The value added multiplier is the total economy wide value added (measured in dollars) generated from one dollar of expenditure.

Industries with higher levels of imported intermediate goods have lower value-added multipliers (like the petroleum and coal sector) whereas those with low levels of imported intermediate expenditure have higher value-added multipliers (like the education sector). This is the case because the value-added in the imported intermediate inputs flows to international capital owners and wage earners.

**TABLE 2-1: VALUE-ADDED MULTIPLIER FOR SELECTED INDUSTRIES**

| | |
|---|---|
| Petroleum and coal products | 0.47 |
| Air and space transport | 0.67 |
| Electronic equipment | 0.72 |
| Textile products | 0.73 |
| Iron and steel | 0.82 |
| Dairy cattle | 0.84 |
| Accommodation, cafes and restaurants | 0.85 |
| Retail trade | 0.90 |
| Education | 0.94 |

Source: ABS Cat. No. 5209.0, Access Economics estimates

## 2.3 INTERNATIONAL STUDENT EXPENDITURE

Of the $51.3 billion in service trade exports, $28.4 is generated by the activity of international visitors to Australia in 2007-08 (Table 2-2). This represents the spending by international tourists on travel and goods and services, defined as an export by the ABS, while in Australia. International students spend $13.7 billion in export related expenditure while studying in Australia; all other personal visitors spent $12.0 in 2007-08.

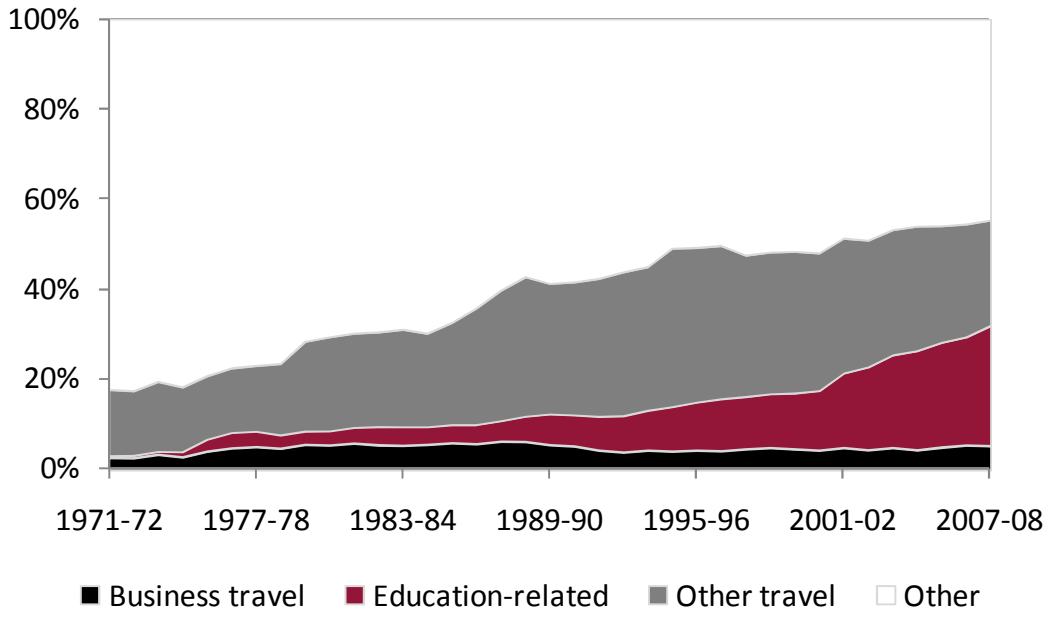
**TABLE 2-2: EDUCATION RELATED EXPENDITURE, 2007-08**

| Category of spending | $M |
|---|---|
| **Travel services** | **28,430** |
| Business | 2,710 |
| Personal | 25,720 |
| *Education related* | *13,726* |
| *Other* | *11,994* |
| **Other services trade** | **22,889** |
| **Total service trade** | **51,319** |

Source: ABS Cat. No. 5368.0.55.003 *International Trade in Services by Country, by State and Detailed Services Category*

The share of education-related travel services has been on the increase since the early 1970s when it made up about one per cent of service exports to 2007-08 where it constituted around 27 per cent (see Figure 2-2).

**FIGURE 2-2: SHARE OF SERVICES TRADE 1971 - 2008**




Source: ABS Cat. No. 5368.0

## 2.4 INTERNATIONAL STUDENT EXPENDITURE PROFILE

The next step in measuring the economic contribution is to apportion total expenditure into industries as represented in the IO tables. The average expenditure by a student traveller was derived from Tourism Research Australia's International Visitor Survey (IVS). As Table

2-3 shows, unsurprisingly, education fees represent a large proportion of expenditure (46.7 per cent), with food, drink and accommodation (31.8 per cent) also a major category of expenditure.

**TABLE 2-3: INTERNATIONAL STUDENT TRAVELLER EXPENDITURE, 2007-08**

| Category | $M | Per cent |
|---|---|---|
| Organised tours | 149.5 | 1.1 |
| International airfares bought in Australia | 353.7 | 2.6 |
| Domestic airfares | 90.1 | 0.7 |
| Other transport fares | 332.6 | 2.4 |
| Self-drive, rent-a-cars, caravans | 62.3 | 0.5 |
| Petrol and oil for self-drive cars or other vehicles | 109.3 | 0.8 |
| Shopping items for use in Australia | 480.3 | 3.5 |
| Shopping items to take home | 296.2 | 2.2 |
| Food, drink and accommodation | 4,366.4 | 31.8 |
| Horse racing and gambling | 42.2 | 0.3 |
| Entertainment | 188.8 | 1.4 |
| Motor vehicles | 408.4 | 3.0 |
| Education fees | 6,435.9 | 46.9 |
| Phone internet, fax and or postage | 261.7 | 1.9 |
| Other | 148.6 | 1.1 |
| **Total** | **13,726.0** | **100.0** |

Source: *International Visitor in Australia*, June 2008, Tourism Research Australia, Access Economics estimates. The proportions were applied excluding package tour expenditure and pre-paid international airfares.

Apportioning this expenditure to industries in the IO table was undertaken by mapping the categories outlined in Table 2-3 to comparable IO table industry classifications. For example, education fees were treated as expenditure in the education sector, while food, drink and accommodation was apportioned to the retail trade and accommodation, cafes and restaurants sectors. The resulting allocation of expenditure is summarised in Table 2-4 below.

**TABLE 2-4: STUDENT EXPENDITURE BY IO TABLE INDUSTRY**

| | $M |
|---|---|
| Electricity supply | 74.3 |
| Gas supply | 74.3 |
| Retail trade | 2,415.6 |
| Accommodation, cafes and restaurants | 3,334.6 |
| Road transport | 454.8 |
| Air and space transport | 443.8 |
| Communication services | 261.7 |
| Education | 6,435.9 |
| Motion picture, radio and television services | 94.4 |
| Libraries, museums and the arts | 94.4 |
| Sport, gambling and recreational services | 42.2 |
| Total | 13,726.0 |

Source: Access Economics' estimates

## 2.5 ASSESSING THE ECONOMIC CONTRIBUTION

### 2.5.1 VALUE-ADDED

The total economy-wide contribution to GDP made by international students is estimated as $12.3 billion in 2007-08 (Table 2-5). Of this, $8.6 billion is returned to labour as wages and $3.6 billion to capital owners as GOS.

