

# Student mobility between Taiwan and Australia

## Challenges and opportunities





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The views expressed in this report are those of the author and do not express the views of the Department of Education, Employment and Workplace Relations or the Australian Government. All photographs (excepting those with the author in frame) were taken by the author.

#### **Explanatory notes**

- Any course fees and other financial data are as cited by institutions during the term of the project.
   Figures in New Taiwan Dollars are cited as NT\$. Any conversions to US and Australian currency were accurate at the time of writing.
- Links to internet resources were live at the time of publication.
- Taiwan education institutions generally adopt formal signage in English but with American spelling. This spelling is reproduced here (e.g. 'Center').
- References to seasons are in the context of the northern hemisphere where (for example) summer is across the months of June to August.
- The survey forms reproduced at Appendices 5 and 6 were developed as online forms for this project and are available on request should a researcher wish to replicate them.

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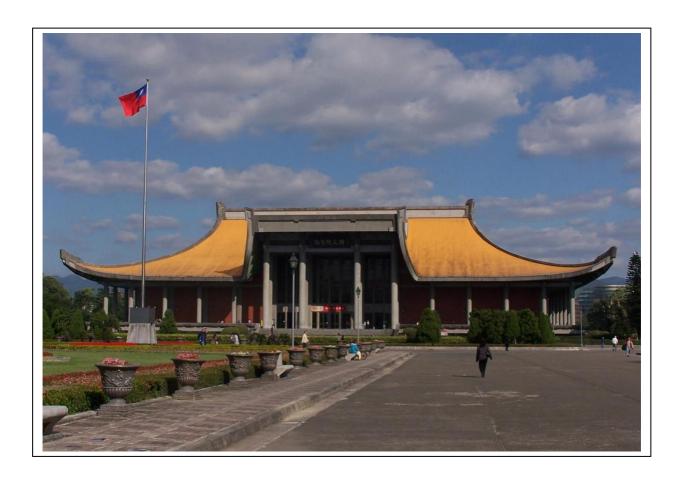
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## Student mobility between Taiwan and Australia Challenges and opportunities

A research project undertaken with a
Taiwan Research Visiting Scholar Grant
by
Steve Nerlich,
Director, International Research and Analysis Unit,
Australian Department of Education, Employment and Workplace Relations.

#### **Abstract**

International education in Taiwan and Australia offers two very different perspectives on student mobility. Significant proportions of Taiwanese students have sought education opportunities in other countries for many years, with a strong preference towards English speaking countries, including Australia. More recently, Taiwan has been seeking to develop its own international education industry, offering an increasing number of courses in English and the ability to learn Mandarin in a friendly, modern society with a unique culture. In contrast, while Australia is a world leader in the provision of international education, its own students are only just beginning to explore the opportunities of overseas study. This report seeks to highlight what Taiwan and Australia can learn from the other with respect to both outward and inward student mobility.



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#### **Executive Summary**

#### Purpose and approach

This report reviews the current status of student mobility between Taiwan and Australia and offers recommendations for further development of student mobility options in both directions. The report includes findings from a survey of Taiwanese students who studied in Australia and a survey of international students studying in Taiwan. A specific survey of Australian students was not considered due to the low numbers currently in Taiwan, though some were approached for face-to-face interview – as were a number of Taiwanese who had previously studied in Australia. The report is also informed by on-site interviews with a range of universities, vocational training providers and schools from across Taiwan.

#### Key findings

From a global perspective, Taiwanese students are relatively mobile with over 33,000 studying overseas in 2008, where the top 3 destinations chosen by students were (by order of volume) the USA, UK and Australia. The perception of Australia as a relatively safe, affordable and friendly English-speaking country has a significant influence on students' (and their families') choice of Australia as a study destination.

Australia has a sound reputation in Taiwan as a quality education provider. However, it is not apparent that elite students from Taiwan with grades sufficient to choose between highly ranked institutions in the USA or UK would be likely to consider Australian institutions. This may be due to a focus on institutional ranking above all else, something Australia may not be able to change in the near future. However, there is an opportunity for Australia to better articulate the expertise of its institutions in specialty areas to build 'niche' markets, something AEI Taipei has already commenced with demonstrable success.

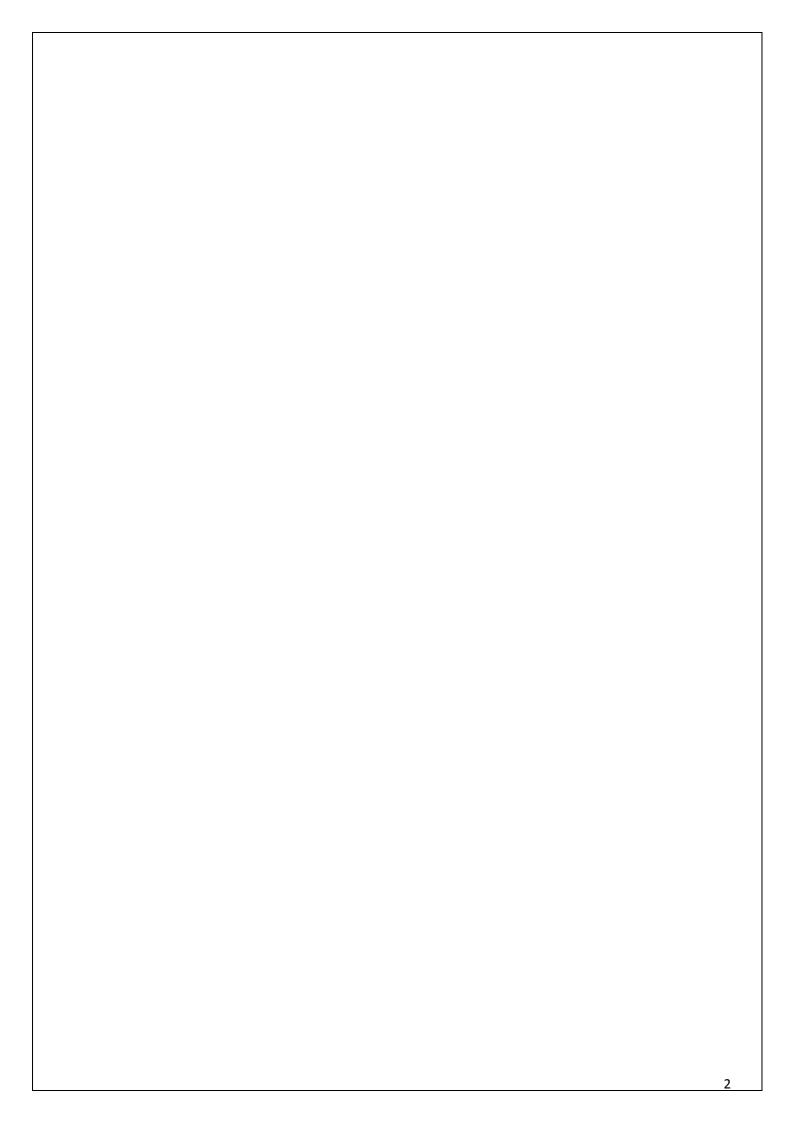
Though comprehensive data on Australian student mobility is not available, it seems clear that Australian students are much less internationally mobile than Taiwanese students. It may be that Australian students and their parents do not share the same perception of value of an international education experience compared with their contemporaries in Taiwan and elsewhere – or do not believe that the risks and expense of an international experience outweigh the potential benefits to be gained.

Australia's world-class education system is arguably a sound reason to stay on-shore and most English speaking countries have low rates of outward mobility, consistent with the view that learning English and gaining qualifications in an English speaking country are the primary drivers for global student mobility. Given this context, the current low level of Australians studying in Taiwan does not reflect a disinterest in Taiwan – rather a limited awareness of the value of *any* overseas study opportunity.

Nonetheless, the number of international education experiences reported by Australians is growing steadily. There is also a growing perception across the Australian community of the economic importance of our Asian trading partners – and consequently a growing interest in developing skills to work in Asia. The April 2009 announcement of the \$14.9 million Prime Minister's Asia Australia Endeavour Awards can also be expected to boost the outward mobility of Australian students in coming years. The announcement identified Taiwan as a priority destination for this scholarship program.

Developments to enhance student mobility from Australia to Taiwan should be informed by liaison across all relevant government department and stakeholders. This may include the involvement of Taiwan's Department of Technological and Vocational Education and the Council of Labour Affairs to create opportunities for Australian students to develop skills and gain work experience in Taiwan's high technology industries through internship arrangements.

Should Taiwan education providers seek to take advantage of a growing Australian interest in international education, they will need to work on raising the profile of Taiwan as a quality education destination. Its immediate attraction is likely to be as a place to learn Mandarin with a distinctive culture and a friendly, hospitable people. The academic strengths of its institutions in technology and Asian business studies – and opportunities to develop technical skills in Taiwan's high technology industries – will be of interest to Australian students, but marketing these strengths should be considered the next step after more collaborative efforts are made to raise awareness of Taiwan as an education destination.



Part 1: The Context of Student Mobility in Taiwan and Australia



#### **Key points:**

- Taiwan has a growing international education industry with approximately 20,000 full course and exchange students in 2007, around half of whom were also studying a Mandarin language course.
- Australia is a world leader in the provision of international education. In 2008, there were over 430,000 students studying in Australia on a student visa.
- In 2007, over 33,000 Taiwanese students travelled overseas for an international education experience. The most favoured destinations were English-speaking countries being the USA, the UK and Australia.
- Data regarding outwardly mobile Australian students is limited, though indicative of relatively low activity. In 2007, a survey of 37 universities found that around 9,500 students had an international experience during their course of study. Taiwan data indicates there were 167 Australians studying in Taiwan in 2007-08.

#### Introduction - Education systems in Taiwan and Australia

Taiwan and Australia have a number of common population characteristics. In 2008, the Australian population was over 21 million and the Taiwanese population was over 23 million. Taiwan has one of the highest population densities in the world (with a land area half the size of Tasmania). While Australia has one of the lowest by land area, it has a highly urbanised society with the large majority of its population concentrated in densely populated cities. In 2008, both countries had similar concerns regarding a declining population rate and its influence on long term labour supply and ongoing economic development.

Education pathways in both countries are similar with respect to duration and sector types. In Taiwan, a senior high school qualification can be obtained after 12 years of schooling, although in years 9 - 12 Taiwan students may choose either a standard senior school education to proceed to university or a vocational senior high school education to proceed to a technical college In Taiwan, an undergraduate university or technical qualification may take 4 years to complete, while in Australia a number of equivalent qualifications can be achieved within 3 years or less. The universities of both countries offer Masters (2 years) and PhD programs (4 years), although again Australia has more flexibility around course duration.

Both countries also have a strong focus on language education for international students with Australia offering a wide range of English Language Intensive Courses for Overseas Students (ELICOS) while Taiwan has many Mandarin language courses<sup>2</sup> (often with a cultural component to introduce students to particular aspects of Chinese culture, such as calligraphy or cooking). Most Mandarin language courses in Taiwan focus on reading and writing with traditional Chinese characters, rather than the simplified Chinese characters used (and taught) in mainland China.

#### Taiwan students - outward mobility

Taiwan has long had a focus on enabling the outward mobility of its students, reflected in statistics dating back to 1998, when over 26,000 students had applied for a student visa to study overseas. That number had increased to over 33,000 in 2007, although this is a decline since a peak of over 37,000 in 2006. Student exchange and dual degree programs, resulting in a qualification from a Taiwanese institution with international components, are very popular. However, Taiwanese international study experiences in Australia and elsewhere also frequently involve completing an entire course of study (up to 3 years or longer) to gain a qualification from an overseas institution.

