



Strengthening the competitiveness of Victoria's higher education sector

Victorian Chamber of Commerce and Industry
Higher Education Taskforce Report





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1 Introduction

The importance of Victoria's higher education sector



Mark Stone
Victorian Chamber of Commerce
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Victoria's higher education sector, which includes universities and private providers, is diverse, competitive and internationally recognised as delivering high quality work-ready graduates and leading edge research. With a number of dual sector providers operating in Victoria, articulation pathways between vocational education and training and higher education are strong. Through teaching, scholarship and research, our universities are a critical part of Victoria's knowledge economy.

Victorian universities are internationally recognised as some of the highest quality universities in the world across many disciplines. Eight out of 100 top universities in the world are Australian and two (Monash and Melbourne Universities) are located in Victoria.¹

In 2014-15, Victorian universities recorded over 800,000 enrolments which represents over 30 per cent of all enrolments in Australia.²

Victoria's international education sector has grown to be one of the state's most valuable and vibrant export sectors with an estimated

value of \$5.74 billion, generating significant multipliers throughout the economy.

By building a highly skilled, adaptive and productive workforce, initiating and supporting the dissemination of innovation and driving international trade, the higher education sector plays a crucial role in growing Victorian exports, our regions, employment, entrepreneurship and investment.

The significance of Victoria's higher education sector can be understood in terms of its contribution to:

A competitive Victorian workforce.

Higher education has a fundamental role to play in Victoria's economic development. Quality education and skills development provided by the higher education sector is crucial to business competitiveness at home and abroad.

Innovation throughout Victorian industry and the state economy.

Research conducted by higher education providers has positive impacts on the Victorian economy by providing technological

\$5.74^B

Estimated value of Victoria's international education sector

30%

Of all enrollments in 2014-15 were to Victorian universities.

8

Of the top 100 universities worldwide are located in Australia.

improvements in business processes and practices. Universities are a valuable source of innovation and competitive advantage for business and university-business research can provide a deeper and broader understanding of social and economic phenomena and ways to raise economic and social welfare.

Victorian economic growth and trade.

In Victoria, traditional industries such as manufacturing are undergoing significant structural change. It is more important than ever that we leverage new industry, trade and employment opportunities from fast growing service industries like higher education which add value across the entire economy, including Victoria's regions.

Individual and social wellbeing.

By increasing an individual's opportunity for labour force participation and employment, the higher education sector also brings significant benefits to individuals and our wider society. Higher education graduates earn on average 75 per cent more over their

lifetimes than those who complete Year 12.³

An educated population contributes to a cohesive well-functioning society where individuals participate in civic and cultural activities.

The challenge for policy makers, business and the higher education sector is to build on these many strengths.

As Victoria's largest and most influential organisation representing the interests of small, medium and large sized businesses, the Victorian Chamber considers further improvements in the competitiveness of the higher education sector can be achieved by reforms that focus on:

1. **Growing the Victorian economy by strengthening Victoria's competitive position in the international education market**
2. **Driving innovation by deepening and broadening university-industry research links**

3. **Increasing productivity and employability by more closely aligning graduate skills with employer needs**

4. **Enhancing student access, learning and employability outcomes**

These priorities and the associated recommendations contained in this report were developed through the work of the Victorian Chamber's Higher Education Taskforce. The Taskforce also contributed to the development of the Victorian Chamber's overarching policy statement 'The importance of higher education' which can be viewed on page 25-28 of this report.

I take this opportunity to thank Taskforce members who shared their time, expertise and experience in coming together to identify issues, opportunities and ideas that will support the continuing growth of Victoria's world class higher education sector.

¹ QS World University Rankings 2014/15

² Department of Education and Training

³ <http://ministers.education.gov.au/pyne/building-world-class-higher-education-system>

1 Introduction (continued)

The importance of Victoria's higher education sector

The Victorian Chamber Higher Education Taskforce considers reforms to improve the competitive position of Victoria's higher education sector should be guided by the following key principles:

Maintain a demand-driven system

In an environment of increasing costs and budget constraints, the underlying challenge for universities and policy makers is to ensure education outcomes are closely aligned to the needs of employers and students, now, and into the future.