**TABLE 2-5: ECONOMIC CONTRIBUTION OF INTERNATIONAL STUDENTS, 2007-08**

| | $M |
|---|---|
| Expenditure | 13,726.0 |
| Labour | 8,628.9 |
| GOS | 3,644.5 |
| **Value-added**[1] | **12,273.4** |

Source: Access Economics' estimates

Based on these estimates and given aggregate GDP of $1,131.5 billion, international students are estimated to have contributed just over one per cent of GDP (Table 2-6) in 2007-08.

**TABLE 2-6: VALUE-ADDED CONTRIBUTION AND GDP, 2007-08**

| | $M |
|---|---|
| Value-added | 12,273 |
| GDP | 1,131,51 |
| Per cent | 1.08 |

Source: ABS Cat. No. 5206, Access Economics' estimates

#### Contribution to education

Given expenditure of $6.4 billion in the education sector alone, an estimated $4.6 billion is generated in value-added (Table 2-7). Of this, $4.1 billion is paid to labour as wages and $433.3 million in GOS.

**TABLE 2-7: ECONOMIC CONTRIBUTION TO THE EDUCATION SECTOR, 2007-08**

| | $M |
|---|---|
| Expenditure | 6,435.9 |
| Labour | 4,597.3 |
| GOS | 482.8 |
| Value-added | 5,080.1 |

Source: Access Economics estimates

[1] Note that the input output table modelling framework used in economic contribution studies do have some limitations. This is the case because the analysis takes place in a static framework that ignores changes in prices and crowding out activities.

### 2.5.2 VALUED-ADDED

As outlined above, $12.3 billion in value-added is generated from $13.7 billion in expenditure by international students, implying a value-added multiplier of 0.88 (see Table 2-8).

**TABLE 2-8: VALUE ADDED TO TOTAL EXPENDITURE RATIO**

| | |
|---|---|
| Expenditure on all goods and services ($Billion) | 13.7 |
| Value added ($Billion) | 12.3 |
| Value-added ratio | 0.88 |

Source: Access Economics estimates

The value-added multiplier measures the income flows to domestic capital owners and labour from a dollar of expenditure. The estimates suggest that for each dollar spent by international students in Australia, $0.88 accrues in value-added as either wages to labour or GOS to capital owners and $0.12 accrues to foreign capital owners and wage earners.

The performance of the international education export market can also be measured in terms of flow-on effects expenditure by international students has on value added. From the IVS, it can be determined that 46.7 per cent, or $6.4 billion, of international student expenditure is directed towards education. But students also spend money on items like food and accommodation generating value added.

**TABLE 2-9: VALUE ADDED TO EDUCATION EXPENDITURE RATIO**

| | |
|---|---|
| Expenditure on education ($Billion) | 6.4 |
| Value added ($Billion) | 12.3 |
| Value-added to education expenditure ratio | 1.91 |

Source: Access Economics estimates

Given the total economy-wide value-added of $12.3 billion, this suggests that every dollar spent on education by an international student has the flow-on effect of $1.91 in economy wide value-added (see Table 2-9).

### 2.5.3 EMPLOYMENT

International student activity is estimated to have contributed just over 122,000 FTE employees to the Australian economy in 2007-08 (Table 2-10). Of these, 33,482 FTE were employed in the education sector and 88,649 in other related sectors.

**TABLE 2-10: INTERNATIONAL STUDENT EMPLOYMENT CONTRIBUTION**

| | |
|---|---|
| Education | 33,482 |
| Other sectors | 88,649 |
| Total employment | 122,131 |

Source: Access Economics estimates

### 2.5.4 EMPLOYMENT MULTIPLIER

As outlined above, international student expenditure in Australia is estimated to have generated just over 122,000 FTE positions in the Australian economy in 2007-08, with 33,482 employed in the education sector. This implies that for every person employed in the education sector, a total of 3.65 are employed economy wide (Table 2-11). This table also indicates an education employment multiplier of 8.90, suggesting that for every million dollars of international student expenditure, 8.9 FTE employment positions are contributed to the economy.

**TABLE 2-11: FLOW-ON EMPLOYMENT EFFECTS**

| | |
|---|---|
| *Education employment (FTE)* | *33,482.1* |
| *Total Employment (FTE)* | *122,131.3* |
| **Ratio of education sector employment to total employment** | **3.65** |
| *Total expenditure ($M)* | *13,726.0* |
| *Total employment (FTE)* | *122.131.3* |
| **Employment multiplier FTE (per $M of expenditure)** | **8.90** |

Source: Access Economics estimates

## 2.6 STATE CONTRIBUTION

At the state level, NSW accrues the largest share of value added with $4.8 billion, followed by Victoria at just below $4.0 billion (see Table 2-12). The state based contributions are based on each jurisdiction's share of the total export in education-related travel services, as published by the ABS.

**TABLE 2-12: STATE CONTRIBUTION* OF INTERNATIONAL STUDENTS, 2007-08**

| | NSW | VIC | QLD | SA | WA | TAS | NT | ACT | Aust. |
|---|---|---|---|---|---|---|---|---|---|
| **Value added ($M)** | | | | | | | | | |
| Labour | 3,358 | 2,798 | 1,188 | 466 | 590 | 77 | 14 | 140 | 8,629 |
| GOS | 1,418 | 1,182 | 502 | 197 | 249 | 32 | 6 | 59 | 3,644 |
| Value added | 4,776 | 3,979 | 1,689 | 663 | 839 | 109 | 20 | 199 | 12,273 |
| **FTE** | | | | | | | | | |
| Education | 13,029 | 10,856 | 4,608 | 1,808 | 2,288 | 298 | 54 | 542 | 33,482 |
| Other | 34,497 | 28,742 | 12,201 | 4,786 | 6,059 | 788 | 142 | 1,434 | 88,649 |
| Total | 47,527 | 39,598 | 16,809 | 6,594 | 8,347 | 1,086 | 196 | 1,975 | 122,131 |

Source: Access Economics' estimates

* Contributions are weighted by state shares of education related travel services in 5368.0.55.003

## 2.7 OTHER EDUCATIONAL SERVICES

The education sector also contributes further to the Australian GDP through the export of other services. These include income from education operations overseas, through institutions overseas (excluding campus operations by Australian institutions) and consultancy services. In total $438 million was earned in other education export income in 2007-08, an increase of 23 per cent over the previous year (see Table 2-13).