There is an almost universal interest in learning English amongst Taiwanese students and their families. Many school students undertake evening courses in Buxiban (or 'cram schools') in addition to their normal schooling. Hence the chance to undertake a course of study in an English speaking country is a popular option for those who can afford it.

The choice of which English-speaking country to study in involves a balanced consideration of affordability and the academic reputation of the country and its institutions. The education agents, university and government personnel contacted during this project concurred that elite high performing Taiwanese students eligible for full scholarships were likely to choose the USA or UK over Australia – on the basis of reputation, but the next cohort of students whose academic performance was sound but who had not gained full scholarships, will choose to self-fund themselves through a quality course education and are likely to consider Australia an affordable, and cost-effective, option.

<sup>&</sup>lt;sup>1</sup> For more information on Taiwan's education sectors and pathways see: http://english.education.edu.tw/ct.asp?xltem=4133&CtNode=2348&mp=12

<sup>&</sup>lt;sup>2</sup> For more information on studying Mandarin in Taiwan go here: http://english.education.edu.tw/public/Data/79269451371.pdf?mp=12&bcsi\_scan\_6AC5834CDD560C4B=0&bcsi\_scan\_filename=79 269451371.pdf

<sup>&</sup>lt;sup>3</sup> Bureau of International Cultural and Educational Relations data collection, reported in *Education Statistics, The Republic of China (Taiwan) 2008 Edition.* 

<sup>&</sup>lt;sup>4</sup> Student exchange programs generally involve studying one or more units at an overseas institution which become components of a student's qualification conferred by their 'home' university. A dual degree program results in a student being awarded two degrees – one at their home institution and another overseas. An example of an Australian dual degree program is at: <a href="http://www.international.mg.edu.au/goingabroad/dual\_degree">http://www.international.mg.edu.au/goingabroad/dual\_degree</a>

The most popular international study destinations for Taiwanese students in 2007 were the USA, the UK and Australia. Total outwardly mobile student numbers had declined by 11% from 2006 (37,171) to 2007 (34,991) but increased again to 37,800 in 2008. The number of students going to Japan, the 4th most popular destination has been growing strongly in recent years. Japan's growing popularity may be due to a growing reputation in teaching English – as well as delivering a range of courses in English. Its strong historic linkages with Taiwan and its geographical proximity are also relevant.

#### Australian students – outward mobility

The outward mobility of Australian students is more difficult to quantify from the limited national level data available <sup>5</sup> The most recent national data on Australian student mobility comes from a survey of 37 Australian universities which showed that in 2007 over 8,000 Australian undergraduates (almost 6% of all completing students) and almost 1,500 postgraduate research students (almost 37% of all completing students) undertook an international study experience. The majority of these experiences involved a period of a semester or longer on a student exchange basis, which may include dual degree programs. Recent data from UNESCO<sup>6</sup> states about 1% of Australian tertiary students were outwardly mobile in 2006, compared with 1.2% of UK students and 0.3% of USA students.

No national level data about the outward mobility of Australian students for school or vocational education and training sectors were available at the time of writing this report. It is assumed that the volume and proportionality of outward student mobility is probably larger in higher education than these other sectors.

#### **Outward mobility data sources**

Taiwan's data regarding the number of Taiwanese students travelling outwards on student visas provides a useful benchmark allowing the Taiwanese Ministry of Education (MoE) to evaluate any initiatives aiming to enhance outward student mobility. New data items might include:

- Sector and level of study (e.g. university or school; undergraduate or postgraduate); and
- Students' funding source (e.g. full or partial scholarship, or self-funded).

Australia's national level data on outward mobility is largely limited to counting the number of Australian students enrolled in Australian universities who have an international experience during their course of study. At an institutional level this data is useful for evaluating any initiatives aiming to enhance outward mobility. All Taiwan institutions contacted during this research project also collected data of this nature.

Nonetheless, this institutional level data does not provide a comprehensive picture even for the Australian university sector as there may be a number of students who choose to enrol directly in an overseas institution with the intention of completing a qualification at that institution. The lack of a national comprehensive data source limits the capacity of the Australian Government to evaluate any initiatives it may undertake to enhance outward student mobility. A survey-based approach about Australian student mobility could be enhanced by collecting data on:

- More detailed data categories (e.g. exchange or dual degree; scholarship or self-funded); and
- Destination countries involved.

#### **Inward mobility - Taiwan**

All Taiwanese teaching institutions contacted during this project were able to provide data on the number of international students studying at their institutions. This data is also collected at a national level and reported in aggregate form In 2007-08, there were approximately 18,000 international students studying in Taiwan, being 15,436 degree level and language study students and over 2,300 exchange program students. Of all these students, over 10,000 were studying Mandarin either as a stand-alone course or a component of an integrated course of study. For the degree level students, the most popular fields of study were Business Administration and Engineering.

 $<sup>^{\</sup>rm 5}$  AEI working towards better supporting and evaluating student outward mobility – see http://www.isana.org.au/files/2008%20Conference%20Proceedings/paper\_Pasfield.pdf

United Nations Educational, Scientific and Cultural Organization (UNESCO) Global Education Digest. See Table 10 from p120 at:http://unesdoc.unesco.org/images/0017/001787/178740e.pdf

Published in Education Statistics, The Republic of China (Taiwan) 2008 Edition and online at http://english.moe.gov.tw/lp.asp?CtNode=1184&CtUnit=415&BaseDSD=7&mp=1

8 2007-08 figure was not available at time of writing

By volume, the largest source countries for degree level and language study courses were Japan (2,297), USA (1,866), Indonesia (1,658) and South Korea (1,505) – with over two thirds of students from each country studying Mandarin. The largest source countries for exchange students were Japan, South Korea, USA and Germany. There were only 167 Australian students in Taiwan in 2007-08, 140 of whom were studying Mandarin courses. MoE statistics did not include a count of international students in Taiwan schools. During this project, it was apparent some Taiwanese schools were operating short term international exchange programs, as well as having long term students who were foreign nationals (generally the children of foreign nationals working in Taiwan under temporary residency arrangements).

#### **Inward mobility - Australia**

Australia requires all providers of registered courses for international students to contribute activity data under Australia's Education Services for Overseas Students (ESOS) Act 2000.9 This data provides detailed statistics about all international students studying in Australia on a student visa. <sup>10</sup> In 2008, there were over 430,000 students studying in Australia generating over 540,000 enrolments (as a number of students may enrol in more than 1 course during a year). A figure for exchange program students is not available from this data source and international students are only counted in this dataset if they entered Australia on a student visa, which is only required when their course duration is 3 months or more.

ELICOS courses in Australia are popular with around 100,000 enrolments, but many more students were studying in the higher education and VET sectors (see Appendix 1). In 2008, the most popular fields of education after ELICOS were Hospitality Management, Accounting, Management/Commerce and Business Management. In 2008, Australia's largest source nationalities were India, China, South Korea, Thailand and Malaysia.

In 2008, Australia had over 27,000 school enrolments by international students on a student visa. The majority of these students were in Australia in home stay or boarding arrangements and were studying towards completing an Australian school qualification. The largest source countries were China, South Korea, Vietnam and Hong Kong.

#### **Conclusions**

Both education institutions and governments in Australia and Taiwan express a strong interest in international education and articulate its benefits in terms of enhancing students' communication skills and developing a global awareness - as well as offering education and skills development opportunities not available at home.

Taiwan has had a focus on outward student mobility for many years and the importance of an international education experience, particularly where this is linked to developing English language proficiency, is acknowledged across the community. Taiwan has also been relatively successful in attracting international students, notably from the Asian region and the USA. A growth rate of 22.5% in student numbers from 2006 to 2007 indicates that Taiwan is gaining ground in the increasingly competitive international education industry.

Australia is currently one of the top global providers of international education (including delivery of a range of education services off-shore) with a current on-shore growth rate in enrolments of around 20% from 2007 to 2008. While Taiwan's focus is on achieving rapid growth of incoming students from a relatively small base, Australia's focus is increasingly towards sustainability, with consideration of the quality and diversity of the education services it delivers.

The Australian Government and individual education institutions support outward student mobility through provision of a range of scholarships and exchange programs. An analysis of the extent of Australian outward student mobility is hampered by a lack of data, however the figures available suggest activity is relatively low in volume, though growing.

<sup>9</sup> http://aei.gov.au/AEI/ESOS/ESOSLegislation/default.htm

http://aei.gov.au/AEI/MIP/Statistics/Default.htm

Part 2: The organisations, infrastructure and relationships that support student mobility.



#### **Key points:**

- The Taiwanese and Australian Governments are committed to welcoming international students to their shores, while also encouraging students of their own countries to seek an international education experience offshore.
- Taiwan's universities offer a wide range of opportunities for Australian students, including Mandarin language courses, full undergraduate and postgraduate degree courses delivered in English, student exchange programs and dual degree programs.
- Taiwan's universities of technology and vocational training institutions, with their industry-driven curricula and interconnections with Taiwan's science parks, offer opportunities for Australian students to develop technical and research skills in Taiwan's high technology industries.
- There is a small, but strategically important, level of student exchange taking place between some Taiwanese and Queensland schools. Ongoing success in this area will ensure there are a growing number of Australian student and parent advocates for study in Taiwan.

#### Introduction

This section outlines and compares strategies used by the Australian and Taiwanese Governments to encourage bilateral student mobility.

Opportunities for international students, including Australians, to study in Taiwan are also outlined as are opportunities for teacher exchange (including both language and school teachers). Taiwan also encourages professorial and research exchange – although these areas were outside the scope of this project. As well as having its own resources to encourage inward mobility of international students, the Australian Government has established the *Study Overseas* website to encourage greater outward mobility of Australian students. <sup>11</sup> The AEI Taipei team are working to establish a Study in Taiwan page for this website.

#### Taiwan – Onshore and offshore representation and marketing strategies

Ministry of Education and Bureau of International Cultural and Educational Relations

The Republic of China (Taiwan) Ministry of Education (MOE) states that international, academic and cultural exchanges are effective ways for promoting understanding in peoples of different nations. The MOE considers these exchanges are vital to cultivating education, which serves as the foundation of any nation, and in producing educated individuals, who are the cornerstone of national development.

The MOE established the Bureau of International Cultural and Educational Relations (BICER) in 1947 to promote academic and cultural exchanges at both the domestic and international levels. Since its establishment, BICER has set up 22 overseas service offices and two special representatives were appointed to help achieve the MOE's global objectives.

To promote international cultural and educational collaboration, BICER assists colleges and universities to enter into academic cooperation with other foreign institutions of higher learning. BICER also sponsors international scholar exchange programs, organises bilateral conferences on higher education and encourages Taiwanese specialists, academics and doctoral students to participate in international academic conferences abroad.

