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A VERY SHORT POLICY BRIEF

Increasing the online learning footprint
of Victorian universities in India

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The Australia India Institute's A VERY SHORT POLICY BRIEF series examines key questions facing contemporary India and the Australia-India relationship. It combines in-depth academic analysis with clarity and policy relevance.



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Summary

Victoria's India Strategy: Our Shared Future prioritises the relationship with India, including international education, Victoria's largest services export sector.¹ As outlined in *Victoria's International Education Sector Strategy*,² a vibrant international education sector is central to positioning Victoria as Australia's Education State.

Victorian universities are well placed to leverage their longstanding international education and online learning experience to achieve success in international markets.

This policy brief reflects the outcomes of the Online Learning in Higher Education Industry Sector Roundtable conducted in India in February 2020. This event involved 62 participants from Australian universities, Indian higher education institutions (Indian School of Business, Amity Online and Institute of Management Technology Centre for Distance Learning, Ghaziabad), Australian and Indian government authorities, KPMG, Rajasthan Royals and Indian private MOOC platform, UpGrad.

Together with desktop research, the roundtable participants have helped shape the three recommendations offered in this Policy Brief. These would see Victorian universities increase the supply of online higher education content in India through partnerships with relevant Indian and global platforms and by making available a targeted package of offerings reflecting India's price and brand sensitivities, complemented by a faculty professional development program.³

1 Victorian State Government, 2018.

2 Victorian State Government, 2016.

3 See Porter, 1985.

Increasing the Supply of Higher Education in India by Expanding Online Learning Opportunities

With a population approaching 1.4bn, a large youth demographic⁴ and high graduate unemployment,⁵ India is of profound interest to foreign higher education institutions and for-profit Online Program Management⁶ education technology (EdTech) companies with interests in online higher education.

The Indian higher education system is the second largest in the world after China.⁷ Comprising nearly 50,000 higher education institutions and 37.4 million students in 2018,⁸ India aims to increase its gross enrolment ratio (26.3% in 2018) to 50% by 2035, as stated in the *National Education Policy 2020*.⁹ This would bring it closer to China's current gross enrolment ratio (50.6%).¹⁰

Unmet demand for higher education in India remains high.¹¹ This is despite India having a well-developed open and distance education sector. This distance or correspondence-based higher education sector particularly attracts marginalised students¹² from remote communities by using combinations of broadcasting, telecasting, the internet, correspondence courses and contact programs.¹³ Transnational education, other than joint PhDs and foreign online learning, remains nascent given India's complex regulatory environment regarding branch campuses, dual degrees and twinning programs. Future developments in transnational education may depend on a shift in Indian foreign qualification recognition; currently the Government of India does not recognise online learning or offerings delivered by non-degree granting institutions.

India's higher education system is also complemented by innumerable central and state/union territory government information communication technology-based initiatives involving freely accessible content on television channels, community radio, digital repositories and open source libraries. However, unmet demand for higher education continues to constrain India's lifelong learning aspirations, as do differences in student agency. At the same time, India's dual challenges of skills shortages and graduate unemployment¹⁴ remain unresolved. The need for more accessible, equitable, quality higher education, lifelong learning opportunities and industry-relevant skills development that also acknowledges the brand sensitivities of Indian students is evidenced by the rapid growth in parallel markets for India's independent learners (Fig. 1).

4 United Nations Population Fund, n.d.

5 The World Bank, 2020a.

6 Increasingly, for-profit OPM firms are partnering with and displacing higher education institutions in critical aspects of teaching and learning. Their scope includes marketing and student recruitment, course management, student administration, academic services (e.g., course and curriculum design and development) (see Coates et al., 2019).