Increase competition and diversity among education providers and increase student choice

A competitive and diverse market will lead to a more efficient and cost effective system. This will require a higher level of flexibility to enable better use of human and capital assets and to address issues such as economies of scale and the trends towards digital learning.

Foster access to the higher education system

All eligible students (school leavers and mature age students), should have access to courses on the basis of their ability rather than income.

Promote fee flexibility

Students must be able to purchase a course from any public or private provider. Funding should be linked to student outcomes/achievements with prices determined by market forces. However, caution must be applied to fee deregulation to ensure that a competitive system does not impede access by making courses unaffordable, particularly for students facing distance and/or financial barriers.

Maintain Victoria's reputation as a market leader in the provision of higher education

Victoria's reputation as a market leader in the provision of higher education must not only be preserved, but enhanced. Teaching quality must be of the highest standard, producing graduates who possess not only strong technical knowledge, but are work ready. Student satisfaction levels must be strong and growing.



2 Growing the Victorian economy

by strengthening Victoria's competitive position in the international education market

International students make a significant economic and social contribution to Victoria. Victoria's recent economic performance has been the strongest of the non-resource based states, in no small part owing to the state's highly competitive international education sector.

Victoria's international education sector is now one of Victoria's most valuable and vibrant export sectors with an estimated value of \$5.74 billion, generating significant multipliers throughout the economy. In 2013, Victoria's share of Australia's international enrolments was 27.1 per cent, giving Victoria the second largest share of the market. In addition, Victoria's commencements are growing well above the national rate, at 9.1 per cent per annum.⁴

International students studying in Australia, together with visiting family and friends, also make a significant contribution to Australia's tourism industry, supporting even more jobs across our services sector. The global market for education services is expanding as populations and incomes continue to rise in emerging economies, particularly in Asia.

Victoria is in a position to leverage its competitive advantage and increase its profile as a preferred destination in the international student market. Our growing international student alumni can reinforce these strengths, promoting not only the benefits of studying in Victoria, but living and investing in the state.

4. DSDBI – International Education: State of the Sector



Victoria's share of Australia's international enrolments



Rate of growth of commencements in Victoria.

However, while Victoria has been highly successful in promoting the benefits and value of Victorian qualifications, competition from traditional and emerging international education players is also growing.

For Victoria to remain a destination of choice, international students need to realise an even stronger return on their investment by receiving excellence in teaching and an outstanding student experience that gives them the skills required for successful careers.

While our past performance has been strong, there are several barriers that could see our reputation begin to slip as competition intensifies. These barriers range from student transport costs, health cover costs, and student accommodation affordability and availability. These issues need to be addressed in order to enhance our positioning for inbound students. For instance, on the issue of health cover, it needs to be noted that international

students do not have full access to the Victorian healthcare system, as is the case in Queensland⁵ where some universities have global policies that include coverage for student healthcare services that would otherwise incur additional premiums.

Also, unlike other states, Victoria does not offer comprehensive international student travel concessions that support student access to regional campuses and their access to part-time employment. There are also a number of real and perceived barriers (e.g. related to visa requirements) for international students seeking internships or employment opportunities when they graduate.⁶ These barriers need to be reduced.

5. investinaustralia.com/news/international-students-entitled-local-benefits-12c3