The MOE publishes useful information on student visa requirements, highlights Taiwan's strengths in the delivery of Mandarin language courses <sup>12</sup> and provides information on scholarships available to international students <sup>13</sup>

These resources include the *Study in Taiwan* website for international students. <sup>14</sup> It includes general information on studying and living in Taiwan, as well as Mandarin and full degree programs.



www.studyoverseas.gov.au

http://english.moe.gov.tw/ct.asp?xItem=8010&CtNode=3892&mp=1

http://english.moe.gov.tw/ct.asp?xltem=6798&CtNode=10632&mp=1

http://www.studyintaiwan.org/

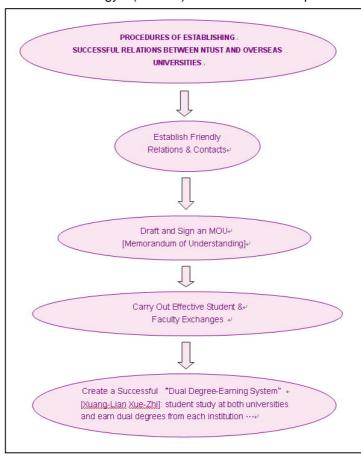
#### Taipei Economic and Cultural Office in Australia (TECO)

TECO was established in Canberra in 1992. Then in 1994, the Cultural Division was established with a mission to facilitate interaction and cooperation between Taiwan and Australia in education, culture, and sport. The Cultural Division supports Taiwanese students in Australia and provides information on Taiwanese educational institutions for Australian students who are interested in studying in Taiwan. There is useful 'Study in Taiwan' information specifically for outwardly mobile Australian students who may be considering studying in Taiwan, including scholarships <sup>15</sup> Mandarin study opportunities and study tours for schools. <sup>16</sup>

#### Opportunities for international students in Taiwan

#### Universities

Many of Taiwan's universities run Mandarin courses which may articulate to ongoing studies in other disciplines and many offer an increasing number of courses in English (see Appendix 2). Many universities in Taiwan are pursuing an internationalisation agenda, where a key objective is to establish Memorandums of Understanding (MoU) with overseas universities. An outline of National Taiwan University of Science and Technology's (NTUST) internationalisation plan is below.



Some Australian academics and personnel at the American Institute in Taiwan (AIT) commented that there was a risk of some Taiwan universities pursuing an MoU as an outcome in itself without dedicating adequate personnel and resources to enable the objectives of these agreements to be fulfilled in the longer term. A presentation given by AIT noted that, where Taiwan and US bilateral student mobility had been established between 'sister' universities, this was the result of both organisations committing to a long term plan and ensuring they maintained the capacity to achieve a set of agreed objectives.

http://www.cultural.teco.org.au/2005/latest/scholarship\_01\_first.htm

http://www.cultural.teco.org.au/2005/latest/studytw\_first.htm

A number of Taiwanese academic commented that MoUs established with Australian universities had mixed success. In some cases exchange programs involved an uneven balance of bilateral mobility with many more Taiwan students going to Australia than Australian students coming to Taiwan. The lack of full reciprocation in Australian student mobility to Taiwan is partly a result of a low incidence of Australians studying anywhere overseas, but may also be a lack of awareness of the opportunities available for study in Taiwan – as well as a lack of awareness of the Taiwan's general context and environment, in comparison to other more familiar Asian travel destinations such as Japan or Korea.

#### Universities of Technology and Vocational Training Opportunities

While many of Taiwan's universities of technology offer a wide range of courses, including Mandarin language courses, they are considered in this section along with Taiwan's vocational training institutions due to their capacity to provide a connection with Taiwan's successful high technology industries.

Taiwan has 3 major science parks – Hsinchu Science Park, Central Taiwan Science Park, and Southern Taiwan Science Park – which provide a dedicated environment for high technology industry development. They are situated away from residential areas but close enough to supply a workforce and associated infrastructure. Each park is well serviced by utilities for the industries and their employees, including schools. Many of Taiwan's universities and vocational training centres have close associations with the science parks providing research expertise and skilled graduates for the workforce.

Hsinchu Science Park was visited during this project. Established in 1980 as a focus of industry and innovation, it is referred to as 'Taiwan's silicon valley' and accounted for 5% of Taiwan's total gross domestic product in 2007. The science park encompasses 379 domestic and 65 foreign companies and employs over 130,000 people, many of whom are recruited from local universities and vocational training institutions, in addition to a large number of overseas employees.<sup>17</sup>

Taiwan science parks are part of a wider network of over 80 industrial parks distributed across the island to support industrial production and development. <sup>18</sup> Taiwan's Export Processing Zones are also key to Taiwan's economy, supporting logistics and distribution, for its high technology industries. <sup>19</sup>

The universities of technology visited during this project had good facilities for innovative development of integrated circuits and other information technologies, including mobile telephony and wireless communication. Other areas of strength include nanotechnology, biotechnology, green technology (including solar cell development) and aquaculture. These institutions have been demonstrably successful in research and development, as indicated by an impressive number of patents achieved year by year (over 49,000 across Taiwan in 2007).

While Taiwan has the potential to offer Australian students an opportunity to develop research or vocational skills in high technology industries, for this to become a reality there will need to be support available for Australians with limited Mandarin language proficiency to usefully engage with others in the workplace. There would also need to be arrangements in place to ensure a qualification gained by an Australian in Taiwan was recognised both in Australia and other major international employment markets.

The attraction of an industrial research or vocational training experience in Taiwan is likely to be enhanced with an opportunity to gain paid employment, under an internship or apprenticeship arrangement. A Taiwan student visa is currently limited to allowing a student to work only 6 hours per week and only from the second year of studying in Taiwan.

#### Schools

As further discussed in Part 3 of this report, a number of schools in Taiwan visited during this project had established their own exchange programs with schools in Queensland. Queensland has the highest concentration of Taiwanese students and migrants of any state in Australia. Although these were very recent developments, it is likely this will lead to a greater awareness of Taiwan's cultural richness and its potential as an education destination in the minds of the parents and students involved.

For more information, go to: <a href="http://investintaiwan.nat.gov.tw/en/env/infr/land/epz.html">http://investintaiwan.nat.gov.tw/en/env/infr/land/epz.html</a>

<sup>&</sup>lt;sup>17</sup> For more information, go to: <u>www.sipa.gov.tw</u>

A map of all industrial parks is at: <a href="http://investintaiwan.nat.gov.tw/en/env/infr/land/industrial">http://investintaiwan.nat.gov.tw/en/env/infr/land/industrial</a> parks map.html#hsinchu\_county

Taiwan's recently announced Secondary School Exchange International program offers a short or longer term overseas study opportunity for Australian high school students<sup>20</sup>. Under the program Taiwan's secondary schools invite students, ages 15-18, from overseas senior high schools to visit and study in Taiwan. This may involve a short-term visit of two weeks or longer-term visits ranging from one semester to an academic year. Students are offered a combination of workshops, classroom and online learning, Chinese language and cultural experiences, and skills exchange. Overseas participants only pay for extraneous costs such as airfare, transportation in Taiwan, food and accommodation.

#### Teacher mobility and exchange

During the project, a number of Australian teachers were interviewed and all indicated they had secured employment in Taiwan relatively easily, including obtaining an Alien Residency Certificate (ARC). Some were teaching a full curriculum in an international or bilingual school (i.e. different classes, but all delivered in English), while other were specifically teaching English language courses. Their comments on teaching opportunities in Taiwan included:

- · Remuneration was very good;
- Taiwan is a pleasant environment to work in, being a safe place to live with modern infrastructure;
- Employers expected a person to remain in a job for at least 1 year;
- Obtaining a job (and an ARC) was easy for a graduate (but might be difficult for others);
- Renewing an ARC was more problematic, requiring the applicant to leave Taiwan and re-apply off-shore (e.g. from Hong Kong); and
- The exchange rate for Australian dollars was better in Taiwan than in mainland China.

Most Australians teachers interviewed had plans to work in Taiwan for 1-2 years, though some had been there for more than 10 years and had established families (and their children were attending international or bilingual schools in Taiwan).

One Taiwanese university contacted during this project noted that it had sought to establish a language teacher exchange program with an Australian university but was unable to finalise this arrangement. It may be that Australian universities need to be convinced that there is benefit of hosting a language teacher within their institution for a short period only. Australian institutions may also be uncertain if they can encourage a sufficient number of Australian teachers to travel to Taiwan in order that such an exchange arrangement can be fully reciprocal.

#### Working holiday visa

Like Australia, Taiwan offers a working holiday visa for temporary visitors who may wish to obtain casual employment while in Taiwan for a brief period – an opportunity that could be combined with a short term Mandarin language course.<sup>21</sup>



http://www.exchange.edu.tw

http://www.workingholidaytaiwan.org.tw/

#### Australia – Onshore and offshore representation and marketing strategies

#### The Department of Education, Employment and Workplace Relations

The Department, through its international arm Australian Education International (AEI), is dedicated to the internationalisation of education with has an emphasis on quality assurance procedures to ensure that all sectors of the Australian international education and training system are recognised as providers of a quality education experience. AEI, through its international network of education counsellors, engages in government to government relations, provides market research and a policy framework to support the operation of the Australian international education industry. AEI seeks to enable the recognition of Australian qualifications and skills overseas, as well as encouraging the recognition by Australian employers of qualifications and skills gained offshore.<sup>22</sup>

AEI publishes the *Study in Australia* website for all international students<sup>23</sup> The website includes detailed information on university, ELICOS, schools and VET courses, student visas, scholarships and the costs of living and studying in Australia.



Australia offers over 700 different scholarships for international students which can be searched by topic, institution, location and sector from the Study in Australia scholarships database <sup>24</sup> The database includes Australian Government scholarships (such as the Endeavour awards) available to students from Asia Pacific and other participating countries, as well as for Australians wishing to study overseas. <sup>25</sup>

Detailed information on study abroad and student exchange programs is also available. <sup>26</sup> AEI publishes a set of Country Education Profiles<sup>27</sup> to subscribers, who may include educational institutions, government agencies and employers. AEI also has summarised information about the range of visas available to students<sup>28</sup> as the information becomes available from the Department of Immigration and Citizenship.

<sup>&</sup>lt;sup>22</sup> http://aei.gov.au/AEI/QualificationsRecognition/Default.htm

<sup>23</sup> http://www.studyinaustralia.gov.au/

http://www.studyinaustralia.gov.au/Sia/en/CourseSearch/ScholarshipSearch.htm

http://www.australianscholarships.gov.au/

http://www.studiesinaustralia.com/study\_abroad\_and\_student\_exchange

http://www.aei.gov.au/AEI/QualificationsRecognition/Information/CEP.htm

http://aei.gov.au/AEI/GovernmentActivities/Visalssues/StudentVisaProgram/Default.htm

#### AEI Taipei (Australian Commerce and Industry Office)

AEI Taipei, also known locally as the Australian Education Centre (AEC) is part of the Australian Commerce and Industry Office (ACIO) which represents the interests of Australia in Taiwan. AEI Taipei provides free information and advice to Taiwanese students seeking to study in Australia, as well as supporting the inward mobility of Australian students.

AEI Taipei publishes a website for outwardly mobile Taiwanese students considering study in Australia<sup>29</sup> and a website with information on Australia's Endeavour Award scholarships (in Mandarin).<sup>30</sup> The website also includes advice to Australians interested in studying in Taiwan (in English) – with a link to the Ministry of Education's *Study in Taiwan* page. AEI Taipei has been very successful in promoting Endeavour award scholarships. To date, over 25 Taiwanese have receiving an award, equating to research and study funding of almost \$1.1 million AUD.

AEI Taipei also supports the Taiwan Australia Alumni Association (TAAA), including hosting a TAAA website (in Mandarin) and organising regular social and academic events. AEI Taipei hosts regular delegations of specialist researchers. For example, an academic delegation of marine biologists and aquaculture experts visited Taiwan during the course of this project, led by Dr Joseph Baker.<sup>31</sup>

To attract a higher number of speciality degree and postgraduate students to Australia, AEI Taipei has developed a DVD showcasing Australia's research strengths and its Nobel prize winners in areas such as medical research and immunology. AEI Taipei has also recently produced a new DVD focusing on student mobility to Australia, with a focus on the experiences of Taiwanese higher education students. The DVD covers university life, ELICOS course opportunities, homestay and lifestyle.