7 UNESCO Institute for Statistics, 2020.

8 Ministry of Human Resource Development, 2019.

9 Ministry of Human Resource Development, 2020.

10 The World Bank, 2020b.

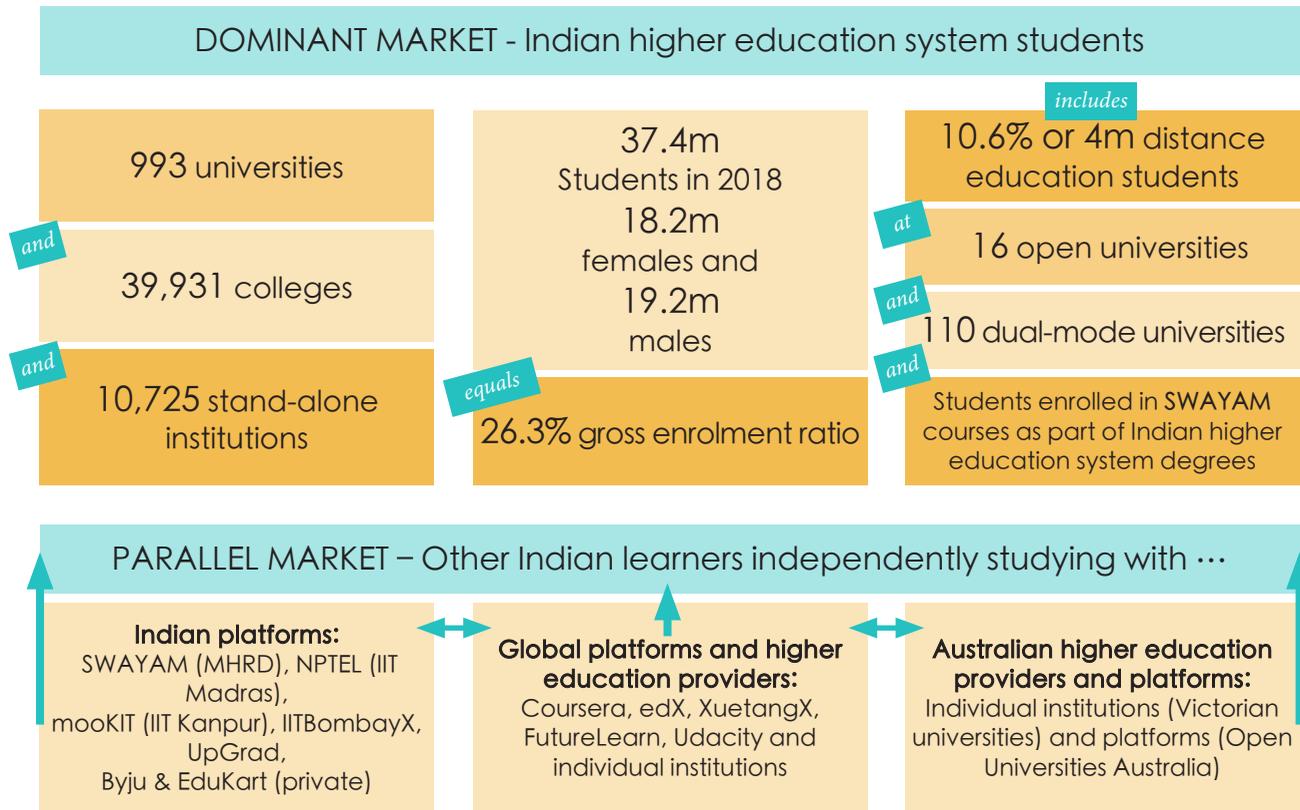
11 Trines, 2019.

12 IGNOU, 2019.

13 Ministry of Human Resource Development, 2019.

14 Agarwal, 2007.

Figure 1: India's higher education landscape: Dominant and parallel markets



Interest in India's government-sponsored Massive Open Online Courses (MOOC) platforms – most notably the Study Web of Active Learning for Young Aspiring Minds (SWAYAM), the National Programme on Technology Enhanced Learning (NPTEL), mooKIT and IITBombayX – has grown rapidly. For example, SWAYAM has attracted over 14.6 million enrolments to mid-May 2020.¹⁵

At the same time, the introduction of online learning platforms by Indian Online Program Management (OPM) companies has encouraged ambitious market projections that span K-12 school education, skills and lifelong learning, language and casual learning, test preparation products, engagement platforms as well as higher education.¹⁶ This market operates in parallel to courses approved by the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE), and includes UpGrad, Byju's and EduKart that make available online higher education programs by partner institutions. This includes the recently launched Deakin Business School online Master of Business Administration (Global) degree in partnership with UpGrad.