**TABLE 2-13: OTHER EDUCATIONAL SERVICES INCOME, $M, 2007-08**

| | 2005-06 | 2006-07 | 2007-08 | Per cent growth |
|---|---|---|---|---|
| Education consultancy services | 74 | 117 | 147 | 25.6 |
| Correspondence courses | 32 | 24 | 23 | -4.2 |
| Services through educational institutions | 101 | 93 | 152 | 63.4 |
| Other education services | 123 | 129 | 116 | -10.1 |
| Royalties on education services | - | 8 | - | – |
| Other educational services | 330 | 362 | 438 | 21.0 |

Source: ABS Cat. No. 5368.0.55.003, as quoted in AEI (2008) *Research Snapshot (Number 42)*

# 3. THE FLOW-ON EFFECTS: FRIENDS AND FAMILY VISITORS

A recent study by Tourism Research Australia highlights that for every two formal students, one friend or relative visited Australia during the students' stay in Australia (see Table 3-1).

**TABLE 3-1: FRIEND AND FAMILY VISITORS PER INTERNATIONAL STUDENT, 2006**

| | Formal study tourist | Informal study tourist | All students |
|---|---|---|---|
| Number of family visiting | 0.3 | 0.1 | 0.3 |
| Number of friend visiting | 0.2 | 0.1 | 0.2 |
| Total | 0.5 | 0.2 | 0.5 |

Source: Tourism Research Australia 2007

Student tourists are defined in the following way:

- Formal: main purpose for visiting Australia was education.
- Informal: main purpose of visiting Australia was for a reason other than education but still studied a course while on the trip.

In total, given enrolments in 2008, this equates to an estimated 217,632 'friends and family' tourists visiting students in Australia (Table 3-2). This includes almost 76,629 friends and family visiting students in the higher education sector. This assumes that all students in the higher education sector are classified as formal (that is, it was the main purpose of their visit).

**TABLE 3-2: STUDENT AND FRIEND AND FAMILY VISITORS, 2008**

| | Formal/ informal | Students | Friend and family visitors |
|---|---|---|---|
| ELICOS | Formal | 28,515 | 14,258 |
| Schools | Formal | 115,128 | 57,564 |
| VET | Formal | 151,258 | 76,629 |
| Higher Education | Formal | 176,161 | 88,081 |
| Other | Formal | 31,035 | 15,518 |
| Total | | 435,263 | 217,632 |

Source: Australian Education International, Access Economics estimates

Table 3-3 outlines the average expenditure by tourists visiting students while studying in Australia as estimated by TRA. On average, this class of traveller spends $1,681 per visit, with almost half of this expended being on food, drink and accommodation, and about a quarter on shopping items. In all, the 262,606 tourists visiting students in Australia spent an estimated $365.8 million in the domestic economy in 2007-08.

**TABLE 3-3: EXPENDITURE* BY EXPENDITURE CLASS, 2007-08**

| | Average expenditure | $M | Per cent |
|---|---|---|---|
| Organised tours | 58.0 | 12.6 | 3.5 |
| International airfares bought in Australia | 26.0 | 5.7 | 1.5 |
| Domestic airfares | 58.0 | 12.6 | 3.5 |
| Other transport fares | 61.0 | 13.3 | 3.6 |
| Self-drive, rent-a-cars, caravans | 56.0 | 12.2 | 3.3 |
| Petrol and oil for self-drive cars or other vehicles | 44.0 | 9.6 | 2.6 |
| Shopping items for use in Australia | 107.0 | 23.3 | 6.4 |
| Shopping items to take home | 311.0 | 67.7 | 18.5 |
| Food drink and accommodation | 779.0 | 169.5 | 46.3 |
| Horse racing and gambling | 23.0 | 5.0 | 1.4 |
| Entertainment | 49.0 | 10.7 | 2.9 |
| Motor vehicles | 51.0 | 11.1 | 3.0 |
| Phone internet, fax and or postage | 23.0 | 5.0 | 1.4 |
| Other | 35.0 | 7.6 | 2.1 |
| Total | 1,681.0 | 365.8 | 100.0 |

Source: Tourism Research Australia 2008

* Expenditure excludes spending on package tours and pre-paid international flights and spending on education to avoid double count.

A significant proportion of spending by the visitors of international students is in the retail trade and accommodation, cafes and restaurants sectors of the economy, with almost $350 million dollars of expenditure in 2007-08 (Table 3-4).

**TABLE 3-4: EXPENDITURE BY IO CLASSIFICATION, 2007-08**

| IO Category | $M |
|---|---|
| Electricity supply | 3.8 |
| Gas supply | 3.8 |
| Retail trade | 156.6 |
| Accommodation, cafes and restaurants | 132.2 |
| Road transport | 30.5 |
| Air and space transport | 18.3 |
| Communication services | 5.0 |
| Motion picture, radio and television services | 5.3 |
| Libraries, museums and the arts | 5.3 |
| Sport, gambling and recreational services | 5.0 |
| Total | 365.8 |

Source: Access Economics estimates

To estimate the economic contribution of friends and family visitors, their expenditure is fed into the IO framework using the methodology outlined above. Economic activity by international visiting relatives is estimated to contribute a further $314.7 million in value-added to the Australian economy (Table 3-5). Of this, $179.7 million is earned by labour as income and $135.0 to capital owners as GOS.

**TABLE 3-5: ECONOMIC CONTRIBUTION OF VISITING FRIENDS AND FAMILY, 2007-08**

| | |
|---|---|
| **Value-added ($M)** | |
| Labour income | 179.7 |
| GOS | 135.0 |
| Value-added | 314.7 |
| **Employment (FTE)** | |
| Retail trade | 1,524.9 |
| Accommodation, cafes and restaurants | 970.1 |
| Other | 1,613.9 |
| Total employment | 4,108.9 |

Source: Access Economics estimates

In addition, economic activity by international visiting relatives contributes an estimated 4,109 FTE employees. Of these, 1,525 are employed in the retail sector and 970 in the accommodation, cafes and restaurant sector; reflecting the high level of expenditure in these sectors by visiting friends and relatives.

At the state level NSW accrues the largest share of value added with $122 million, followed by Victoria at $102 million (see Table 3-6).

**TABLE 3-6: STATE CONTRIBUTION* OF INTERNATIONAL STUDENTS, 2007-08**

| | NSW | VIC | QLD | SA | WA | TAS | NT | ACT | Aust. |
|---|---|---|---|---|---|---|---|---|---|
| **Value added ($)** | | | | | | | | | |
| Labour ($M) | 122 | 102 | 43 | 17 | 22 | 3 | 1 | 5 | 180 |
| GOS ($M) | 53 | 44 | 19 | 7 | 9 | 1 | 0 | 2 | 135 |
| Value added | 122 | 102 | 43 | 17 | 22 | 3 | 1 | 5 | 315 |
| **FTE** | | | | | | | | | |
| Retail trade | 593 | 494 | 210 | 82 | 104 | 14 | 2 | 25 | 1,525 |
| Accom. etc. | 377 | 315 | 134 | 52 | 66 | 9 | 2 | 16 | 970 |
| Other | 628 | 523 | 222 | 87 | 110 | 14 | 3 | 26 | 1,614 |
| Total | 1,599 | 1,332 | 566 | 222 | 281 | 37 | 7 | 66 | 4,109 |

Source: Access Economics estimates

* Contributions are weighted by state shares of education related travel services in 5368.0.55.003

# 4. ILLUSTRATIVE DEMAND SHOCKS

This section outlines the modelling results under a number of assumptions to demonstrate sensitivity of the sector's estimated economic contribution to changes in student (and associated friend and family visitor) numbers. The low scenario assumes five per cent fewer students for the reference year 2007-08 while the high case assumes five per cent more students. Table 4-1 outlines student and friends and family visitor numbers under the alternate assumptions. It should be noted that the illustrative demand shocks only model the changes in contribution during the students visit in Australia as a student; it does not include any potential contribution of other flow-on effects of the increase (or decrease) in student visitors.

