

Deloitte Access Economics

# Growth and opportunity in Australian International Education

A report prepared for  
Austrade

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# Contents

Glossary .....	i
Executive Summary .....	2
1 Introduction .....	12
2 Dimensioning the opportunity .....	14
2.1 Onshore international education .....	17
2.2 Borderless international education .....	25
3 Australia's advantage .....	41
3.1 Quality of education .....	41
3.2 Overall study experience .....	44
3.3 Proximity .....	45
3.4 Strong framework .....	47
4 Enablers for realisation .....	49
4.1 Accessibility .....	49
4.2 Learner experience .....	55
4.3 Outcomes .....	58
5 Conclusion and next steps .....	62
References .....	64
Appendix A : Global international education landscape .....	68
Appendix B : Headline statistics by market .....	73
Appendix C : Projection methodology .....	75
Appendix D : Onshore projections .....	77
Appendix E : Scenario analysis of Australian international education onshore potential .....	80
Appendix F : Summary of country prospects .....	83
Limitation of our work .....	91

# Charts

Chart 2.1 : International learner commencements by sector .....	18
Chart 2.2 : International learner enrolments by sector .....	19
Chart 2.3 : Annual % enrolments growth in largest source markets (as determined by numbers) .....	22
Chart 2.4 : Annual % enrolments growth in fastest growing source markets (as determined by % growth) .....	23

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Chart 2.5 : Subsector enrolments by key source markets by 2025 .....	24
Chart 2.6 : Learners reached, with 0.5%, 1% and 10% of those participating in education (25-64 year olds).....	29

## Tables

Table 2.2 : Top eight source markets for Australia by enrolments all sectors 2015 – 2025 (baseline scenario).....	21
Table 2.3 : Assumptions of how \$1 of fee revenue translates to value added across the scenarios .....	33
Table 4.1 : Impact of enablers .....	61
Table A.1 : Business/institution/government to consumer/student.....	68
Table A.2 : Business/government/university to Business/government/industry/university.....	71
Table B.1 : Headline statistics by key markets.....	73
Table D.1 : Projected onshore international enrolments – Higher education .....	77
Table D.2 : Projected onshore international enrolments – VET .....	77
Table D.3 : Projected onshore international enrolments – Schools .....	78
Table D.4 : Projected onshore international enrolments – ELICOS .....	78
Table D.5 : Projected onshore international enrolments – Other .....	79
Table E.1 : Scenario analysis of onshore international education .....	81
Table E.2 : Sensitivity analysis of onshore international education .....	82
Table F.1 : Summary of country prospects.....	83

# Glossary

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ACPET	Australian Council for Private Education and Training
AEI	Australian Education International
AIE	Australian International Education
AIHST	Australian Institute of Health Science and Technology
ARC	Australian Retail College
BC	British Council
CRICOS	Commonwealth Register of Institutions and Courses for Overseas Students
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DET	Department of Education and Training
DIBP	Department of Immigration and Border Protection
EDTECH	Education technology
EIT	Engineering Institute of Technology
ELICOS	English Language Intensive Courses for Overseas Students
GDP	Gross domestic product
HE	Higher education
LMS	Learning Management System
MOOCS	Massive Open Online Course
OECD	Organisation for Economic Co-operation and Development
PG	Postgraduate
PPP	Purchasing power parity
UG	Undergraduate
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VET	Vocational education and training

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## Executive Summary

International education is Australia's largest service export and the nation's fourth largest export overall – after iron ore, coal and natural gas. In 2014/15, the sector's measured export earnings stood at \$18.8 billion<sup>1</sup>, but unmeasured borderless activity suggests its size is even greater still.

Looking ahead, international education is expected to be among the major beneficiaries of the unprecedented economic transformation the global economy is currently undergoing. Indeed, over the coming two decades, international education is predicted to be among the fastest growing sectors globally, firmly positioning it as one of five sectors identified by Deloitte (2014) as capable of driving the next phase of Australian economic growth.

At the same time, technology is changing the way education is purchased, experienced and consumed, and is extending international education markets beyond their established geographic and service boundaries. Delivery modes are expanding and evolving, and so too is the range of education and training services available. These supply-side shifts are potentially just as seismic as the changes in demand.

In order to fully capitalise on these opportunities, Australia's international education providers will need to be more nimble and more enterprising than they have ever been, exploring new markets and segments and developing innovative products to meet changing demands of learners and industry. Success will also require effective development and deployment of market strategies, settings and programs, which build on Australia's competitive advantages, position providers to operate effectively and identify new ways to achieve sustainable growth.

In support of this strategic endeavour, Deloitte Access Economics, in partnership with EduWorld, was engaged by the Australian Trade Commission (Austrade) to develop an independent and evidence-informed research report. This research report dimensions the scale and scope of the international education opportunity available to Australia over the next decade, including through:

- benchmarking current activity,
- projecting future activity; and
- developing case study exemplars of new and emerging delivery models and service opportunities.

While predominately focused on the demand side of the opportunity, this report also provides some initial thoughts on favourable supply side conditions and initiatives. It includes some suggestions about approaches and factors to consider in prioritising future opportunities – that is, where opportunity meets advantage – and indicates the actions of public and private stakeholders that will be required in support.

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<sup>1</sup> ABS (2015). *International Trade in Services, by Country, by State and by Detailed Services Category, Financial Year, 2014-15* (Cat. no. 5368.0.55.003)

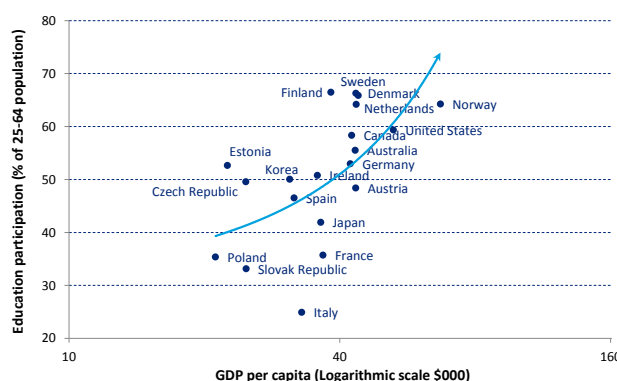
## What's driving the global opportunity in international education?

International education is a highly – and increasingly – diverse sector, comprising both onshore<sup>2</sup> and borderless<sup>3</sup> provision.

While a range of variables determine an individual's study decisions, global demand for international education is driven by three key parameters: (1) size of relevant populations; (2) per-capita incomes; and (3) availability of quality education domestically.

- Deloitte Access Economics projects that the global **15 to 29 year old population living in urban areas**<sup>4</sup> will increase from 960 million in 2015 to 1.1 billion in 2025.
  - This relatively modest rate of growth (1.2% per annum) is despite sharp rises in urbanisation across many of Australia's key source markets. What this reflects, therefore, is that the underlying rate of population growth across the 15 to 29 year old cohort is projected to be relatively slow, with some variation across source markets.
- **Average incomes** are also projected to continue to grow – particularly in developing economies – boosting participation in formal education and exposing a vast new population cohort to the prospect of a world class international education.
  - Globally, Deloitte Access Economics projects that Gross Domestic Product (GDP) per capita will grow at around 3% per annum over the next ten years, with markets such as China and India expected to grow much faster, at 6% and 7%, respectively. The impact of this income growth on participation in formal education will be significant. For instance, analysis by Deloitte Access Economics indicates that a **1% increase in GDP per capita leads to an increase in the rate of higher education participation in the order of 1.1%**. Indeed, Chart i suggests that there is a positive relationship between income and participation in education across OECD countries – a relationship that is also likely to hold true as the economies of developing nations grow.

**Chart i: Relationship between GDP per capita (logarithmic scale) and education participation for OECD countries**



Source: OECD

<sup>2</sup> Learners coming to Australia for higher education, vocational education and training (VET), English language intensive courses for overseas students (ELICOS), schooling, non-award programs and learning that does not require a student visa (other visa holders can undertake up to approximately three months education or training while in Australia).

<sup>3</sup> Which is far broader and includes not only higher education, VET, ELICOS and schooling, but also non-accredited training, professional development, educational technologies and software and business-to-business services (see Figure 2.2 and Figure 2.3)

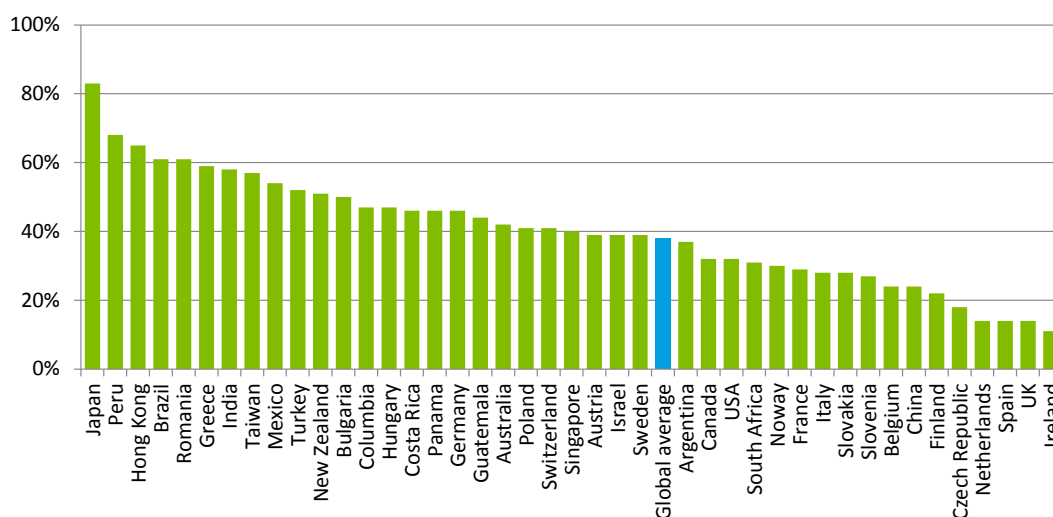
<sup>4</sup> As a proxy indicator for the size of the predominant population seeking to engage with formal education

- The international education opportunity created by the world's growing middle class will be tempered by the pace at which quality provision emerges locally. While the outlook for the **availability of quality education domestically** is hard to project with any precision, destination countries like Australia (and others) will undoubtedly face stronger competition as domestic education systems in markets such as China grow in quality and capacity.

Demand for education – and in particular its composition across study fields and levels – is also influenced heavily by the changing **workforce needs of the global economy**. This includes both changes driven by the world's shifting economic structure and changes driven by the evolving skill sets that existing occupations require.

- The outlook in this regard is shaped by a global economy that is undergoing unprecedented industrial transformation, and the pervasive impact of technology on how work is undertaken. The dual impact of these forces manifests in increasing levels of demand for higher skill workers.
- The ability for workers to upskill or reskill within their current occupations, through both formal and non-formal training, will be vital. Indeed, research by McKinsey suggests there could be a global shortage of 85 million medium-skill and high-skill workers by 2020.
  - Many developed countries are already experiencing difficulties filling job vacancies (Chart ii), and as the structure of economies in developing countries matures, they too are likely to face similar difficulties in the absence of sufficient training and education.

**Chart ii: Percentage of employers having difficulty filling jobs**



Source: Manpower (2015)

Ultimately, increased urbanisation and average incomes across the developing world will propel large volumes of people into contention for international education, and at a time when the global economy's demand for high-skilled workers is increasing sharply. Combined, these forces suggest that the economic opportunity in international education will be rivalled by few sectors over the coming decades.

### How large is the onshore opportunity available to Australia?

Australia has historically demonstrated strong performance in the provision of onshore international education, consistently ranking as a destination of choice across many of the major source markets. Looking ahead, Deloitte Access Economics<sup>5</sup> projects increased (from today's market position) onshore commencements and enrolments over the next decade.

Deloitte Access Economics projections for the 29 key source markets<sup>6</sup> show that **Australia's onshore international education sector is capable of increasing from 650,000 enrolments today to 940,000 by 2025** (which equates to a compounding annual growth rate of 3.8%).

While the composition of enrolments from each sector remains stable, the fastest growing markets within each sector vary, as outlined below (2025 compared to 2015):

- Higher education growth is expected to be concentrated from China (additional 32,000 enrolments) and India (additional 15,800 enrolments);
- Vocational education and training (VET)<sup>7</sup> is projected to experience the greatest growth from the Philippines (additional 10,200 enrolments) and India (additional 8,500 enrolments);
- Schooling growth will be driven by China (additional 2,000 enrolments) and Vietnam (additional 700 enrolments); and
- English language intensive courses for overseas students (ELICOS)<sup>8</sup> is projected to experience the greatest growth from Thailand (additional 2,100 enrolments), India (additional 1,900 enrolments) and Vietnam (additional 1,700 enrolments).

With this growth expected to comprise a large volume of relatively higher yield segments, the sector's **contribution to export earnings is expected to almost double to in excess of \$33 billion.**<sup>9</sup>

However, the opportunity may well be larger than these baseline projections suggest. This may arise either by virtue of economic conditions evolving more favourably than expected<sup>10</sup> or by Australia strategically outperforming the baseline market share expectations.

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<sup>5</sup> Utilised its international education demand model which is based on the key underlying economic drivers including income, population and exchange rates (see Appendix C)

<sup>6</sup> These markets are: Brazil, Chile, China, Colombia, Germany, Ghana, Hong Kong, India, Indonesia, Italy, Japan, Kenya, Malaysia, Mexico, Myanmar, Nepal, Nigeria, Oman, Pakistan, Philippines, Saudi Arabia, Singapore, South Korea, Thailand, United Arab Emirates, United Kingdom, United States of America, Vietnam, and Zimbabwe.

<sup>7</sup> VET courses are designed to deliver workplace-specific skills and knowledge across a wide range of careers and industries, and can be delivered by both public and private VET providers.

<sup>8</sup> ELICOS courses are for students studying English full-time in Australia on student visas, with a minimum of 20 scheduled course contact hours per week of face-to-face classes of English language instruction.

<sup>9</sup> The value added figure is calculated from the projected \$33.4 billion of projected international student expenditure, from Deloitte Access Economics' 2013 report for ACPET *The economic contribution of international students*. It is acknowledged that not all offshore activity is captured in this definition.

<sup>10</sup> See Appendix D for detailed projection results



In the end, there are both upside and downside risks to the scale and realisation of these projections, for instance:

- Price competitiveness is an important element<sup>11</sup> and, in this regard, it is anticipated that the recent improvements driven by the depreciation of the Australian dollar will be sustained; though
- The reputational and experiential competition from our legacy competitors, and on anticipated new competitive fronts (particularly across Asia), will be unrelenting and will impact upon learners' considerations of value for money; and
- There are legitimate enquires to be made in respect of the capacity of Australian education and training institutions, and supporting infrastructure, to accommodate this level of onshore growth.

Regardless, under any set of reasonable assumptions, it is apparent that the realisable opportunity for Australia in onshore international education is a vast one and one capable of making an even more material contribution to the nation's future economic prosperity.

### How large is the borderless opportunity available to Australia?

The borderless market is one that is in many respects untapped and without precedent. It is partly about channels and methods that are well known – such as international campuses and partnerships – but it is far more about those which are still being discovered. Even with the greatest foresight, its characterisation a decade from now is likely to be far different to today's.

Reliable quantification of its scale is correspondingly challenging, but some broad parameters are instructive. Defining the potential market (narrowly) according to the participation rates of 25-64 year olds in formal and non-formal education<sup>12</sup>, applied to the 29 key source markets of interest to the Australian international education sector<sup>13</sup>, there are **projected to be in excess of one billion 'in scope' learners in 2025**.

The share of this market which Australia captures is a function of a raft of factors, many of which are not amenable to quantitative forecasting.

- The factors so instrumental to our onshore successes – like geographic proximity and the Australian lifestyle experience – will have considerably less bearing, suggesting our onshore market share is unlikely to be matched in the borderless realm.
- Similarly, Australia's current share of borderless provision serves as a relatively poor indicator of future performance in what is a vastly different borderless future.

<sup>11</sup> Alongside other elements such as quality of education, availability of courses, proximity and safety.

<sup>12</sup> Formal education includes planned education provided in the system of schools, colleges, universities and other formal educational institutions, while non-formal education is defined as *sustained* and *organised* education activities that does not fall under the realm of accredited formal education. It includes activities such as open or distance learning courses (MOOCs), private lessons, organised sessions for on-the-job training, and workshops or seminars. However, non-formal education, by its definition, is hard to estimate with confidence.

<sup>13</sup> Due to limitations of the currently available data, estimates of Australia's potential reach to those aged under 25 have not been able to be determined. This is not to say that these age groups are unlikely to be significant consumers of borderless education services in the future.

However, **if Australia is able to reach just 1% of these learners, this would translate to over 11 million learners in 2025**, and if Australia was able to reach 10% of these learners that would equate to over 110 million learners in 2025.

Among the most prospective regions for borderless growth, based on high-level qualitative research of each market's education policy and regulation of foreign institutions, are **China, India, Vietnam, South Korea, Malaysia and Hong Kong** (see Figure 2.1). This broadly accords with the findings of the British Council which suggests that the markets with above average opportunity for 'formal' borderless provision are: Hong Kong, Malaysia, Singapore, United Arab Emirates, Qatar and South Korea. They are rated as being above average for a combination of: (1) accommodative policy host environments; (2) higher GDP per capita and greater demand for relatively more expensive borderless education; and (3) have achieved critical mass as host countries for borderless education (British Council, 2013).

Determining the most effective business models, including pricing approaches, will be critical to translating this opportunity not just into great volume, but also into significant value, in terms of export earnings for Australia and value-added in the Australian economy.

- Since per-student revenue will most likely be much lower than onshore provision and, under many models, a share of the economic activity will be retained in the host nation, the **per-student economic gain from borderless provision will be considerably less than currently observed with onshore**.
- By way of illustration, a stylised example of how revenue translates to value-added for the Australian economy was developed. It suggests that every dollar of fee revenue paid by a borderless learner at an Australian higher education campus overseas could translate to between -\$0.03 and \$0.41 of value added<sup>14</sup>. The size of the value added component would vary based on the business model, level of local versus Australian inputs, and profitability of the campus.

It is also acknowledged that offshore provision may serve broader strategic purposes which, over time, have the potential to realise further economic and social value for Australia.

Of course, the challenge remains mapping a path for the expansion of Australian international education products and services and, therefore, realising this significant potential. In this regard, it is instructive (and reaffirming) that Australian international education providers are already having some success:

- ChattyKidz is using technology to widen access to quality educational experiences
- OpenLearning has had more than 280,000 learners take a course with them since 2012
- Moodle's open source software for learning already has 65 million registered users
- Australian universities are profitably delivering higher education overseas, including Monash Malaysia and University of Wollongong in Dubai
- Australian TAFEs are partnering with foreign enterprises and institutions to offer borderless provision, as described by TAFE directors.

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<sup>14</sup> This compares to the \$0.93 of value added estimated for each dollar of fee revenue for onshore study.

- Australian Private VET providers are modularising and tailoring qualifications delivered overseas to better suit specialised business needs, including the Engineering Institute of Technology (EIT).
- Australian schools are opening up campuses overseas, such as Haileybury College in China.
- Australian ELICOS providers are developing both partnership models and stand alone schools such as UTS – Insearch in Indonesia in partnership with ELTI Gramedia and Academies Australasia through their Singapore campus.

### **Australia's comparative advantages can be leveraged to help realise the opportunity**

Australia has established itself as among the global leaders in the provision of international education. Our comparative strengths – that is, the 'Australian Advantage' – have been integral to our performance to this point, and will be key to the sector's future successes.

Among these strengths and advantages are:

- Proximity to key markets, and increasingly open trade relations with those markets.
  - There are few, if any, substitutes to physical proximity to market, which in Australia's case relates particularly to the emerging nations of South-East Asia. Further, the shared time-zone with Asia also allows for greater utilisation of synchronous online delivery of borderless education.
- A multi-cultural and multi-lingual society, enabling learners to experience global citizenship.
  - Minimal social/political fragmentation makes Australia a relatively welcoming destination.
- Clear pathways from schooling and ELICOS to higher education and VET, coupled with flexible qualification recognition arrangements, as well as strong accreditation and regulatory frameworks.
  - This simplifies the higher education application processes and creates greater certainty of educational pathways, particularly for those who commence ELICOS and/or schooling within the Australian system. Strong education frameworks have created an easy-to-understand, standardised and low risk product for learners, and these frameworks extend to accredited borderless delivery.
- Reputation for quality, a vital attribute to effectively realising the onshore and borderless opportunity.
  - While the perception of the quality of Australian education and training may vary across markets and segments, Australia is consistently described as being among the top education and training providers globally.
- Industrial prowess and specifically those areas where Australian industries are leading the world in terms of advanced technologies, skills and processes – for instance gas, tourism, agribusiness, health, wealth management and mining.
  - Australia's track record and experience means it is able to help emerging nations unlock their economic and social potential via borderless education and training in these domains, particularly where they match the workforce and skills needs of these nations.
- Price competitiveness, particularly within the projection window and in comparison to the key competitors such as the US and the UK.

- Strong performance by the Australian international education sector against a high Australian dollar in recent years bodes well for the future, given future expectations for its value against critical cross-rates.
- Post-study work opportunities (short-term and beyond), which have proven in the past to be a strong onshore drawcard, particularly given Australia's employment and lifestyle opportunities.
  - Under recent changes to visa requirements, higher education graduates may apply for a four-year post-study work visa.

While other competitor countries may perform better on individual market dimensions, **it is Australia's consistently high performance across this suite of factors that underscores the very distinctive Australian Advantage.**

At the same time, the changing nature of the international education landscape – in particular, the vast opportunity that exists in the borderless sphere – means that the Australian Advantage in international education is an evolving one. Looking ahead, of most relevance to the borderless opportunity will be the combination of:

- the quality of Australian education (and associated strong frameworks that provide learners with certainty of that),
- Australia's well-established industrial strengths (and where that intersects with the business and broader needs of other nations); and
- an emerging ability to deliver new and innovative education and training products (tailored to the needs of individual consumers).