AEI Taipei also routinely offers:

- a regular information service to potential students who are considering studying in Australia;
- an face-to-face consultation service for any potential students visiting the office;
- formal training sessions for education agents operating in Taiwan, including an exam which, if passed, results in that agent being listed on AEI Taipei's website.
- support for the TAAA (with 1,300 members), who are strong advocates for Study in Australia.
- dedicated marketing events including the Australian Schools Exhibition, the Working Holiday Maker Exhibition and Study in Australia.

The presence of education agents in Taiwan is a significant contribution to overall international student recruitment for Australia. AEI Taipei's support through awareness raising and information exchange helps these agents to market Study in Australia.

#### **Education agents**

Education agents are not linked to government, but play a key role in the marketing of Australian study opportunities and recruitment of Taiwan students to Australia. During this project Academia Asia and JRIS consulting were interviewed. Their comments have been aggregated below to give a general picture of student mobility from an education agents' perspective.

These agencies reported that postgraduates (principally Masters candidates) were over 50% of their clients that showed an interest in studying in Australia. The remainder were mainly undergraduates, with a small number of VET students who commonly chose cooking or hospitality courses and were interested in gaining permanent residency in Australia. VET students did not normally require support from an agent.

Generally Taiwan students either know which course – or which university – they want. Through discussion of their particular interests, the agent helps them make a best match of university and course. Student choices of country, university and course are strongly driven by word-of-mouth and are often driven by what their parents hear. At least 60% of the agencies' student clients come from recommendations or referrals.

www.australianscholarships.org.tw

<sup>29</sup> http://www.aec.org.tw/

https://www.amsa.asn.au/about/councillor\_profiles/baker\_joe.php

The other 40% are probably driven by the following activities, although each has its limitations as noted:

- Exhibitions by Austrade, although students rarely 'sign up' at these exhibitions.
- Internet, although this is not considered to be effective on its own as it doesn't engender trust.
- Newspaper advertisements are not successful, but advertisements in professional magazines (e.g. nurses journal; career magazines) can be effective.

The agents do not generally promote Australian undergraduate scholarships as they feel it would raise false hopes of success in a very competitive field. Taiwan students of a calibre to be competitive in gaining an Australian scholarship are more likely to pursue a study experience in the USA or the UK and are more likely to directly engage with the universities or agencies offering those scholarships, rather than working through agents.

An agency may successfully place around 10 PhD students in Australia annually (with around 20 enquiries being managed concurrently). Having ascertained a student's research interests, an agent can search websites – or approach known contacts to forward project proposals to a potential supervisor – and work with a university to further improve the proposal before submitting it as a formal application.

The agents noted their relationship with AEI Tapei was very constructive. AEI Tapei hosts regular meetings and provides regular email updates on current trends and issues. AEI Taipei also provides Agent Training for one full day every September.

This is followed by an exam (with an approximately 80% pass rate). AEI Taipei then publish a list of agents who have passed on its website. The agents find that being able to note that they are on that list helps to gain a client's confidence.

Some key selling points for studying in Australia (from a Taiwanese agent's perspective) are:

- Australian courses are often streamlined, so there is less overall course duration to gain an equivalent qualification from Australia
- Good ranking of Australian universities. Agents can sell a higher ranking entry to an Australian university over entry to a lower ranked US university.
- Australia's online application systems are very good can get approval within 3 days.
- The 20 hours per week employment allowed by an Australian student visa is highly valued. While the UK has a similar opportunity in the USA and Canada, students can only work on campus.
- Lower cost current exchange rate makes Australia more attractive.
- A more streamlined process to obtain a student visa (e.g. the USA requires all international students to sit an exam).
- More flexible timeframes e.g. there can be 2-3 course intakes per year.

#### **Support for outward Australian student mobility**

The Australian Government provides over \$4.9 million per year to support undergraduate outbound student exchange through the Endeavour Student Exchange Program, Australian University Mobility in Asia and the Pacific (UMAP) and the Endeavour Cheung Kong Student Exchange Programs.<sup>32</sup>

In April 2009, the Government committed \$14.9 million to the Prime Minister's Australia Asia Endeavour Awards to support Australian university students for up to one year of study, which can be followed by an internship or work placement in Asia. Taiwan is identified as a priority destination for these scholarships.<sup>33</sup>

To develop Australian students' interest in studying overseas, DEEWR also publishes a *Study Overseas* website. <sup>34</sup>

The website includes resources to help students identify an appropriate location, as well as guidance regarding the administrative, health and other matters to consider and a guide to the financial assistance that may be available (including scholarships).

http://www.studyoverseas.gov.au/

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<sup>&</sup>lt;sup>32</sup> More information is available from the Endeavour Awards website.

http://www.deewr.gov.au/Ministers/Gillard/Media/Releases/Pages/Article\_090423\_092319.aspx



AEI Taipei is expecting to develop the first location-specific page on *Study Overseas* being a page about studying in Taiwan. It is anticipated this will include:

- Current international student numbers and study opportunities available;
- Popular Mandarin courses and a list of courses delivered in English:
- Taiwan's top universities, vocational training institutions and schools;
- Scholarship opportunities, courses and application procedures;
- Links for institutions interested in student exchange;
- Links for academics, researchers and teachers;
- Visa types and application procedures;
- Information about cost of living in Taiwan and how to find accommodation;
- Testimonials from past students; and
- Contacts (e.g. TECO; ACIO; Endeavour scholarships).

AEI Taipei works to encourage the outbound mobility of Australian students to Taiwan and has its own *Study in Taiwan* website. <sup>35</sup> Currently, the website features interviews with Australian students who have studied in Taiwan and there are plans to add more relevant content in the future.

AEI Taipei also announces relevant onshore activities in Taiwan (through the AEI e-newsletter), for example an opportunity for Australians to participate in the YODEX (Young Designers' Exhibition). This event is held annually in Taipei and is considered to be Asia's largest student design fair.

The Department of Education, Employment and Workplace Relations also offers OS-HELP, a loan scheme to assist eligible Australian undergraduate students to undertake overseas study as a component of an Australian qualification they are enrolled in. <sup>36</sup>

<sup>35</sup> http://www.aec.org.tw/stady.asp

http://www.goingtouni.gov.au/Main/Quickfind/StudyOverseas/OSHELP.htm

#### **USA** –Taiwan student mobility (a comparative benchmark)

TECO in Australia, suggested this project also explore the current success of bilateral student mobility between the USA and Taiwan, and consider what Australia might learn from this.

In 2007, Taiwan was the USA's fifth source country for international students (29,094 students)<sup>37</sup> while the USA is Taiwan's second largest source country (1,866 students in 2007-08)<sup>38</sup> with 81% attending a Mandarin Language centre. For comparison, there were 167 Australian students in Taiwan in 2007-08, with 93% attending a Mandarin Language centre.

The *Open Doors 2008* report states that in the academic year 2006/2007, 241,791 U.S. students studied abroad, an increase of 8.5% from the previous year – with an increase of 4% in outwardly mobile students choosing to study in Taiwan.

The American Institute in Taiwan (AIT) cited the Open Doors report press release <sup>39</sup> which indicates that the USA's recent growth in outward student mobility can be attributed to:

- increasing numbers of Fulbright and Gilman scholarships for USA grantees;
- increase in program opportunities overseas;
- increases in partnerships between higher education institutions in the USA and abroad; and
- a range of fields and programs to accommodate the needs of USA students.

With regard to Taiwan specifically, AIT noted the strong historical ties between the USA and Taiwan, the USA highly ranked universities and very active alumni promoting Taiwan as a study destination.

On a per capita basis, the number of Australians studying in Taiwan is roughly equivalent to the number of US students (where the population of the USA is around 14 times the size of Australia's). However, the US students show a greater tendency towards study opportunities other than Mandarin language courses.

Currently, the Australian Government's Endeavour scholarship program is under subscribed suggesting that access to scholarships to study overseas is not a limiting factor to Australia's anecdotally low rate of outward student mobility.

Nonetheless, like the USA, Australia's universities have shown a steady growth in the number of agreements with overseas universities. A 2007 survey by Universities Australia found that there were over 5,000 formal agreements established between Australian and overseas universities, most of which had student exchange and academic research collaboration components, with a lesser proportion also having study abroad or staff exchange arrangements. 40

This was an increase of 15% over the number recorded in a previous survey conducted in 2003. Around 45% of these agreements were with Asian countries and there were 70 active agreements between Australian and Taiwan universities in 2007.

http://opendoors.iienetwork.org/?p=113743

<sup>&</sup>lt;sup>38</sup> Published in Education Statistics, The Republic of China (Taiwan) 2008 Edition and online at http://english.moe.gov.tw/lp.asp?CtNode=1184&CtUnit=415&BaseDSD=7&mp=1

http://opendoors.iienetwork.org/?p=113743

http://www.universitiesaustralia.edu.au/content.asp?page=/policies\_programs/international/activities/index.htm

Part 3: Interviews with educational institutions in Taiwan



#### **Key points:**

- Taiwanese universities are becoming increasingly internationalised with many offering courses
  delivered in English to attract Taiwanese and other Asian students who might otherwise consider
  travel to an English speaking country.
- Taiwan's unique network of science and industrial parks, with close links to local universities, offer opportunities for Australian students to develop skills and experience in high technology industries.
- International and bilingual schools in Taiwan are increasingly adopting the International Baccalaureate Program to remain competitive within the Asian education marketplace.
- Exchange programs between Australian and Taiwan universities and a small number of schools

   represent a potential area of growth in bilateral student mobility. However, gaining a reciprocal flow of Australian students to Taiwan remains a challenge.

#### Introduction

The following section represents findings from institution visits carried out during the term of this project. The outline of each institution highlights particular issues and features raised by institution representatives during meetings. The author acknowledges the following narrative is not a comprehensive description of all services offered by each institution and there is no intention to compare or rank the institutions' services here. It is intended that this section highlights the range of different features of Taiwanese educational institutions, as well as opportunities and support services available to international students considering study in Taiwan.

The visits focused on a range of universities in and out of Taipei with either, developing or well-established, international connections, including student and academic exchange programs. These included two universities of technology which had close links with industry. A meeting with one VET institution with an international exchange program was also undertaken. Visits to a number of schools in and out of Taipei were also undertaken to discuss the potential for student and teacher mobility between Australia and Taiwan.

#### Universities in Taipei

#### National Taiwan University

National Taiwan University (NTU) is Taiwan's largest and highest ranked university. In 2008 it was 164<sup>th</sup> in the Shanghai Jiao Tong (SJT) rankings (the highest of any university in China, Taiwan or Hong Kong). In accordance with Taiwan's *Aim for Top University Program*, NTU has been successfully climbing the SJT rankings from 181st in 2006 to 172nd in 2007.

In 2008, there were over 33,000 students, including 909 PhD students. The university has several campuses across Taiwan as well as its main centre in Taipei. Its alumni include 1 Nobel Prize winner and 91 Academia Sinica 42 fellows. The university also has a small number of Australian faculty staff.



<sup>&</sup>lt;sup>41</sup> Lee Yuan-Tseh. Born in Hsinchu in 1936, he gained a bachelor degree at National Taiwan University; a Masters at National Tsinghua University and a PhD at the University of California (Berkeley). He received a Nobel Prize in Chemistry in 1986.

<sup>&</sup>lt;sup>42</sup> Taiwan's national academy covering three major academic divisions: 1) mathematics and physical sciences; 2) life sciences; and 3) humanities and social sciences.

International students at National Taiwan University:

In 2008, NTU had 2,109 international students (about 6% of the total student population). NTU teaches 599 of its courses in English (excluding courses in English language). The majority of students are from the Asian region, but many such students (e.g. students from Japan) who may be more fluent in English than Mandarin, choose to study a course delivered in English for this reason.