6. AUJIDF – Improving the employment outcomes of international students, Robert Lawrence, 2013.

Key recommendations

- Conduct a campaign that highlights the benefits to employers in employing post-secondary students, including through internships and other work based placements.
- Encourage universities to develop streamlined systems to help students and graduates find employment and work based learning placements.
- Remove the obligation of government agencies to only recruit graduates who are Australian citizens or permanent residents.
- Promote the use of global health insurance policies issued through universities which provide coverage for services that would otherwise be an additional cost for international students.
- Extend public transport concessions for international students to short term tickets across all fare zones in Victoria, providing the same discounts that apply to domestic students.
- Improve student accommodation across the state, facilitating affordable close to campus and on campus options.
- Reduce the complexity of the application of WorkSafe Insurance and Public Liability Insurance policies for higher education students undertaking work placements and training. The current system is complex and confusing for employers and acts as a barrier to international student work placements.
- Professional membership organisations and alumni groups should be encouraged to extend student categories and services to encourage international students to become student members. Specific networking events should be encouraged to build employer engagement and student appreciation of labour market dynamics and employer expectations, as well as improve cultural fit and social inclusion.
- Encourage higher education providers to develop a workforce induction module for all international students undertaking any form of work integrated learning placement (paid or unpaid) which encompasses diversity, business communication skills and workplace culture.
- Pilot a regional model for international student experience, with deeply integrated university/ business cooperation. Develop a regional/rural strategy to support international student recruitment and experience.
- The Victorian Government should review the International Education Strategy released in 2013 to ensure its key objectives are on track and that allied marketing initiatives are resulting in increased student enrolments across Victorian institutions. The Strategy needs to be aligned with *the Draft National Strategy for International Education*.

3 Driving innovation

by deepening and broadening university-industry research links

Research and development collaboration between Victoria's higher education sector and industry resulting in commercial outcomes is essential for the state to create new jobs, increase productivity and remain competitive.



3 Driving innovation (continued)

by deepening and broadening university-industry research links

University-industry collaboration is more important than ever. The intensification of global competition has drastically shortened product lifecycles and as such, businesses need to develop new products and services more rapidly. Furthermore, innovation has become more complex and costly, requiring an ever more diverse input of knowledge. However, increased specialisation has reduced the diversity of knowledge available within an individual business, requiring them to look outside their boundaries for expertise.

Despite this growing need to innovate and collaborate, Australia ranks 29th out of 30 in the Organisation for Economic Co-operation and Development (OECD) in terms of the proportion of large businesses and SMEs collaborating with higher education and public research institutions on innovation.⁷

For instance, there is less than 30 per cent of Australian researchers who work in industry compared to Germany and the

US where the comparable rate is around 70 per cent of PHD graduates employed in industry.

Small and medium businesses in particular need greater support to better collaborate with the research sector to develop new ideas with commercial potential, keeping the intellectual property and proceeds in Australia. SMEs also need to help to identify knowledge gaps that are preventing business growth.

The general experience across the higher education sector encompasses a very broad range of research across industry sectors. However, business awareness of these capabilities is relatively low and stronger efforts are needed to build university-industry connections and improve small and medium sized business understanding of the relevance and value of collaborative partnerships.

The higher education sector needs to balance the influences of market pull (i.e.

what problems businesses need solved) and capability push (i.e. what solutions are already available). To achieve this, deeper ongoing university-industry links are required.

The benefits of this approach will directly link to workforce planning arrangements, particularly for regional areas. Enhanced models of co-operation will underpin government priorities to grow targeted sectors, such as the development of the Victorian Food Strategy. The plethora of government assistance programs at commonwealth and state levels plays a legitimate role in supporting regions and sectors. However, there is a need to examine how government roles can be better targeted to meet industry needs and also underpin collaborative partnerships with the higher education sector.

⁷ Organisation for Economic Co-operation and Development

Key recommendations

It is estimated that 75 per cent of the fastest growing occupations require science, technology, engineering and mathematics (STEM) related skills and experience. However, less than 20 per cent of senior secondary students are studying a STEM subject with only two state and territory jurisdictions requiring maths up to year 12. The Victorian Government must work with universities to ensure that primary and secondary teacher qualifications have a priority focus on STEM subjects to ensure that teacher quality improves the delivery of related subjects, and student participation increases. This will grow the pool of eligible students to undertake STEM related courses and ensure that industry will be able to grow its research capability.