¹⁵ SWAYAM, n.d.
¹⁶ KPMG, 2017; Rangan, Barker and Linke, 2019.

This parallel market also includes global OPM companies managing MOOC platforms and scaling online higher education delivery for India (Fig. 2). Coursera, a global leader in university-based MOOCs with Indian partners including the Indian Institute of Management Calcutta and the Indian School of Business, has successfully entered the Indian market, attracting 4.8 million Indian enrolments in 2019.¹⁷ Another leading platform, edX, has partnered with the Indian Institute of Technology Bombay and Indian Institute of Management Bangalore.

Indian and foreign higher education institutions, operating individually or in partnership with Indian or foreign OPM companies can increase online learning opportunities for Indian learners using a range of platforms, technologies, capacities, qualification outcomes, prices and value adding services. Victorian universities would gain an early adopter competitive advantage in this rapidly emerging, transnational education market by providing a targeted package of offerings and services specifically tailored to the Indian market.

Scoping the Higher Education Online Learning Landscape in India

In recent years, the Government of India has launched regulatory frameworks to facilitate the introduction of approved online learning by Indian higher education institutions. Coupled with digital communication infrastructure and literacy initiatives such as Digital India, and enabled by increasing electricity stability, and internet and smart device connectivity, the scope of India's higher education online learning landscape is rapidly changing.

Study Web of Active Learning for Young Aspiring Minds (SWAYAM) Online Courses

The Government of India's most significant investment in approved online higher education is the SWAYAM MOOC platform. SWAYAM courses target students in secondary through to higher education levels. They have broad disciplinary coverage, including science, technology, engineering and mathematics (STEM) and humanities and social sciences (HASS). SWAYAM courses are freely available. Learners can receive certification following successful completion of final examinations¹⁸ for a small fee.¹⁹

SWAYAM course content development is co-ordinated by sector-specific national co-ordinators, including the University Grants Commission (UGC), All India Council for Technical Education (AICTE), IGNOU and the Indian Institute of Management, Bangalore (IIMB).²⁰ In this way, high quality SWAYAM course content is designed to be aligned to, or supplement, approved courses conferred by Indian universities, colleges and technical institutes but more typically delivered through face-to-face, and open and distance learning (Fig. 2).²¹

¹⁷ Kapur, 2019.
¹⁸ Ministry of Human Resource Development, 2017.
¹⁹ SWAYAM, 2019a.
²⁰ Premier institutions that have developed SWAYAM content include the Indian Institute of Technology, Bombay, Jawaharlal Nehru University, the University of Hyderabad, Jadavpur University, the University of Delhi, the Indian Institute of Management, Calcutta and IGNOU.
²¹ Courses made available on the SWAYAM platform are copyrighted to SWAYAM (MHRD, 2017).

Figure 2: Approved Indian online learning, and parallel market for independent learners

DOMINANT MARKET – Indian higher education system students (under Government of India regulatory framework) studying with ...	PARALLEL MARKET – Other Indian learners independently studying with ...
<p>Indian higher education institutions: Enabling students to incorporate ≤20% SWAYAM online units, with credit, into certificates, diplomas, degrees and coursework masters and/or Delivering open and distance learning according to the UGC/AICTE regulatory framework</p>	<p>Higher education providers: Delivering ≤100% online micro-credentials, units or courses outside UGC/AICTE regulatory framework (not GOI recognized). Indian learners are enrolled with higher education institutions directly, or via Indian platforms (UpGrad, Byju's) or global platforms (Coursera, edX, FutureLearn, Udacity, Open Universities Australia).</p>
<p>Top 100 Indian higher education institutions: UGC has authorised the Top 100 Indian higher education institutions to deliver 100% on line courses.</p>	<p>Education, training and test preparation providers: Delivering K-12 school education, skills and lifelong learning, language and casual learning, test preparation products, and engagement platforms (recruitment and internships, gig-based staffing, digital credentialing)</p>
<p>With some changes due to COVID-19 (2020): Higher education institutions delivering, to varying degrees, online and offline teaching modes (including courses through SWAYAM, NPTEL, Indian and global platforms), but not including terminal online examinations. These are exceptional arrangements. Future? Potentially Indian higher education institutions may look to delivering 25% of their syllabus through online teaching, according to UGC advice.</p>	