**TABLE 4-1: ALTERNATE STUDENT AND VISITOR MODELLING ASSUMPTIONS, 2007-08**

| | Low | Central | High |
|---|---|---|---|
| Students | 413,500 | 435,263 | 457,026 |
| Friends and family visitors | 206,750 | 217,632 | 228,513 |

Source: Access Economics estimates

If constant expenditure per student and visitor is assumed under the low modelling scenario, spending by all international visitors falls to $13.4 billion from $14.1 (Table 4-2). This has the effect of reducing total value-added in the economy from $12.6 to just under $12.0 billion. Employment decreases from about 126,240 to 119,928.

**TABLE 4-2: ECONOMIC CONTRIBUTION UNDER LOW, CENTRAL AND HIGH MODELLING ASSUMPTIONS**

| | Low | Central case | High |
|---|---|---|---|
| **Students** | | | |
| Expenditure ($M) | 13,039.7 | 13,726.0 | 14,412.3 |
| Labour ($M) | 8,197.4 | 8,628.9 | 9,060.3 |
| GOS ($M) | 3,462.3 | 3,644.5 | 3,826.7 |
| Value-added ($M) | 11,659.7 | 12,273.4 | 12,887.0 |
| Total employment | 116,024.7 | 122,131.3 | 128,237.8 |
| **Visiting friends and family** | | | |
| Expenditure ($M) | 347.5 | 365.8 | 384.1 |
| Labour ($M) | 170.7 | 179.7 | 188.7 |
| GOS ($M) | 128.2 | 135.0 | 141.7 |
| Value-added ($M) | 299.0 | 314.7 | 330.4 |
| Total employment | 3,903.5 | 4,108.9 | 4,314.4 |
| **Student and visiting friends and family** | | | |
| Expenditure ($M) | 13,387.2 | 14,091.8 | 14,796.4 |
| Labour ($M) | 8,368.2 | 8,808.6 | 9,249.0 |
| GOS ($M) | 3,590.5 | 3,779.5 | 3,968.4 |
| Value-added ($M) | 11,958.6 | 12,588.0 | 13,217.4 |
| Total employment | 119,928.2 | 126,240.2 | 132,552.2 |

Source: Access Economics estimates

Under the high modelling scenario, value-added increases from $12.6 billion to $13.2 billion and employment increases from 126,240 to about 132,552.

# 5. THE INTERNATIONAL EDUCATION SECTOR

## 5.1 STUDENT ACTIVITY

For a relatively small country, Australia hosts a high proportion of the world's international students. Of the almost 2.8 million tertiary students studying abroad in 2006, just over 207,000 studied in Australia—7.5 per cent of all international tertiary students studying worldwide (Table 5-1). The United States of America and the United Kingdom host the largest numbers of foreign students, accounting for 21.2 and 12.0 per cent of total international students, respectively, in 2006.

**TABLE 5-1: INTERNATIONALLY MOBILE TERTIARY* STUDENTS BY HOST COUNTRY, 2006**

| Host country or territory | Number | Per cent |
|---|---|---|
| **Arab States** | **80,009** | **2.9** |
| **Central and Eastern Europe** | **208,101** | **7.6** |
| **Central Asia** | **51,174** | **1.9** |
| **East Asia and the Pacific** | **507,193** | **18.4** |
| *Australia* | 207,264 | 7.5 |
| *Japan* | 130,124 | 4.7 |
| **Latin American and the Caribbean** | **36,803** | **1.3** |
| **North America and Western Europe** | **1,798,299** | **65.3** |
| *Canada* | 75,546 | 2.7 |
| *France* | 247,510 | 9.0 |
| *Germany* | 259,797 | 9.4 |
| *United Kingdom* | 330,078 | 12.0 |
| *United States of America* | 584,814 | 21.2 |
| **South and West Asia** | **10,620** | **0.4** |
| **Sub-Saharan Africa** | **62,174** | **2.3** |
| *South Africa* | 53,738 | 2.0 |
| **World** | **2,754,373** | **100.0** |

Source: *Global Education Digest 2008, Comparing Education Statistics Across the World,* UNESCO Institute for Statistics, 2008

* This includes International Standard Classification of Education (ISCED) classifications 5 (first state of tertiary education) and 6 (second stage of tertiary education) only.

Table 5-2 shows the Inbound Mobility Rate—the number of international tertiary students as a proportion of total tertiary students—for a selection of countries in 2006. As is evident from the table, Australia is unique in that it has a high number of international students (some 207,000 in 2006) as well as a high proportion of international students relative to domestic students, with an international mobility rate of 20.2 per cent. By comparison, major host countries like the U.S. and the UK have international mobility rates of 3.3 and 14.1 per cent, respectively.

**TABLE 5-2: INBOUND MOBILITY RATE FOR SELECTED COUNTRIES, 2006**

| Host country | Students | Inbound mobility rate (Per cent) |
|---|---|---|
| Macao, China | 11,930 | 50.0 |
| Luxembourg | 1,137 | 42.2 |
| Qatar | 2,487 | 28.0 |
| Cyprus | 5,309 | 25.8 |
| Australia | 207,264 | 20.2 |
| New Zealand | 40,774 | 17.0 |
| United Kingdom | 330,078 | 14.1 |
| United States of America | 584,814 | 3.3 |

Source: UNESCO Institute for Statistics

Table 5-3 outlines the top five host destinations for a selection of international student source countries. Australia features in the top five.. Proximity has a major bearing on host destinations, with students from some of Australia's closest neighbours, including Indonesia, Malaysia and Singapore, opting for Australia as their preferred destination. For other countries, such as Vietnam, cultural and linguistic ties seem to be a factor in student destinations, with a high proportion of their mobile tertiary students studying in France (this is further analysed in Table 5-3 below).