- In collaboration with industry, the Department of Economic Development, Jobs, Transport and Resources should create and manage a web portal for industry access which outlines research undertaken in Victoria (by sector and technology type) which present the strongest commercialisation prospects. The portal could provide an interface for universities seeking industry partners for projects and for business to identify university partners for R&D opportunities.
- Ensure funding for the Victorian Government's Innovation Voucher Program (funding for businesses to engage researchers) is maintained in order to meet existing and anticipated business demand.
- Allocate \$5 million over the term of Government to provide workshops (project funding) for SME's to engage in collaborative innovation by providing the tools to build internal capability and access to research organisations.
- Provide \$50 million of seed funding and grants for universities and students to partner with industry to pay for patent costs, technology transfer operations and the set-up of spin-off companies.
- Undertake a feasibility study to extend physical and virtual technology enterprise zones and start-up hubs with incentives for universities and industry to co-invest in research infrastructure. This should be aligned to economic strategies for regional Victoria and Victoria's priority growth sectors.
- Review existing regional advisory structures which oversee workforce planning and training delivery to identify efficiencies that can be achieved by better aligning higher education delivery models and industry skill requirements. This approach would identify barriers to higher education engagement and result in improved participation, attainment and retention.
- Encourage SMEs to partner with universities on research and development by reducing the company tax rate to 10 per cent on SME profits earned from their patents developed in Australia.





4 Increasing productivity

and employability by more closely aligning graduate skills with employer needs

Employers need to have confidence in Victoria's higher education sector that graduates are gaining the appropriate knowledge and skills to increase the productivity and efficiency of their business.

4 Increasing productivity (continued)

and employability by more closely aligning graduate skills with employer needs

A recent survey of over 350 businesses undertaken by the Victorian Chamber indicated that 53 per cent of respondents experienced difficulty recruiting skilled staff or apprentices in the last 12 months. One third indicated this was due to applicants lacking relevant qualifications, 39 per cent reported it was due to applicants lacking relevant job experience and a further 18 per cent said applicants were not job ready (i.e. they lacked basic literacy and numeracy, problem solving and teamwork skills).

The skill sets employers are looking for are constantly changing as industries evolve and consumer demands change.

As such, employers are increasingly looking for capabilities in active learning, critical thinking, complex problem solving and creative problem solving, all of which correlate closely with science, technology, engineering and maths (STEM) qualification based skills.⁸

Undergraduate and graduate skills must also be aligned with Victoria's priority growth sectors which include:

- transport, defence and construction technologies
- advanced manufacturing
- food and agribusiness
- medical technology and pharmaceuticals
- professional services

Work integrated learning (including internships, clinical placements and industry based learning) is one of the most effective teaching methods for helping students acquire the skills they need in the workplace and ensure newly qualified graduates are able to contribute to an organisation as quickly as possible.⁹ However, many graduates complete their studies without undertaking any relevant work integrated learning or work experience.

While the higher education sector engages with industry broadly in terms of developing curriculum content, the pace of change across all industry sectors demands content that is relevant and responsive to industry needs. Therefore, the challenge for the higher education sector is to work in partnership with industry to develop and deliver curriculum based on actual and projected employer hiring activity.

^{8,9} Australia's STEM workforce: a survey of employers

Key recommendations

- Map employer demand for specific qualifications, occupations or skills by industry and region to help minimise the mismatch between employer expectations and the attributes, knowledge and skills that graduates exit universities with.
- Universities to conduct an audit of the relevance of current curriculum design and expand the curriculum offered to ensure it meets industry demand and skill needs. A course advisory committee model could be applied which is currently used in some universities for some courses.
- Conduct a comprehensive assessment of the value of work integrated learning in terms of student outcome, employer benefit, employer and university engagement, and professional and workforce development in terms of overall economic benefit considering:
 - Assessment of existing financial and other support mechanisms and their effectiveness;
 - Employer and business incentive structures;
 - Student support programs;
 - Best practice, innovative approaches that ameliorate costs; and
 - Opportunities to develop and promote sustainable resourcing systems.
- Create a centralized online portal to link higher education students to employers with information on available internships, post study placements, research and training projects.
- As part of student coursework, include an internship preparation unit which teaches students how to engage in a work environment and important 'employability' skills (teamwork, communication, lateral thinking, flexibility, resourcefulness etc).
- Encourage higher education academics, researchers, policy makers, administrators and HR practitioners to undertake secondments or fellowships within industry to increase industry-university links and strengthen the higher education sector's understanding of current industry practices and needs.
- Aim for a 30 per cent increase in science, technology, engineering and mathematics (STEM) graduates over the next decade. This recognises that a workforce with a strong STEM skills base is critical to business innovation.
- Strengthen student awareness of the career opportunities associated with undertaking STEM related studies.