This important reform was enabled by the introduction of several related Government of India regulations. Firstly, in 2016 the UGC and AICTE issued equivalent regulations (*Credit Framework for Online Learning Courses Through SWAYAM*),²² supported by the Ministry of Human Resource Development 2017 *Guidelines for Developing Online Courses for SWAYAM*. Accordingly, all public and private Indian higher education institutions may incorporate SWAYAM content into their own approved 6-month certificates, 1-year diplomas and degree courses in accordance with the UGC Choice Based Credit System.²³

The 2016 UGC/AICTE regulations enable Indian higher education institutions to “allow up to 20% of the total courses being offered in a particular program in a Semester through the online learning courses provided through SWAYAM platform.”²⁴

22 See the UGC (*Credit Framework for Online Learning Courses Through SWAYAM*) Regulation, 2016 and the AICTE (*Credit Framework for Online Learning Course Through SWAYAM*) Regulation, 2016.

23 UGC, n.d.

24 UGC, 2016, s.4.3.

These credit transfer arrangements refer to the inclusion of online higher education content available through the SWAYAM platform. As noted, the Government of India’s prohibition concerning the recognition of foreign higher education qualifications incorporating online learning remains, as do any teaching- and examination-mode requirements of Indian professional councils governing regulated professions.²⁵

There are positive signals, however, that Indian national education policy reform²⁶ and the COVID-19 pandemic may prompt the waiver of foreign qualification recognition criteria regarding online learning, and relaxation of remaining UGC/AICTE requirements regarding online teaching and human proctored examinations. As the *draft National Education Policy* suggests, reforms in this area would need to ensure that foreign qualifications could be aligned to an Indian higher education qualifications framework (once developed), and agreement could be reached about “delivery methods, modes of interaction with students, and assessment procedures.”²⁷ Until such reforms are introduced, the non-conforming qualifications completed by Indian nationals limit their future study and employment options.

There have also been recent positive moves towards approved remote teaching. In 2018, the UGC issued further regulations²⁸ enabling the Top-100 (and select open and distance) Indian higher education institutions to register and deliver 100% online certificates, diplomas, degrees and master programs through the SWAYAM platform, other than courses in engineering, law, medical, dentistry, pharmacy, nursing, architecture, physiotherapy or applied arts. This represents a significant reform, and in time, should improve the status and legitimacy of qualifications achieved through online learning in India.

The 2018 regulations envisaged select Indian higher education institutions delivering “e-text materials, video lectures, audio-visual interactive material, virtual classroom sessions, audio podcasts, virtual simulation, and self-assessment quizzes or tests.”²⁹ Representing a major shift towards assessment flexibility, the 2018 UGC regulations enable premier institutions registered under the 2018 regulation to administer either technology-enabled online assessments – with appropriate security arrangements ensuring transparency and credibility – or human proctored examinations that are more typically used throughout India to date.

By 30 January 2020, seven early adopters³⁰ had registered to deliver sub-bachelor certificate and masters programs predominantly focused on disciplines readily adapted to online education (management and commerce, information technology, languages, tourism, journalism/communications).³¹ In May 2020, the Top-100 Indian higher education institutions were automatically authorised to deliver online programs under the PM e-VIDYA initiative, and the online component of conventional universities and open and distance learning programs was increased from 20% to 40%.³² These programs are typically low-cost.³³

25 Freeman, 2018.

26 Ministry for Human Resource Development, 2020; Shukla, 2020; Sharma, 2020.

27 Committee for Draft National Education Policy, 2019, p. 248.

28 See the *University Grants Commission (Online Courses or Programmes) Regulations*, 2018.

29 UGC, 2018, p. 12.

30 According to the UGC (2020a), the seven registered Indian higher education institutions are: Manipal Academy of Higher Education, Manipal (16 NIRF ranking), JSS Academy of Higher Education and Research, Mysuru (55), Shanmugha Arts, Science, Technology & Research Academy, Thanjavur (63), Dr. D.Y. Patil Vidyapeeth, Pune (70), Amity University, Noida (84), Bharati Vidyapeeth, Pune (88) and IGNOU (no ranking).