Otherwise the most common source country for students who speak English as their first language is the USA. In 2008, NTU also offered 17 dual degree programs and had 47 dual degree students in that year.

In 2008, NTU had student exchange programs operating with 109 'sister' universities, including ten Australian universities listed below. (The six asterixed had active student exchange programs for Spring 2008):

- Australian National University\*
- Deakin University\*
- Griffith University\*
- Macquarie University\*
- The University of Adelaide
- University of Melbourne\*
- University of New South Wales\*
- University of South Australia
- University of Sydney
- University of Western Australia.

#### Chinese Language Division, Language Center, National Taiwan University

The Language Center offers regular courses and tailored course for exchange students, as well as the International Chinese Language Program, available for external students at basic and intensive levels.

Costs are of the order of 180 hours for NT \$35,000 (around US \$1,000) with 3 intakes per year – or a 150 hour program in December-February for NT \$29,100 (around US \$850). Class sizes were generally 4-6 students only, where classes can be tailor made to suit current proficiency and need.

For 2008, the centre had about 200 students (around 70 per intake), their student mix was reported as: 50% Asia, 18% America, 16% Europe, 10% Australia, 3% Africa, 3% Oceania (ex-Australia).

The centre also offers 'reinforcement courses' (pronunciation, handwriting and conversation) and a 4-8 week Study Tour: *Touring Taiwan – Learning Chinese*. This is a practically focused course on everyday Mandarin – including developing a basic knowledge of Chinese society and culture. Courses are run in summer (July/Aug) and winter (Jan/Feb).

### National Taiwan Normal University

National Taiwan Normal University (NTNU) was founded as a teaching college and although its curriculum has widened it maintains a strong focus on graduate and postgraduate qualifications for teachers. Its sister universities include 5 Australian universities 43



National Taiwan
University – Office of
International Affairs.
Dean, Professor
Kun-Liang Chunag with
Ms Sandy Chen and
the author.

<sup>&</sup>lt;sup>43</sup> University of Tasmania, Royal Melbourne Institute of Technology, Deakin University, Curtin University of Technology and Queensland University of Technology.

#### National Taiwan Normal University -Mandarin Training Center

The author's visit focused on the university's internationally renowned Mandarin Training Center (MTC).

The MTC has been operating since 1956 and reports being the largest Mandarin training centre in Taiwan, providing services to approximately 1,500 students per quarter.

It reports having over 40,000 alumni members around the world, including the Hon Kevin Rudd MP. Prime Minister of Australia.

#### Costs:

3 month (quarterly) sessions:
10 hours/week NT\$18,000 (US\$520) or
15 hours/week NT\$27,000 (\$US780).
2 month summer courses:
10 hours/week NT\$12,000
or 15 hours/week NT\$18,000.
All class sizes are limited to 6 – 10 students.



Mandarin Training Center Project Manager, Ms Ivy Fann (left) and Secretary, Ms Li-Li Chen (right) with Sandy Chen (AEI Taipei) and author

#### National Chengchi University

In 2008, the university had 15,167 students, 405 were international degree students, while another 500 were exchange and Mandarin language course students.

Of incoming foreign students in 2008, the university international office reported that 8 were Australians (5 doing language courses and 3 are degree based, doing Asian commerce/business studies).

There were no Australian exchange students on campus, but several Taiwanese students were in Australia under an exchange program. <sup>44</sup> The university also offers a 4 week summer school which is popular with international students (e.g. a course on mainland China relations).

The university considers itself to have the best international commerce and business courses in Asia, with a range of business-related programs targeted at the international student market (notably a popular international MBA). These courses may be conducted in English while students concurrently study Mandarin language. After 2 years, student can pursue courses in Mandarin.

The university reported having 'university-level' sistership agreements with Queensland University of Technology and Deakin University (for student exchange) and faculty-level agreements with Griffith University, Australian National University and Flinders University (for academic exchange).

Taiwanese domestic students play a strong role in international student support, where exchange students are welcomed by 'study ambassadors' and informally paired with 'buddies'. Taiwan students must act as a buddy as a prerequisite for becoming an exchange student themselves.

International exchange students are guaranteed on-campus accommodation placement, although all international students get assistance with finding an apartment in Taipei.

<sup>&</sup>lt;sup>44</sup> University of Tasmania, RMIT, Deaking University, Curtin University of Technology and QUT.

#### Tamkang University

In 2008 Tamkang university had 27,455 students and 2,186 faculty staff. The university reported having 204 international students and 45 exchange students.

In 2008, it had 103 sister universities, including the University of Queensland. The international office discussed negotiations they had undertaken towards establishing a Mandarin training centre onshore in Australia – though this had not been successful to date. The university had an Australian professor on faculty and 50 professors have visited Australia for academic exchange (compared with 400 faculty who had visited Japan and 50 who had visited the USA).

The university viewed that establishing academic exchanges represented a vital first step in establishing student exchange programs, which might then encourage more international students to study a full qualification at the university. The university was keen to develop an academic conference exchange (where respective universities host a conference and support the attendance of faculty from partner universities). The university was also very supportive of sabbatical programs (where the home university keeps paying scholars salary while off-site at a partner university). The university also suggested creating an Australian – Taiwan Friendly Association would maintain a dialogue to exchange ideas and develop opportunities.

The university offers a Mandarin course and a Mandarin summer school (3 week intensive course) – which is very popular with Japanese students.

The university has also established a 'Digital Campus' – involving a series of video-conference lectures with Japanese classes (conducted in English). They have good videoconference facilities and would be interested in exploring the potential of this technology with Australian providers. They also expressed interest in joint research programs with Australian universities and would welcome visiting professors who wanted to teach in English.

### National Taiwan University of Science and Technology

Described as the No. 1 technical university in Taiwan, NTUST (or 'Taiwan Tech') has 9,145 students and 656 faculty staff.

NTUST is one of Taiwan's top universities being sponsored by the Ministry of Education's *Aiming for* the Top University and Elite Research Center program.

NTUST operates in close collaboration with industry and a has range of technical demonstration, testing and calibration facilities on site.

The university's office of international affairs is seeking to



Office of International Affairs, Program Coordinators, Ms LydiaTsai and Ms Maggie Kuo, the author and Sandy Chen.

strengthen internationalisation through a step-wise process (also outlined at page 11 of this report) which summarises a common approach adopted by most Taiwan universities met during this project.

The approach adopted for *Internationalizing NTUST*<sup>45</sup> consists of four steps to achieve both inward and outward student mobility:

1) Establishing and Maintaining Frequent Friendly Relations. Establish a relationship with an overseas institution through regular informal contact.

#### 2) Drafting a Memorandum of Understanding (MoU).

An MOU is an agreement between two universities to recognise future possibilities for cooperation and student, faculty and academic research exchanges.

#### 3) Engaging in Faculty and Student Exchanges.

This is described as 'making the MoU come to life through implementing regular student and faculty exchanges.

#### 4) The Dual-Degree-Earning System.

Facilitated by the Ministry of Education, this system allows students from each participating institution to enrol in coursework at both universities and, after completing the requirements stipulated by the two universities at the department and institutional level, receive a degree from each institution.

#### **Universities outside Taipei**

#### Southern Taiwan University

Located in Tainan county, the Southern Taiwan University is a privately-owned university of technology with a strong focus on collaboration with industry, including close associations with the adjacent Tainan Science-based Industrial Park. <sup>46</sup> In 2008, it had 18,199 students. It receives Ministry of Education funding under the Teaching Excellence Project (ranked first in 2007 and 2008). <sup>47</sup>

As a university of technology, gaining patents is a key indicator of performance and the university gained 51 patents in 2007. The university has particular strengths in biotechnology, as well as electrical and mechanical engineering. Its team ranked 5<sup>th</sup> in the 2007 Australian Solar Car Rally and ranked 3<sup>rd</sup> in Japan's 2007 F3 race.



At Southern Taiwan University in Tainan province

Vice President, Mr Hsin-Hsin Wu, Sandy Chen, the author, President Mr Chein Tai. Office of Research and Development Dean Ms. Yeong Tsyr Hwang, Office of International Affairs, Mr Yung-Peng Wang.

For more information go here: <a href="http://www.oia-e.ntust.edu.tw/front/bin/ptlist.phtml?Category=10">http://www.oia-e.ntust.edu.tw/front/bin/ptlist.phtml?Category=10</a>

<sup>46</sup> For more information: http://www.stut.edu.tw/english\_version

For more information: http://english.education.edu.tw/ct.asp?xltem=9512&ctNode=9282&mp=12

The university is very active in providing quality education to international students, particularly students seeking to develop skills and experience in high technology industries. It offers a range of courses in English and would clearly welcome the participation of Australian students with academic or vocational training interests.

The university established a Division of International Affairs in 2001 and has made rapid progress in internationalisation since then. The university offers courses in English, being an International MBA and PhD or Masters in Mechanical or Electrical Engineering. In 2008, students from Japan, USA, Switzerland, Austria, Spain and Croatia studied on campus.

Exchange students have tuition costs waived and the university offers free language courses for international degree-based students. The university has also established Study Abroad programs for its undergraduate and postgraduate students. Chinese language courses available include 2 week language and culture camps. 48



Preparing for Australia week at Southern Taiwan University Library

VLSI Design and Application Center (Southern Taiwan University)
The Very Large Scale Integration (VLSI) Center is a key part of Southern Taiwan University's engagement with industry and an example of the how Taiwan's universities contribute to high technology developments which have a major driver of Taiwan's economy in recent years.

The Center develops integrated circuitry for commercial use and applied designs such as a solar power assisted air conditioning unit. Each year, the Center receives around \$1.15 million (AUD) from the Taiwan Government and around \$0.5 million from industry.

The Center executes government projects and collaborative industry projects and averages 15 patent claims and 20 journal publications per year. It provides education and training support to industry and over 70% of VLSI layout training students are hired after course completion. Around 10% of Masters students have gained employment before they graduate.

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<sup>&</sup>lt;sup>48</sup> For more information: <a href="http://www.stut.edu.tw/clc/chilance/index.htm">http://www.stut.edu.tw/clc/chilance/index.htm</a>

#### Tzu Chi University, Hualien

A private university located in Hualien which is a small city in a scenic location on Taiwan's east coast adjacent to the spectacular Taroko National Park. The university is in a regional location, 30 minutes by air or 2.5 hours by rail from Taipei. The university has a small number of international students and a centre for Mandarin language. The university has a sister school arrangement with 29 universities around the world, including Griffith University, although this has not developed into an active student exchange program to date. The university supports Buddhist values and prides itself on its respectful treatment of cadavers bequeathed to the university with the support of the family of the deceased. This 'silent mentors' program supports medical, nursing and allied health professional studies.

The university may be unlikely to attract large numbers of international students due to its regional location. It does have the attractions of cheaper accommodation, much scenic landscape and closer links with Taiwanese indigenous communities. Hence, it may attract small numbers of students who prefer to avoid a bustling metropolis like Taipei. The population of Hualien is less than 150,000 people.

Public transport options in Hualien (beyond taxis) are limited. On campus accommodation is deliberately frugal with students sharing 4 bed dormitories with no air conditioning (though very inexpensive, about \$1,400 AUD per annum). There are also vegetarian (only) meals available for around \$4 per day. The university is close to the Hualien town centre so there is alternative accommodation available.



Hualien Gorge National Park, Hualien

#### **Vocational Training**

#### Taishan Vocational Training Center

Taishan is located in Taipei and provides vocational training courses- generally to students who have studied in one of Taiwan's vocational high schools. Taishan has particular strengths in electrical engineering and industrial electronics.