### Enabling the opportunity

The advantages that Australia has established have served us well historically and, for some segments, will provide a strong basis for future performance. However, they do not automatically translate into realisation of the international education opportunity – especially given the extent to which these opportunities lie outside established channels.

Rather, there are a series of enabling initiatives – categorised here under the broad banners of learner **accessibility, experience and outcomes** – that will be required to bring this opportunity to fruition.

The characterisation of these initiatives varies across market segments and so too does their relative importance. Collectively, however, they represent a series of focus areas that – with appropriate development and specification – are capable of propelling Australia toward releasing the potential that exists.

- **Accessibility** is perhaps most relevant to success in the emerging borderless markets<sup>15</sup>. These borderless enablers include:
  - precise identification of where the opportunities exist and how the product or service in demand differs by market, and communicating these opportunities;
  - development of cohesive branding through a coordinated strategy;

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<sup>15</sup> Though expanding onshore source markets to grow Africa and South America may also require more proactive effort, given their proximity to some of Australia's key competitors in Europe and North America

- establishing partnerships with stakeholders in these markets (between providers, governments and Australian enterprise);
- seed support for innovation and entrepreneurship (particular EdTech); and
- addressing barriers to accreditation to ensure that entry to borderless markets is not delayed.

The sector and government can work together on these aspects to ensure that there is a cohesive 'Brand Australia' platform, in marketing efforts and other approaches (akin to the Tourism 2020 strategy for the Australian tourism industry).

- **Experience** is important to the onshore and borderless sectors. These enablers include:
  - provision of adequate onshore infrastructure for students, including accommodation that is suited to their needs (such as short-stay options for ELICOS learners and homestays for school learners);
  - engendering positive community attitudes towards onshore learners and opportunities for learners to engage with the wider Australia; and
  - ensuring that the learning experience is positive and engaging for both onshore and borderless learners and tailored to their needs of learners (for instance work integrated learning for those seeking professional development).

The sector and government can work to ensure that the value of international learners (beyond revenue) is recognised by the Australian community, that there is ongoing investment in infrastructure to accommodate the growth in onshore international learners expected over the next decade, and that learners have a positive learning experience overall.

- **Outcomes** are the most critical enabling factor for all learners, regardless of whether they are undertaking onshore or borderless study. These enablers include:
  - offering a quality product that helps learners successfully complete their learning and gain the skills and knowledge they desire;
  - providing clear pathways for progression into further study (for instance, from schooling and ELICOS into higher education and VET);
  - ensuring that education provides learners with the experience and transferable skills required for success in the 21<sup>st</sup> century workforce; and
  - setting stable and transparent migration policies to provide students with certainty over the course of their studies and achievable outcomes post-study.

The sector, government and industry can work together to ensure that education and training meets the needs of industry, particularly as the nature of work changes over time, to ensure that information about the quality of Australian international education is easily and widely accessible and that migration policies are stable thereby providing certainty and employment opportunities (both during and post-study) for learners.

### Conclusion and next steps: where opportunity meets advantage

This research report has dimensioned a remarkable opportunity for Australian international education, while at the same time defining the challenge of:

- refining that opportunity into its most prospective form for Australia – based on the relative size of the growth opportunities by source market and sector; and

- creating the ‘supply-side’ conditions and initiatives that best support the realisation of that refined opportunity.

The report thereby frames how (rather than where) opportunity meets advantage for Australian international education, and indicates the high level actions of public and private stakeholders that will be required in support.

Headline findings in this regard include:

- While Australia’s key onshore markets (China and India) will remain important over the next decade, there is projected to be significant growth in other onshore markets (including Thailand, Philippines and Nepal), and therefore **the sector’s focus needs to be diversified to capture this**.
- While growth in learner numbers onshore is likely to be eclipsed by growth in borderless provision over the next decade, the economic value to Australia per learner is likely to be a fraction of that generated per onshore learner. This reiterates the need to ensure **a balance of focus on onshore and borderless opportunities**, and motivates the careful consideration of the pricing of both borderless products and services.
- All three enablers – **learner accessibility, experience and outcomes** – are important for the realisation of the opportunity, both onshore and borderless:
  - For onshore markets, outcomes and experience may require the greater focus, and in particular the sector must recognise the importance of accommodating increasing learner numbers without compromising quality. For borderless markets, accessibility and experience may require the greater focus (given that many of these markets are still emerging), and as such the sector must recognise the importance of collaboration and competitive advantages in identifying and positioning for new business.

Future research and analysis could consider the more detailed strategic dimensions that support these prioritisation efforts, including identifying:

- those markets most open to international education partnerships with Australia;
- where Australian enterprise is in-country and local skills needs align with Australian expertise (in emerging markets);
- the onshore capacity in Australia to deliver the projected growth to a sufficient quality of educational and broader experience;
- the frameworks for collaborating and sharing value among providers (onshore and borderless); and
- the opportunities for providers to collaborate with industry in provision and work integrated learning.

#### **Deloitte Access Economics and EduWorld**

# 1 Introduction

The upside potential from the rise of education internationally, and the opportunity this presents for the Australian international education sector, is significant.

In the short to medium term, international education is predicted to be among the fastest growing sectors globally. At the same time, technology is changing both the way learners make decisions and expanding competitive markets beyond their typical geographic and service boundaries, through new delivery modes and broadening the range of education and training services that can be delivered.

As is typically the case with any such opportunity, realising it will be enhanced by a deliberate and coordinated endeavour that builds off Australia's existing advantages, and identifies new ways to sustainably develop the growth prospects. That is, a series of supporting market development strategies, settings and initiatives.

In support of this strategic endeavour, Deloitte Access Economics, in partnership with EduWorld, have been engaged by Austrade to develop a research report. This report:

- dimensions the scale and scope of the economic opportunity that lies ahead for Australian international education to 2025, through benchmarking current activity, projecting future activity and undertaking consultations with current and emerging providers in the sector, (in order) to help inform the development of the growth strategy; and
- covers both established, onshore international education provision, as well as borderless opportunities, including current transnational face-to-face delivery, online learning, non-formal learning and education technology offerings from Australian companies.

It is predominately focused on the demand-side of the opportunity, though with acknowledgement of the need for the supply-side to grow and adapt together with demand.

This research and analysis forms a key initial component in widening the traditional lens of Australian international education. The structure of the report is set out in Figure 1.1.

Figure 1.1: Report structure





## 2 Dimensioning the opportunity

In determining the scale of the opportunity for Australian international education, this section articulates the various components of what will likely constitute the global international education sector over the next decade, across markets, and across onshore and borderless activity.

A growing population and increasing wealth globally are driving demand for services – one of which is education. The strong growth in international education over the past decade has seen the sector become one of Australia's largest services exports.

These drivers will be supported by the continued strong fundamentals that have improved international learner mobility over the past decade – (1) population growth and (2) economic growth, with the global number of tertiary learners seeking international education projected to increase from 4.5 million in 2012 to over 7 million by 2025 (DEDJTR, 2015). More than 50% of those learners are expected to demand an English language education (UNESCO, 2012).

The **size of the global 15-29 year old population** – the main consumers of formal international education – is one of the key determinants of future demand for international education. While Deloitte Access Economics projects the global 15-29 year old population to increase from 1.77 billion in 2015 to 1.85 billion by 2025, there will be some compositional shifts. Although China, Australia's current largest inbound source market for onshore learners, is expected to experience a decrease in the size of its 15-29 year old population from 292 million to 252 million (a decrease of 40 million) from 2015 to 2025, its urbanisation rate will increase from 55% in 2015 to 62% in 2025, and there will be emerging opportunities in other markets. In particular, over the 2015 to 2025 period, the 15-29 year old population in India, Australia's second biggest inbound source market, is set to increase by 16 million (accompanied by a four percentage point increase in urbanisation rates), and the combined markets of Nigeria, Pakistan and the Philippines, are set to collectively increase by 29 million.

Whereas population determines the total eligible pool of participants in education, **economic growth** and wealth is strongly correlated with/to the proportion that will consider international education. For instance, despite the recent pessimism over the state of the global economy, particularly over fears of a downturn in China, gross domestic product (GDP) per capita in purchasing power parity (PPP) terms in China is expected to grow at 7.2% per annum until 2024 (British Council, 2013). This is followed closely by India (6.8%), Indonesia and Nigeria (tied at 5.5% each). Deloitte Access Economics analysis indicated that a 1% increase in GDP per capita globally is associated with a 1.1% increase in global participation in higher education.

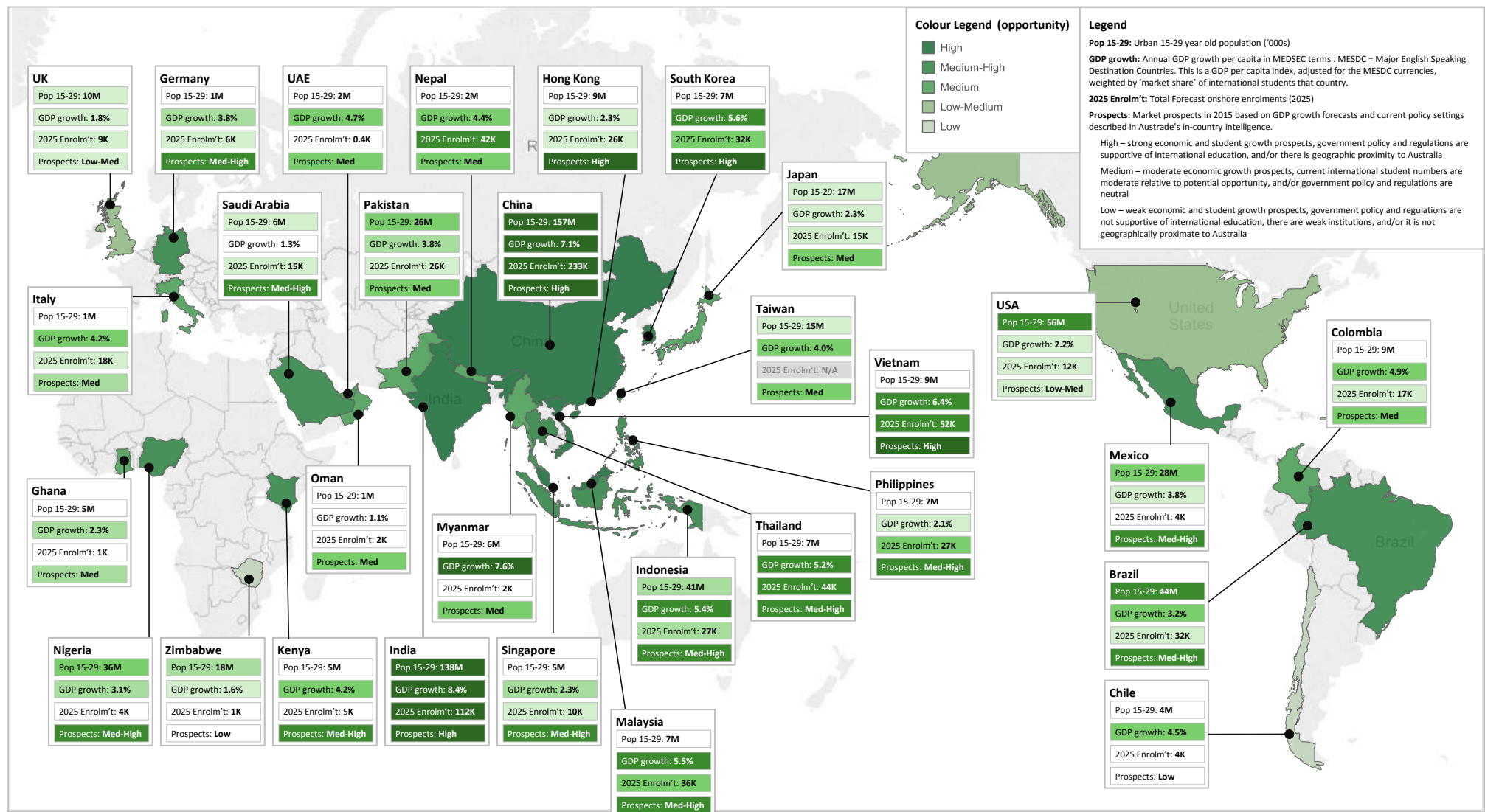
As the developing economies grow, they are expected to shift from a primary industry and manufacturing-based economy to an increasingly service-orientated one. This is expected to simultaneously create a global shortage of 'knowledge workers,' such as engineers, technicians and IT staff (Manpower, 2015), and an oversupply of low-skilled workers. Employers in the new 'knowledge economy' will also place a greater emphasis on soft

‘portable’ skills such as communication, problem solving, critical thinking and work ethics. Consequently, individuals are expected to rely on education to address the skills mismatch and improve employability in the competitive global workforce.

Both Australian onshore and borderless international education have the potential to benefit from these strong fundamentals. The following sections will examine the specific trends for key source markets and dimension the opportunities for the Australian international education sector.

Figure 2.1 summarises the key statistics and prospects for the markets examined as part of this report. It illustrates that markets which have historically been strong for Australia (such as China and India) will continue to play an important role for Australian international education, but that markets such as South Korea, Malaysia, Indonesia, Vietnam, and Hong Kong present high prospects for international education, given their current economic and policy environments (see Appendix E for sensitivity analysis).

Figure 2.1: Key statistics and market prospects for source markets



## 2.1 Onshore international education

Currently, onshore international education delivered in Australia comprises higher education (43% share of current enrolments), VET (26%), schooling (3%), and English Language Intensive Courses for Overseas Students (ELICOS) provision (23%), and Non-Award programs (6%).<sup>16</sup>

Other activity, such as foreign academics and teachers visiting Australia, is also part of the current onshore international education sector, but due to the limitations of the available data, they have not been included in the projections below.

### 2.1.1 Baseline projections of international onshore commencements and enrolments

To dimension the size of the economic potential presenting to the Australian international education onshore sector across higher education, VET, schooling and ELICOS, Deloitte Access Economics' in-house projection model has been used. The model methodology is described in Appendix C and the results of the model are presented below.

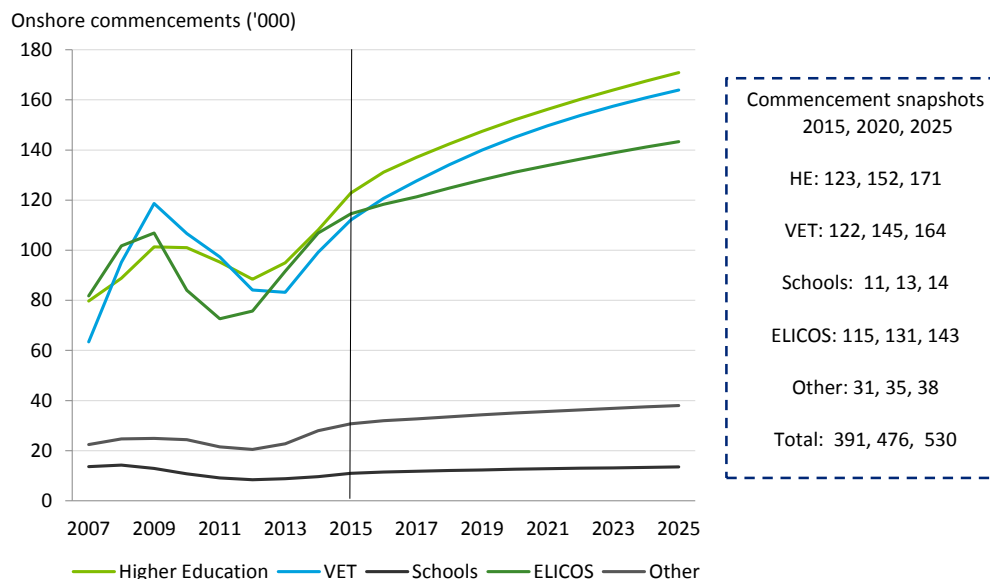
The results in Chart 2.1 and the proceeding charts show actual commencement and enrolment data between 2007 and 2014 for Australian international education, with 2015 representing the first full projection year. The period between 2009 and 2011 marked a downturn for the onshore international learners sector. The widespread reporting of violence against Indian learners in Melbourne had tarnished Australia's reputation as a safe destination for international learners. Indeed, learners from India accounted for 81% of the total decline in international student visa grants between 2009 and 2011. In addition, factors such as the high exchange rate, the global economic downturn and changes to visa rules played a large role in moderating demand during this period.

#### Commencements

Since 2011, the international education sector returned to a high-growth trajectory temporarily between 2013 and 2014 (despite the persistent strength of the Australian dollar). This has coincided with more favourable economic conditions in key source markets. In the coming decade, there is projected to be a slightly slower, but steady, increase in international learner commencements of around 3.1% per annum under the baseline assumptions. Total onshore international learner commencements in Australia are projected to be 475,800 in 2020, growing further to 529,700 by 2025.

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<sup>16</sup> Non Award programs include any remaining courses that do not confer a qualification under the AQF. This includes foundation, other enabling courses and study exchange programs recorded in PRISMS

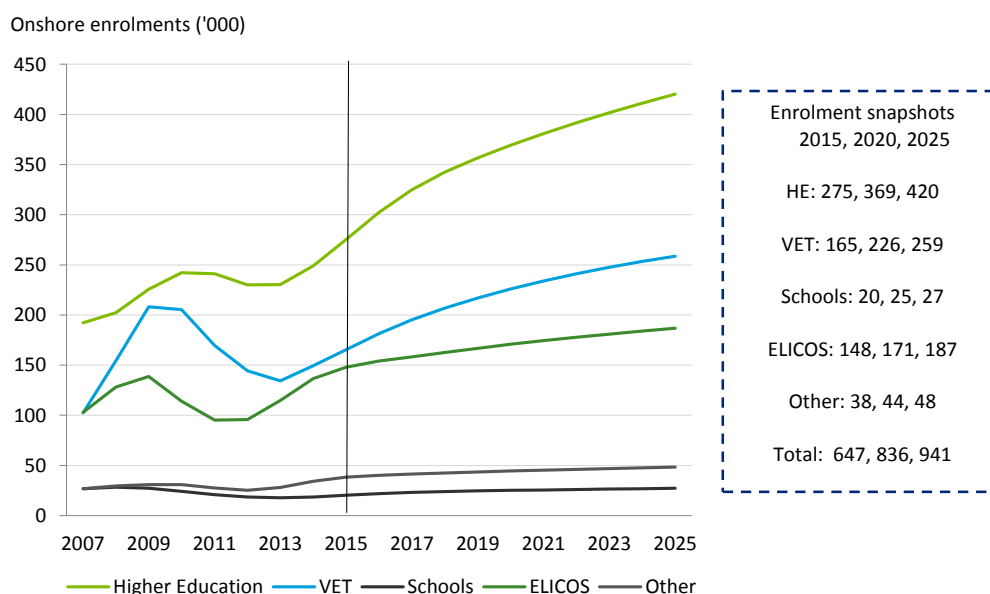
**Chart 2.1: International learner commencements by sector**

Source: DET, Deloitte Access Economics

## Enrolments

From an enrolment perspective, the story is similar, with the exception of a few minor differences. Firstly, the global financial crisis had a lagged effect on enrolments when compared to commencements. Due to the time taken to complete courses, 2013 marked the corresponding low point for onshore international enrolments in Australia. This trend was predominantly driven by lower international uptake in the higher education and VET subsectors by Indian learners.

Secondly, the rebound in international onshore enrolments is stronger, with a high-growth trajectory projected to hold between 2014 and 2018, before converging to a steady state long term growth path. These trends are projected to see onshore international learner enrolments in Australia increase from a projected 647,300 in 2015, to 835,500 in 2020 and 941,400 by 2025 under the baseline assumptions. This translates to a 10-year compounding annual growth rate in onshore international enrolments of 3.8%.

**Chart 2.2: International learner enrolments by sector**

Source: DET, Deloitte Access Economics

### Sector-level analysis

At the subsector level, the expansion in onshore international education is expected to permeate across both accredited and non-accredited courses. As is defined in Section 2.2, entry into CRICOS accredited courses requires visas and is offered mostly by higher education and VET providers, and by ELICOS and schooling institutions to a lesser extent. Over the period to 2025, the fastest growing subsectors in onshore international education are projected to be higher education and VET, which are also the two largest subsectors.

Total international learner commencements in higher education and VET are projected to grow at an annual rate of 3.4% and 3.9%, respectively. This flows on to drive growth in enrolments of around 4.3% and 4.6%, respectively. Underpinned by the established reputation of Australian universities and the growth of private VET providers offering flexible and tailored accredited courses, these two subsectors are estimated to account for 72% of all onshore international learner enrolments in Australia by 2025. This would see an expansion on their current share of 68%, although it is acknowledged that improved measurement of learners and delivery modes currently not well captured in the available data may in fact reveal a picture that reduces these market share figures.

Through the use of the ABS data on international learner expenditure and the projected commencements, Deloitte Access Economics estimates that in 2025, the average international learner will spend around \$61,000 on higher education in Australia. In total, international higher education onshore learners are projected to spend around \$25.6 billion.

A leading Australian higher education provider reflects on the future growth opportunities to come in the case study below.

**Case study: higher education provider**

This Australian higher education provider is one of the biggest international higher education providers in Australia.

The Deputy Vice-Chancellor believes growth will come from the middle-class segment, particularly in China, as university rankings are a key decision factor for these learners. Australia may not be the top destination choice (the US and UK are), but if this middle segment can be effectively identified and developed, Australia could do well.

The Provider also believes that it is necessary to ensure that there is sufficient capacity in the education system to accommodate increasing learner numbers without sacrificing quality. Furthermore, providers should be committed to a longer-term strategy and presence in the market that is built on bilateral or multilateral partnerships and relationships, rather than a transactional or opportunistic entry to the market.

Reflecting its function as a key progression pathway, much of the medium term growth in the tertiary international education subsectors is currently being driven by the boom in ELICOS commencements and enrolments. The baseline projections suggest that as a share of total onshore international enrolments, the ELICOS subsector hit its peak in 2014 when it constituted 23% of the market. At present, more than 70% of Chinese learners who complete an intensive English-language course continue on to study at an Australian higher education provider and around 69% of Indian learners and 60% of Brazilian learners studying English transfer to either higher education or VET courses. A similar proportion of Korean, Thai, Colombian, Japanese and Saudi learners continue along this study pathway.