**TABLE 5-3: SOURCE COUNTRY AND TOP FIVE DESTINATIONS, 2006**

| Country | Top five destinations (number of students) |
|---|---|
| China | USA, Japan, UK, Australia (40,316), Germany |
| Hong Kong | Australia (13,525), UK, USA, Canada, New Zealand |
| Indonesia | Australia (11,302), USA, Malaysia, Germany, Japan |
| Japan | USA, UK, Australia (3,976), France, Germany |
| Malaysia | Australia (18,538), UK, USA, Japan, Ukraine |
| South Korea | USA, Japan, Australia (4,889), UK, Germany |
| Singapore | Australia (11,206), USA, UK, Canada , Malaysia |
| Thailand | USA, Australia (5,014), UK, Japan, Germany |
| Vietnam | USA, France, Australia (3,055), Germany, Japan |
| UK | USA, Australia (5,412), France, Germany, Denmark |
| USA | UK, Canada, Australia (3,935), Germany, France |
| Bangladesh | Malaysia, Australia (3,606), USA, UK, Japan |
| India | USA, Australia (22,039), UK, Germany, Canada |
| Pakistan | UK, USA, Malaysia, Australia (1,545), Canada |
| Sri Lanka | UK, Australia (2,726), USA, Japan , Malaysia |
| Kenya | USA, UK, Australia (1,230), Canada , India |

Source: UNESCO Institute for Statistics

As a complement to Table 5-3, Table 5-4 shows the major source regions for international tertiary students, for a range of countries in 2006. As is clear from the table, three in five of Australia's international tertiary students are sourced from East Asia and the Pacific—more than double the share of these regions in the international market. China, with 40,316

tertiary students (20% of the Australian total) in 2006, is Australia's single largest source market, followed by India, Malaysia and Hong Kong.

**TABLE 5-4: INTERNATIONAL TERTIARY STUDENTS BY REGION OF SOURCE, SELECTED COUNTRIES AND THE WORLD, 2006**

| Student source region by country of study | Australia | France | Germany | UK | USA | World |
|---|---|---|---|---|---|---|
| Arab States | 1.8 | 30.0 | 6.4 | 4.4 | 2.8 | 6.9 |
| Central and Eastern Europe | 1.1 | 9.0 | 40.8 | 4.8 | 6.4 | 12.1 |
| Europe Central Asia | 0.1 | 0.7 | 2.9 | 0.3 | 0.6 | 3.3 |
| East Asia and the Pacific | 59.0 | 11.7 | 16.4 | 29.3 | 41.8 | 29.4 |
| Latin America and the Caribbean | 1.2 | 4.4 | 3.0 | 2.6 | 11.5 | 5.6 |
| North America and Western Europe | 11.0 | 14.5 | 20.2 | 37.0 | 13.9 | 17.8 |
| South and West Asia | 15.4 | 1.2 | 4.5 | 10.6 | 17.0 | 8.4 |
| Sub-Saharan Africa | 3.5 | 18.5 | 4.0 | 8.4 | 5.7 | 7.5 |
| Unspecified | 7.0 | 10.0 | 1.8 | 2.5 | 0.2 | 9.0 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

Source: UNESCO Institute for Statistics

Table 5-4 also demonstrates that cultural/linguistic and historical ties may be a determinant in students' choice of location for foreign study. For example, a high proportion of international students in France come from Arab states and Sub-Saharan Africa, including the former colonies of Morocco (with 29,299 students), Algeria (21,641) and Senegal (9,399).

## 5.2 WORLD GROWTH

Many of the countries that place a high demand on the Australian education sector are developing and newly industrialised countries in the Asian regions. These countries are generally classified as having higher growth rates than the developed countries like the US and the world average. Notably, growth in the student intake from China averaged nearly 12 per cent between 2006 and 2008, and growth from India, nearly 12 per cent. However, in line with a slowing more broadly, growth in student numbers from these markets is projected to have eased to 9.7 per cent, and 7.9 per cent, respectively in 2008.

**TABLE 5-5: GROWTH RATES FOR SELECTED COUNTRIES, 2006 TO 2008**

| | 2006 | 2007 | 2008 (projected) |
|---|---|---|---|
| China | 11.6 | 11.9 | 9.7 |
| India | 9.8 | 9.3 | 7.9 |
| Indonesia | 5.5 | 6.3 | 6.1 |
| Malaysia | 5.8 | 6.3 | 5.7 |
| Korea | 5.1 | 5.0 | 4.1 |
| Singapore | 8.2 | 7.7 | 3.6 |
| United States | 2.8 | 2.0 | 1.6 |
| World | 5.1 | 5.0 | 3.9 |

Source: International Monetary Fund, *World Economic Outlook*, October 2008.

## 5.3 EXPENDITURE IN AUSTRALIA

Table 5-6 outlines the student expenditure by source country. Consistent with student numbers, China and India have the largest levels of expenditure in the year 2007-08, with $3.1 billion and $2.0 billion respectively. Asian countries identified in Table 5-5 provide $9.2 billion of the $13.7 billion in education related exports. Brazil, the number ten ranked country by expenditure, contributed $316 million in expenditure in 2007-08.

**TABLE 5-6: STUDENT EXPENDITURE CONSUMPTION IN AUSTRALIA BY COUNTRY, 2007-08**

| | $M |
|---|---|
| China | 3,107 |
| India | 2,004 |
| Republic of Korea | 1,035 |
| Malaysia | 723 |
| Hong Kong | 574 |
| Thailand | 552 |
| Indonesia | 512 |
| Vietnam | 365 |
| Japan | 340 |
| Brazil | 316 |
| Other countries | 4,190 |
| Education related travel services | 13,726 |

Source: AEI *Research Snapshot (Number 42)*

## 5.4 SKILLED MIGRATION

The international education sector also contributes to the Australian economy through augmenting the migration of skilled labour. Many students choose to continue to reside in Australia following the completion of their studies. In 2007-08 21,421 students were granted residency under various visa class applications (Table 5-7). The table below outlines the number of visas granted to onshore student visa holders while in Australia. The 2007-08 figure is slightly down from 2006-07, but is up almost 20 per cent from 2005-06.

**TABLE 5-7: ONSHORE STUDENT VISA HOLDERS TO SKILLED MIGRANT PATHWAYS*, 2005-06 TO 2007-08**

| | 2005-06 | 2006-07 | 2007-08 |
|---|---|---|---|
| Un-sponsored | 15,504 | 20,288 | 17,851 |
| Sponsored | 2,392 | 2,570 | 3,570 |
| Total onshore student | 17,896 | 22,858 | 21,421 |
| Total Economic migration – Skill stream | 97,340 | 97,940 | 108,542 |

Source: Unpublished Department of Immigration and Citizenship visa grant data and DIAC Annual Reports 2006-07 and 2007-08. * Un-sponsored includes visa class 880 and 885 (skilled independent overseas student). Sponsored includes visa sub-classes 881 (Australian sponsored overseas student), 882 (designated area) and 886 (skilled sponsored).

Onshore student visa holders represented just under 20 per cent of all economic migration program residency grants for 2007-08. This is based on total economic migration of 108,542.

# 6. THE DOMESTIC EDUCATION SECTOR

This section provides a statistical description of the domestic Higher Education and Vocational Education and Training (VET) sectors in Australia.