31 UGC, 2020a.

32 Government of India, 2020.

33 Shah, 2020.

National Programme on Technology Enhanced Learning project

A second initiative, the National Programme on Technology Enhanced Learning (NPTEL) project, enables India's elite Indian Institute of Science, Bangalore (IISc), in conjunction with seven Indian Institutes of Technology, to deliver AICTE approved curriculum through online learning, typically for free. While largely focused on engineering and technology courses, courses in the HASS disciplines have progressively been introduced including economics, literature, languages, political science, gender studies, psychology and management. In 2020, nearly 400 NPTEL courses are available.³⁴

Operating as a hybrid MOOC model, NPTEL online content is complemented by on-ground elements run by Single Point of Contact local chapters. Students interested in receiving certification for NPTEL courses of 4, 8- and 12-weeks duration complete human-proctored examinations conducted throughout India in one of over 100 cities for a nominal fee. As such, NPTEL courses developed by faculty at premier higher education institutions complement traditional, face-to-face courses throughout the country.³⁵

Other online education initiatives

There are innumerable other relevant initiatives that further enable India's higher education, lifelong learning and digital literacy effort. For example, the Government of India makes available additional resources, typically for free, including **UGC MOOCs Courses** for undergraduate and postgraduate students, and the **e-PG Pathshala** gateway to further postgraduate courses. The **Consortium for Educational Communication (CEC)** provides resources including the VYAS Channel, CEC MOOCs and Open Education Resources, while **SwayamPrabha channels** provide free to air courses via Tata Sky, Airtel, Dish TV and the Jio TV app.

India's innovative **Virtual Labs** initiative provides remote access to science and engineering laboratories. Digitised materials are available through the **National Digital Library of India**, **Shodhganga's** repository of Indian theses and dissertations and **e-ShodhSindhu**, which provides access to peer-reviewed journals, e-books and research databases. Several of these initiatives have been developed over recent years under the National Mission on Education through ICT (MNE-ICT), first launched in February 2009.

COVID-19 and the rapid shift to emergency remote teaching mode

The COVID-19 pandemic, which emerged in early 2020, saw India's Prime Minister Narendra Modi locking down the country, including all higher education institutions, just prior to terminal examinations in March 2020. The UGC's April 2020 advice encourages Indian higher education institutions, wherever possible, to adopt online teaching modes using SWAYAM, SwayamPrabha channels, Google Classroom, Google Hangout, Cisco Webex Meeting and YouTube Streaming. This advice acknowledges that not all Indian higher education institutions were well placed to transition rapidly to virtual classrooms and to remotely invigilated examinations due to variations in available technological infrastructure, and student, faculty and institutional preparedness. There are also concerns regarding admissions, online examination integrity, assessment security and the academic calendar.

³⁴ NPTEL, 2020.

³⁵ See Lahiri and Freeman, 2018.

Looking forward, the UGC recommends that in Indian higher education institutions, "faculty should be adequately trained for the use of ICT and online teaching tools, so that they can complete about 25% of the syllabus through online teaching and 75% syllabus through face-to-face teaching".³⁶

Ambitious online teaching capacity objectives are progressively being addressed to some extent through professional development initiatives sponsored by the Ministry of Human Resource Development (MHRD), such as the Annual Refresher Programme in Teaching (ARPIT) for faculty using SWAYAM. Many such initiatives are managed by the National Institute of Educational Planning and Administration (NIEPA), a deemed university that operates as a higher education policy thinktank in Delhi.

It is likely that the shift to mass online teaching mode during the COVID-19 pandemic lockdown and recovery phase will have a transformative impact on higher education in India. This should see an uptick in transnational education activity through the delivery of SWAYAM and online content by foreign providers, notably global MOOC platforms such as Coursera, edX and FutureLearn. As one roundtable participant observed, "all [online course] publishers, even the government, are now trying to crowdsource their content". This plethora of free Indian and foreign MOOCs and other technology-enabled learning resources will support the transformations occurring in Indian higher education in the midst of, and post, COVID-19. The recessionary impact of COVID-19 will exacerbate India's price sensitivities, and encourage students to focus on free, or low-price online content.