Indeed, nearly two thirds of international students enrolled in ELICOS went onto further study in higher education (34%) and VET (23%; DET, 2015b). An earlier survey conducted by English Australia (2012) found that many students also studied for general English purposes (36%), and examination purposes such as IELTS or English for teachers (16%). Of all surveyed participants, 33% cited employment-related reasons for their studies (English Australia, 2012), and this underscores the importance of the ELICOS sector now and into the future.

Going forward, enrolments in ELICOS are projected to grow at 2.4% per annum, 1.4 percentage points below the onshore international sector average. By 2025, enrolments in ELICOS are projected to make up 20% of the onshore international education sector under the baseline.

In part, this can be attributed to the maturation of key ELICOS source markets, notably in China, where both the public and private sectors have invested heavily in increasing advanced English-based offerings domestically. While this has a positive effect on direct enrolments in Australia's tertiary sectors, it reduces the need to travel abroad and commence in an ELICOS course. In the very long term, as the present group of emerging ELICOS source markets also begins to mature (i.e. Thailand, Brazil and Colombia), the demand for ELICOS onshore is likely to continue to moderate, with more learners electing to enrol further up the education hierarchy directly. It does however, as noted elsewhere in this document; increase the opportunity, already in play to some degree, of online offerings in English language teaching.

Non-award education in the onshore international education sector has been captured by tracing student visas used for exchange programs and courses or components of a course that do not lead to an award. This is represented through the “other” subsector category. Onshore international enrolments in this group are projected to grow at the same rate of the ELICOS subsector, at 2.4% per annum to 2025.

Due to data limitations, other forms of non-formal learning that can be undertaken without a student visa, such as through study tours, professional and executive programs, and English language training have not been captured in the modelling.

### Key source markets

The top eight onshore international source markets for Australia ranked by enrolments in 2025 are listed in Table 2.1. This group is projected to contribute 62% (583,400) of total onshore international enrolments in 2025, with China and India together accounting for 37% (345,800). Though between now and 2025, the top four source markets by enrolment of China, India, Vietnam and Thailand are expected to remain unchanged, their relative significance and those of other key source markets vary over time.

For instance, the share of learner enrolments from China and India are projected to increase to 48% by 2025, while the share of learners from Thailand, Vietnam, Nepal and Malaysia also increase marginally, accommodated by declines in the share from Brazil and South Korea.

**Table 2.1: Top eight source markets for Australia by enrolments all sectors 2015 – 2025 (baseline scenario)**

	Market ranking	2015	2020	2025	Annual growth rate	Enrolments in largest subsector in 2025 (% of total <sup>17</sup> )
■	China	166,600	213,600	233,500	3.5%	Higher ed 145,900 (63%)
■	India	72,100	95,300	112,400	4.5%	Higher ed 58,100 (52%)
■	Vietnam	33,600	45,600	52,400	4.5%	Higher ed 23,000 (44%)
■	Thailand	28,800	39,200	43,600	4.2%	VET 20,700 (48%)
↑	Nepal	21,600	33,200	41,800	6.8%	Higher ed 23,900 (57%)
↑	Malaysia	23,700	32,000	35,700	4.2%	Higher ed 20,800 (58%)

<sup>17</sup> Note that percentages are based on actual figures (rather than the rounded numbers presented in this table).



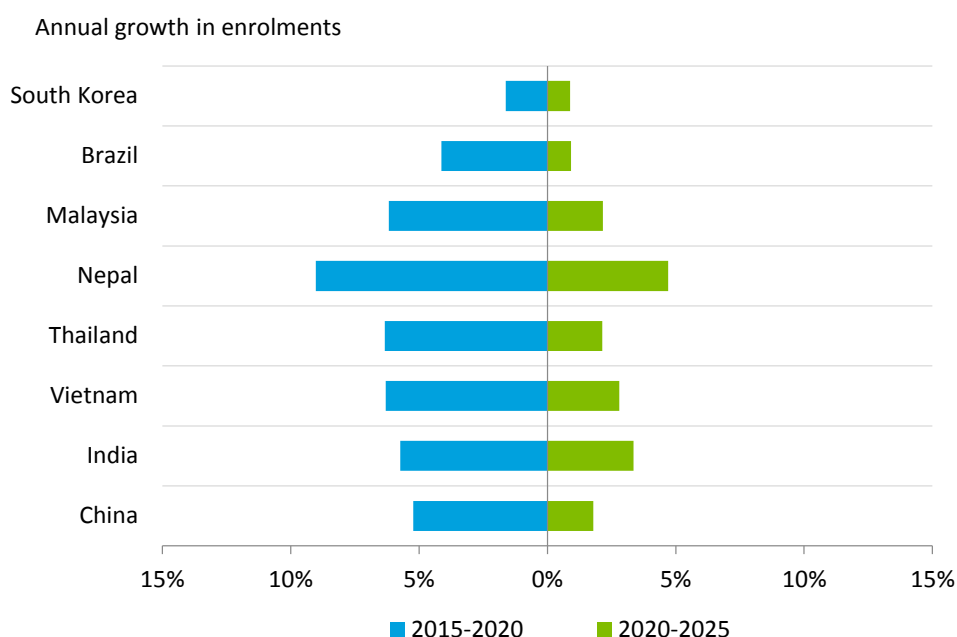
Market ranking	2015	2020	2025	Annual growth rate	Enrolments in largest subsector in 2025 (% of total <sup>17</sup> )
↓ Brazil	25,100	30,700	32,200	2.5%	ELICOS 15,500 (48%)
↓ South Korea	28,200	30,500	31,900	1.3%	VET 16,700 (52%)

Source: Deloitte Access Economics

A common feature across most of Australia's key international onshore source markets is that the growth in enrolments is sharper over the first half of the modelling horizon to 2020. This represents the growth that is considered to be 'locked in' based on prevailing student visa data, the average length of study and indirect enrolment pathways. Beyond this period, growth becomes less certain and is more heavily influenced by economic conditions, income distribution and changes in demographics and relative costs. In addition, as global education becomes more mobile and information dissemination is wider, proximity to home countries and the presence of existing trade links may become weaker indicators for future enrolment decisions.

As can be seen from Chart 2.3 and Chart 2.4, Australia's mature and largest volume markets (i.e. enrolments in excess of 35,000 by 2025) are not necessarily the ones projected to grow the fastest, especially in the longer term. It is emerging economies such as Ghana, Nigeria, Kenya and the Philippines that are projected to increase enrolments by between 6.5% - 9.0% per annum over 2015-2025 under the baseline.

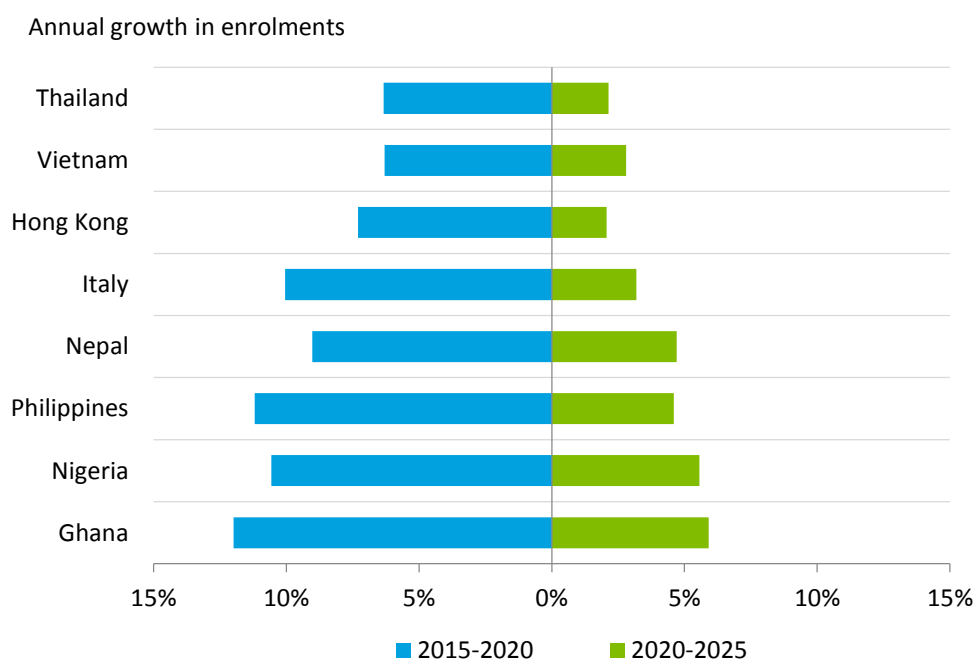
**Chart 2.3: Annual % enrolments growth in largest source markets (as determined by numbers)**



Source: Deloitte Access Economics

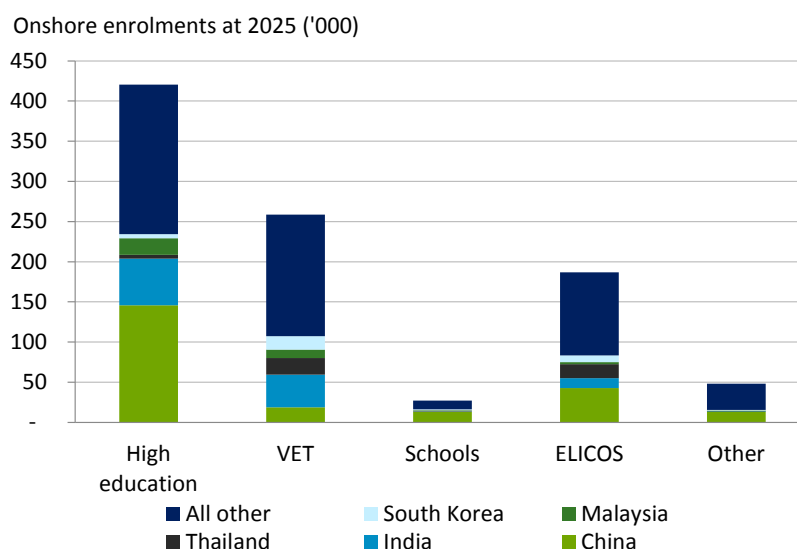
Enrolments are projected to increase at an annual average rate of 4.5% beyond 2020 for the top eight fastest growing source markets, compared to 2.3% for the eight largest volume source markets. However, as this higher growth is projected to occur off a relatively small base of onshore enrolments in Australia (i.e. enrolments within a 1,000-5,000 range), the onshore education sector will continue to be weighted towards mature economies over the next decade.

**Chart 2.4: Annual % enrolments growth in fastest growing source markets (as determined by % growth)**



Source: Deloitte Access Economics

A snapshot of the enrolment distribution in international education by subsector and main source markets is displayed in Chart 2.6. As our largest source market, both now and in 2025, it is no surprise that the largest number of enrolments in the onshore higher education, schooling and ELICOS subsectors are from Chinese learners. In 2025, learners from China are projected to account for 35% of the onshore international education segment, 23% of the ELICOS and 49% of school subsectors. Chinese learners also comprise the leading source market in other non-accredited student visa market (27%).

**Chart 2.5: Subsector enrolments by key source markets by 2025**

Over the modelling horizon, demand from Brazil and South Korea are also projected to comprise a sizable share of the ELICOS subsector, both contributing 9%. Colombia, Japan and Saudi Arabia collectively form 14% of the ELICOS onshore enrolment market. The source of enrolments in the VET subsector is more dispersed. Learners from India comprised the largest share of VET onshore enrolments at 16%, followed by Thailand (8%) and South Korea (7%).

### Achieving the baseline projections

As indicated above, the baseline projections for onshore international learner enrolments are predicated on the size of the global international education market and competitive advantages that will steer learners towards Australia. Current student visa grant data, pathway trends, along with demographics and economic growth in key source markets dictate the composition of growth from markets and across education subsectors.

Critically, this represents a 'baseline' projection of demand, and this projection will only be realised as enrolments if Australian international education onshore providers are sufficiently prepared and able to deliver this volume of training and where no new competitive forces emerge (or are not overcome where they do emerge). Consultation participants also consistently noted that a focus on providing a quality product is the best way to ensure that Australia continues to be an attractive destination for onshore education.

In addition, the Australian Government must continue to put in place supportive policy settings and trade agreements.

For instance, the increasing number of international enrolments has raised concerns that the supply of purpose-built learner accommodation – a potential obstacle to increasing student numbers onshore that was raised in some of our consultations – will not be able to keep pace without infrastructure planning. According to data from the Department of

Education, Australia currently has 315 purpose-built learner accommodation sites with a total of 74,480 beds. Approximately 40% of those beds are occupied by international learners.

Research by Jones Lang LaSalle (JLL) suggests that up to 375,000 additional beds will be required by 2025 and is estimated to cost close to \$45 billion to develop. JLL has estimated that around 50% of all onshore international learners will live in purpose-built learner accommodation by this time, alongside 25% of domestic learners who move interstate and 10% of domestic learners who remain in their own state.

The Australian Government is also in the midst of negotiating and finalising free trade agreements (FTA) which are likely to play a central role in encouraging the movement of learners and their visiting friends and relatives, along with improving market access for borderless Australian education providers. As an example, within one year of entry into force of the China-Australia Free Trade Agreement, China will list on the Ministry of Education website 77 Australian private higher education institutions registered on the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS). This will add to the existing 105 Australian institutions already on the website. In addition, Australia and China will continue to discuss options that facilitate student and teacher exchange between the two countries and increase the marketing of Australian education providers.

Similarly, the Trans-Pacific Partnership, which was negotiated by Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, Peru, New Zealand, Singapore, the United States and Vietnam will provide Australian universities and VET institutions greater market access to Asia-Pacific economies.

As the number and diversity of international education source markets expand under the baseline assumptions, student visa settings will become more important, to ensure certainty and transparency. The simplified student visa framework (SSVF) that is expected to be introduced mid-2016 is an important step in this regard. Under the SSVF, the number of student visa subclasses will be reduced from eight to two, a student visa and a student guardian visa. A simplified single immigration risk framework will also be applied to all student visa applicants, providing certainty and transparency for learners – and ensuring that learners do not interpret SSVF as implicit government endorsement of particular providers.

## 2.2 Borderless international education

UNESCO defines borderless education as ‘all types of higher education study programmes or set of courses of study, or educational services...in which the learners are located in a country different from the one where the awarding institution is based’. The borderless sector, as mapped out in Appendix A as part of this project, also includes VET, schools, ELICOS, non-accredited training, education technologies and software, and business-to-business services.

To date, the focus of borderless international education activity has been in the higher education and VET sectors, of which Australia has been one of the global leaders. Despite the growing significance of the sector, with the borderless programs of Australian higher

education and VET providers accounting for 35% and 40% of their respective total international learner enrolments in 2013 (DET, 2014a), there has been limited research on the scope, extent and impact of the sector more broadly (DET, 2013).

However, this is not to say that there is not activity occurring in other parts of the borderless sector, there are already numerous providers operating across this diverse sector, serving large numbers of learners globally. Figure 2.2 and Figure 2.3 illustrate the global landscape of the borderless international education sector, and its diversity – not only are providers delivering education to learners, but businesses are providing education related services to other business (who may then go onto deliver training to learners).

**Figure 2.2: Current landscape of 'Provider to Learner' borderless international education**

Provider to Learner				
	Delivery mode			
	Face-to-face	Online	Blended	Other
Borderless learners enrolled at an Australian institution in their own country, or a third country (HE, VET, Schools, ELICOS)	●	●	●	○
International learners enrolled with an Australian online provider undertaking online tutoring	○	●	○	○
International learners sitting Australian qualifications or assessments	●	○	●	○
International learners pursuing a professional, employment or lifestyle outcome (VET)	●	●	●	○
Accreditation of foreign qualifications (VET)	○	○	○	●
Credentialing service	●	●	●	○
Mentoring service	●	●	●	○

Source: EduWorld

**Figure 2.3: Current landscape of 'Business to Business' borderless international education**

Business to Business			
	Sectors		
	Consultancy	Training	Collaboration and contracts
Educational system and framework reform	●	○	○
Train the trainer and teacher training	●	●	○
Education for development	●	○	○
Australian provider delivering nationally recognised and non-formal training courses to corporates, government and individuals	○	●	○
Foreign organisations on Australia education provider boards or Australian skills council	●	○	●
Sponsorship of foreign researchers into Australia	●	○	●
Teaching and learning infrastructure or foundation building tools and services	●	○	●
Fully integrated digital education providers	●	○	●
Content, curriculum development and licencing	●	○	●
Evaluation and assessment tools	●	○	●
Integrated learning environments	●	○	●
Learner and parent management and information systems	●	○	●
Digital education marketplaces, marketing and sales	●	○	●

Source: EduWorld

## 2.2.2 Aspirational borderless opportunity

The opportunity that faces the borderless sector is measured through a stylised, illustrative measure of the potential size of the Australian borderless sector that is derived through high-level assumptions about the relationship between participation in education and income growth, and the proportion of learners that Australia could reach.

Using the available data from the OECD about participation in formal and non-formal<sup>18</sup> education by 25-64 year olds in OECD countries<sup>19</sup>, the relationship between participation in formal and non-formal education and GDP per capita is estimated. This relationship is applied to population and income estimates for 25-64 year olds in the markets of interest for the Australian international education sector, resulting in over one billion learners participating in education by 2025. From this, illustrative Australian proportions of learners reached were chosen.

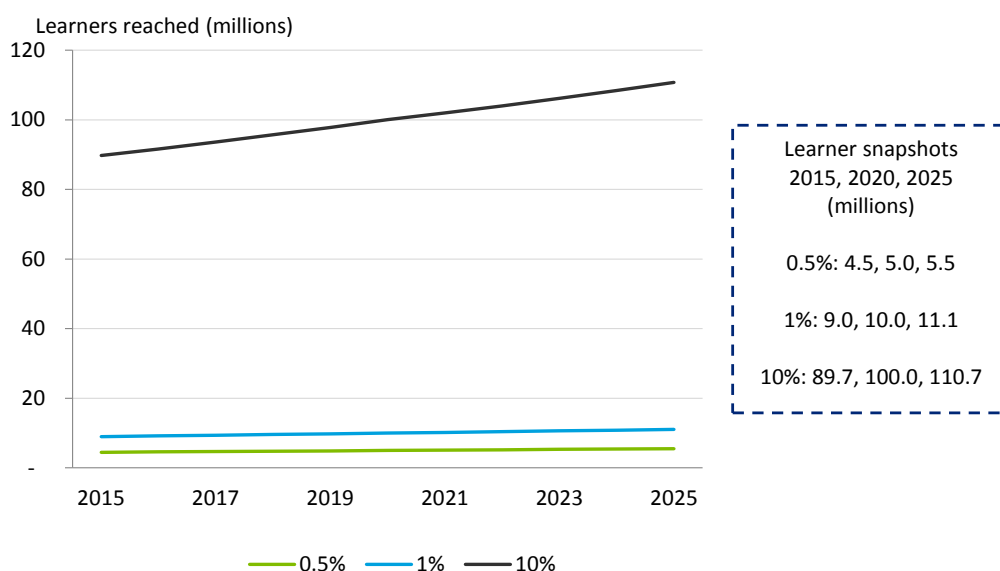
If 1% of learners participating in education are reached by Australian borderless providers, it is projected that 11.1 million learners will be reached by 2025 (from 9 million in 2015). In addition, two scenarios are considered. If the borderless sector is able to reach 0.5% of learners, there are projected to be 5.5 million learners in 2025, and if 10% of learners can be reached, Australia will be serving 110.7 million learners (see Chart 2.6).

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<sup>18</sup> “Non-formal education may therefore take place both within and outside educational institutions and cater to individuals of all ages. Depending on country contexts, it may cover education programmes in adult literacy, basic education for out-of-school children, life skills, work skills, and general culture. The Survey of Adult Skills uses a list of possible non-formal education activities, including open or distance learning courses, private lessons, organised sessions for on-the-job training, and workshops or seminars to prompt respondents to list all of their learning activities during the previous 12 months.”

<sup>19</sup> Whilst the borderless sector will reach learners both under 25 years of age and over 64 years of age – limitations of the available data mean that it has not been possible to determine their level of participation in education and hence the potential reach of Australia’s international education sector. Thus, these numbers could be considered a lower bound for the sector.

**Chart 2.6: Learners reached, with 0.5%, 1% and 10% of those participating in education (25-64 year olds)**



Source: Deloitte Access Economics

There are some limitations to this analysis:

- Firstly, it implicitly assumes that there is a linear relationship between participation in education and income for OECD countries, and that relationship can be extrapolated to non-OECD countries.
- Secondly it assumes that GDP growth is equivalent to GNI per capita growth, which could result in an overestimation of GNI per capita growth (given the GDP growth includes population effects).
- Thirdly, it assumes that the choice drivers of onshore education and borderless higher education and VET are the same as the choice drivers for all other segments of borderless provision. In fact, learner choice drivers for non-accredited training and online learning, and business choice drivers for EdTech and other business-to-business services may vary dramatically, given different learner cohorts served by these providers and their motivations for seeking education, as well as their willingness to pay.

There are also limitations associated with the data – the age of learners being analysed here differs from that analysed for onshore international education (in part, driven by the data that is available), and learners of different age groups may take into consideration different factors when making decisions (for instance, a school-aged learner seeking English language tutoring may be influenced by different factors than an older learner considering non-accredited professional development). In addition, the available data does not distinguish between learners that are internationally mobile and those that are not.

The following sections articulate the borderless opportunity in greater detail and illustrate the diversity of the sector.



## 2.2.3 Borderless tertiary opportunities

### Current higher education and public VET market

Between 2003 and 2009, the higher education and public VET borderless sector has experienced steady growth, with the total number of learner enrolments (of any age) increasing from approximately 75,000 in 2010 to 140,000, before declining slightly and stabilising at 134,000 by 2013.