## 6.1 AUSTRALIA'S HIGHER EDUCATION SECTOR

According to the Department of Employment, Education and Workplace Relations (DEEWR, 2008), the higher education sector in Australia comprises:

- the university sector consisting of 37 public and two private institutions;
- one approved branch of an overseas university;
- three other self-accrediting higher education institutions; and
- approximately 150 non-self-accrediting higher education institutions.

Just over one million students undertook higher education within the sector in 2007—this represents a 4.7 per cent increase over 2006 (See Table 6-1). New South Wales had the highest number of students in the sector, with just over 321,500 or 31 per cent of the national market, followed by Victoria with 266,800 (26 per cent).

**TABLE 6-1: HIGHER EDUCATION STUDENT NUMBERS BY STATE, 2006 AND 2007**

| | 2006 No. | 2007 No. | Per cent Change |
|---|---|---|---|
| New South Wales | 305,278 | 321,574 | 5.3 |
| Victoria | 251,694 | 266,842 | 6.0 |
| Queensland | 190,036 | 192,262 | 1.2 |
| Western Australia | 100,884 | 106,167 | 5.2 |
| South Australia | 69,401 | 72,949 | 5.1 |
| Tasmania | 18,759 | 19,531 | 4.1 |
| Northern Territory | 6,068 | 6,599 | 8.8 |
| Australian Capital Territory | 25,411 | 26,138 | 2.9 |
| Multi-State* | 16,530 | 17,784 | 7.6 |
| Total | 984,061 | 1,029,846 | 4.7 |

Source: Higher Education Statistics 2007, Department of Education, Employment and Workplace Relations

* Multistate: includes higher education providers that provide services in multiple states, includes the Australian Catholic University

Overall student numbers grew by 4.7 per cent between 2006 and 2007. The highest rate of growth was reported in the Northern Territory, with 8.8 per cent, though the base in the Territory is significantly smaller than that in other jurisdictions. Queensland exhibited the slowest rate of growth, with enrolments expanding by just 1.2 per cent between 2006 and 2007.

The relatively slow growth in Queensland resulted from a decline in the number of students in the public university sector (See Table 6-2). Indeed, Queensland was the only state or territory to experience a drop in public university numbers between 2006 and 2007. Though strong growth was experienced in Queensland's private tertiary education sector—as it was

in all jurisdictions (Table 6-2)—the small number of students in private tertiary education was not sufficient to offset the fall in public sector enrolments.

Across Australia, the public university sector grew by 2.1 per cent between 2006 and 2007, with strong growth in the Northern Territory and the multi-state provider (the Australian Catholic University). Of the jurisdictions to record positive growth, New South Wales reported the slowest rate of growth (1.8 per cent), with student numbers increasing from around 296,800 in 2006 to around 302,170 in 2007.

**TABLE 6-2: PUBLIC UNIVERSITY STUDENTS NUMBER BY STATE, 2006, 2007**

| | 2006 No. | 2007 No. | Per cent Change |
|---|---|---|---|
| New South Wales | 296,837 | 302,172 | 1.8 |
| Victoria | 249,179 | 258,092 | 3.6 |
| Queensland | 183,090 | 181,224 | -1.0 |
| Western Australia | 95,126 | 97,585 | 2.6 |
| South Australia | 68,118 | 70,260 | 3.1 |
| Tasmania | 18,719 | 19,437 | 3.8 |
| Northern Territory | 6,068 | 6,599 | 8.8 |
| Australian Capital Territory | 25,411 | 26,138 | 2.9 |
| Multi-State | 13,967 | 15,279 | 9.4 |
| Total | 956,515 | 976,786 | 2.1 |

Source: Higher Education Statistics 2007, Department of Education, Employment and Workplace Relations

Private providers of higher education generally grew at a much faster rate than the public university sector over the years 2006 to 2007, the only exception being the multi-state sector. The private sector grew from 27,500 to 53,060 students over the years 2006 to 2007, a growth rate of 92.6 per cent (See Table 6-3).

The highest growth among private providers was experienced in Victoria, with the sector increasing by almost 250 per cent—from around 2,500 to 8,750 enrolments. New South Wales increased by about 130 per cent, from 8,441 to 19,402 students attending private higher education providers. Tasmania also experienced a high level of growth, though from an extremely small base (40 students).

**TABLE 6-3: PRIVATE PROVIDERS* OF HIGHER EDUCATION STUDENT NUMBERS BY STATE, 2006, 2007**

| | 2006 No. | 2007 No. | Per cent Change |
|---|---|---|---|
| New South Wales | 8,441 | 19,402 | 129.9 |
| Victoria | 2,515 | 8,750 | 247.9 |
| Queensland | 6,946 | 11,038 | 58.9 |
| Western Australia | 5,758 | 8,582 | 49.0 |
| South Australia | 1,283 | 2,689 | 109.6 |
| Tasmania | 40 | 94 | 135.0 |
| Northern Territory | - | - | . |
| Australian Capital Territory | - | - | . |
| Muti-state | 2,563 | 2,505 | -2.3 |
| Total | 27,546 | 53,060 | 92.6 |

Source: Higher Education Statistics 2007, Department of Education, Employment and Workplace Relations

* Private providers include accredited providers of higher education other than those listed at Table A of the Higher Education Support Act 2003 (HESA). Higher Education Providers listed at Table A are referred to as "Public Universities".

## 6.2 AUSTRALIA'S VOCATIONAL EDUCATION AND TRAINING SECTOR

The VET sector in Australia comprises a diverse set of education providers including:

- Technical and Further Education (TAFE);
- universities;
- secondary schools;
- industry organisations;
- private enterprises;
- agricultural colleges;
- community education providers; and
- other government providers (NCVER 2008).

Australia-wide, 1.67 million students were enrolled in the VET government funded sector in 2007, a small decrease of 0.7 per cent over the previous year. Broadly in line with population shares, New South Wales has the largest VET sector with 549,000 students (33 per cent of the total), followed by Victoria with 472,900 (Table 6-4). Other than New South Wales and Queensland, all jurisdictions experienced growth in VET enrolments between 2006 and 2007.

**TABLE 6-4: VET STUDENT NUMBERS* BY STATE, 2006, 2007**

| | 2006 No. | 2007 No. | Per cent Change |
|---|---|---|---|
| New South Wales** | 565,300 | 549,000 | -2.9 |
| Victoria | 471,100 | 472,900 | 0.4 |
| Queensland | 293,300 | 287,100 | -2.1 |
| Western Australia | 121,700 | 123,000 | 1.1 |
| South Australia | 137,200 | 142,300 | 3.7 |
| Tasmania | 41,800 | 43,900 | 5.0 |
| Northern Territory | 21,900 | 22,800 | 4.1 |
| Australian Capital Territory | 23,600 | 24,000 | 1.7 |
| Total | 1,676,000 | 1,665,000 | -0.7 |

Source: Australian Vocational Education and Training Statistics: Students and Courses 2007, NCVER

** The decline in student numbers in New South Wales can be partly attributed to new and better defined exclusions from reporting scopes.