Taishan, like most vocational training institutions in Taiwan did not have a significant number of international students, nor did it have an exchange program common to the university sector. However, for the benefit of its domestic students, it has adopted the German *Dual System Vocational Training Model* for its Taiwan-Germany Elite Project sponsored by the Council of Labour Affairs, the Ministry of Education and the German Trade Office Taipei.

The project features three days per week of practical training in industry and 2-3 days school training. In the workplace, students work as Apprentices (Lehrling) to a Master (Meister). At the completion of all onshore study components of the program, students gain an industry placement in Germany for 1 month – with travel and a stipend funded by their sponsor.

#### Schools in Taipei

#### Wenhua Elementary School

Wenhua offers bilingual programs for their 1,800 students. The school implemented English teaching 9 years ago for its students as a higher quality alternative to Buxibans (after-hours 'cram schools') which otherwise can be the only option available to Taiwanese school students to learn English.

Around 62% of teaching faculty are Masters or PhD graduates. The school has one Australian teacher on staff. Parents help to raise funds for English teaching resources (about \$40,000 AUD per annum), much of which is used to fund an exchange program with Australia. This exchange program has been running for 4 years, initially involving Taiwan students going to Australia, but for the first time in September 2008, a contingent of 20 Australian students across Years 3-7 visited Taiwan for 13 days, staying with homestay parents in Taipei.

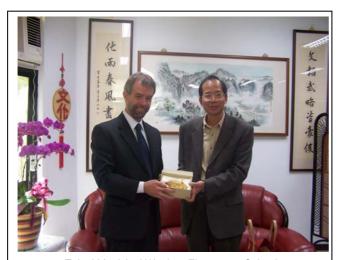
Similar to Australian arrangements, home stay parents in Taiwan must:

- Pass a criminal record check:
- Provide a student with their own room; and
- Live within 40 minutes of school and agree to drive or walk the student to school.

A welcome initiative for parents from Taiwan and Australia is a website allowing the posting of photos for parents to follow the progress of their children during their overseas study experience.

The exchange program was developed by Wenhua in collaboration with Roger Sheehan, principal of Streeton State College in Queensland. He has strong connections with Taiwan, having taught in National Taiwan Normal University for 3 months focusing on his expertise in teaching children with special needs.

Under the program, about 70 Taiwanese elementary school students have spent three weeks at the Queensland schools; Merimac, Nerang, Chatswood Hill and Stretton State College.



Taipei Municipal Wenhua Elementary School Author with Dr Huang San-Chi, Principal and President

Wenhua hosts a website allowing parents to view photos of their children. Wenhua noted that an experimental school in Tainan had also started student exchanges with Queensland schools.

Wenhua had an Australian teacher from Adelaide on staff. In an informal interview, he discussed that Taiwanese students are expected to work longer hours at school, including time spent helping to clean the school and classrooms.

He suggested that Taiwanese students travelling to Australia were likely to immediately engage with in standard classroom learning for the primary purpose of developing their English skills.

The initial visit by Australian students was principally a cultural study tour for the primary purpose of having had an overseas experience. The Australian teacher speculated that Australian students may have more difficulty adjusting to the different diet of Taiwan and that the air quality of a busy metropolis like Taipei may be an issue for students with asthma. However, initial experiences have been good.

As well as employing English-speaking teachers from Australia and elsewhere, Wenhua is also encouraging its Taiwanese teachers to train in Australian Teachers of English to Speakers of Other Languages (TESOL) colleges to enhance their capacity to teach bilingually.

#### Taipei European Secondary School and Taipei American School

The European and American Schools offer an English speaking school environment, primarily for the children of English-speaking families working in Taiwan. Neither school was considered a likely candidate for developing a Taiwan-Australia student mobility program, but both had Australian staff onsite who provided some helpful insights into international education opportunities in Taiwan and teacher mobility.

All teachers interviewed, from Australia or other English-speaking countries, were very satisfied with their working conditions and some had stayed for over 10 years establishing a family of their own in Taiwan. Nonetheless, staff turnover was relatively frequent and the schools were constantly undertaking recruitment activities. The Australian teachers noted many employers had a preference for English speakers with a North American accent, however the job market was such that Australian, British and New Zealand teachers had secured jobs in these schools relatively easily. They reported that qualified Australian teachers with an additional TESOL qualification would be able to get a working visa (Alien Residency Certificate) relatively easily and would be considered highly employable by Taiwan schools if willing to stay for 1 year or more.

The schools advertise regularly in the Times Educational Supplement, through international recruitment agencies and the International School Service. Most of the Australian teachers had heard of opportunities in Taiwan by word of mouth or via their TESOL training institution. The American School reported its students performed very competitively under its International Baccalaureate program, with the aim of scoring highly in the US SAT to gain entry to the best colleges in the US.

The Director of the Taipei Youth Program Association and the Athletic Director of the American School both commented on the importance of sport as an avenue for international student interaction, as well as giving a hosting country an opportunity to showcase their school facilities. The School was looking forward to hosting a 6 school conference for international schools from Jakarta, Bangkok, Kuala Lumpur, Manila and Singapore (and Taipei) involving sport, art and music activities. They suggested Australian schools might be well positioned to meet the growing international interest in playing rugby.

#### Schools outside Taipei

Hsinchu – National Experimental High School (Bilingual school).

This high school is situated adjacent to Hsinchu science park and is a bilingual school providing education to local students as well as the children of overseas science park employees. It is an international school following a US-style curriculum rather than a standard Taiwan high school curriculum. This is partly to assist children of visiting science park staff to articulate their education in Taiwan with their home education system.

#### I-Shou international school

Located in Kaohsiung (Taiwan's second largest city) I-Shou is a private school with 34 international teachers (representing 80% of teaching staff) principally from America and Canada, but including two Australians. The school follows a US-style curriculum. The school is very engaged in internationalisation, has sister schools in the USA and Japan and will host an international education fair in 2009.

Education and boarding costs around NT\$200,000 per semester (this equates to around \$20,000 AUD per year). The school is working towards becoming an International Baccalaureate (IB) accredited school. <sup>49</sup> The school has a developing exchange program with The Lakers College (Gold Coast, Queensland). Taiwanese students went to Australia first, for two years from 2006, before Australian students came to Taiwan in 2008.

A group of Year 6-7 Australian students came with two teachers from Lakers. The students stayed for a five days school week, with four nights in a dormitory; then a further two days involving weekend homestay. Australian students are 'buddied-up' with a local student who can speak English and stay with homestay families who can speak English.

<sup>&</sup>lt;sup>49</sup> For more information, go here: <a href="http://www.ibo.org/ibap/diploma/">http://www.ibo.org/ibap/diploma/</a>

Part 4: International student and Australian alumni interviews



#### **Key points:**

- Mandarin language courses are the most popular field of study for international students in Taiwan. Current students comment favourably on the focus on traditional Mandarin characters for developing reading and writing skills – as well as the overall quality of the courses. There is potential for Taiwan to attract even higher numbers of Mandarin students if teaching of simplified characters was also offered as a concurrent option.
- Australians who have studied in Taiwan state its key attractions as a study destination are that it is a very safe and stable democracy, with a friendly, welcoming people and at least in Taipei it is relatively easy to get by as a native English speaker.
- The combination of modern infrastructure, wonderful cuisine and good shopping, combined with rich Chinese cultural influences make it a fascinating place to undertake a course of study.
- Taiwanese students who have studied in Taiwan and in Australia have been very successful in gaining well paid employment on their return to Taiwan, principally as a result of having a reputable international qualification combined with well developed English language skills.

Mandarin Language Students – Survey and Interviews

#### About the survey group

Due to the short field work period of this project and the proximity of the end of the academic year, it was only possible to survey a class of 18 students from the Mandarin Training Center in National Taiwan Normal University.

Most (89%) of respondents did not speak English as a first language and were primarily from the Asian region, with Japan being the most common country of origin. About 20% of the group reported knowing no Mandarin at all at the start of the course and another 66% had only basic skills.

#### Reasons for choosing study in Taiwan

Wanting to learn to write in traditional Mandarin characters was the most common reason for choosing to study in Taiwan, followed by having family or friends in there. No respondent chose Taiwan's high standard of living as a reason.

Only a third of the group indicated they were studying Mandarin for employment purposes. Half of the sample group had no immediate plans to use the language, but considered it a useful skill to develop.

#### Quality of the course

Nearly all students (94%) indicated that they would recommend the course to others.

- 94% were satisfied or very satisfied with the quality of the course
- 72% with the quality of teaching materials
- 83% with the competence of the teaching staff
- 53% with the cost of the course
- 72% with the facilities and amenities
- 89% with the student support
- 72% with their learning of spoken Mandarin
- 89% with their learning of reading Mandarin
- 72% with their learning of writing Mandarin.

#### Australian student interviews

To supplement the findings of the survey, five Australians studying in Mandarin were interviewed with discussion focused on why they chose Taiwan over alternative study destinations and what their study experience to date had been like. All the students were based in Taipei.

All spoke favourably of the quality of life in Taiwan with respect to affordability, good public transport, excellent food, very hospitable local people and an agreeable mixture of traditional Chinese culture, modern infrastructure <sup>50</sup> and occasional western influences (for example, *Starbucks* coffee shops). All agreed these factors would be important in raising the profile of Taiwan as an international study destination to other Australians.

Three of the five students had come to Taiwan specifically to study Mandarin prior to undertaking further tertiary study back in Australia. These students spoke of the value of learning traditional Chinese characters as a unique "selling point" for studying Mandarin in Taiwan. The two others were both employed in Taiwan and were hence studying in Taiwan as a consequence of that. From their perspective the value of studying traditional Chinese characters was useful only in the context of working in Taiwan. One said he would have no hesitation in recommending studying Mandarin in mainland China to any Australians with employment intentions as the mainland job market dwarfed that of Taiwan and a course in mainland China would focus on learning simplified Chinese characters. In his opinion, simplified characters were both simpler to learn and clearly of more immediate value for working and living in mainland China.

<sup>&</sup>lt;sup>50</sup> Taiwan's high speed rail and Taipei's underground mass rapid transport system (MRT) are often referred to in this context.

Although, it is acknowledged the findings of this area of investigation are based on a limited sample size, it was clear from these inputs, as well as discussions with Taiwanese academic personnel, that:

- Taiwanese educational institutions providing Mandarin courses for international students actively promote the teaching of traditional Chinese characters as a unique strength of study in Taiwan.
- Generally, international students who have chosen to study in Taiwan also espouse the value of learning traditional characters, though principally from an academic and aesthetic perspective.
- The majority of these students have immediate or long term intentions to use Mandarin language skills in an employment context, but in that respect more often focus on the utility of developing spoken language skills or anticipate learning traditional characters in Taiwan is a step towards developing skills in reading and writing simplified Chinese characters required for the much larger job market of mainland China.

While learning traditional Chinese characters is a distinctive feature of studying Mandarin in Taiwan and represents a 'niche' market, it is unlikely this feature gives Taiwan a competitive advantage in attracting international students wishing to learn Mandarin. It is possible that those students choosing Taiwan represent a niche market of students specifically seeking to learn traditional characters. However, it is equally likely these students primarily chose to study in Taiwan because they perceive it as an interesting, easy and safe study destination.



National Taiwan University Student Exchange Fair (November 2008)

Taiwanese Australian Alumni – Survey and Interviews

#### **Employment outcomes from study in Australia**

#### About the survey group

Due to the short field work period of this, it was only possible to survey 37 Taiwanese Australia alumni. 87% of the group had studied to university level and nearly half (49%) reported their highest qualification achieved in Australia was a Masters (by coursework). Only 8% had done an ELICOS course and only 5% had done a VET course. The most commonly nominated field of study was business management (25%), with IT and marketing also popular.