In the **higher education** sector, ten Australian universities are currently delivering borderless programs via distance education, and another 14 have physical campuses overseas (DET, 2015a). The campuses are predominantly based in Asia, but there is also presence in the Middle East and Africa. In 2014, approximately 85,900 learners studied at an overseas campus at an Australian institution (DET, 2015a).

The composition of the borderless higher education sector also differs significantly from the onshore sector. Malaysia is the single biggest borderless higher education market (comprising 24% of Australian enrolments – compared to just 6% of Australian onshore higher education enrolments) – followed by Singapore at 20% versus 3%, Hong Kong at 11% versus 3%, and China at 11% versus 36% (Universities Australia, 2014).

In addition to the borderless higher education campuses established by the likes of Monash University (Malaysia) and University of Wollongong (United Arab Emirates) amongst others, higher education institutions are also expanding their reach online, delivering borderless education through their own platforms such as Swinburne Online and Deakin Digital, and shared platforms, such as Open Universities Australia and OpenLearning.

For the **VET sector**, quantification has been mostly focused on public VET providers. In 2013, there were 35 Australian providers offering nearly 500 courses in 31 markets. China is by far the largest market, with Chinese enrolments making up 72% of the total 50,000 borderless public VET learner enrolments in Australian institutions.<sup>20</sup>

There are also private Australian VET providers active overseas. For instance, the Australian Retail College (ARC) and the Australian Institute of Health Science and Technology (AIHST) are private VET providers specialising in industry-specific professional training. It was estimated that in 2011, there were approximately 6,800 learners studying at private VET institutions overseas, based on a survey of Australian Council for Private Education and Training (ACPET) members (AEI, 2012). Others, such as EIT (see Case study in Section 3.1.2), TAFE NSW and an RTO specialising in oil and gas have already begun to deliver borderless education both face-to-face and online.

### Future higher education and VET opportunities

Positive demand and supply side factors will drive future growth in borderless education, through both a deepening of established markets in higher education and VET, and a

<sup>20</sup> While 2014 figures are available from the NCVER, they are not strictly comparable to data applied in the projections (namely they're sample estimates as opposed to true figures).

widening of focus to new markets and sectors, including the business-to-business provision of education services in consultancy, and technology enabled learning content and tools.

On the demand side, the total global demand for tertiary education is set to increase by 21 million between 2011 and 2020, with a total of over 202 million learners expected to be enrolled in tertiary education by 2020 (British Council, 2012). However, as only approximately seven million of these learners will be travelling abroad (DEDJTR, 2015), there is a large opportunity for borderless providers to meet this demand in those markets where there is an overall lack of supply and in particular, quality supply.

Combined with recent supply side shifts, including the unprecedented ability to link to the rest of the world through political, technological and communication advances, education providers are finding borderless provision more attractive. Rather than having learners come onshore for education, the borderless provision will involve taking education to learners in their home markets or international education hubs such as Malaysia and United Arab Emirates.

In addition, if local institutions are unable to meet growing demand, Australian providers will have the opportunity to meet the supply gap and grow their borderless enrolments.

### **Borderless versus onshore international higher education: the impact on exports and value added (an illustration)**

Different models of education delivery can potentially have very different impacts on both the amount of fees received by a university and the amount of that fee revenue that is retained in Australia (in the form of value-added to national income (GDP)).

While measures of exports capture all the fee revenue from international students studying at an Australian provider, a more appropriate measure of the impact on GDP is the gross value added associated with international education. This accounts for the fact that not all student revenue is retained in Australia as some inputs used by universities are imported.

The extent to which student revenue contributes to value added will differ considerably based on the delivery model. To illustrate how different delivery models will contribute differently to value added it is useful to consider three scenarios:

- **Scenario 1** - an international student coming to Australia to study onshore;
- **Scenario 2** - an international student studying a borderless online course that is delivered wholly by a campus in Australia; and
- **Scenario 3** - an international borderless campus owned by an Australian university.

First, the export revenue under each scenario is recorded differently.

- In Scenario 1, both expenditure on fees and living expenses are captured by the ABS as an export in ABS Cat. No. 5368.0 under 'education related personal travel'.
- In Scenario 2, student fees remitted to Australia are also captured in ABS Cat. No. 5368.0 but under correspondence courses and services through educational institutions.

- In Scenario 3, none of the fees paid by students are currently captured as exports because the ABS does not include activity by foreign affiliates in its export calculations, although experimental estimates have been developed in the past<sup>21</sup>.

Secondly, the fees received per student are typically very different in each scenario. While there is no authoritative measure of fee revenue for students at Australian campuses located overseas in all education sectors, in 2014 Australian public universities did include information on revenue received offshore in their annual reports.

To analyse the potential size of fee revenue from students located offshore, Deloitte Access Economics aggregated information from all public universities provided in their annual reports. This analysis showed that at a consolidated level (which accounts for the fact that many offshore operations are jointly controlled entities of the parent university), Australian public universities received fee income of \$382 million from offshore students.<sup>22</sup> This figure is likely to include revenue from students studying online (Scenario 2).

In 2014, \$6.7 billion in fees were paid by onshore international students in Australia across the higher education and VET sectors (ABS, 2015). While little is known about the revenue from offshore enrolments in the VET sector, given the revenue from offshore students in higher education and other publicly available information on enrolments in VET, this suggests that the total revenue from borderless international students is in the region 6% to 8% of that onshore.

Thirdly, fee revenue from different delivery modes is likely to translate differently to value added. Little is known about how fee revenue translates to value added for Scenarios 2 and 3. This is because universities rarely disaggregate financial information for online activities or international campuses in their annual reports. Those that do provide this information do not detail how much expenditure on wages and intermediate inputs occurs in Australia relative to the host country. As a consequence, it is difficult to know how much fee revenue from overseas activity is likely to translate to value added in Australia.

Table 2.1 provides some assumptions on how \$1 of fee revenue translates to wages, Gross Operating Surplus (GOS), indirect activity from purchases of intermediate inputs and total value added across the scenarios.

- The first column is based on an analysis of the university sector by Deloitte Access Economics for Universities Australia in 2015.
- The second column is based on assumptions about operating costs under Scenario 2, but draws on information from university financial reports. Overall, total value added here is assumed to be similar or possibly slightly lower than Scenario 1, since all the physical infrastructure and employees are based in Australia.
- The third column is based on assumptions by Deloitte Access Economics drawing on an analysis of university of financial reports detailing overseas activity.

<sup>21</sup> See ABS catalogue no. 5495.0 – Australian Outward Foreign Affiliates Trade, 2002-03

<sup>22</sup> This includes fee income from James Cook University Enterprises Pty. Ltd. and revenue from the Swinburne University of Technology's International Operations.

The analysis of university financial reports found the gross operating surplus of overseas campuses varies considerably by campus, with some making net losses and others making significant profits. While over 90% of onshore fee revenue is likely to translate to value added locally, a much smaller proportion of overseas fee revenue is likely to translate to value added locally, though this may vary considerably depending upon the organisational structure and profitability of the individual university, as demonstrated in Table 2.2 below (i.e. between -3% and +41%, by this illustration).

**Table 2.2: Assumptions of how \$1 of fee revenue translates to value added across the scenarios**

Scenario:	1. Onshore study	2. Borderless learner studying online with university in Australia	3. Borderless learners at an Australian campus overseas
Wages in Australia	0.51	Likely to be similar to or slightly lower than scenario 1	0 to 0.1
GOS in Australia	0.16	Likely to be similar to or slightly higher than scenario 1, found to be 0.32 for one university	-0.04 to 0.26 (based on financial results)
Indirect value added and production taxes in Australia	0.25	Likely to be slightly lower than scenario 1 (less expenditure on campus facilities)	0.01 to 0.05
Total value added	0.93	Likely to be similar or slightly lower than scenario 1	-0.03 to 0.41

Source: DAE report for Universities Australia 2015, DAE assumptions and analysis of offshore activity in various university Financial Reports.

At the same time, it is also acknowledged that offshore provision may serve broader strategic purposes which, over time, have the potential to realise economic value for Australia. There are also other, less-tangible benefits to borderless education, which go beyond their value-add to the Australian economy. Some of these benefits are described below.

**Intangible benefits associated with borderless education**

In general, international education can:

- act as a form of soft diplomacy and creates future advocates for Australia (for instance, half of Indonesia's cabinet has been educated in Australia);
- create bilateral connections on a personal level, both by exposing international students to a new learning culture, and promoting Australian students' understanding of other cultures;
- increase the bilingual capacity of the country, which can promote further business and trade linkages;
- create more opportunities for collaboration and research between countries, institutions and businesses; and
- bring about an internationalisation to the curriculum that is delivered.

#### 2.2.4 Emerging borderless opportunities

Borderless activity is not just limited to higher education and VET sectors. In particular, Australian providers are also active in the schools and English language learning sectors, and increasingly in the provision of education technology (EdTech) solutions. However, due to the more distributed nature of these businesses, there has not been a comprehensive collection of data for these segments.

This section illustrates not only the diversity of the borderless sector, but also a sample of the current providers in the space, and the strong potential for highly scalable growth in learner numbers over the coming years.

The subsectors of borderless and the significant opportunity described above are explored in greater detail in the following sections, noting that the borderless opportunity described in Section 2.2.2 only considers 25-64 year olds (due to limitations of the available data) and that the borderless sector is far broader and wide-reaching.

Growth in each of these sectors is vital for Australia to realise the opportunity. The following discussion and case studies have been informed by consultations with key stakeholders and players in the industry and existing literature, and aim to provide a qualitative description of the emerging opportunities.

#### Schools

There are numerous opportunities in the provision of borderless schools education, with an estimated 3.1 million pupils studying at over 6,300 English-language schools globally in 2012 (HM Government, 2013). While this market is currently dominated by the United Kingdom (with approximately 1.4 million pupils studying at nearly 3,000 British schools overseas), Australian schools are starting to establish themselves in these overseas markets, and there is potential for the sector to grow. An example is the Haileybury International School, which is located in Tianjin, China.

**Case study: Haileybury International School**

Haileybury College is a large Australian independent school with a 120-year history of educating learners in Melbourne. In 2013, it opened its first borderless campus, an international school for Chinese learners in a satellite town near Beijing.

Haileybury pioneered Australian education in Chinese schools and now has eight programs in schools across the country, with more than 400 learners studying the VCE of whom over 90% are expected to receive offers from Australian universities. As a logical extension of this program, Haileybury International School was established as a K-12 boarding school for Chinese learners seeking a pathway to Australian and other overseas universities, and now has 350 learners. Principal Nicholas Dwyer believes that international schools form a powerful component of the Australian international education system and that there is great potential for growth overseas. Indeed, given the young age of school learners and the distance between China and Australia, many Chinese parents now prefer a local “international” education option. Dr Dwyer suggests there may be opportunities to develop similar schools in other markets in China and South-East Asia.

For success, he emphasises the need to spend time in China to understand the country and its needs and to link effectively to the higher education sector, since a key driver for learners choosing the school is the increased likelihood of entrance to foreign universities in that school’s home country.

The ability to study at an in-market Australian school may also be particularly attractive for learners considering undertaking higher education or VET with an Australian provider onshore or overseas, given Australia’s strong pathway system and straightforward applications process (described in more detail in Section 3.4).

Yet another potential opportunity is Australia supporting the uptake of VET-in-schools overseas; to both strengthen the quality of systems where this is already in play (e.g. Indonesia and the Philippines) and in consulting to less developed VET-in schools markets such as Myanmar and Pakistan.

**English language learning**

English is the default *lingua franca* of the world, and as such, demand for English learning is likely to remain strong. The British Council estimates that of the 1.5 billion learners that make up the global market for English language learning, only around 1.5 million are studying outside their home markets (HM Government, 2013). This means that there is great potential in bringing English learning education – either face-to-face or online – to learners’ home markets. Indeed, this market was estimated to be worth over US\$50 billion in 2012 (HM Government, 2013).

At present, there are numerous Australian companies delivering and supporting English language learning overseas, through both the use of traditional delivery modes and media (books and print materials), and the use of high-tech video and software. Consultation participants also note that offering English learning has indirect benefits, such as reaching learners at a younger age and shaping their perceptions of a country and the quality of its education.

## Professional development

Given the changing demands of the modern labour force (discussed in Sections 3.1.3 and 4.3.2), employees increasingly require continuous training and 21<sup>st</sup> century skills in order to perform their roles and remain competitive. This emphasis on life-long learning and employment-linked training provides new opportunities to provide education to these non-traditional ‘learners’ through the emergence of professional courses that are not necessarily accredited.

Deakin Digital is a leader for Australia in the professional development segment and the case study below describes how they see the opportunity that confronts the Australian sector.

### Case study: Deakin Digital

Deakin Digital was established in 2014, and offers professionals the chance to earn credentials through practical assessments of the capabilities and experiences they have gained through the workplace. In contrast with a traditional higher education approach that tends to ask learners to “leave their prior knowledge at the door”, recognition of professional practice is at the heart of Deakin Digital’s mission to “change the relationship between qualifications and work forever”.

With currently 3.5 billion people in the world who are working, most of whom only have a basic education, CEO Allyn Radford believes that the future opportunities for Deakin Digital and for the education sector are enormous. He believes it will be important to re-engage those people who may not be actively looking for education and flip the higher education model by acknowledging their prior practical knowledge and experience. The first of several planned qualifications, the Master of Professional Practice can be awarded by Deakin after a single capstone unit of study, so long as the required ‘Credentials’ have been earned.

Deakin Digital has attracted widespread media attention and coverage internationally and is exploring opportunities to expand the offering overseas. As a pioneer and current leader in this sector, it believes that it is well positioned to capture borderless opportunities. However, for Australia to maintain its advantage and protect its market against new entrants, future innovations will be crucial.

This segment has the potential to see significant growth in learner numbers, as the pool of learners interested in undertaking professional development could include any employed individual – even a small portion of this market captured by Australian providers could be significant.

## Alternative learners

Education services are no longer just delivered directly to learners, as more education providers develop and tailor their services to businesses and governments. In the business-to-business (B2B) space, Australian providers are leveraging their reputation for quality to train trainers for foreign institutions. For instance, TAFE partnerships often involve sending Australian staff to the overseas institution in the initial stages of the partnership to deliver Australian qualifications to local learners, while also providing training for the local staff.

This building of capability means that over time, local staff are able to deliver Australian qualifications to borderless learners.

Australian education providers also offer cross-border consultancy services; with the ABS valuing the sector's 'education consultancy services' export income at \$140 million in 2014. These can include global assessment tools that have the potential to reach international learners from around the world. Indeed, UNSW Global administers the International Competitions and Assessments for Schools (ICAS) across 20 markets each year. In addition to offering a revenue stream for institutions, it indirectly promotes the institution's brand overseas (ABS, 2015).

### Online learning

Online learning, or e-Learning, refers to 'learning facilitated and supported through the use of information and communications technology' (JISC Digital Media). It covers a wide spectrum of activities, from the partial or complete delivery of courses online, to the use of technology to support learning as part of a 'blended' or hybrid teaching approach (which combines traditional face-to-face classroom learning with the delivery of content and instruction via digital and online media) or web-facilitated approach (which uses technology to facilitate a face-to-face course online). The proliferation of technology and high-speed Internet around the world has made e-Learning a viable borderless market. In 2015, the global e-Learning market is expected to be worth \$107 billion, and has averaged annual growth rates of over 13% over the past five years (Forbes, 2014).

Online learning has disrupted the established tertiary sector, with 23% of learners in Australia taking their courses either solely or partially through distance education (DET, 2014a). Consequently, online learning has gained increasing attention from the education sector, with 70% of academic leaders in the US in a survey considering online learning to be an essential component of their future strategies (Hanover Research, 2013). Online learning is also a viable option for borderless delivery, with 25,500 borderless learner enrolments through traditional distance education and traditional online education in 2014 (DET, 2015a). Open Universities Australia is a key player in this space.



**Case study: Open Universities Australia**

Open Universities Australia (OUA), originally a provider of online higher education, was formed in 1993. To secure its future growth, OUA has recently diversified from its established offerings, and now provides massive open online courses (MOOCs) and online VET courses, in addition to online higher education courses. Most of its products are aimed at the Australian market, with a small number of international exposures primarily through expatriate Australian learners studying abroad, though learners of its MOOCs come from over 194 countries.

CEO Paul Wappett believes that online education will be important for the future growth of the Australian international education sector because it can offer better value for money for learners. While the middle class is growing in emerging economies, those travelling overseas for their education will make up just a small fraction of the total number of learners demanding tertiary education. Online borderless education can help fill the unmet demand. He indicates that increased competition from other countries may limit growth in onshore education.

In addition to offering a new delivery method of traditional degrees, online and digital technologies have also facilitated the development of new products, such as massive open online courses (MOOCs), which are large-scale online courses available to anyone. These courses break down the traditional barriers to participation, which include cost, geography, and qualifications, and can resemble traditional courses with filmed lectures, readings, problem sets and online student forums (xMOOCs), or be based on a connectivist pedagogy (cMOOCs), with participants acting as both teachers and students, sharing information and engaging in a joint teaching and learning experience.

Twenty-five Australian universities and nine other vocational and professional educators currently host 108 MOOCs on both Australian platforms, such as OpenLearning, and overseas platforms. With the average MOOC course enrolling approximately 43,000 learners (Jordan, 2014), Australian educators have the potential to reach a large number of borderless learners through new channels. However, despite its initial wide reach, attrition rates in MOOCs are generally high, with only 6.5% of enrolments expected to complete a course on average. Some higher education MOOCs, such as Arizona State University in the United States, are beginning to experiment with new business models – offering courses for free, but charging for assessment and certification of completion, and others, such as Udacity is offering ‘nanodegree’ certificates that are recognised by various technology companies in the United States. Some of the challenges and opportunities associated with online learning are described further in Section 4.1.1.

There will also be opportunities to use the data generated by a successful online platform. For instance, tracked keystroke patterns by learners in online courses are being used to help other educational institutions understand how learners learn and inform the design of better courses, and assist with early identification and intervention for learners at risk of non-completion based on the study patterns of all learners.

**Education Technology (EdTech)**

Digital or technology supported education tools and platforms also enhance traditional face-to-face instruction. For instance, learning management systems (LMS) software is now an indispensable part of the administration, documentation, tracking, reporting and

delivery of e-Learning courses and training programs, and the LMS industry was worth US\$2.5 billion globally in 2013 (Docebo, 2014). Australian-based Moodle, a developer of LMS software, is a world leader in this space, with more than 65 million users worldwide.<sup>23</sup>

There are numerous examples of Australian EdTech companies that are already experiencing success in reaching learners globally, including:

- **Moodle** – an online, open platform learning management system that allows education providers to develop a tailored solution for their needs;
- **Grok Learning** – online software that is a course in programming for learners, complete with resources for teachers;
- **Smart Sparrow** – utilises adaptive learning technology that responds to a learner’s progress and ability to take different learning pathways within a lesson in its online learning software;
- **Literatu** – a formative assessment platform that collects real-time learner learning data so that teachers can better address needs; and
- **Intersective** – is a technology platform that enables better collaboration for experiential and work integrated learning programs, which are normally constrained by the availability of resources.
- **SoccerBrain** – provides coach education for football clubs, coaches and players targeted to the team’s age and skill level.
- **Funetics** – a system that improves the learning of correct pronunciation through assessment, recommendations, training and reporting at both the individual and class level

Another Australian EdTech company is OpenLearning, described in greater detail in the case study below.

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<sup>23</sup> The 65 million users reached through Moodle are distinct from those students that can be reached by Australia’s borderless education for two reasons: (1) Moodle users include both users in Australia and other developed countries around the world not included in Australia’s top 30 source markets; and (2) It is an open-source *platform* with educators from both Australia and overseas uploading their own *content*. Given that it is not feasible to work out what proportion of Moodle users are offshore and studying Australian content, it is not directly comparable to the projected figure. It’s also the case that the borderless estimate relies on data that might not fully-reflect current participation in non-formal education, as by its definition it’s hard to estimate with confidence.

#### **Case study: OpenLearning**

OpenLearning is an Australian EdTech company that offers a social online learning platform to deliver massive open online courses (MOOCs). Focussing on peer based learning, rather than content delivery, OpenLearning is free for public courses but has an enterprise model for businesses and private course providers who want to restrict participation.

First launched in 2012, OpenLearning's first clients included the University of New South Wales and Taylor's University, Malaysia. In June 2015, OpenLearning was commissioned to deliver the Australian Federal Government's first MOOC and it has recently been appointed as the official MOOC of the Malaysian Ministry of higher education for public institutions. The Malaysian government aims to teach 15% of all public university courses online as MOOCs by the end of 2015, increasing this to 30% of all university courses by the year 2020.

According to CEO and co-founder Adam Brimo, the business has been global from day one. He believes the limited domestic market acts as an enabler for Australian start-ups forcing them to look at overseas opportunities early on in their development. Brimo says OpenLearning generates revenue through its enterprise services offering but the company isn't focused on making money. Instead, the objective is to build the best learning platform and reach a critical mass of users that will ultimately help it generate revenue in the long term.

Support for innovative companies such as these, will enable further growth in the EdTech segment, and is discussed in further detail in Section 4.1.5.

## 3 Australia's advantage

Despite its relatively small population, Australia's international education sector has a significant share of the global international education market, and is the fifth most popular destination for outbound tertiary international learners globally.

Indeed international tertiary enrolments make up 18% of total enrolments in Australia, one of the highest proportions in the world (Productivity Commission, 2015a). However, while the international education sector has been expanding in absolute terms, with enrolment numbers growing at an annual rate of 9.6% between 1994 and 2014 (DET, 2014a), Australia's relative share of international tertiary learners has been comparatively stable over time, increasing from approximately 5.1% in 2000 to 5.5% in 2012 (DET, 2012).

However, global competition for international learners will only increase over the next decade, both from established rivals and emerging ones. For instance, Canada aims to double the number of international learners by 2022 to 450,000. At the same time, some of Australia's established source markets, including Singapore and China, are improving the quality and capacity of their own education systems in an attempt to increase their attractiveness as education destinations. This means that they are also increasingly attracting other international learners, especially from the Asia-Pacific region, and some countries have set goals – for example, China aims to have 500,000 international learners studying at Chinese institutions by 2020.