5 Enhancing student access

learning and employability outcomes

An effective higher education system produces graduates who have the skills and capabilities to meet the current and future needs of business. Students need to be confident that the resources they are allocating to their studies will result in access to rewarding job prospects and real employment outcomes.

5 Enhancing student access (continued)

learning and employability outcomes

A properly funded higher education system is vital to ensuring our universities are not only able to maintain world class service delivery standards, but improve those standards and enhance student experiences.

Funding cuts would be detrimental at a time when the number of students who invest significant time and expense and then do not obtain a qualification remains high. Although recent reports suggests that the overall retention rates are stable at 73.6 per cent, for low socioeconomic status students, retention rates drop to 68.9 per cent, dropping further for rural students (59.5 per cent) and even further for indigenous students (46.7 per cent).¹⁰

Therefore, increasing demand, particularly from international students in the face of intense global competition will require the quality of Australian higher education qualifications to be world class.

Victoria's higher education sector must embrace cutting edge digital technology, for example blended learning methods embracing technology as well as best practice and innovative delivery models to maintain competitiveness.

For the vast majority of students in Victoria, the most important return on their education investment is employment. However, it is getting harder for graduates and young people to find employment. This is highlighted by the percentage of Victoria's youth who are unemployed which continues to grow and is consistently above the national average. The fact that graduate employment has fallen from 75 per cent in 2010 to 65 per cent in 2014 only compounds the youth unemployment problem.

In this economic environment, although the higher education sector cannot guarantee employment for graduates, the sector

should aspire to ensure students graduate possessing employability qualities such as teamwork, motivation, customer service (if the job requires such skills), communication skills, problem solving and reliability.

There is an opportunity for government to work with the community services sector to facilitate opportunities for the sector to provide work integrated learning placement options that link to areas of undergraduate study, in turn underpinning the achievement of social objectives.

It is recognised through a number of studies that youth leaving regional communities to study in metropolitan regions seldom return as employees – even in the context of employment opportunities. Partnership between employers, vocational education and training (VET) providers and universities to deliver flexible and relevant modes of delivery in regional Victoria must be a priority.

¹⁰ . Joining the Dots, Australian Council for Education Research Paper, May 2015

Key recommendations

Helping young people to be well prepared to safely undertake work, requires understanding of work health and safety issues. For this reason, approaches to deal with the challenges and pressures of work should continue to be embedded within education programs.

Encouraging graduates to become self-employed and establish their own business by providing them with the skill sets and networks is also important.

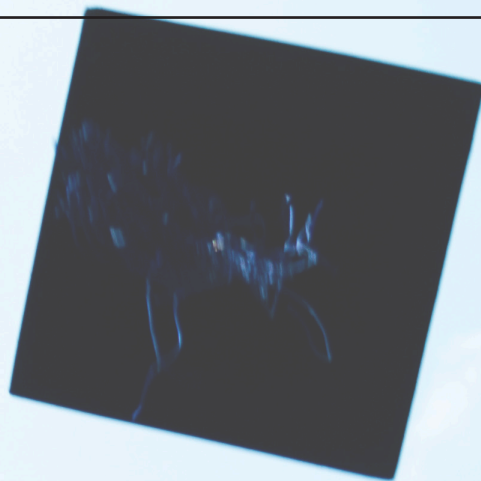
- Introduce a competitively priced disposable Day Pass for all international and interstate students using public transport throughout Victoria.
- Provide free Wi-Fi on all metropolitan and regional public transport modes to assist students to continue studying while travelling.
- Fund a structured entity to develop a career education and development program in primary and secondary schools, as well as among community groups, to raise the aspirations and build the capacity of young people from low socio economic status (SES) backgrounds, regional and rural areas, to encourage tertiary education participation. This approach will address barriers to engagement as well as promote VET pathways to higher education options.
- Build a stronger culture of entrepreneurship and innovation amongst the student body by establishing mentoring and microfinance programs. This will support students who want to gain employment by moving into self-employment or start-ups.
- Support SME's to employ more graduates by delivering a further 500 places under the current 'Employment Start Up for Business' program.
- Embed the teaching of graduate capability (personal development, self-awareness, lateral thinking, analytical skills, global perspectives, work ethic and confidence) within the core curriculum of all post-secondary courses.
- Support the development of regional and rural education models that attract and retain graduates in rural Victoria.