Relevant to this emerging environment, one of the roundtable participants foreshadowed the importance of foreign providers tailoring offerings to the Indian market:

"So, if you want to be successful in India you need to be open to local tailoring, to local conditions, at local costs, and that means some local content as well. Don't expect to produce content in Australia and offer it unchanged to India. Also, the price point shouldn't be too high".

As in other jurisdictions, COVID-19 is likely to further highlight persistent issues including differences in institutional, faculty and student digital literacy, equipment, bandwidth and technical preparedness for online teaching and assessment, as well as variable higher education quality more broadly.

³⁶ UGC, 2020b.

Challenges for India's Transition to Online Learning

There are six key challenges for India's transition to online learning which impact the capacity of Victorian universities to establish a footprint in India:

1. Given the recent shift to massified remote teaching in India, many higher education faculty members have not been adequately trained to develop and deliver online learning programs. While the rapid transition to remote teaching during the COVID-19 pandemic has highlighted this capability challenge, the Government of India's forward targets for increased online teaching further emphasise the importance of addressing this capability-building need.
2. Many in India remain unfamiliar with, or unconvinced of the potential quality of, technology-enabled learning at the higher education level. Limited awareness, status differentials and perceptions regarding legitimacy impact the potential take-up rate of Indian and foreign online higher education learning and qualifications.
3. Despite rapidly increasing telecommunications penetration in India, usage patterns emphasise social media communications such as WhatsApp and YouTube for communication and recreation, rather than education, purposes.
4. Despite increasing gross national income (GNI) per capita,³⁷ many Indian learners have limited financial capacity to pay for high data usage or broadband sufficient for online learning (e.g., Webex or Zoom videoconferencing, live streamed lectures).³⁸
5. Take-up of foreign online learning will continue to be shaped by the Government of India's approach to recognising foreign qualifications involving online learning.³⁹
6. There remains a series of 'digital divides' in India; between learners in metropolitan and remote areas, and between learners based on their caste, socio-economic status, gender, religion and language. While online learning has the capacity to increase the supply of lifelong learning opportunities and higher education seats, remote and marginalised communities, and non-English speakers, face systemic challenges accessing English-medium online higher education. At least some students at elite Indian higher education institutions will face challenges associated with these 'digital divides'.

³⁷ The World Bank, 2020c.

³⁸ Mandal, 2020.

³⁹ Freeman, 2018.

Victoria's Higher Education Online Learning Environment

Under state government legislation Victorian universities have authority to develop, approve and deliver higher education courses in regular face-to-face, blended and online mode. They have progressively transitioned from traditional pedagogies and curriculum to technology-enabled learning. They have enthusiastically embraced online learning as technologies have advanced,⁴⁰ and progressively introduced comprehensive learning management systems and academic analytics capabilities.

Victoria's education technology ('EdTech') ecosystem is thriving,⁴¹ and this support positioned Victorian universities well as they embraced technology enabled learning. At the same time, Victoria hosts Indian multinationals including Infosys, Wipro, Tata Consultancy Services and Tech Mahindra. Their presence is conducive to industry-informed education relevant to the Indian market.

When COVID-19 restrictions disrupted teaching operations in early 2020, most Victorian universities were well positioned to rapidly transition remaining 'traditional' offerings online. Where required, they also enhanced faculty and professional staff capabilities, digital communication infrastructures and remote assessment technologies. Many had already entered into partnerships with OPMs to deliver higher education micro-credentials, units and degrees (Table 1). As discussed by participants at the roundtable, this includes global, Australian and Indian for-profit MOOC platforms including Coursera, FutureLearn, Udacity, Open Universities Australia, and Seek Learning.

Some of these platforms operate low cost/high volume models, with revenue derived from optional assessment and certification rather than delivery. Initiatives such as the Austrade partnership between FutureLearn and StudyAustralia.gov.au may increase Victorian universities' exposure to such ventures. This longstanding and rapidly scaled capacity in online learning, demonstrated ability to build collaborative ventures with OPMs, and strong Victorian EdTech ecosystem positions Victorian universities well to establish a successful online learning footprint in India.