For Australia to maintain its current position in the international education space and realise the opportunities dimensioned in the previous chapter, it is critical to articulate Australia's value proposition – what differentiates an Australian educational experience from that of competitors and its comparative advantages – in order to remain an attractive option for international education seekers.

Further, while there is no doubt that all of these advantages have been instrumental in Australia's success in onshore and borderless international education to date, it is difficult to determine their relative importance to onshore versus borderless education – given the diverse and changing nature of the Australian international education sector. Also, it is likely that it is the combination of Australia's advantages, rather than each of the advantages in isolation that have contributed to Australia's success. They complement and build upon one another to create a unique competitive advantage that is not easily replicable.

### 3.1 Quality of education

The quality of education products across all levels is the key international decision driver, and given the quality of Australia's offering, a key advantage in attracting at international learners to Australia's shores. Research has consistently found quality to be an important factor in the international learner decision-making process (Hobsons, 2014; DET, 2014b; Mazzarol and Soutar, 2002). Quality for international learners is defined by:

- the quality of the courses and the institutions;

- the global recognition of the qualifications; and
- improved employment outcomes, whether in Australia, at home, or in a third country.

### 3.1.1 Institutional quality

The quality and reputation of Australia's education institutions is well established on institutional and other global rankings. Whilst these measures do not provide a complete view of providers, they are often used by learners as a proxy for determining quality in higher education. This can influence their choice of study destination, whether that is onshore or borderless. Other factors, such as the strength of regulatory and quality assurance frameworks, can also provide an indication of the general level of institutional quality.

In the higher education sector, university rankings can shape learner perceptions of institutional quality. On these measures, Australia has eight higher education institutes in the top 200 of QS World University Rankings, and 21 in the top 400 (QS Top Universities, 2015). University representatives note that although Australia may not be the top destination choice for learners, with the US and UK still generally regarded as the top destinations for higher education (HSBC, 2014), Australia could position itself to be the destination of choice for the 'middle-segment' of learners, particularly in large source markets such as China. More generally, for future success it is considered important that Australian international education providers clearly identify and target appropriate segments within specific markets.

The quality of Australia's educational offering extends to borderless VET, for instance with the TAFE brand having widespread recognition and acceptance in many regions, particularly in China where TAFE institutes are specifically listed as approved providers and partners by the Chinese Ministry of Education (TAFE Directors Australia, 2014).

The Australian Government has also developed several websites that provide information to learners (both international and domestic), including 'Quality Indicators for Learning and Teaching' for higher education, 'My Skills' for VET providers and courses, and 'My School' for quality data on Australian schools. Over time, as these websites are further developed and become more mature, they will provide information to potential learners about the relative quality of Australian institutions, including learner satisfaction and employment outcomes.

### 3.1.2 Course quality and specialised knowledge

Research by Hobsons (2014) suggest that most learners decide on a course of study, before choosing institutions. Therefore, Australia should focus on the areas in which it has a comparative advantage, especially when competing head-to-head with elite institutions in the US or UK. Australia should also continue to build its expertise and course quality with consideration to areas of strong international demand, particularly where they can be combined with projected workforce needs in key markets or areas of specialised knowledge.

For instance, Australia can leverage its comparative advantage in areas of industrial knowledge and expertise to offer high quality and specialised course offerings. For instance,

Deloitte (2014) identified gas, tourism, agribusiness, health, and wealth managements as emerging sectors of Australian advantage, in addition to the existing strength area of mining. An example of an offshore Australian private niche provider is described in the case study below.

#### **Case study: Engineering Institute of Technology (EIT)**

The Engineering Institute of Technology (EIT) uses a live, synchronous, online approach to teach engineering courses – from short courses through to Master degrees – specifically tailored to the needs of industry. With more than half its learners overseas, the EIT model was developed in response to the recognition that online learning may result in very high attrition rates and limited learning outcomes for learners.

EIT's CEO Steve Mackay believes that Australian education providers can succeed by focusing on niche areas, such as mining, engineering, marine conservation or ecology, where they can more easily differentiate themselves from competitors. While accreditation has presented hurdles and sometimes slowed down the process of being able to offer courses, he feels that the stringent accreditation process helps to give credibility to Australian qualifications, something that could be better leveraged if education businesses could work together more collaboratively.

EIT has a particular focus on the UK, Africa and North America. In order to deal with the negative perceptions of online education that are held in some parts of Asia, Mackay believes one solution is to provide a blended approach in collaboration with local providers.

Over time, as the global economy evolves, its workforce will change, and there will be greater emphasis on education that provides learners not only with the knowledge they need, but also the 21<sup>st</sup> century skills that allow them to think critically, collaborate with others, be flexible and take initiative in solving problems. The ability of Australian education to equip learners with these skills will be vital for their quality and to ensure that learners achieve their desired outcomes from training (as described in Sections 3.1.4 and 4.3.2). Indeed, Manpower (2015) found that it is increasingly difficult, globally, to fill job vacancies, with the key reasons cited as: a lack of available applicants and a lack of technical and workplace competencies. Australia's strength and position as a developed country means that it is well positioned to deliver these skills to learners globally.

### **3.1.3 Course recognition**

The Australian brand, certificates and qualifications are recognised worldwide for their high quality. For instance, Murray et al. (2011) found Australia scored the highest in 'quality assurance' compared to competitor countries including the UK, US and Germany in higher education. This measure shows "the strength of national monitoring and enforcement of quality standards in cross-border provision; the robustness of mechanisms to recognise international degrees; and the policies in place to ensure entry and teaching standards are maintained in education provision at home and abroad".

This suggests that while accreditation can be a time-consuming and onerous process for providers (as described in Section 4.1.6), it serves an important purpose in protecting Australia's reputation and ensuring the quality of training delivered to learners, onshore or borderless. It's also the case that some proportion of programs in the borderless space will

be non-formal or locally accredited, and the interaction between these and existing quality mechanisms onshore in Australia must be carefully considered.

Another distinguishing factor is Australia's ability to offer courses in English, and the use of English outside of the classroom. English is still seen as the global language of trade, business and research, and is a key advantage for Australia against competitors such as Germany, France and Japan. Strong regulation, through the establishment and maintenance of an appropriate regulatory framework of the Australian ELICOS sector has also been one of Australia's key features and strengths in attracting learners (English Australia, 2014).

### 3.1.4 Employment outcomes

Research has found broadly positive employment outcomes for Australian international graduates of higher education and VET courses, with international graduates valued over their local counterparts for their perceived critical thinking skills, life experience, and English proficiency (AEI, 2010).

Australian Education International (AEI) surveyed learners who graduated between 2004 and 2008 and found that 9% of surveyed international VET and 11% of international higher education graduates were seeking employment in 2009, with the remainder working or pursuing further study. Of those working, only 15% of higher education graduates and 27% of VET graduates were in a job not related to their field of study, which suggests that the training they received met their needs.

Employers were generally satisfied with international graduates, with 74% of overseas employers finding Australian education international graduates to either meet or exceed their expectations, compared to 68% for locally educated graduates (AEI, 2010), illustrating the employment outcomes that Australian international education graduates are able to achieve.

However, Deakin University (2014) found that there were still many challenges faced by international students in the work market. In particular, limited local networks, lack of knowledge of the Australian labour market, poor understanding of the job application process and weak communication skills, are found to be barriers for international students in gaining work experience.

Equally important as the quality of Australia's offering is the communication of that quality to learners in key markets. Higher education representatives note that while Australia's higher education sector is currently ranked among the top in the world, this is not widely known in many emerging markets such as Africa. As such, the use of websites (as described in Section 3.1.1) can help raise Australia's visibility in emerging markets, maintain visibility in current markets, and inform and guide learner decisions.

## 3.2 Overall study experience

The value of the Australian brand lies in more than just the institutions, but also in intangible factors, including the Australian people and the opportunities available to learners as a result of their study. Learner experience covers a range of factors including

safety, community attitudes towards international learners (including support from education providers). Furthermore, the learner experience is no longer seen as ending with the awarding of a degree or qualification, with learners increasingly regarding post-study work experience as an integral part of the education 'package'.

### 3.2.1 Safety and community attitude

Safety and a country's attitude towards international learners are key considerations for learners, with both ranked as some of the most important factors for international learners considering study abroad (Hobsons, 2014). According to the 2014 International Student Survey (ISS) of learners across all four education sub-sectors, a high proportion of international learners (88%) are either 'satisfied' or 'very satisfied' with the overall Australian experience.

Indeed, consultations with industry stakeholders found that Australia is perceived globally as a multicultural country with friendly people. However, the link between the safety and the attractiveness of a country was observed in the decrease in enrolments (particularly from India) following the incidents of violence against international learners in Melbourne in 2009 and 2010 that gained widespread global media coverage.

### 3.2.2 Work opportunities

Another component of the learner experience is post-study work opportunities. Learners believe that gaining relevant work experience is essential to improving their chances of achieving the employment outcomes they desire, in Australia, at home or in a third country. This is especially the case in the current situation, where the increasing number of learners heading abroad for education may erode the value of a standalone international qualification.

The introduction of post-study work rights for all higher education graduates in Australia in 2013, and further broadening of the eligibility criteria in 2015, allows graduates to remain in Australia for two to four years depending on the degree. The Department of Immigration and Border Protection's (DIBP) research suggests that a large proportion of eligible learners – 80% to 90% – apply for post-study work visa, suggesting its importance to learners.

Post-study work opportunities are currently a competitive advantage Australia holds over global competitors, especially the UK, which eliminated its post-study work programme in 2012 (UK Home Office, 2012). This change was associated with a decline in learner enrolment numbers during 2012 and 2013 in the UK.

## 3.3 Proximity

Consultation participants also noted Australia's proximity to key markets in Asia as a key advantage. This is especially important considering the size of the Asian market, with China, India and Korea ranked as having the largest number of outbound learners globally (OECD, 2013). Indeed, learners from Asia accounted for 53% of all international learners enrolled in higher education institutions worldwide (OECD, 2013). Proximity can be thought of as comprising three parts: geography, time zone, and cultural and historic ties.



### 3.3.1 Geographic proximity

Research by Hobsons (2014) found that there is strong correlation between geography and study destination, with geography “a stronger indicator than grades or wealth as to where a learner is likely to choose to study”. While East Asia is closer to Australia than the US, Australia is not the preferred country when compared to the UK. However, Australia has an advantage and is the preferred country for South Asia and South East Asia markets including Bangladesh, India, Indonesia and Malaysia. Australia also has an advantage in Africa, including in Ethiopia, South Africa and Zimbabwe. These are important markets as they have growing 15-29 year old populations, do not currently invest heavily in their education systems, but will require more skilled workers to meet the demands of their transitioning economies and industrialisation over the coming decade. This local supply deficit presents an opportunity for Australian borderless providers to meet local demand.

### 3.3.2 Shared time zone

While geography is important for onshore study, it can be less significant for digital education since it eliminates the barriers of distance. However, in those situations where the online education is synchronous and thus involves live interaction between participants in their home country and educators in Australia, time zone differences can be a factor. Where there is live interaction, Australia’s shared time zone with Asia offers a key advantage in this market.

This is especially important as synchronous or live digital education is thought to be linked to greater learner engagement and improved learner outcomes. Asynchronous models of online delivery, while relatively inexpensive, tend to have higher attrition rates. The Chatty Kidz case study illustrates the comparative advantages Australia has when offering synchronous online learning.

**Case study: Chatty Kidz**

Chatty Kidz is an online digital book store, a tutor service and a interactive teaching tool that teaches kids from around the world to read and speak English. It supports learning through both face-to-face and technology delivery solutions, by helping local teachers develop course content, providing video and audio files for learners to use, and interactions with native speakers in real-time.

Founder Ken Taggart believes that Australia is well placed in the Asian market to teach English as a second language as Australia is already recognised for its high quality services. Furthermore, Australia will have an advantage over established competitors like the UK or the US due to its shared time zone with Asia, which is crucial for the interactive, real-time learning methods offered by Chatty Kidz. For instance, where there is a two hour time difference between China and Australia, there is a seven hour difference for the UK, and a 12 hour difference for the US.

### 3.3.3 Cultural and historic ties

Australia's strong trade and business links within the Asia-Pacific region and vibrant established migrant and learner populations are also important factors for international learners considering study abroad. For instance, Mazzarol and Soutar (2002) found that for learners across a range of Asian markets – including China, India, Taiwan, and Indonesia – the presence of family and friends either living or studying in a country was an important factor influencing choice of country.

Furthermore, Australia's long history of international education can offer additional advantages as it has built up several generations of alumni in the Asia-Pacific region. As those former learners become policy and industry leaders in their countries, their success and the power of 'word of mouth' promotion will be an important advantage for attracting younger generations of learners to study with Australian institutions onshore or overseas.

## 3.4 Strong framework

Australia has built up a transparent, structured, and low-risk education system through sequential improvements over time. This has led to Australia being recognised as having best practice frameworks by NAFSA Association of International Educators. Furthermore, Australia is rated as second best globally in openness to cross-border education, behind the UK and ahead of Germany, Malaysia and the US in a benchmarking exercise by the British Council and Economist Intelligence Unit (2010).

### 3.4.1 Pathway system

A key feature of Australian international education is the pathway system, which offers alternative entry to learners unable to enter their preferred course directly, through studying in the Australian school system, taking English language preparation or studying a

VET or pathway course. Pathways courses may be delivered by dedicated providers such as Study Group and Navitas, or universities and VET providers.

In 2014, nearly half of all international learners in Australia who commenced a higher education course did so through a pathway from another sector (46%), the most likely being ELICOS (29%). Of the international learners who commenced a VET course in 2014, more than half did so through a pathway from at least one other sector. More than a third (36%) of learners completed an ELICOS course prior to starting their VET course (International Education Advisory Council, 2013), underscoring their importance in preparing learners to undertake higher level study.

The innovative activities of Australian institutions in packaging courses and regulations to assure their quality (see Section 3.1.1) have been a key feature of Australia's success. ELICOS courses play a particularly important role, given the large number of learners from Asia for whom English is not the first language choosing to study in Australia.

In addition to ELICOS students on student visas, a number of international students may also study ELICOS on a non-student visa, or experience life in Australia before committing to further studies. Austrade (2014) found that 14% of international students granted student visas in 2013-14 held a visitor or working holiday maker (WHM) visa previously. The proportions are particularly high for students from Taiwan (51%), Singapore (47%), and South Korea (43%), countries with which Australia have flexible visa agreements.

### 3.4.2 Low risk

Consultations revealed that Australia tends to be viewed as a 'low-risk' destination compared to international competitors.

In particular, Australia employs a transparent admissions process for entry into higher education based predominantly on secondary school qualifications, in contrast to rival countries such as the US and UK where learners are evaluated at the discretion of the individual institutions on a variety of factors, including personal statements and references.

Further, international learners completing Australian year 12 qualifications either onshore or overseas are able to apply through the centralised admissions centres for each state. This is also reflected in findings from Hobson (2014) that 70% of learners intending to study in Australia applied to two or fewer institutions, compared with only 40% of learners intending to study in the UK. In comparison, only 7% applied to five or more institutions in Australia, while 34% applied to five or more in the UK.

Australia also has a strong regulatory environment in place, particularly around the monitoring and regulation of accredited borderless delivery (British Council, 2011). This ensures that Australian qualifications have sufficient levels of quality assurance and are well recognised, reducing the risks for learners, and at the same time helps to support provider mobility (also see Section 3.1.3).

However, the regulatory environment is not without its problems. In many of the consultations, there were concerns expressed that the burdens imposed by regulatory agencies acted as a brake upon expansion of Australian international education.

## 4 Enablers for realisation

The continued transformation of the Australian international education sector is required to fully realise Australia's current advantages and to build new advantages capable of meeting the demands of emerging markets. While the sector may currently be performing well, it is vital that it continues to innovate. The sector's exposure to increased competition from global competitors and digital disruptions means that the sector needs to be prepared for an unprecedented future pace of change.

Current barriers should be re-framed as possible enablers in the future. Removing barriers will allow the sector to grow faster, and support Australia's future prosperity.

In particular, enablers can be separated into three categories that support different facets of the learner's purchase of Australian educational products. These are:

- **accessibility** of Australian international education (including price, legal, and physical aspects);
- **experience** of international learners during their study, both inside and outside the classroom; and
- **outcomes** of international learners post-study including their educational, employment, and personal achievements.

An assessment of the *possible impact* (low, moderate and high) the presence of each enabler would have on the ability of Australian international education to realise the opportunities dimensioned (Chapter 2) is included at the end of each section.

### 4.1 Accessibility

The accessibility of Australian international education to international learners encompasses both demand and supply side considerations. On the demand side, factors such as the cost of international education (including streamlined application and admissions processes) and visa policy can play important roles in determining learner choice. On the supply side, ensuring that providers can identify and enter markets where demand exists and unnecessary legal and cost impediments are removed are equally important in ensuring that Australian providers are able to deliver relevant and competitive products.

#### 4.1.1 New markets

At the core of accessibility is the ability to identify key learner segments and articulate the value of Australian education – that is, Australia's advantages – that are relevant to them, in a coordinated and cohesive manner.

Thus far, the sector has been slow to respond to opportunities in emerging markets, as the continued growth in demand from key markets buoys the performance of the industry. In particular, China is the top market of origin for international learners, standing at 26% of total enrolment numbers, with enrolment numbers nearly doubling in the last decade (AEI,

2015). While China will continue to be a core market, it will be increasingly necessary to enter new markets, particularly as domestic education systems of key markets mature and become more attractive to learners. There is a danger in being overly reliant on any one market, as evidenced in the 2009-2011 drop in enrolments from India due to security concerns. Further, higher education representatives participating in consultations noted that the over-reliance on one market could dilute the multicultural experience that is seen as an attractive part of the Australian international education experience.

It is imperative for the sector to act collectively and collaboratively to identify and develop future key markets and cohorts for Australia. Consultation participants note that Australia needs to be strategic in its approach and where it competes, rather than trying to be 'all things to all people'.

The importance of a strategic approach has also been emphasised by the literature, which has found that there is not a singular or typical international learner (HSBC, 2014; Hobsons, 2013). Instead, the learner decision making process is complex, motivated by individual factors such as career objectives, market of origin, field of study, level of study, and age. Consequently, the sector needs to be nuanced in its marketing strategies to attract international learners, and it needs to consider that the factors that drive onshore decisions may differ from those that drive borderless decisions.

In addition, to succeed in the digital space, it is important to understand local perceptions of the medium. For instance, in China, online study is often considered to be of lesser quality. Work could be done to support the changing of perceptions of online education by conducting or facilitating research that demonstrates the quality of learning outcomes from studying online.

Conversely, there are other cohorts of learners who consider the use of technology (for instance, for online learning as one component of their studies) an indicator of the quality of teaching (Hobsons, 2014), illustrating the increasing importance of technology in the economy and the need to ensure that technology is used well.

In particular, consultation participants saw a need for market intelligence to assist them in segmenting learners in key onshore and borderless markets. This could include:

- researching the individual source markets to identify their human capital objectives, and the gaps that are present in the local education market;
- identifying the value of Australian educational offerings in each market; and
- ensuring positive perceptions of non-traditional delivery modes (such as online).

The ability to identify and understand new markets is likely to have a **moderate impact** on the growth of Australian international education.

#### 4.1.2 Cohesive branding

The sector needs to develop a coordinated marketing strategy proposition with long-term vision through collaboration between the providers, all levels of government, institutions, peak bodies and Industry agencies. The success of the coordinated Australian tourism strategy in marketing Australia as a destination for visitors is instructive for both onshore and borderless Australian international education. The importance of a county brand has

also been supported by research on onshore learner decisions, which has found that the majority of learners decide on a country of interest before choosing their institution (Hobsons, 2014).

In particular, there needs to be greater emphasis on digital and online branding and content. Online is often the first point and key source of information for international learners, and easy to navigate websites, quick and personalised responses to learner queries are essential. This could be supported through existing government websites, as described in Section 3.1.1.

There is also a role for industries not directly involved in the provision of education services such as publishing or related industries such as tourism to promote a positive image of Australia. Training for local tourism sector workers in how to deal with foreign cultures and tourists and ensuring the wider community is culturally aware could lead to indirect gains for the international education sector through the fostering of improved impressions of Australia.

A cohesive marketing and branding strategy for Australian international education will have a **moderate impact** on growth for both onshore and borderless. There is a role for:

- a sector-led purpose and vision that can articulate the shared purpose and vision for what education in Australia represents;
- developing linkages with overseas alumni, to act as formal or informal ambassadors for the success of Australian international education; and
- a strategy that can focus the efforts of the sector in a cohesive and inclusive way.

#### 4.1.3 Identifying opportunities

The consultations also revealed that some participants believed that future strategies should recognise the diversity of the sector and consider the opportunity facing the entire sector, not just the established areas of delivery such as onshore higher education. Participants noted that in many cases, education providers in non-tertiary segments of Australian international education were unaware of the global opportunities that are present, especially overseas and through the use of emerging, disruptive digital technology delivery channels.

Government-sponsored trips to foreign markets for Australian EdTech companies and other education providers could assist these emerging, borderless sectors understand the opportunity and local markets. For instance, StudyNSW sponsored trips to China, supported by Austrade, have been catalysts for ELLA and ChattyKidz to expand into the Chinese EdTech market.

**Case study: ELLA**

ELLA is an Australian learning app that helps K-12 professionals across all stages of their careers - from entry level teachers to principals - find the best professional training programs that match their development aspirations.

Co-founder Atul Pandey believes that in the EdTech space, the most important enabler for success is awareness of the global opportunity. The Government can play a role in raising this awareness, with initiatives such as Austrade-sponsored trips to provide companies the opportunity to present to and build relationships with interested local parties under the official banner of the Australian Government.

Pandey believes that, in many instances, these opportunities are more valuable than funding because they enable Australian companies with good products to see the potential to reach a far wider audience.