The importance of higher education

The Victorian Chamber's policy statement

The Victorian Chamber recognises the value that higher education contributes to the Victorian and national economy by building a highly skilled, adaptive and productive workforce, initiating and supporting the dissemination of innovation throughout industry and driving international trade. The higher education sector is not only a major employer in itself, but a significant contributor to business competitiveness and social and community development.



The importance of higher education (continued)

The Victorian Chamber's policy statement

The significance of higher education can be understood in terms of a number of dimensions, including:

Individual and social wellbeing

Higher education contributes to the development and wellbeing of individuals by increasing their opportunities for labour force participation, employment and earning. Higher education also brings significant benefits to society, which go well beyond its contribution to an individuals' employability or income. An educated population contributes to a cohesive well-functioning society where individuals participate in civic and cultural activities.

A competitive workforce

Higher education has a fundamental role to play in Victoria's economic development. Quality education and skills development provided by the higher education sector is crucial to business competitiveness at home and abroad.

Innovation throughout industry and the economy

Research conducted by higher education providers can have positive 'spill overs' to the wider economy by providing technological improvements in business processes and practices. Universities are a valuable source of innovation and university-business research can provide a deeper and broader understanding of social and economic phenomena and ways to raise economic and social welfare.

Economic growth and trade

In Victoria, traditional industries such as manufacturing are undergoing significant structural change. Recognising that we lack the major mineral and energy resources existing in other states, it is more important than ever that we leverage new industry, trade and employment opportunities from fast growing service industries like higher education which add value across the entire state economy, including Victoria's regions. Victoria's international education sector has grown to be one of the state's most valuable and vibrant export sectors with an estimated value of \$5.74 billion, generating significant multipliers throughout the economy.

The higher education sector and international education strengthens our global relationships and linked investment and tourism opportunities with fast growing economies in our region such as China, India and South East Asia.

The importance of higher education (continued)

The Victorian Chamber's policy statement

Reforms to improve the competitive position of Victoria's higher education sector should be guided by the following key principles:

Maintain a demand- driven system

In an environment of increasing costs and budget constraints, the underlying challenge for universities and policy makers is to ensure education outcomes are closely aligned to the needs of employers and students, now, and into the future.

Maintain our reputation as a market leader in the provision of higher education

Victoria's reputation as a market leader in the provision of higher education must not only be preserved, but enhanced. Teaching quality must be of the highest standard, producing graduates who possess not only strong technical knowledge, but are work ready. Student satisfaction levels must be strong and growing.

Foster access to the higher education system

All eligible students (school leavers and mature age students), should have access to courses on the basis of their ability rather than income.

Increase competition and diversity among education providers and increase student choice

A competitive and diverse market will lead to a more efficient and cost effective system. This will require a higher level of flexibility to enable better use of human and capital assets and to address issues such as economies of scale and the trends towards digital learning.

Promote fee flexibility

Students must be able to purchase a course from any public or private provider. Funding should be linked to student outcomes/achievements with prices determined by market forces. However, caution must be applied to fee deregulation to ensure that a competitive system does not impede access by making courses unaffordable, particularly for students facing distance and/or financial barriers.



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