#### **Employment outcomes**

- 76% of the group gained a job within 3 months or returning to Taiwan and only 5% reported actively seeking a job but not getting one within this period.
- 97% of the group had looked for a job by the time of the survey. When asked about the difficulties they faced in looking for work nearly half (46%) reported they had experienced no difficulty at all.
- 24% reported not having enough work experience as a barrier to getting a job and 16% reported submitting applications that did not result in an interview. Only 3% reported being interviewed but not getting the job.
- 46% of respondents reported working directly in their field of study and another 3% had previously done so. Only 16% reported never having worked in their field of study.

#### **Expectations from studying in Australia**

- 100% of respondents said developing English language skills had been an extremely important (76%) or important (24%) aspect of their Australian study experience.
- 84% said gaining a higher salaried job was important or extremely important.
- 81% said achieving a satisfying and rewarding career was important or extremely important.
- 95% said being able to work in the global market was important or extremely important.
- 89% said gaining qualifications with a good reputation was important or extremely important.
- 65% said achieving a secure job was important or extremely important.
- 43% said developing an ability to teach was important or extremely important.
- 27% said becoming an academic lecturer or researcher was important or extremely important.

#### Other Australian alumni interviews

To supplement the findings of the survey, over 20 members of the Taiwan Australian Alumni Association<sup>51</sup> were approached for a face-to-face or telephone interview. Nearly half of the graduates indicated they had felt initial reservations regarding living in Australia having heard seemingly racist views espoused by Ms Pauline Hanson and her supporters in the media in the late 1990s. This, and Australia's historical 'White Australia policy', was also mentioned by a number of academics<sup>52</sup> as indications that Australia was still perceived by some Taiwanese as struggling to become a fully integrated multi-cultural society – albeit they acknowledged Australia offered high quality education services they were keen for their students to experience.

Some of the graduates described that when they arrived in Australia they experienced some initial social isolation in response to finding themselves in a foreign culture while still developing their English proficiency. However, all reported a very positive experience in the longer term as they made friends, most commonly with other international students. Given the diversity of different language groups in the international student population, English was generally spoken by all.

Some students did make Australian friends and fellow Australian students were regarded as friendly, albeit they had less involvement with on-campus social activities than international students generally.

http://www.linktaaa.org.tw/E-index.html

during institution visits outlined in Part 3 of this report.

Students who had attended school in Australia described their relationship with their homestay family as very rewarding and many maintained contact with those families for years after their return to Taiwan.

Students indicated they (and their families) chose to study overseas rather than Taiwan primarily for the purpose of developing English language proficiency. A number of students commented that Taiwan had too many universities meaning that the sector's resources were spread too thinly. Education in Taiwan was also described as overly focused on rote learning styles and did not encourage the development of problem-solving and critical thinking – skills that an Australian education was more likely to develop.

Students commented positively with respect to how much an Australian education had developed their English language proficiency – with several commenting that working in an English-speaking workplace was what really consolidated their language skills. All graduates interviewed were currently employed full time, working in a range of government and business areas – as well education agencies. The majority were not working in a job directly related to their field of study – several commented that having a reputable qualification from an English-speaking country contributed the most to their employability in Taiwan. None of the interviewees indicated that they had a clear view of their career aspirations before they commenced a course of study in Australia.

Three students had studied in the VET sector doing hospitality and cooking courses. None had been motivated by the option of permanent residency in Australia. Having a hospitality qualification and English language proficiency made them very employable with the growing Asian tourist industry. Each had worked for 1-3 years in such a role before finding a better paid job in another industry unrelated to their course of study.



AEI Taipei (represented by Ms Cherry Hu) at the National Taiwan University Student Exchange Fair

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<sup>&</sup>lt;sup>53</sup> At the time of writing there were 51 public and 97 private universities, as well as 3 public junior colleges and 12 private junior colleges in Taiwan. See: http://english.moe.gov.tw/ct.asp?xltem=552&CtNode=415&mp=1



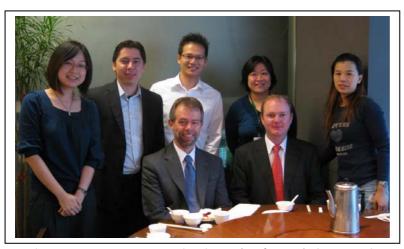
At the Ministry of Education: Day 1, Week 1.

Back row – Ms Sandy Chen and Mr Nicholas McKay (AEI Taipei) with Ms Julie Chiu, Bureau of International Cultural and Educational Relations, Ms Wan-Fen Su, Specialist of Department of Statistics, Ms June Chuang, Research Assistant, Department of Higher Education, and Ms Sophie Hsiao, Section Chief, Department of Technical and Vocational Education.

Front row – Mr Liu Ching-Jen, Director-General, Bureau of International and Cultural Relations with the author.



Mr Yuri Chih,
Director, Cultural
Division and Ms
Tiffany Yu-Wen
Chen, Senior
Officer, Cultural
Division of the
Taipei Economic
and Cultural Office
in Australia with
the author.





The AEI Taipei team: Amy Lin, David Trethowan, (Neo from JRIS), Cherry Hu and Kristen Huang. Nicholas McKay and the author seated and photo taken by Sandy Chen. Ms Chen is pictured with the author during institution visits in Tainan.

#### **Appendix 1: Market Data Snapshot Taiwan**



May 2009

#### Taiwan

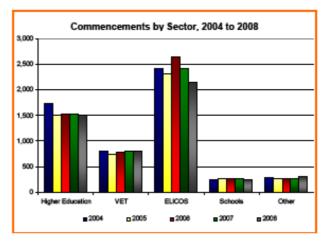
In 2008, more than 33,000 Taiwanese students commenced study overseas. Australia is considered a quality study destination, positioned third in the Taiwanese market behind the United States and United Kingdom, and ahead of Japan and Canada. Taiwan is Australia's thirteenth largest source market, with more than 9,000 enrolments in 2008. In recent years there has been a slight decline in student commencements from Taiwan, however there appears to be renewed interest in studying in Australia in 2009, with commencements in the first three months of 2009 almost 9% higher than in the first three months of 2008. With an increase in unemployment as a result of the economic downturn, more Taiwanese may look to consider post-graduate and training courses. With an unemployment rate at its highest in almost five years, for many the opportunity to pursue further education is now more viable as corporate downsizing continues to affect the Taiwanese workforce.

With progressive regionalisation of industry, Taiwan's low to mid-technology manufacturing continues to be relocated to other countries in North and South East Asia, with managerial oversight from Taiwan. As a result, it is expected that Taiwan's need for high quality graduates who can speak English will continue to grow.

#### **Higher Education**

Taiwan's higher education system has grown rapidly in recent years, and Taiwan now has more than 160 universities. The large number of universities has led to an oversupply of domestic undergraduate places in Taiwan.

Graduates of Taiwanese universities are increasingly looking to gain postgraduate qualifications to differentiate themselves in the domestic labour market, with many seeking to study overseas to enhance their job prospects.



Given Australia's quality reputation in Taiwan as a provider of higher education, Australian higher education providers are well placed to meet the growing demand for postgraduate qualifications.

Australian and Taiwan are working bilaterally to identify opportunities to increase student mobility and AEI Taipei is continuing to place an emphasis on Australia's research strengths within Taiwan to promote research exchange at all levels and encourage the perception of Australia as a key destination for postgraduate research.

#### Vocational Education and Training (VET)

Taiwan is a relatively small VET market for Australia, although there is an increasing interest in studying in Australia. Taiwanese VET commencements have increased by more than 30% in the first three months of 2009 relative to 2008.

Taiwan is looking to develop its VET system, which is likely to create opportunities for collaboration with Australian providers. AEI will continue to promote Australia's VET system within Taiwan, and will be exploring opportunities for Australian providers to benefit from internships and training opportunities.

Taiwan is seeking to raise awareness of opportunities for Australians to develop skills in its high technology industries. This could involve a period of study and subsequent workplace internship through a VET institution or university of technology which have close links to Taiwan's science and industrial parks. Taiwan has indicated a desire to facilitate partnerships between its VET institutions and universities of technology and equivalent Australian education providers to enable this.

#### English Language Intensive Courses for Overseas Students (ELICOS)

While Taiwanese ELICOS commencements have been declining since 2008, ELICOS commencements have grown by more than 9% in the first three months of 2009 relative to 2008. There has also been growing interest in Taiwan towards undertaking ELICOS study in Australia on Working Holiday Maker (WHM) visas. WHM grants to Taiwan passport holders in 2008 (calendar year) was 8,480.

For further information about international education in Taiwan, contact Nicholas McKay, Director Education, Science and Training, Taipel at nicholas mckay@dewn.gov.au

### Appendix 2:

## 2006/2007 Programs in English Offered by Universities in Taiwan

Universities in Taiwan							
University	Degree Conferred	Program					
		International Master's Program in Taiwan Studies (IMTS)					
		International Master's Program in China Studies (IMCS)					
National Chengchi University	Master	International Master's Program of Business Administration (IMBA)					
		International Master's Program in International Communication Studies (IMICS)					
	Doctoral	International Doctor Program in Asia-Pacific Studies (IDAS)					
		Program for International MBA					
		International Master Program in Information Systems and Applications					
	Master	Chemical Biology and Molecular Biophysics					
		Bioinformatics					
		Nano Science and Technology					
National Tsing Hua University		Chemical Biology and Molecular Biophysics					
		Chemical Biology and Molecular Biophysics					
	Destand	Molecular Sciences and Technolgy					
	Doctoral	Bioinformatics					
		Nano Science and Technology					
		Computational Linguistics and Chinese Language Processing					
	Master	English MBA					
	Doctoral -	Nano Science and Technology					
National Taiwan University		Nano Science and Technology					
		Chemical Biology and Molecular Biophysics					
		Computational Linguistics and Chinese Language Processing					
National Taiwan Normal	Master	Graduate Institute of International Workforce Education and Development					
University		The Honors Program in Advanced English					
National Cheng Kung		International Curriculum on civil engineering and management, ICEM					
University	Master/Doctoral	Institute of Creative Industry Design					
		IMBA					
National Chung Hsing	Master	Graduate Institute of Electronic Commerce					
University	Doctoral	Molecular and Biological Agricultural Sciences					
National Chiao Tung	Master	EECS International Institute					
University	Master	MBA					
National Central University	Master	MA (Adult Learning) in International Development					
National Central Onliversity	Master	English MBA					
	Maria	Master of Business Administration in International Business					
	Master	International Master's Program in Electric Power Engineering					
National Sun Yat-sen	21 credits	International Exchange Program					
University	20 credits	Program of East-Asian Studies					
	21 credits	Power & Information Technology Program					
	21 credits	International Business Management English Program					