The removal of trade barriers and lowering of barriers to entry in foreign markets could also enable growth in borderless markets to be realised. In particular, the recent signing of the Trans-Pacific Partnership (TPP) could open up new opportunities and reduce barriers for Australian education providers in the eleven signatory markets.

Foreign ownership rules and regulations can be onerous for borderless providers. For instance, foreign universities in India must be not-for-profit entities and cannot repatriate profits, and foreign universities in Thailand must partner with a Thai-owned organisation (see Appendix F for more detail). Further relaxation of these restrictions through trade agreements and overseas policy changes, particularly in emerging markets could further enable growth.

Being able to identify and develop opportunities in the sector could have a **high impact** on enabling growth for the sector, particularly in borderless markets. This could involve:

- sponsor trips overseas for Australian organisations or invite foreign educators to Australia;
- facilitate local meet-ups and linkages between Australian providers, so that they can share experiences, insider knowledge, and challenges;
- establish free trade agreements and trade partnerships with other countries; and
- work with foreign governments to reduce restrictions on foreign education providers, particularly around foreign equity limits, screening and approval processes.

#### 4.1.4 Partnership and collaboration

Partnerships offer many advantages and are often crucial for success. Established Australian providers can partner with EdTech companies to develop new products and reach new markets. These partnerships have the potential to increase the scalability of education, particularly for borderless products.

Local partners are also important, as they can leverage their existing networks with relevant parties, provide up-to-date market intelligence, and can assist with the customisation and localisation of the content to ensure relevance for learners. Local

partners can also share some of the financial burden and risk, and indeed, 84% of borderless public VET courses in 2013 are offered under partnership arrangements.

There are many modes of partnership, one of which is a ‘twinning’ arrangement. This involves a partnership between institutions in Australia and the destination country, with the offer of an Australian qualification through the borderless partner’s institution. In many cases, the Australian qualification is mapped to a local qualification, and the graduate gains both a local and Australian qualification. This is often the preferred method for higher education and TAFE institutes operating overseas, and offers the advantage of not requiring significant capital investment in physical infrastructure.

#### Case study: Borderless public VET provider

Australian public VET providers have led the growth of borderless Australian VET training. Currently, they have over 100 partnerships with local institutions (mainly polytechnic universities) in locations including the Middle East, India and China, and 45,000 international learners studying across those locations.

For future success, the CEO of this Australian VET provider believes the Government could promote collaboration between the sector and overseas institutions, facilitate bilateral agreements on applied industry training, and co-invest in research centres. He cites the successful example of the AusAID initiative Australia-Pacific Technical Colleges, which has helped learners in Pacific nations to gain Australian-standard skills and qualifications, and believes it can be extended to other markets such as South East Asia.

Some consultation participants believe that the ultimate factor for success is the long-term commitment of providers: to build up capability within the staff working overseas, establish relationships and gather intelligence to better understand the local market.

To ensure that successful partnerships and collaborations are created, there is a need to:

- facilitate consortia of Australian businesses working together to develop new products;
- leveraging Australia’s development program and budget, following the lead of the UK and Germany;
- facilitate linkages between Australian providers and relevant local parties,
- identify recent changes or key features of local regulatory frameworks through engagement with the foreign education and training departments, so that providers can make informed decisions about markets; and
- provide monetary support, similar to the efforts of German Government owned body GIZ, which supports German VET providers in 130 countries with infrastructure development, curricula and pedagogy (GIZ, 2015).

This could have a **high impact** on borderless growth for the sector.

#### 4.1.5 Innovation

From the consultations, many small start-ups operating in the EdTech space lamented the difficulties in gaining funding and the lack of support for innovation or entrepreneurship in



Australia. With no strong start-up culture in Australia, unlike Silicon Valley or Israel, there could potentially be a loss of talent as young entrepreneurs head overseas to secure funding. Policy that supports crowdsourcing or angel investors or incubators could support innovation in the sector.

There are already numerous successful and emerging EdTech start-ups in Australia, who are already reaching a large number of learners in Australia and internationally. With further support to grow the start-up community and the creation of a more friendly policy and regulatory environment, there could be even more entrepreneurial activity and success stories in Australia.

Universities also have an important role to play in supporting innovation. They can educate learners in entrepreneurship, develop an entrepreneurial culture within the university, facilitate access to resources and expertise, and look to the experiences of successful international institutions in the US, UK and Israel (Spike Innovation, 2015).

In order to enable international education providers to innovate, there could be a variety of initiatives including:

- providing test-beds in Australian institutions for EdTech companies to trial their innovative solutions, and provide feedback to help create new successful products;
- building the start-up and venture capital community within Australia, including through the creation of incubators and accelerators;
- improving the policy and regulatory environment to make it more attractive to start-up companies in Australia; and
- developing the capabilities and desire of learners to be entrepreneurial.

This enabler could have a **high impact** on the growth of the sector, if it leads, for instance to the creation of more Australian leaders in the EdTech space, or disruptive models for borderless provision.

#### 4.1.6 Accreditation and quality mechanisms

Accrediting Australian qualifications, while providing recognition and certainty for learners, also present a challenge, especially for those providing borderless education in developing markets – given the cost and time associated with the process. Participants note that the accreditation process can delay entry to borderless markets and can make Australian providers more expensive than local products. This is especially important where Australian certificates and diplomas are not recognised or relevant to the local market.

For instance, despite the large opportunities present in India, where the Indian Government hopes to provide training for 500 million people by 2022, there has been little success for Australian public VET providers, with only 15 enrolments in India in 2013 (DET, 2014c). Due to the lack of government support for international entrants (SANNAM S4, 2013), the best approach may not be the ‘low volume, high cost’ business model offered through accredited courses, but the flipped ‘high volume, low cost’ model, which creates qualified learners able to succeed in the global work force, but without the formal qualification.

**Case study: The Australian Retail College**

The Australian Retail College (ARC) is a private owned Australian training provider that entered the Indian market in 2013. ARC currently delivers courses at nine locations in India, three of which are ARC colleges, preparing workers for employment in the retail industry and providing training for trainers. While ARC offers Australian quality training, the lower willingness to pay of the market in India mean that it does not offer Australian accredited qualifications there.

ARC believes the Government can enable future growth by providing accurate data and working models and by streamlining the process and reducing the cost of applying for business visas for staff.

There are also opportunities to improve the recognition of Australian qualifications internationally, and ensure that training is not overly localised and sufficiently flexible to take into consideration the needs of borderless learners and other markets. For instance, requirements for borderless VET provision may include competencies and skills that are specific to Australia (such as Australian specific health and safety legislation) and unlikely to be required by borderless learners (Productivity Commission, 2015b). However, care should be taken to ensure that the quality and content of training delivered is maintained, to protect Australia's comparative advantage in this area (see Section 3.1.3).

There is potential for other, innovative ways to ensure that learners considering non-formal training can obtain reliable information about the quality of that training, without over-burdening the sector with regulations, and reducing the ability of these providers to be flexible and responsive to learner and industry needs. These could include the use of online platforms that learners can share feedback and quality ratings of different providers. There is also a need to ensure that teaching staff are able to obtain the appropriate visas to deliver borderless training. The cost of obtaining visas can similarly dissuade providers from offering a 'low volume, high cost' model. This enabler also relates to Section 4.1.3, which describes how lowering trade barriers and relaxing foreign regulations may encourage the growth of borderless education.

Whilst accreditation can be a time consuming process, it serves the purpose of assuring the learner of the quality and content of the training that they are purchasing. To help ensure that accreditation and quality mechanisms are an enabler, there could be:

- encouragement of the international recognition of Australian qualifications or harmonisation of frameworks, which would help to justify the accreditation process for providers;
- ensuring that there is sufficient flexibility in accreditation and quality frameworks, so that delivery is not too Australia-specific; and
- cutting of red tape, particularly in the obtaining of visas for borderless teaching staff.

This enabler is likely to have a **moderate impact** on the growth of the sector.

## 4.2 Learner experience

While accessibility as described in Section 4.1 helps to attract international learners to Australia and encourage their use of Australian education services in the borderless realm,

it should not be the only aspiration of the sector. Instead, ensuring a high quality learner experience in Australia, both inside and outside the classroom, is essential for maintaining the quality of Australia's education offering, and achieving learner satisfaction and sustainable growth for the sector.

#### 4.2.1 Accommodation

For Australia to double international onshore enrolment, there needs to be investment from both education providers and the private sector in new infrastructure to support that growth. The Australian (2015) estimated were there to be an additional one million onshore learners in 2025, an additional 375,000 additional beds would be necessary. This is even after taking into account recent efforts to address current accommodation shortages, such as the additional 24,000 spaces provided by universities, over the 1999 to 2014 period and a further 14,000 spaces planned by 2018 (DET, 2014d). Given this shortage, the majority of learners (53% in 2014) are expected to continue to rely on private rented houses, flats and rooms.

Learner accommodation should ideally be affordable, safe, in a convenient location and of high quality (Murray et al., 2011). At present, some learners live in locations that require the use of public transportation late at night. High accommodation costs have become a point of relative dissatisfaction for international learners, with only 49% of surveyed learners satisfied with accommodation costs (DET, 2014b), and the lack of public transport concessions for learners in Victoria and New South Wales (Productivity Commission, 2015) detracts from these States appeal as destinations for onshore learners.

There is also a need to ensure adequate supplies of short-term accommodation options to support ELICOS learners, who stay an average of 13 weeks in Australia (English Australia, 2014), and homestay host families, which are the preferred means of accommodation for school learners.

The availability of accommodation for learner pertains primarily to onshore learners, and includes:

- investment in increasing the supply of accommodation for learners, particularly short-term options; and
- ensuring adequate public transport infrastructure and services for learners, and the eligibility for public transport concessions for learners in all states.

This enabler is likely to have a **moderate impact** on the growth of the sector.

#### 4.2.2 Other infrastructure

Other resources and infrastructure that support the international learner experience onshore include access to part-time employment while studying. 76% of higher education and 87% of VET learners rated the ability to work while studying as an important factor in deciding where to study (DET, 2014b). Studies consistently find that one third of international learners experience financial difficulty (Murray et al, 2011), with the majority of international learners working part-time to support themselves during their studies. The exploitation of foreign workers (including international learners) can be detrimental to Australia's image and attractiveness (SMH, 2015).

The size of classes, research spaces and facilities, and adequate staff and support services for international learners are also important enablers. These enablers will allow for sustainable growth without compromising on quality, and reducing quality for short-term gains could result in diminished future growth prospects.

The availability of other infrastructure pertains primarily to onshore learners, and includes:

- ensuring there is sufficient physical infrastructure at the education provider to support learners, alongside staff support and other welfare services for learners.

This enabler is likely to have a **moderate impact** on the growth of the sector.

### 4.2.3 Community experience

Consultations found that Australia is perceived globally as a multicultural country with friendly people and a laid-back attitude that has been one of the key differentiators for Australia.

It is important to ensure that onshore and borderless learners receive the multicultural, genuine 'Australian' experience that first attracted them to the country. This multicultural attitude and sensitivity to differences should not only be present within the education, through culturally sensitive content and delivery of training for both onshore and borderless learners, but also in the broader Australian community for onshore learners, particularly being involved with and part of the local community and securing quality part-time work.

To ensure that the broader community is welcoming of onshore learners, it is important that the Australian community recognises the wider cultural, economic and social value of international learners (beyond the revenue they bring to Australian education institutions), both during and after their studies.

There should be an emphasis on the positive flow-on benefits that allow the country to become more multicultural, diversify its industrial base, and engage meaningfully on the global stage. Through international education, Australia has an opportunity to build relationships across the world, affect long-lasting and impactful change in developing markets, and exert soft power within the region.

The effort to change community perceptions could start through a paradigm shift towards viewing all learners as 'international' given the increasingly global nature of the economy and work, and to encourage more learners from Australia to study abroad. This could help to inspire the next generation of Australians to become international citizens, and promote a greater understanding (and acceptance) of the international learner experience. Recognising the importance of promoting outbound learners as well as inbound learners, the US has launched the '100,000 strong' initiative, which aims to encourage a greater number of US learners to study in China.

To ensure that onshore and borderless learners have a positive community experience whilst studying, there is a need to:

- ensure that the content and delivery of education is culturally aware and sensitive;
- promote education of the benefits of international education to the Australian community and dispel misconceptions; and
- promote international education participation by Australian learners.

This enabler is likely to have a **moderate impact** on growth.

## 4.3 Outcomes

The final and most important link in promoting Australia's international sector is outcomes. While accessibility and learner experience are important factors, they remain secondary to the overriding purpose for pursuing international education: improved educational, employment and post-study work opportunities.

### 4.3.1 Educational outcomes

Regardless of whether it is being delivered onshore, in market or online, it is important to ensure the best educational outcomes for international learners.

Some of the literature has found positive results, with a large cohort study of the performance of international learners in Australia and the UK detecting “no substantial difference in the overall performance of international students when compared to domestic students in Australia and the UK” (Arkoudis and Starfield, 2007). This is reflected in the similar success rates between international and domestic Australian bachelor learners, which measures the units passed as a proportion of the total units attempted. In 2014, it was 85% and 83% respectively for international and domestic bachelor learners across Australian higher education institutions (DET, 2014a).

The similarity also extends to attrition rates, which measures the proportion of learners that drop out of their studies from year to year. However, other studies have found that “international students were less likely to achieve upper level passes at the degree level” (Murray et al, 2011).

It is also important to ensure that information about the quality of Australian education, and the outcomes its graduates achieve is widely disseminated. As described in Section 3.1.1, there already exist a number of Australian websites that distribute information on the quality of Australian education providers, such as the Quality Indicators of Teaching and Learning. It is vital to ensure that the information on these websites is sufficiently detailed and up-to-date so that learners can determine whether training will meet their needs and have confidence in the sector. These websites can also signal to learners the extent to which broader mechanisms are in place in Australia to ensure the quality of education, and potentially, adjust for student starting points to illustrate student ‘gain’/institute ‘value add’ (similar to the Brookings Institute approach).

To ensure that onshore and borderless learners achieve positive education outcomes there is a need to ensure that:

- the content and mode of delivery is relevant and meets the needs of learners, to ensure that they learn and gain the knowledge and skills they desire; and
- information about the quality of Australian providers is widely available so that learners can make informed choices.

This enabler is likely to have a **high impact** on growth as achieving educational outcomes is a key reason for learners to seek training.

### 4.3.2 Employability

An important role of education is to provide learners with the skills and knowledge they need to participate in the increasingly competitive global workforce and adapt to the changing needs of industry. Indeed, research by McKinsey (2012) suggests that there could be a global shortage of 85 million medium-skill and high-skill workers by 2020 despite predicted increases in the level of youth unemployment. This may be driven by a lack of skill development and alignment between industry needs and education providers.

Given that improved employment outcomes are one of the most important perceived returns associated with international education, Australian education providers – especially at the higher education and VET levels – will need to maximise the employability of international learners, regardless of where they decide to work. This employability can be thought to comprise of two components – relevant work experience and transferable ‘soft’ skills.

**Work experience**, through internships, apprenticeships or traineeships, is increasingly seen as an important part of the international education experience. Research has repeatedly shown that employers both overseas and in Australia highly value work experience, and that ‘providing practical work experience’ and ‘linking with business to provide internships’ are key areas that require greater emphasis in the Australian education system (AEI, 2010).

At the same time, Australian businesses need to recognise the advantages of employing a diverse workforce. The recently signed free trade agreements with China, Japan and Korea provide unprecedented opportunities for Australian businesses of all sizes in Asia. To succeed, they will need culturally and linguistically sensitive international learners with high ‘Asia capabilities’. International learners may also bring a diversity of views to the workplace, and be able to leverage their local networks.

Individual institutions have important roles to play in emphasising employability throughout the course of a degree. This includes raising English language abilities, given that this is the single most important attribute for Australian employers hiring international graduates (AEI, 2010). Additionally, the sector could provide additional support through career education and facilitate work integrated learning (WIL).

In addition to WIL, it is important to equip learners with the **soft, transferable skills** needed to succeed in the global economy. For instance, the World Economic Forum (2015) emphasises the importance of ‘21st century skills’ such as communication, problem solving and collaboration, in addition to the fundamental literacy and numeracy skills. These skills

are increasingly required for 'solving unstructured problems and effectively analysing information' as a part of skilled jobs. Indeed, Manpower (2015) has reported that the occupations that employers are having greatest difficulty filling are those undertaken by skilled trade workers, engineers and technicians.

To ensure that onshore and borderless learners obtain the employment outcomes they desire, there is a need to:

- facilitate dialogue within the sector and with other industries and businesses to ensure that education equips learners with the knowledge and skills they need to succeed in the modern workforce;
- engage alumni community, who can mentor learners, provide work integrated learning (WIL) and employment opportunities; and
- communicate to industry the advantages of having a culturally diverse workforce and encourage providers to work with organisations to create more internship and work-integrated learning opportunities.

This enabler can have a **high impact** on the growth of both onshore and borderless education, given its prominence as a motivating factor for learner choice.

#### 4.3.3 Post-study work opportunities (short-term or longer-term skilled migration)

The opportunity for post-study work opportunities can also be an important factor for learners considering international education. This could include opportunities in Australia, in a learner's home country or a third country. Indeed, through StudyNSW and its industry action plan, New South Wales has worked to establish partnerships with large multinational corporations to try and create overseas employment opportunities for its higher education graduates (NSW Government, 2012).

Post study work opportunities and the potential for international learners to pursue long or short term work in Australia or even applying for permanent residency is certainly a factor of choice for some international students. According to IDP (2011) 25% of all international learners in the US obtain permanent residence compared with 21% in the UK.

Australia sits behind these markets with only 19% of our international learners obtaining permanent residency illustrating that this could be a potential enabler in some markets, and as described in Section 3.2.2, the ability for all Australian higher education graduates to apply for post-study work visas has acted as a competitive advantage for Australia. The potential for this eligibility to be expanded to graduates of VET training could help make Australia a more attractive destination for international students.

To ensure that post-study work opportunities are an enabler for Australia, there needs to be:

- a stable and transparent immigration policy that provides certainty for onshore learners when making their study choice and over the course of their studies; and
- develop a cohesive policy ecosystem, in which visa policies are interlinked with international education and labour market needs.

This enabler is likely to be of a **high impact** for onshore growth, given its implications for post-study employment opportunities.

Each of the enablers described in this chapter will be important and it is likely that the combination of several enablers will be the key to success for the Australian international education sector. The impact of enablers that has been described in this chapter are summarised in Table 4.1.

**Table 4.1: Impact of enablers**

Enabler	Impact
<b>Accessibility</b>	
New markets	Moderate
Cohesive branding	Moderate
Identifying opportunities	High
Partnerships and collaboration	High
Innovation	High
Accreditation and quality mechanisms	Moderate
<b>Learner experience</b>	
Accommodation	Moderate
Other infrastructure	Moderate
Community experience	Moderate
<b>Outcomes</b>	
Educational outcomes	High
Employability	High
Post-study work opportunities	High



## 5 Conclusion and next steps

Australia has been able to successfully leverage its comparative advantages to great success thus far. These advantages need to be maintained and strengthened in order to realise the significant opportunity that exists for the sector. These include:

- maintaining the **quality of Australian education** in terms of institutional and course quality, course recognition and employment outcomes, and entering markets where Australian expertise aligns with local skills needs;
- ensuring that the overall **education experience**, encompassed in safety and community attitudes, and work opportunities during study is positive for learners;
- taking advantage of **proximity** of key source markets to Australia, particularly the importance of shared time-zones for synchronous online learning, and longstanding cultural ties; and
- maintaining and improving the **strong frameworks** that provide learners with certainty around the pathways from schooling and ELICOS into tertiary education and the strong accreditation and quality assurance frameworks in place for the onshore and borderless sectors, whilst ensuring sufficient flexibility is in place to encourage innovation and entrepreneurship.

In order to take capitalise on these advantages, the Australian international education sector needs to ensure the right enablers are in place across the identified themes of accessibility, experience and outcomes.

**Accessibility** – ensuring that providers are able to identify potential markets and are supported in the development of those markets, that there is a cohesive strategy for the sector, there are appropriate accreditation and quality assurance frameworks in place, a supportive environment for start-ups and new technologies, and Australian businesses to collaborate and partner with one another.

**Experience** – ensuring that there is sufficient affordable, and convenient accommodation for learners, including those taking short-courses, and that learners have a welcoming, culturally diverse and culturally aware experience of Australian education and the broader Australian community.

**Outcomes** – ensuring Australian international education provides the further study or employment outcomes that learners are seeking, and that migration policy is stable and transparent so that learners have certainty over their post-study options.

There are opportunities further research and data collection, including to:

- understand supply-side constraints (including capacity and capability), onshore and offshore, and support business models and products that take advantage of the dimensioned opportunities and avoid supply constraints;
- identify markets most open to international education partnerships with Australia, including detailed market intelligence, particularly the borderless opportunity and the opportunity in emerging regions;

- understand the impact of the regulatory frameworks (including visa changes, accreditation and quality assurance) in competitor countries on Australia's market share;
- undertake in-depth analysis of emerging markets – including where Australian enterprise is in-country and local skills and workforce needs align with Australian expertise;
- develop frameworks for collaborating and sharing value among providers (onshore and borderless, established and emerging), for instance, by profiling Australian and international success stories to see what lessons can be drawn from their experiences; and
- explore opportunities for providers to collaborate with industry in provision and work integrated learning, given the importance of employment outcomes to learners.

This work would allow for Australia's strongest advantages to be identified, and in combination with the findings of this report inform and guide the development of the Australian international education strategy and the developing of markets with the greatest growth potential.