* Figures include TAFE and government providers, multi-sector higher education institutes, and community and private providers only.

Table 6-5 shows a breakdown of Australia's VET sector by type of provider. The TAFE and government sector is the largest VET provider, accounting for 79 per cent of student enrolments in 2007. 'Other registered providers' represented 10.7 per cent and community education providers a further 9.9 per cent.

**TABLE 6-5: VET SECTOR BY STUDENTS BY TYPE OF PROVIDER**

| | 2005 No. | 2006 No. | 2007 No. | 2007 Per cent | Per cent change |
|---|---|---|---|---|---|
| TAFE and other government providers | 1,267,163 | 1,325,072 | 1,312,836 | 78.8 | -0.9 |
| Community education providers* | 199,691 | 165,673 | 164,735 | 9.9 | -0.6 |
| Other registered providers | 177,462 | 178,749 | 178,844 | 10.7 | 0.1 |
| Students attending various providers | 6,444 | 6,470 | 8,603 | 0.5 | 33.0 |
| **Total students** | **1,650,760** | **1,675,964** | **1,665,018** | **100.0** | **-0.7** |

Source: NCVER Statistical tables

* Note that definitional changes may explain some movement of levels in the data.

## 6.3 PRIVATE EDUCATION SECTOR

Along with the higher education and VET sector there is also a private education sector that hosts international students in Australia (see Table 6-6). ACPET membership records indicate of the 1,093 registered members, a total of 660 provide educational services to international students.

Australia wide 60 per cent of ACPET members rely on international students for part of their enrolment intake. This figure is higher for NSW and Victorian providers, at 66 per cent and 63 per cent respectively.

**TABLE 6-6: PRIVATE EDUCATION PROVIDERS BY STATE, 2009**

| | NSW | VIC | QLD | SA | WA | ACT, NT, Tas | Total |
|---|---|---|---|---|---|---|---|
| International and domestic | 205 | 222 | 136 | 44 | 40 | 13 | 660 |
| Domestic students only | 104 | 127 | 95 | 38 | 46 | 23 | 433 |
| Total | 309 | 349 | 231 | 82 | 86 | 36 | 1,093 |

Source: The Australian Council for Private Education and Training

## 6.4 INTERNATIONAL STUDENTS

The number of international students attending Australian education institutions has increased sharply over the three years to 2008, growing from 380,000 in 2006 to 544,000 in 2008—an increase of 43 per cent (see Table 6-7).

International enrolments in VET have increased from 82,540 in 2006 to 175,461 in 2008—an increase of over 112 per cent, and approximately 27 per cent of the aggregate increase in international enrolments over this period. The number of students in English Language Intensive Courses for Overseas Students (ELICOS) has also grown markedly, increasing by 63.7 per cent over the same period.

**TABLE 6-7: INTERNATIONAL ENROLMENTS AND STUDENTS BY EDUCATION SECTOR, 2006 2008***

| | 2006 | 2007 | 2008 | Per cent growth (2006-2008) |
|---|---|---|---|---|
| **Enrolments** | | | | |
| ELICOS | 76,822 | 101,856 | 125,727 | 63.7 |
| Schools | 24,506 | 26,884 | 28,798 | 17.5 |
| VET | 82,543 | 119,836 | 175,461 | 112.6 |
| Higher Education | 169,710 | 174,577 | 182,770 | 7.7 |
| Other (Non-award courses, enabling courses) | 26,431 | 27,406 | 31,142 | 17.8 |
| **Total** | **380,012** | **450,559** | **543,898** | **43.1** |
| **Students** | | | | |
| ELICOS | 70,246 | 92,890 | 115,128 | 63.9 |
| Schools | 24,341 | 26,602 | 28,515 | 17.1 |
| VET | 74,552 | 107,066 | 151,258 | 102.9 |
| Higher Education | 164,237 | 168,052 | 176,161 | 7.3 |
| Other (Non-award courses, enabling courses) | 25,543 | 27,256 | 31,035 | 21.5 |
| **Total**** | **317,909** | **370,238** | **435,263** | **36.9** |

Source: Australian Education International

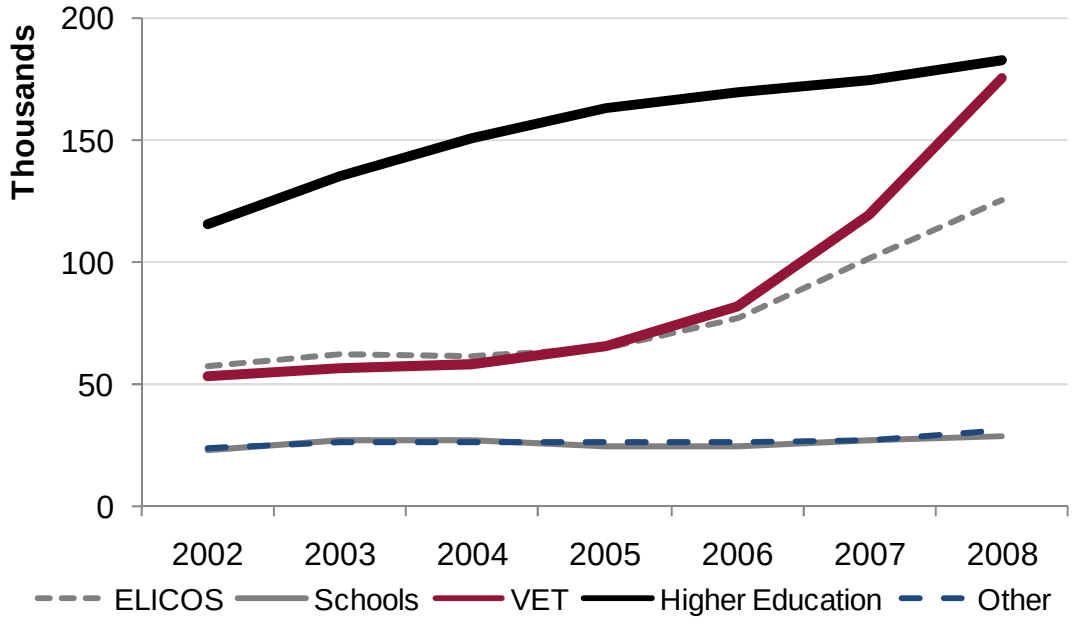
* Figures are year-to-date enrolments as at December

** Note, components do not add to total as students can study in more than one sector

The number of students in Australia over the period grew from 317,909 to 435,263; an increase of 36.9 per cent (see Table 6-7).