Table 1: Victorian-based universities collaboration with Indian, Global and Australian MOOC platforms

	Government of India's platform (SWAYAM)	Indian for-profit platform	Global platforms			Australian platform
			Coursera	FutureLearn	Udacity	Open Universities Australia
RMIT University				✓	✓	✓
Deakin University		✓ (UpGrad)		✓		
The University of Melbourne			✓	✓		
Monash University				✓		
Australian Catholic University						✓
La Trobe University						✓
Swinburne University of Technology						✓
Federation University						
Victoria University						
University of Divinity						

⁴⁰ Freeman, Barker and Lahiri, 2018.

⁴¹ Freeman, Barker and Lahiri, 2018.

Strategies to Increase the Online Learning Footprint

Complementing India's efforts to increase the supply of online higher education content

OPMs with established market presence will be critical to Victorian universities interested in delivering online higher education content in India. As Coates et al. report, OPMs help “a typically non-profit institution, such as a university, re-engineer education, resources and services and scale program delivery.”⁴²

Recommendation 1:

That Victorian universities increase the supply of online higher education content in India by partnering with Australian, Indian and global platforms with demonstrated potential for Indian market penetration, including:

- the Government of India's platform (SWAYAM)
- an Indian for-profit platform (UpGrad)
- global platforms (Coursera, FutureLearn, Udacity) and
- the Australian platform (Open Universities Australia).

Curating a unique package of offerings relevant to Indian learners

One of the roundtable participants succinctly identified Victorian university's opportunities as follows:

“In India it is more about acquiring customers and [their] stickiness ... [with] more students coming in earlier into the platform, ... [going] into micro certification but because of the way you're able to aggregate certain other assets ... [you] add other sources of income. Even in traditional universities now it's not tuition fee driven ... In India ... content is getting democratised ... [and] high quality content at low cost will happen. ... It's the quality content which keeps a user engaged, but in terms of revenue it's other streams which add to the value chain - whether it's assessment, or post assessment certification, or pathways downstream through foundational or bridge courses on the platform before they even come into the university.”

Indian and elite foreign higher education providers and for-profit OPMs operating in the Indian market have made available a plethora of free higher education offerings online. Ambitious market projections have also alerted onlookers to India's potential. In this environment, Victorian universities can curate a niche market acknowledging India's price and brand sensitivities, scaling-up learner numbers, establishing a risk-based approach to qualification choice, and recognising India's potential interest in value-adding services.

⁴² Coates et al., 2019, p. 5.

The importance of minimising risks associated with delivering non-recognised sub-bachelor programs (that is, as a pipeline to further studies) or other non-recognised higher education courses or qualifications was emphasised at the roundtable during discussion regarding India's regulatory framework:

“In India, the mind-set for undergraduate learning is – if the course is recognised? And, will I be able to pursue further education after the completion of this course?”

Recommendation 2:

That Victorian universities make available a targeted package of offerings, including:

- low cost, high quality content tailored to the Indian market (micro-credentials, units and degrees), prioritising enrolment numbers (scale) over price;
- optional assessment and certification, as revenue-raising services;
- minimal risk products (e.g., industry-oriented non-award short courses and executive education) acknowledging current issues with Government of India non-recognition of foreign online learning and non-degree granting higher education institutions;
- value-adding services (employment placement, career counselling, soft skills development), in partnership with Indian collaborators, for marketing and revenue-raising purposes.

Complementing India's online learning professional development efforts

Given the scale of India's higher education system, initiatives aimed at enhancing online learning effort require increased know-how regarding online learning curriculum development and pedagogy, remotely invigilated examinations, learning management systems and academic analytics. Victorian universities are well placed to support India's rapid transition to remote teaching by developing and delivering an online learning professional development program. This program could be developed in conjunction with Indian higher education institutions, and focus on Australia-India engagement and scale, rather than individual program price.

Recommendation 3:

That the Victorian Government partner with Victorian universities to develop an online 'faculty professional development program' targeting Indian higher education institution faculty members. To be made available online to Indian higher education institutions, this program would support India's transition to remote teaching by focusing on curriculum development and pedagogy for an online environment.

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