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## Appendix A: Global international education landscape

Table A.1: Business/institution/government to consumer/student

Segment (by product)	Onshore	Offshore	Modality	Award	Description/Other comments
<b>Higher education</b>					
International students enrolled in an Australian higher education (HE) course with CRICOS provider for undergraduate (UG), postgraduate (PG), PhD Research, Pathway (foundation)	Student Visa Needed		Classroom		
Transnational education (TNE) students enrolled in an Australian HE course for UG, PG, PhD Research, Pathway (foundation) in their own country			Classroom Online Blended		
TNE students enrolled in an Australian HE course for UG, PG, PhD Research, Pathway (foundation) in a 3 <sup>rd</sup> country			Classroom Blended		
International students enrolled in an Australian HE course for semester study abroad during UG, PG, PhD Research			Classroom		
Visiting foreign faculty			Classroom/ Lab		
<b>Schooling</b>					
International students enrolled full time in an Australian school (CRICOS)	Student Visa Needed		Classroom		
TNE students enrolled full time in an Australian school in their own country			Classroom Online Blended		
TNE students enrolled full time in an Australian school in a 3 <sup>rd</sup> country			Classroom		

Segment (by product)	Onshore	Offshore	Modality	Award	Description/Other comments
International students attending on a temporary basis an Australian school	Student Visa Not Needed		Classroom		Includes study tour, study abroad, holiday programs.
International students enrolled with an Australian online provider undertaking online tutoring			Online		
International students undertaking an experiential learning tour (no official formal education component)	Student Visa Not Needed		Non Formal Within Australia		
International students sitting Australian qualifications/ assessments offshore			Classroom Online		
Teacher exchange/teacher study tour/temporary foreign teacher			Classroom		
<b>VET</b>					
International students enrolled in an accredited course with CRICOS VET provider	Student Visa Needed		Classroom		
TNE students enrolled in an Australian VET course in their own country or a 3 <sup>rd</sup> country			Classroom Online Other		
International adult undertaking structured workplace-based training, professional development training as an invited visitor or to observe or participate in a research project in Australia	402 Visa needed		Classroom/on-ground		
International adults pursuing a 'lifestyle' outcome (e.g. skills for healthy living or recreational pursuits)			Classroom Online Blended		Includes short courses undertaken by families visiting students onshore in Australia.



Segment (by product)	Onshore	Offshore	Modality	Award	Description/Other comments
International adults pursuing professional or employment outcome (e.g. enhancing leadership and management skills or gaining a component of a full skill set, such as retail customer service skills) through non accredited Australian course			Classroom Online Blended		E.G RTO that delivers a range of specialist engineering courses (from short courses through to Masters) using synchronous, live online teaching to students offshore.
Accreditation of foreign qualifications					Institutions offering skills assessments for overseas trained I tradespeople seeking to migrate to Australia for work purposes, through recognising their formal qualifications and helping to facilitate access to an Australian trades work licence.
<b>ELICOS</b>					
International students enrolled in ELICOS course on a visa			Classroom but most using blended delivery within classroom setting		Approximately 60% of all ELICOS students in Australia are on a student visa (English Australia, 2014).
International students enrolled in ELICOS course (currently a third of the Australian English language market) <b>not on a visa</b>	(Non-Student Visa)		Classroom		Approximately 40% of ELICOS students have working holiday, visitor visa or other visas (English Australia, 2014).
International K-12 students enhancing English language skills on study tours in Australia	(Non-student visa)		Classroom		
TNE K-12 student enrolled in Australian ELICOS course (delivered in partnership with a local provider or in a subsidiary) in their own country			Classroom Online Blended		
TNE adult students enrolled in Australian ELICOS course (delivered in partnership with a local provider or in a subsidiary) in their own country			Classroom Online Blended		
<b>Other</b>					

Segment (by product)	Onshore	Offshore	Modality	Award	Description/Other comments
Credentialing service			Face to face Online Blended		Panel of experts assesses/gives credits for prior knowledge/skills
Mentoring service			Face to face Online Blended		Matches participants with mentors in their future industry.

Source: EduWorld (2015)

**Table A.2: Business/government/university to Business/government/industry/university**

Segment (by product)	Onshore	Offshore	Modality	Description/Other comments
<b>Consultancy</b>				
Educational system & framework reform				Working with education departments and governments to improve the learning experience for students
Research				Planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services.
Train the trainer/teacher training				Professional preparation of teachers (all sectors) usually through formal course work and supervised practice teaching or training of new teachers. schools that provide teacher training offshore, ensuring that teaching meets Australian domestic standards
Education for Development				Working with bi-lateral and multi-lateral donor agencies such as the World Bank, Asian Development Bank, DFAT, and large foundations to deliver projects aimed at improving access to and quality of education in developing countries.
<b>Provider to Employer Training Delivery</b>				
Australian provider delivering nationally recognised training courses to corporates, government and individuals			Online Blended Face-to-face	Accredited and non-accredited courses as stand-alone qualifications, upgraded skills assessment or CPE

Segment (by product)	Onshore	Offshore	Modality	Description/Other comments
<b>Research Collaboration/Patents/Consulting/Contracts</b>				
Foreign government to Australian education provider/skills council				Includes grants, contracts and subcontracts
Foreign company to Australian university				Includes grants, contracts and subcontracts
Foreign institution to Australian institution				Includes joint research, consulting and up skilling staff
Government/Industry/University across borders				
Sponsorship of foreign researchers into Australia				
Teaching and learning Infrastructure or foundation building tools and services				A variety of technology enabled tools with the common aim of improving education through facilitating the learning processes and bettering the performance of the educational systems or environments where they are applied.
Completely integrated digital education providers			Online	All aspects of the learner experience are delivered online; from marketing to assignments, virtual classrooms, assessments, social networking
Content, curriculum development and licensing			All	Licensing curriculum to providers
Evaluation and assessment tools			All	Provision of research-based products and services to improve learning; Includes – national assessments, global assessments, subject matter assessments and competitions,
Integrated learning environments for particular 'subject' markets			Online	Includes a variety of subject/skill based digital tools that analyse, assess, educate and up-skill groups and individuals.
Student and parent management and information systems			Online	Management information systems for educational institutions to manage student data and provide a range of feedback at the individual or institutional level for parents, teachers, students and administrators
Education labour force management and development tool			Online	
Digital education marketplaces, marketing and sales			Online	Online student recruitment portals that include marketing for institutions, student acquisition and retention tools and services, applications etc
Closely related student labour market tool			Online	Technology enabled services, including delivery platforms, designed to assist educators deliver experiential learning.

Source: EduWorld (2015)

## Appendix B: Headline statistics by market

Table B.1: Headline statistics by key markets

	China	India	Vietnam	Thailand	South Korea	Brazil	Malaysia	Nepal	Indonesia	Colombia
<b>Total opportunity (2025)</b>										
Urban 15-29 year old population ('000s)	157,000	138,000	9,000	7,000	7,000	44,000	7,000	2,000	41,000	9,000
Annual GDP growth per capita in MEDSEC terms <sup>24</sup>	7.1%	8.4%	6.4%	5.2%	5.6%	3.2%	5.5%	4.4%	5.4%	4.9%
<b>Forecast onshore enrolments (2025)</b>										
Higher education	145,900	58,100	23,000	4,600	5,100	1,700	20,800	23,900	11,800	1,900
VET	18,800	40,600	11,200	20,700	16,700	10,100	10,600	13,200	11,100	3,500
Schools	13,200	600	3,000	700	1,400	300	600	27	300	30
ELICOS	42,700	12,500	14,000	17,500	8,200	15,500	2,600	3,800	2,700	11,600
Other	12,900	700	1,200	200	500	4,600	1,100	800	1,000	100
<b>Total</b>	<b>233,500</b>	<b>112,400</b>	<b>52,400</b>	<b>43,600</b>	<b>31,900</b>	<b>32,200</b>	<b>35,600</b>	<b>41,800</b>	<b>26,800</b>	<b>17,200</b>
<b>Broader narrative</b>										
Market prospects in 2015 <sup>25</sup>	High	High	High	Medium-High	High	Medium-High	High	Medium	Medium-High	Medium

<sup>24</sup> MESDC = Major English Speaking Destination Countries. This is a GDP per capita index, adjusted for the MESDC currencies, weighted by 'market share' of international students that country.

<sup>25</sup> Based on GDP growth forecasts and current policy settings described in Austrade's in-country intelligence. **High** – strong economic and student growth prospects, government policy and regulations are supportive of international education, and/or there is geographic proximity to Australia

**Medium** – moderate economic growth prospects, current international student numbers are moderate relative to potential opportunity, and/or government policy and regulations are neutral  
**Low** – weak economic and student growth prospects, government policy and regulations are not supportive of international education, there are weak institutions, and/or it is not geographically proximate to Australia

	Japan	USA	Pakistan	Taiwan	Philippines	Saudi Arabia	Italy	Hong Kong	Germany	Singapore
<b>Total opportunity (2025)</b>										
Urban 15-29 year old population ('000s)	17,000	56,000	26,000	15,000	7,000	6,000	1,000	9,000	1,000	5,000
Annual GDP growth per capita in MEDSEC terms <sup>1</sup>	2.3%	2.2%	3.6%	4.0%	2.1%	1.3%	4.2%	2.3%	3.8%	2.3%
<b>Forecast onshore enrolments (2025)</b>										
Higher education	2,000	2,700	14,600	N/A	6,400	6,700	2,300	14,500	1,200	8,700
VET	4,300	2,100	8,700	N/A	18,800	500	10,500	6,400	1,000	600
Schools	1,100	66	53	N/A	100	19	500	1,100	1,000	200
ELICOS	6,900	30	2,700	N/A	1,000	6,900	4,600	2,300	300	41
Other	600	7,000	100	N/A	300	500	600	1,400	2,100	500
<b>Total</b>	<b>14,900</b>	<b>12,000</b>	<b>26,100</b>	<b>N/A</b>	<b>26,700</b>	<b>14,500</b>	<b>18,500</b>	<b>25,700</b>	<b>5,600</b>	<b>10,100</b>
<b>Broader narrative</b>										
Market prospects in 2015 <sup>2</sup>	Medium	Low-Medium	Medium	Medium	Medium-High	Medium-High	Medium	High	Medium-High	Medium-High

	Ghana	Nigeria	Kenya	Mexico	Myanmar	Zimbabwe	UK	Chile	Oman	UAE
<b>Total opportunity (2025)</b>										
Urban 15-29 year old population ('000s)	5,000	36,000	5,000	28,000	6,000	18,000	10,000	4,000	1,000	2,000
Annual GDP growth per capita in MEDSEC terms <sup>1</sup>	2.3%	3.1%	4.2%	3.8%	7.6%	1.6%	1.8%	4.5%	1.1%	4.7%
<b>Forecast onshore enrolments (2025)</b>										
Higher education	400	2,400	2,500	900	1,100	800	2,400	800	1,200	200
VET	300	1,400	1,900	1,400	200	600	4,800	1,000	19	92
Schools	5	9	4	83	38	1	100	21	0	4
ELICOS	31	200	200	900	74	19	45	1,600	400	100
Other	4	39	65	500	200	30	2,000	91	100	2
<b>Total</b>	<b>800</b>	<b>4,100</b>	<b>4,700</b>	<b>3,800</b>	<b>1,600</b>	<b>1,400</b>	<b>9,400</b>	<b>3,500</b>	<b>1,800</b>	<b>400</b>
<b>Broader narrative</b>										
Market prospects in 2015 <sup>2</sup>	Medium	Medium-High	Medium-High	Medium-High	Medium	Low	Low-Medium	Low	Medium	Medium

# Appendix C: Projection methodology

## Onshore projection methodology

To dimension the size of the economic potential presenting the Australian international education onshore sector, Deloitte Access Economics' in-house forecasting model has been used. The forecasts are based on a two-stage methodology:

- Stage 1: in the short-run, commencements are determined by the existing pool of international students already in Australia and their progression along recognised study pathways into other Australian international education sectors; and
- Stage 2: in the medium to long-run, the granting of new student visas are incorporated and commencements start to reflect education-related economic fundamentals in source markets such as population and income growth.

Projected enrolments are calculated as a function of total commencements (direct and through study pathways) and course attrition rates. Key drivers for the number of international students sourced directly by country are:

- the number of people aged 15-29 in the country (i.e. the broad pool). While the age group of students can arguably encompass those aged 14-30 data limitations contain the ability to capture these fringe cohorts;
- the rate of urbanisation in the country (the relevant pool of potential students);
- changing economic growth in the country (a proxy for the likelihood of potential students to pursue education)
- benchmark share of international education provision captured by Australia in the past (to benchmark the likelihood of students choosing Australia); and
- competitiveness impacts driven by exchange rates (influencing the relative cost of service provision to students).

Demographic changes in the Asian region suggest the number of 15-29 year olds will decline across the next decade – mainly due to significant falls in China, Hong Kong and South Korea offsetting expected rises in India, Malaysia and Nepal. Within the relevant pool, economic effects will drive the take-up of international education. In this model, the faster the rate of economic growth – measured relative to the number of 15-29 year olds – the greater the take-up of education.

Price changes provide a further influence over the international education decision. While it is extremely difficult to capture the entire effect of competitive pressures from other providers of international education, the exchange rate does represent the relative price competitiveness of education between Australia and other source countries (which is one factor in overall competitiveness).

Based on these drivers, projections of student visa grants by source country are developed as the basis to estimate direct commencements. That is the number of commencements

resulting from students arriving directly from overseas, excluding commencements from international students already in Australia.

Visas are granted under a number of categories, which correspond to the different education sectors: higher education, VET, ELICOS, schools and other (i.e. enabling and non-award courses). However, students do not necessarily commence in the sector for which they have a visa. They may enter a sector further down the hierarchy first. Indeed a significant proportion of visa recipients in all sectors enrol in an ELICOS course first. For this reason, study paths are mapped for each key source market.

### Borderless projection methodology

Australia's aspirational borderless student enrolments are projected to 2025 by taking a constant share of global 25-64 year old population participating in both formal and non-formal education over the 2015 to 2025 period. The base population is determined by projected GDP and population dynamics, while a range of shares (0.5%, 1%, and 10%) have been chosen for illustrative purposes.

The latest participation rates in both formal and non-formal education by the 25-64 year old population of OECD member nations in 2012 are used as the starting point. The OECD participation rates are regressed against the OECD per capita incomes to find a positive linear relationship between GDP per capita and participation rates. It has been estimated that for each US\$1,000 increase in GDP per capita globally, an additional 7 persons per 1,000 25-64 year old population will participate in either formal or non-formal education.

Assuming that the relationship holds for non-OECD nations, the global 25-64 year old population participating in formal and non-formal education in 2015 has been estimated from UN data on the 25-64 year old population in Australia's key source markets, and their current GDP per capita, such that:

$$\text{total participation} = 25 - 64 \text{ year old population} \times \text{participation rate}$$

It is estimated that in 2015, approximately 0.90 billion people in Australia's top 30 source markets are participating in education. Of these, approximately 0.12 billion are in formal education, and 0.85 billion are in non-formal education.<sup>26</sup>

The total global demand for education over the modelling period has been estimated from population and GDP growth projections. By 2025, the number of people participating in education is expected to reach 1.11 billion. The model implicitly assumes that there are not diminishing effects as GDP per capita continues to rise over the forecast period.

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<sup>26</sup> Sum of people participating in non-formal and formal education does not equal to total number of people participating in education as there are a number of people participating in both formal and non-formal education simultaneously.

## Appendix D: Onshore projections

The following tables details the results of the baseline and scenarios of onshore international student enrolments to 2025 across the higher education, VET, schools, ELICOS and Other sectors for the largest five countries by volume.

**Table D.1: Projected onshore international enrolments – Higher education**

Country	Baseline			Constant market share			High market share		
	2015	2020	2025	2015	2020	2025	2015	2020	2025
China	97,500	132,600	145,900	97,500	127,100	129,700	96,900	138,300	145,500
India	34,500	49,500	58,100	34,500	46,300	50,300	35,900	77,200	87,100
Malaysia	14,600	18,300	20,800	14,600	17,300	18,300	15,300	27,900	30,800
Vietnam	13,400	19,600	23,000	13,400	18,800	20,600	13,300	19,400	21,600
Nepal	12,400	19,100	23,900	12,400	18,000	20,900	12,200	31,300	43,600
Other countries	102,900	130,200	148,600	102,900	123,500	131,000	103,200	161,500	181,400
<b>Total</b>	<b>275,300</b>	<b>369,300</b>	<b>420,300</b>	<b>275,300</b>	<b>351,000</b>	<b>370,800</b>	<b>276,800</b>	<b>455,600</b>	<b>510,000</b>

**Table D.2: Projected onshore international enrolments – VET**

Country	Baseline			Constant market share			High market share		
	2015	2020	2025	2015	2020	2025	2015	2020	2025
India	28,100	34,100	40,600	28,100	32,800	36,500	32,300	103,700	140,000
Thailand	12,200	18,700	20,700	12,200	18,100	18,800	12,200	21,700	24,100
China	13,200	16,900	18,800	13,200	16,200	16,800	13,100	17,400	18,700
Philippines	7,800	15,000	18,800	7,800	14,800	18,100	7,800	14,700	18,100
Republic of Korea	12,800	15,600	16,700	12,800	15,100	15,300	12,900	31,600	40,700



	Baseline			Constant market share			High market share		
Country	2015	2020	2025	2015	2020	2025	2015	2020	2025
Other countries	91,400	125,600	143,100	91,400	119,800	126,900	98,900	213,600	247,200
<b>Total</b>	<b>165,500</b>	<b>225,900</b>	<b>258,700</b>	<b>165,500</b>	<b>216,800</b>	<b>232,400</b>	<b>177,200</b>	<b>402,700</b>	<b>488,800</b>

Table D.3: Projected onshore international enrolments – Schools

	Baseline			Constant market share			High market share		
Country	2015	2020	2025	2015	2020	2025	2015	2020	2025
China	9,500	12,300	13,200	9,500	11,500	11,500	9,700	13,900	14,000
Vietnam	1,900	2,600	3,000	1,900	2,500	2,600	1,900	2,700	2,900
Republic of Korea	1,400	1,400	1,400	1,400	1,300	1,200	1,500	3,800	3,800
Hong Kong SAR	900	1,000	1,100	900	1,000	900	900	1,200	1,100
Japan	900	1,000	1,100	900	900	900	900	1,100	1,100
Other countries	5,700	6,800	7,400	5,700	6,400	6,600	6,000	9,700	10,100
<b>Total</b>	<b>20,300</b>	<b>25,100</b>	<b>27,200</b>	<b>20,300</b>	<b>23,600</b>	<b>23,700</b>	<b>20,900</b>	<b>32,400</b>	<b>33,000</b>

Table D.4: Projected onshore international enrolments – ELICOS

	Baseline			Constant market share			High market share		
Country	2015	2020	2025	2015	2020	2025	2015	2020	2025
China	35,500	39,900	42,700	35,500	36,900	36,700	36,300	44,200	44,100
Thailand	13,000	15,700	17,500	13,000	14,600	15,100	13,600	19,000	19,900
Brazil	12,800	14,700	15,500	12,800	13,600	13,300	12,700	15,000	14,800
Vietnam	10,300	12,300	14,000	10,300	11,300	12,000	10,300	12,400	13,100
India	8,800	10,700	12,500	8,800	9,900	10,700	15,300	35,300	39,200
Other countries	67,600	77,600	84,700	67,600	71,600	72,800	79,000	128,500	133,600
<b>Total</b>	<b>148,000</b>	<b>170,900</b>	<b>186,900</b>	<b>148,000</b>	<b>157,900</b>	<b>160,600</b>	<b>167,200</b>	<b>254,400</b>	<b>264,700</b>

**Table D.5: Projected onshore international enrolments – Other**

	Baseline			Constant market share			High market share		
Country	2015	2020	2025	2015	2020	2025	2015	2020	2025
China	9,800	12,000	12,900	9,800	11,200	11,200	9,700	12,300	12,400
United States of America	5,700	6,400	7,000	5,700	5,900	6,000	6,300	8,800	9,000
Brazil	3,900	4,300	4,600	3,900	4,000	3,900	3,800	4,200	4,100
Germany	1,900	2,000	2,100	1,900	1,900	1,800	2,000	2,400	2,400
United Kingdom	1,600	1,800	2,000	1,600	1,700	1,700	1,600	2,000	2,100
Other countries	15,300	17,900	19,700	15,300	16,400	17,000	16,500	25,400	26,400
<b>Total</b>	<b>38,200</b>	<b>44,400</b>	<b>48,300</b>	<b>38,200</b>	<b>41,100</b>	<b>41,600</b>	<b>39,900</b>	<b>55,100</b>	<b>56,400</b>

## Appendix E: Scenario analysis of Australian international education onshore potential

Building on the baseline projections of onshore learner commencements and enrolments, three scenarios and sensitivities have been constructed to demonstrate the sensitivity of the projections.

The scope of the economic opportunity in onshore international education provision will inevitably depend on the size of the potential pool of learners in source markets and the capacity of their family to fund study overseas. A destination's comparative advantages in international learner-decision factors then bear influence on where the learner will choose to study (i.e. which country and institution).

Future changes in the learner demographic profile in source markets can be predicted with a fair degree of accuracy from current population data. Therefore it is factors such as GDP per capita (a proxy for average income levels), the bilateral exchange rate (a proxy of the relative cost of international education), and the availability of quality education alternatives at home that will determine the size of the international learner market that Australia will compete for through to 2025.

To reflect these inherent uncertainties, one scenario that captures the downside/upside from the ineffective/effective implementation of the growth strategy to 2025 has been developed:

- **Scenario 1 'Market share':** A continuation of Australia's recent performance which sees the current 5.5% (OECD, 2014) share of global onshore international *tertiary* education maintained, or a marked improvement following the implementation of the growth strategies that see the share return to its overall historical high of 7% (with market shares varying by country and sector) (OECD, 2011).

The results of the scenario analysis are displayed in Table E.1. Scenario 1 demonstrates the possible outcomes from seizing the opportunity presented by the global growth in international education demand. If Australia was to maintain its current share of the global international education market over the modelling horizon, onshore enrolments are projected to be 829,000 in 2025 under the low sensitivity in Scenario 1. This is approximately 112,300 enrolments (12%) below the sector's potential as estimated in the baseline projections.

However, progressively increasing Australia's international learner market base to its historical high of 7% is projected to see onshore enrolments grow by an average of 7.1% per annum to reach 1,353,000 by 2025 under Scenario 1. This outcome is 44% above the baseline, or 411,600 additional enrolments. While this is an optimistic assumption, it does provide a reasonable upper bound target that could be pursued through initiatives set a new national strategy.