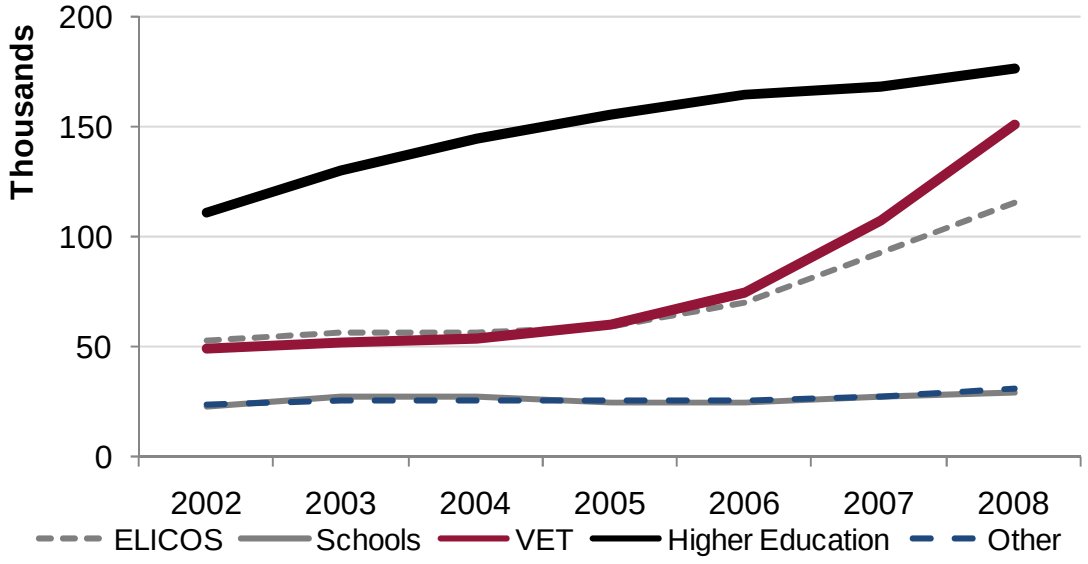
The lower rate of growth in higher education suggests that this sector has reached a mature growth phase compared with other sectors of the education market. This is confirmed by both enrolments in Figure 6-1 and student numbers in Figure 6-2, which shows a tapering off in growth in the higher education sector from around 2005 to 2008. Conversely, ELICOS and the VET sectors have experienced an upsurge in growth over the same period. Both the schools sector and 'other (including non-award)' have experienced relatively flat growth over the whole period.

**FIGURE 6-1: INTERNATIONAL ENROLMENTS BY EDUCATION SECTOR, 2002 TO 2008**




Source: Australian Education International

**FIGURE 6-2: INTERNATIONAL STUDENT NUMBERS* BY EDUCATION SECTOR, 2002 TO 2008**




Source: Australian Education International

## 6.5 PROVIDER TYPE

Over the period 2006 to 2008, international student enrolments grew by 43.1 per cent. The non-government education sector experienced a relatively large increase over this period, with enrolments expanding by 88.1 per cent. Enrolments in the government sector grew by a comparably slow 15.5 per cent (see Table 6-8). As at 2008 the non-government sector had slightly higher enrolments with 272,053 (compared with 271,845)

**TABLE 6-8: INTERNATIONAL STUDENT ENROLMENTS* BY SERVICE PROVIDER TYPE,** 2006 TO 2008**

| | 2006 | 2007 | 2008 | Per cent growth (2006-2008) |
|---|---|---|---|---|
| **Government** | | | | |
| ELICOS | 22,220 | 26,890 | 30,936 | 39.2 |
| Schools | 9,350 | 10,626 | 11,694 | 25.1 |
| VET | 18,054 | 23,261 | 27,930 | 54.7 |
| Higher Education | 165,160 | 169,587 | 177,038 | 7.2 |
| Other | 20,628 | 21,595 | 24,247 | 17.5 |
| **Total** | 235,412 | 251,959 | 271,845 | 15.5 |
| **Non-government** | | | | |
| ELICOS | 54,602 | 74,966 | 94,791 | 73.6 |
| Schools | 15,156 | 16,258 | 17,104 | 12.9 |
| VET | 64,489 | 96,575 | 147,531 | 128.8 |
| Higher Education | 4,550 | 4,990 | 5,732 | 26.0 |
| Other | 5,803 | 5,811 | 6,895 | 18.8 |
| **Total**** | 144,600 | 198,600 | 272,053 | 88.1 |

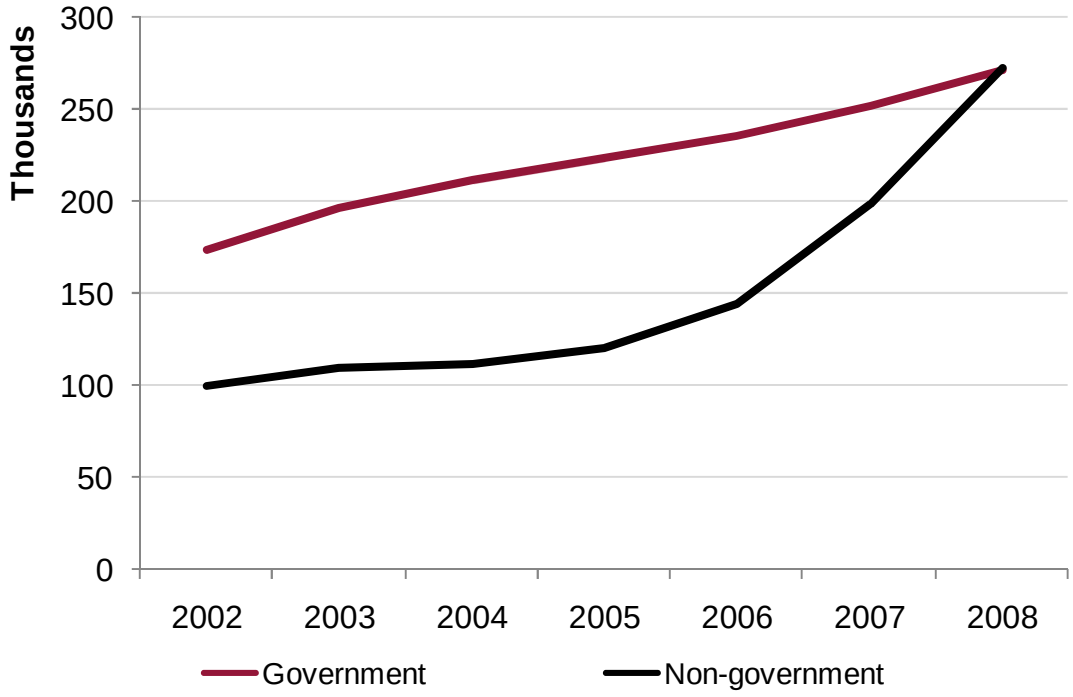
Source: Australian Education International Detailed Pivot Table

* Figures are year-to-date enrolments as at December

** Provider type is based on Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS)

The non-government sector has outpaced the government sector over a longer period of time also (Figure 6-3). Non-government sector enrolments have increased from about 100,000 in 2002 to 272,000 at 2008, government provider enrolments have increased from about 173,630 to 271,845.

**FIGURE 6-3: STUDENT ENROLMENTS BY SERVICE PROVIDER TYPE, 2002 – 2008**




Source: Australian Education International

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