National Kaohsiung Normal University  Doctoral  Doctoral  English Department MA Program  Graduate Institute of Biotechnology  International Health Program  A.Molecular Medicine Program  B.Bioinformatics Program  National Taipei University  Master  Graduate Institute of Electrical Engineer  National Dong Hwa University  Undergraduate  Program of International Business Manage  National United University  Master  Master of Business Administration  Department of Biology Science and Technical  English Department MA Program  English Department MA Program  And Program  International Health Program  A.Molecular Medicine Program  B.Bioinformatics Program  Master of Electrical Engineer  Program of International Business Manage  National United University  Master  Department of Biology Science and Technical	
National Changhua University of Education  National Yang-Ming University  National Taipei University  National Dong Hwa University  National Dong Hwa University  National University	
University of Education  National Yang-Ming University  Master/Doctoral  Master/Doctoral  National Taipei University  Master	
National Yang-Ming University  Master/Doctoral  A.Molecular Medicine Program b.Bioinformatics Program  National Taipei University  Master  Master  Graduate Institute of Electrical Engineer  National Dong Hwa University  Undergraduate  Program of International Business Manage  National United University  Master  Master  Master of Business Administration	
University  Description  Descri	
National Taipei University  National Dong Hwa University  National United University  Master  Description  De	
National Dong Hwa University Undergraduate Program of International Business Manage National United University Master Master of Business Administration	
University University Master Master Master of Business Administration	ement
Department of Biology Science and Technic	
	ology
National University of Tainan Undergraduate Department of Biology Science and Technology	ology
Department of Mathematics Education	n
National PingTung University Undergraduate Program for Practical English	
of Education Certificate Program for English Teaching	
Certificate Business Management in English	
Fu Jen Catholic University Undergraduate Department of History	
Master Department of History	
Soochow University Master Global Business Program	
Nanotechnology Program	
Chemical Engineering and Materials Prog	gram
Master/Doctoral Optomechatronics Program	
Microelectronic Engineering & Applications P	Program
Teaching Chinese as a Second Language P	Program
Chung Yuan Christian University  Master  Business and Management Program	
Biotechnology Program	
Biomedical Engineering Program	
Environmental Engineering Program	
Master/Doctoral Industrial and System Program	
Civil Engineering Program	
English Program in Business Administrat	tion
Undergraduate Program in Literature	)
Providence University Undergraduate Program in Linguistics	s
Undergraduate Program in TESOL	
Chang Gung University Undergraduate Innovative Industry Curriculum in Englis	sh
Department of Business Administration	n
Department of Finance	
Yuan Ze University Master Department of International Business	3
Department of Accounting	
I-Shou University Elite Management Program	
English-Taught Marketing Communication P	rogram
Shin Hsin University  Undergraduate  Journalistic English Reporting and Editing Policy  Journalistic English Reporting English English Reporting English Eng	rogram
Ming Chuan University Undergraduate International Business and Management Pr	-
Applied Computing Program	
Journalism and Mass Communication Pro	gram
Travel and Tourism Program	

		English for Professional Studies Program					
		Teaching Chinese As A Second Language					
	Master	Grad-International Affairs					
	Master	Graduate School of Management					
	Doctoral	Graduate School of Management					
Shih Chien University	Undergraduate	International Exchange Program					
Kaohsiung Medical University	Undergraduate	Faculty of Medicine for Post-baccalaureate					
Radiisiung Wedical Oniversity	Master	Master Program for Clinical Medicine					
		Program of Healthcare Administration					
Asia University	Master	Program in Information and Networking Technology					
Asia Offiversity	iviastei	Department of Business Administration					
		Department of Biotechnology					
Kainan University	Undergraduate	International Honors Program					
Mingdao University	Undergraduate	Hospitality Management					
Taipei Physical Education College	Master	Graduate Institute of Sports Equipment Technology					

Kindly provided for this project by the Ministry of Education, Republic of China (Taiwan)

## Appendix 3: Taiwan's Development Plan for World Class Universities and Research Centers of Excellence

Number of International Students Recruited by Subsidised Universities

	Number of international students studying for degrees						
University	2005 (previous to the plan implementation)	2006	2007	2008 (until the 3 <sup>rd</sup> quarter)			
National Taiwan University	343	373	439	500			
National Cheng Kung University	134	272	414	483			
National Tsing Hua University	107	155	204	223			
National Chiao Tung University	314	367	398	205			
National Central University	21	27	91	122			
National Sun Yat-sen University	39	72	97	114			
National Yang-Ming University	131	138	140	178			
National Chung Hsing University	61	91	166	222			
National Taiwan University of Science and Technology	78	116	239	223			
National Chengchi University	365	425	489	713			
Chang Gung University	1	2	13	10			
Yuan Ze University	17	38	71	88			
Total	1,611	2,076	2,761	3,081			

Kindly provided for this project by the Ministry of Education, Republic of China (Taiwan).

## Appendix 4 Questionnaire: International education and subsequent employment

Instructions: Please click on 1 or more checkboxes for each question where asked. Where typing is required use the grey box.

Q1	What month and year difinish studying in Austra	lia?	Q5	from Au	rst 3 months after you returned stralia to Taiwan, did you		
	Month	Year		•	look for, but not get, a job? 1		
Start				,	Get a job? <sup>2</sup>	ī	
Finish				Take time of	off without wanting to work? <sup>3</sup>	ī	
					Enrol in further studies? 4	Ť	
Q2	Where were you studying (Please tick as many boxe				Other (please specify) ▼ 5		
	At an English Langua	ge (ELICOS) 1					
	At a primary or secondary	chool/college (high) school 2					
	At a technical or vocation		Q6		ever looked for a job since you om Australia to Taiwan? (Please		
		t a university 4		tick one bo			
	Other (please		Yes	1 •	Please proceed to Question 7		
			No	2	No further questions, thank you	,	
			110		for your help!		
Q3	What qualifications did yo studying in Australia? ( <i>Ple boxes as apply</i> )	ease tick as many	Q7		of issues have you faced when a job? (Please tick as many		
Eng	lish language (ELICOS) co	urse – any level	I ha	ave applied	for a job/s, but have not got 1	٦	
	School or Higher School		I ha	ve been inte	an interview └─ crviewed for a job/s, but did 2	_	
Certi	ificate, Diploma or Advance				not get them L		
	(Vocationa Pass bache		The		ly any job vacancies for the which I have qualifications		
	Honours bache			Employers v	wanted someone with more 4	一	
	Graduate certificate	· –	Fm		work experience than I have hited someone with different 5	_	
	Masters Degree (co	· <u>–</u>	qualifications than I have				
	Masters Degree				In looking recently and I am 6 onfident I will get a job soon		
	Doctorate (PhD) or pos	tdoctorate 9			Other (please specify) $\nabla$		
	Student exchang	e program 10			, , , , ,		
	Other (please s	pecify) ▼ ¹¹					
			Q8		got a job since you returned from (Please tick one box only)		
			Yes	1 ▶	Please proceed to Question 9		
Q4	From the list below, what field of study of your higher qualification? (Please tick	est Australian	No	2 •	No further questions, thank you for your help!	j	
	English language co		Q9		e list below, what best describes		
	0 0	accounting 2			you are working in now? ( <i>Please</i> many boxes as apply)		
	Business ma	nagement <sup>3</sup>	l:		bb I got after my return from 1	7	
	Hospitality ma	nagement 4			Australia		
	Information t	echnology <sup>5</sup>			e same employer, but have	_	
	Graphic arts a	ınd design <sup>6</sup>	bee	n promoted	since the first job I got after <sup>2</sup> my return from Australia	╛	
		Marketing 7	Lwor	k for a diffor	rent employer since the first 3	_	
	Postgraduate		i woi		ter my return from Australia		
	Other (please s	pecify) ▼ <sup>9</sup>	Му	current job i	s closely related to the field of study I identified at Q 4		
	05 5 14 1	winds aids a Catha	field	of study I id	is <b>not</b> closely related to the lentified at Q4, but previous y return from Australia were		
	Q5 is at the top	right side of this page.			orked in a job related to the / I identified at Q4 since my return from Australia		

#### Questionnaire: International education and subsequent employment

Instructions: Please click on 1 or more checkboxes for each question where asked. Where typing is required start typing in the grey box.

Q10	What is your current job title and the type of industry you work in?								
My job title (e.g. Accountant, Chief Engineer, Registered Nurse, Research Officer)									
The industry I work in (e.g. Finance, Construction, Health, Biochemistry)									
Q11	Please rate the importance of your Australian education exper	rience a	nd qual	ification	/s in rea	ards to			
	achieving the following (Please tick only one box in each row)		·		J				
		ely	ınt		± ₩	ut all	wor		
		Extremely important	mportant	Useful	Not that important	Not at all important	Don't know / NA		
		≙.⊆	<u>E</u>		ž.⊑	ž.⊑	۵۲		
	English language skills	1	2	3	4	5	6		
	Gaining a higher salary	1	2	3	4	5	6		
	Having a satisfying and rewarding career	1	2	3	4	5	6		
	Being able to work in the global market	1	2	3	4	5	6		
	Having a qualification with a good reputation	1	2	3	4	5	6		
	Having a secure job	1	2	3	4	5	6		
	Being able to teach	1	2	3	4	5	6		
	Become a leading academic lecturer or researcher	1	2	3	4	5	6		

## Appendix 5 Questionnaire: Studying Mandarin language courses in Taiwan

Instructions: Please click on 1 or more checkboxes for each question where asked. Where typing is required start typing in the grey box.

Q1	When did you start, and when do you to finish, your course?	expect	Q6	What outcomes are course? (Please tick				from de	oing this	;
	Month Year		Em	ployment in a field who	ere Mar	ndarin la	anguage are ess		1	
Start				I want to travel and				le in a	2	٦
Finis	h		I	have no immediate pla Mandarin language is	ans, bu	t think c	ompete o have f	nce in for the	3	]
				ainly wanted to live in or a period of time and			ry like T useful v	while I	4	
Q2	What is your nationality?				Othe	er (pleas	wa: se speci	s here fy) ▼	5	
						.,	· ·			_
Q3 Yes	Is English your first language?	· vo.t	Q7	Can you please sta	se that\					
No	If No, can you state your fi language please?	151		one box in each rov	V)			ъ	70	>
					Very satisfied	Satisfied	Indifferent	Unsatisfied	Very unsatisfied	Don't know / NA
Q4	Why did you choose to study Mandar Taiwan? (Please tick as many boxes		(	Quality of the course overall	1	2	3	4	5	<sub>6</sub> П
	apply) I wanted to learn to read and write in	1	Qı	uality of the teaching materials	1□	2	3	4	5	6
S	traditional Mandarin characters tudying in Taiwan was a less expensive option for me	2		Competence of the teaching staff	1	2	3	4□	5	6□
som	Taiwan was recommended to me by eone who had studied in Taiwan before	3		Cost of the course	<sup>1</sup>	2	3□	4□	5□	<sup>6</sup> □
	Taiwan was recommended to me by my school, college or university	5	Fac	of the teaching institution	¹□	2	3	4	5	6
l cl	employer wanted me to study in Taiwan nose Taiwan because I wanted to get to know the country and its people	6		storal care / support ervices provided for overseas students	1□	2	3	4	5	6
I hea	ard Taiwan had a high standard of living I have family and/or friends in Taiwan	8		How much you have earnt about speaking Mandarin	¹□	2	3	4	5	6
	Other (please specify) ▼	9		How much you have learnt about reading Mandarin	1□	2	3	4	5	6
<b>Q</b> 5	From the list below, what best describ	nes how	ı	How much you have learnt about writing Mandarin	¹□	2	3	4	5	6
<b>4</b> 0	much Mandarin spoken language skil had before starting your course? (Ple one box only)  No skills at all I could speak less than 10 words	ls you	Q8	Would you recomm people? (Please tick				e studyii	ng to oth	ner
	I could speak less than 10 words  I could speak a very simple sentence	3	Yes	1						
F	although I made some mistakes, I could have a meaningful conversation with	4	No	<sup>2</sup> If No, o	can you	state w	hy you	would n	ot do th	is?
	someone in Mandarin yas a competent Mandarin speaker and mainly doing this course to increase my skills in reading and writing	5								