**Table E.1: Scenario analysis of onshore international education**

	2015	2020	2025	Annual growth rate	Change from baseline
<i>Baseline</i>					
Commencements	391,100	475,800	529,700	3.1%	--
Enrolments	647,300	835,500	941,400	3.8%	--
<i>Scenario 1</i>					
<i>Constant market share</i>					
Commencements	391,100	445,200	461,800	1.7%	-67,900
Enrolments	647,300	790,500	829,100	2.5%	-112,300
<i>High market share</i>					
Commencements	425,600	712,200	783,100	6.3%	253,400
Enrolments	681,900	1,200,100	1,353,000	7.1%	411,600

Source: Deloitte Access Economics

Two sensitivities based on optimistic/conservative assumptions around the outlook for economic fundamentals have also been developed:

- **Sensitivity 1 ‘GDP per capita’:** GDP per capita is varied by  $\pm 10\%$  to provide a lower and upper bound sensitivity of the baseline projections to changes in income growth in source markets.
- **Sensitivity 2 ‘Exchange rate’:** The bilateral exchange rate is varied by  $\pm 10\%$  to provide a lower and upper bound sensitivity of the baseline projections to changes in the purchasing power of source market currencies against the Australian dollar.

For Sensitivities 1 and 2, factors such as a high exchange rate and slower GDP per capita growth have a negative correlation with the level of onshore international commencements and enrolments, as expected. Under Sensitivity 1, a 10% decrease in GDP per capita in source markets relative to the baseline leads to a 2% drop in onshore international learner activity. This translates to around 10,600 and 18,000 fewer commencements and enrolments respectively in 2025. At the same point in time, a 10% appreciation in the Australian dollar under Sensitivity 2 is projected to lead to a 2.5% decrease in onshore international commencements (13,100) and enrolments (22,900).

Conversely, when GDP per capita in source markets rise or the exchange rate depreciates, onshore international enrolments are projected to increase by between 18,800 and 22,900 above the baseline under the respective sensitivities in Sensitivities 1 and 2. This suggests the demand for international education in Australia is more sensitive to changes in cost than to changes in income growth in source markets — a consistent outcome with the literature on learner decision drivers.

As the exchange rates and international economic growth are both outside the control of the sector, Australian international education providers must seek ways to continuously improve their inherent appeal across non-financial and financial aspects to strengthen the sector’s resilience to economic fluctuations. The effective implementation of a national strategy could provide a coordinated approach to achieve this objective, and potentially expand on Australia’s existing onshore international education base.

**Table E.2: Sensitivity analysis of onshore international education**

	2015	2020	2025	Annual growth rate	Change from baseline
<i>Baseline</i>					
Commencements	391,100	475,800	529,700	3.1%	--
Enrolments	647,300	835,500	941,400	3.8%	--
<i>Sensitivity 1</i>					
<i>Low GDP/capita</i>					
Commencements	389,800	467,400	519,500	2.9%	-10,200
Enrolments	645,900	821,700	923,300	3.6%	-18,000
<i>High GDP/capita</i>					
Commencements	392,600	484,500	540,400	3.2%	10,600
Enrolments	648,800	850,000	960,200	4.0%	18,800
<i>Sensitivity 2</i>					
<i>Low Australian dollar</i>					
Commencements	392,700	486,600	542,900	3.3%	13,200
Enrolments	648,900	853,100	964,200	4.0%	22,900
<i>High Australian dollar</i>					
Commencements	389,600	465,000	516,600	2.9%	-13,100
Enrolments	645,700	818,000	918,600	3.6%	-22,800

Source: Deloitte Access Economics

## Appendix F: Summary of country prospects

The table below summarises the economic status, education sector and education policy of the thirty countries selected by Austrade for analysis in this report, and provides a snapshot of the prospects of the market.

**Table F.1: Summary of country prospects**

Country	Summary
<b>China</b>	<ul style="list-style-type: none"> <li>China's GDP growth is forecast to moderate from 6.9 per cent in 2015 to 6.3 per cent in 2025.</li> <li>762,000 international tertiary students (17 per cent of global international student population), with a growing private education sector, and demand significantly exceeding local supply.</li> <li>Government education spending at 4.3 per cent of GDP, with strong growth in vocational education (25 per cent, 2005-13), and high levels of support for improving quality and prestige. An increasing number of schools are offering Australian curricula.</li> <li>Aim to have 500,000 foreign students (150,000 in universities) studying within Chinese institutions by 2020, with financial assistance made available.</li> </ul>
<b>India</b>	<ul style="list-style-type: none"> <li>India's GDP growth is forecast stable at 8.4 per cent in 2015 and 8.6 per cent through to 2025.</li> <li>217,000 international tertiary students, with growing enrolments in domestic higher education (13.9m to 21.8m, 2006-12), as demand exceeds local supply.</li> <li>Government spending on higher education will increase by 30 per cent to \$20.4b between 2013 and 2017.</li> <li>Foreign university campuses in India must be not-for-profit entities, cannot repatriate profits, and must maintain a corpus of at least \$4.5m. There are also many different regulatory bodies and frameworks across jurisdictions within India, making compliance costly.</li> </ul>
<b>Vietnam</b>	<ul style="list-style-type: none"> <li>Vietnam's GDP growth is forecast stable at 6 per cent in 2015 through to 2025.</li> <li>61,000 international tertiary students globally. Significant growth in the education sector has been characterised by intensifying competition and market segmentation, however demand still well exceeds supply. Government estimates suggest that up to 86,000 new English teachers will need to be trained or upskilled by 2020.</li> <li>Government spending on education has increased to 20 per cent of total expenditure (\$400m in 2012), with significant efforts to expand supply, particularly at the postgraduate level. Private operators and foreign investment has been actively promoted, with favourable loans, land packages and reduced administration on offer.</li> <li>The business environment in Vietnam can be burdensome as laws, regulations and guidelines change rapidly.</li> </ul>

Country	Summary
<b>Thailand</b>	<ul style="list-style-type: none"> <li>Thailand's GDP growth is forecast stable at 3.7 per cent in 2015 and 3.8 per cent through to 2025.</li> <li>26,000 international tertiary students, with 5,600 government scholarships awarded in 2013 for studying overseas. Growing number of local English-language schools, international schools and higher education institutions.</li> <li>Regulations for foreign educational institutions can be onerous and are subject to the same rules of ownership and control as private foreign companies. Overseas universities must partner with a Thai organisation with majority Thai ownership, and must also offer a comprehensive range of programs.</li> </ul>
<b>South Korea</b>	<ul style="list-style-type: none"> <li>South Korea's GDP growth is forecast stable at 3.3 per cent in 2015 and 3.7 per cent through to 2025.</li> <li>135,000 international tertiary students globally. Very strong demand for education and English-language learning, with significant private spending on private education and tutoring.</li> <li>Government spending on education in 2011 was \$48b. This included extensive scholarships and programs for teachers and students to study and work abroad. There is a strong focus on improving English-language and increasing the number of university courses taught in English.</li> <li>It is a government objective to become an 'education hub' of Asia and attract international students. This has led to efforts to build relationships with overseas education institutions and develop a visa-free international city.</li> </ul>
<b>Brazil</b>	<ul style="list-style-type: none"> <li>Brazil's GDP growth is forecast to recover from negative 1 per cent in 2015 to positive growth the next year, stabilising at 2.5 per cent from 2020 through to 2025.</li> <li>39,000 international tertiary students globally, with 5,000 scholarships awarded to study in Australian universities between 2010 and 2014.</li> <li>A number of joint research initiatives, as well as a scholarship program for 101,000 science students and researchers to study abroad between 2011 and 2014.</li> </ul>
<b>Malaysia</b>	<ul style="list-style-type: none"> <li>Malaysia's GDP growth is forecast stable at 4.8 per cent in 2015 and 5 per cent through to 2025.</li> <li>64,000 international tertiary students, with many students choosing to earn foreign degrees locally.</li> <li>Government is actively pursuing and encouraging foreign investment and aims to become a popular destination for international students, particularly among Muslim populations. Australian education institutions in Malaysia are allowed to retain full ownership in tertiary education services.</li> </ul>
<b>Nepal</b>	<ul style="list-style-type: none"> <li>Nepal's GDP growth is forecast to moderate from 5 per cent in 2015 to 4.5 per cent in 2025.</li> <li>35,000 international tertiary students globally. Demand for tertiary education well exceeds supply, with many students looking to study overseas to avoid local political instability.</li> <li>High level of fraud amongst education agents.</li> </ul>

Country	Summary
<b>Indonesia</b>	<ul style="list-style-type: none"> <li>Indonesia's GDP growth is forecast to increase from 5.2 per cent in 2015 to 6 per cent in 2025.</li> <li>42,000 international tertiary students. At present, there are efforts to improve access to education for low-income families and ensure that all children undertake nine compulsory years of education.</li> <li>Government spending on education is relatively low at 0.7 per cent of GDP in 2013.</li> <li>Key government reforms to improve English-language have led to internationalised high school and university system, and increasing collaboration with overseas institutions. Foreign education providers are required to partner with local institutions, however there is high demand for these joint university programs and short courses.</li> </ul>
<b>Colombia</b>	<ul style="list-style-type: none"> <li>Colombia's GDP growth is forecast to increase from 3.4 per cent in 2015 to 4.3 per cent in 2025.</li> <li>32,000 international tertiary students. Increasing number of International Baccalaureate (IB) school-leavers and students looking overseas for English-speaking undergraduate study destinations.</li> <li>Government goal is to be the highest educated country in Latin America by 2025. This has resulted in education becoming the largest government budgetary item. Scholarship funding for students is primarily allocated for domestic study.</li> <li>Internationalisation and English-language are the key priorities of universities. As a result, English proficiency levels and the number of classes taught in English have increased. Despite this, English-language learning centres are generally poor quality, with a number of VET institutions looking for English-language programs, providers and partners to fill the supply gap.</li> </ul>
<b>Japan</b>	<ul style="list-style-type: none"> <li>Japan's GDP growth is forecast to increase from 0.9 per cent in 2015 to 1.4 per cent in 2025.</li> <li>36,000 international tertiary students, with 22,500 scholarships to study overseas allocated for higher education students in 2014-15. Oversupply of places at local institutions due to demographic changes and flat international student numbers in Japan.</li> <li>Government focus on internationalisation and English-language, with an aim of doubling the number of study abroad university students to 120,000 and the number of high school students to 60,000 by 2020. Significant commitment by universities to send students overseas on study tours.</li> </ul>
<b>USA</b>	<ul style="list-style-type: none"> <li>GDP growth in the USA is forecast to remain stable at 2.5 per cent in 2015 and 2.3 per cent in 2025.</li> <li>70,000 international tertiary students studying globally, and is the largest inbound tertiary market in the world.</li> <li>US Federal financial aid, which more than 70 per cent of US students use, can be used to attend foreign universities, with a number of country-specific scholarships for students to study in Australia also available.</li> </ul>



Country	Summary
<b>Pakistan</b>	<ul style="list-style-type: none"> <li>• Pakistan's GDP growth is forecast to increase from 4.3 per cent in 2015 to 5 per cent in 2025.</li> <li>• 52,000 international tertiary students with increasing capacity and willingness to pay for higher fee institutions both locally and abroad. Demand exceeds local supply and private institutions have attempted to address this; however, studying overseas has increasingly become the popular option, with the number of outbound students doubling between 2009 and 2013.</li> <li>• VET sector is growing but still viewed poorly by locals, despite being particularly important for the Middle East and other countries that import Pakistani labour.</li> <li>• Political and economic instability as well as restrictions on travel and student visas is dampening growth.</li> </ul>
<b>Taiwan</b>	<ul style="list-style-type: none"> <li>• 32,000 international tertiary students with flat enrolments to Australia.</li> <li>• Desire to position itself as a regional education leader, and increase the proportion of inbound international students from 1.5 per cent to 5 per cent of the student body (an increase of approximately 90,000 students) between 2013 and 2017, equating to 90,000 students.</li> <li>• Both public and private education spending is significant (\$26.7b in 2011) with the extension of compulsory schooling to 12 years (from nine) and the number of tertiary institutions doubling between 2004 and 13. English-language skills and tutoring is also a focus.</li> <li>• Diplomas and certificates, including those at the graduate level, are not recognised by the Ministry of Education, which can create issues for civil servants and professional/technical personnel who are required to sit national examinations.</li> </ul>
<b>Philippines</b>	<ul style="list-style-type: none"> <li>• Philippines' GDP growth is forecast to moderate from 6.7 per cent in 2015 to 6 per cent in 2025.</li> <li>• 18,000 international students. Australia is increasingly popular particularly due to the presence of other family members in Australia.</li> <li>• Public spending on education is increasing (\$7.6b in 2014), with the introduction of a "K to 12" system in 2013, from previously a "K to 10" system.</li> <li>• Foreign ownership of education institutions is limited to 40 per cent. Off-shore programs can be registered through a local partner provider.</li> </ul>
<b>Saudi Arabia</b>	<ul style="list-style-type: none"> <li>• Saudi Arabia's GDP growth is forecast stable at 3 per cent in 2015 and 3.3 per cent in 2025.</li> <li>• 67,000 international students. The King Abdullah Scholarship Program grants 18,000 scholarships to study overseas annually, with 8,000 going to Australia in 2012-13. All levels of education are free for Saudi nationals, and inbound students to Saudi Arabia predominately study Arabic language and Islamic studies.</li> <li>• A large and increasing budget for education is focused on building capacity and expertise locally with a focus on replacing expatriate workers with educated Saudis.</li> <li>• Initiatives to build the education sector's capacity almost always utilises partnerships with foreign education providers. A highly regulated and governed industry also means that foreign institutions must partner with Saudi providers in order to be licenced.</li> </ul>

Country	Summary
<b>Italy</b>	<ul style="list-style-type: none"> <li>Italy's GDP growth is forecast to remain flat at 0.5 per cent in 2015 and 1 per cent through to 2025.</li> <li>73,000 international students. Italian students are particularly mobile and increasingly willing to explore overseas opportunities. The number of Australian student visas issued to Italians has grown 24 per cent annually between 2008 and 2012.</li> <li>Studying in an English-speaking country is highly valued given the high regard of English-language and the limited opportunities to practice English locally.</li> <li>Government and universities are increasingly focused on joint university programs and developing greater levels of internationalisation.</li> </ul>
<b>Hong Kong</b>	<ul style="list-style-type: none"> <li>25,000 international tertiary students globally. A \$65m scholarship scheme to support students at high ranking overseas universities to be trialled for three cohorts of students from 2015.</li> <li>Government spending on education was 17.6 per cent of total expenditure and 3.6 per cent of GDP (\$14.2b in 2014), with the goal to become a regional 'education hub'.</li> <li>Australian institutions deliver over 160 transnational education programs to 12,000 students in Hong Kong. A local shortage in international school places has prompted provision of land and grants for international school development.</li> <li>Limited local provision of professional degrees, particularly sciences (medical, allied health, forensic, veterinary), aviation, creative design and law.</li> </ul>
<b>Germany</b>	<ul style="list-style-type: none"> <li>Germany's GDP growth is forecast to remain flat at 1.6 per cent in 2015 and 1.3 per cent in 2025.</li> <li>141,000 international tertiary students globally. Government initiatives to encourage 50 per cent of German undergraduates to study abroad.</li> <li>Government spending on education is 4.6 per cent of GDP. There has been significant growth in the number of private institutions and joint university projects, with a number of German institutions opening overseas branches across Asia and Europe.</li> <li>Regulations vary across states, in particular with respect to fees. Germany and Australia have a mutual recognition of university qualifications.</li> </ul>
<b>Singapore</b>	<ul style="list-style-type: none"> <li>Singapore's GDP growth is forecast stable at 3 per cent in 2015 and 3.2 per cent through to 2025.</li> <li>22,000 international tertiary students. Despite opening additional universities and are aiming for a 30 per cent participation rate (from 26 per cent) in local public universities, demand for higher education continues to greatly exceed supply. Accordingly, many students instead go study overseas or attend private universities.</li> <li>Strong reputation as a regional hub for educational excellence, attracting large flows of foreign students and institutions. Currently, 35 Australian institutions offer more than 450 borderless programs in Singapore through local partners.</li> </ul>

Country	Summary
<b>Ghana</b>	<ul style="list-style-type: none"> <li>• Ghana's GDP growth in 2015 has been considerably weaker than trend at 3.5 per cent. Growth is forecast to increase and stabilise at 4.3 per cent through to 2025.</li> <li>• Currently there are 14,000 international tertiary students. Economic development has led to the creation of a growing middle class that is willing to invest in their children's higher education. Subsequently, entry into senior high schools and universities are very competitive.</li> <li>• One third of the government's budget in 2011 was spent on education, with making primary and secondary schools free and increasing the affordability of tertiary education key priorities. A number of scholarships are also allocated for studying overseas.</li> <li>• There has been an increase in foreign universities setting up local campuses and forming partnerships with local institutions.</li> </ul>
<b>Nigeria</b>	<ul style="list-style-type: none"> <li>• Nigeria's GDP growth is forecast to increase from 4.8 per cent in 2015 to 6 per cent in 2020 and through to 2025.</li> <li>• 70,000 international tertiary students. A very large youth demographic and rising middle class incomes has seen demand for tertiary education exceed supply. The result has been an increase in private education providers in Nigeria and more students studying overseas. Government scholarships for studying overseas are mostly limited to postgraduate studies.</li> <li>• Education received 8.4 per cent of the national budget in 2012. Alongside capacity constraints, quality is a major issue for local education institutions.</li> <li>• Poor infrastructure, administrative red tape and bureaucracy are common difficulties for operating in Nigeria. Students perceive obtaining Australian visas as a difficult process.</li> </ul>
<b>Kenya</b>	<ul style="list-style-type: none"> <li>• Kenya's GDP growth is forecast at 6.9 per cent in 2015 and expected to hold at 6.6 per cent to 2025.</li> <li>• 12,000 international tertiary students globally, with increasing demand following an expanding middle class. Free compulsory basic education is a constitutional right.</li> <li>• Government spending on education is 8 per cent of total expenditure. Significant reforms have been introduced to improve the education system, and have focused in developing the VET sector.</li> </ul>
<b>Mexico</b>	<ul style="list-style-type: none"> <li>• A number of foreign universities have local partnerships or campuses in Kenya.</li> <li>• Mexico's GDP growth is forecast to increase from 3 per cent in 2015 to 3.8 per cent in 2025, based largely on improvements in the US economy.</li> <li>• 30,000 international tertiary students globally, with increasing local enrolments. A significant number of scholarships for studies related to the energy sector have been announced for both local and international institutions.</li> <li>• A recent signing of a Memorandum of Understanding between Mexico's and Australia's education departments is likely to enable future growth.</li> </ul>

Country	Summary
<b>Myanmar</b>	<ul style="list-style-type: none"> <li>Myanmar's GDP growth is forecast to moderate from 8.3 per cent in 2015 to 7.5 per cent in 2025.</li> <li>9,500 international tertiary students globally.</li> <li>In 2011, Myanmar began a dramatic transformation from a centrally-planned economy to a democratic market-based economy. As part of this, significant reforms and expansion efforts are taking place within the tertiary sector.</li> <li>Australia provides scholarships for 50 students from Myanmar to complete postgraduate studies in Australia each year, as well as a number of scholarships for short courses.</li> <li>A joint Australia-UK initiative aims to provide basic education to more than 160,000 children in Myanmar.</li> </ul>
<b>Zimbabwe</b>	<ul style="list-style-type: none"> <li>Zimbabwe's GDP growth is forecast to increase from 2.7 per cent in 2015 to 3.7 per cent through to 2025.</li> <li>15,000 international tertiary students globally. Government spending on education amounted to 2.5 per cent of GDP in 2010.</li> <li>Zimbabwe claims to have the highest literacy rate in Africa, and students are taught in English.</li> <li>There are no government incentives for overseas education institutions and at present there are no foreign institutions currently operating in Zimbabwe.</li> </ul>
<b>UK</b>	<ul style="list-style-type: none"> <li>GDP growth in the UK is forecast stable at 2.1 per cent in 2015 and 2.5 per cent through to 2025.</li> <li>44,000 international tertiary students. A significant increase in undergraduate fees in 2012 has prompted both local and EU students to choose other study destinations. A competitive labour market has also prompted interest in overseas training and further education.</li> <li>Education spending is 13 per cent of the budget in 2014, with the majority of 166 universities receiving public funding. UK and EU university students can apply for government tuition fee loans.</li> </ul>
<b>Chile</b>	<ul style="list-style-type: none"> <li>Chile's GDP growth is forecast to increase from 2.7 per cent in 2015 to 3.9 per cent in 2020 through to 2025.</li> <li>11,000 international tertiary students, with 1,300 scholarships awarded to study in Australian universities between 2010 and 2014.</li> <li>There are relatively low levels of English delivery in VET and postgraduates studies, but increasing efforts to improve overall English-language skills via language courses. Grants can be provided to cover learning costs of up to 200 hours.</li> </ul>
<b>Oman</b>	<ul style="list-style-type: none"> <li>Oman's GDP growth is forecast to slow considerably from 4.6 per cent in 2015 to 1.3 per cent in 2020 through to 2025.</li> <li>14,000 international students globally. Reducing the reliance of the Oman economy on oil revenue and diversification through education and human resources development is a priority.</li> <li>There is an emphasis on improving English proficiency, with international talent and expertise being sought to develop the education sector.</li> </ul>

Country	Summary
UAE	<ul style="list-style-type: none"> <li>• GDP growth in the UAE is forecast to increase from 3.2 per cent in 2015 to 4.1 per cent in 2025.</li> <li>• 8,000 international tertiary students globally.</li> <li>• The UAE is focused on diversifying its economy into non-oil sectors and increasing access to education both locally and abroad. As part of this, government is actively seeking and encouraging foreign education institutions and experts to visit and establish a presence in the UAE.</li> <li>• A Memorandum of Understanding with Australia in 2014 is likely to provide a platform for future engagement and growth.</li> </ul>

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