

# **The Future of the Higher Education Sector in Australia**

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*COVID-19 has resulted in disruption of higher education sector in Australia. This study offers a conceptual paper looking at how the distance education system has evolved over the years and reached where it is now. COVID-19 has disrupted the traditional forms of teaching and learning and fast tracked the online teaching and learning models. This paper explores the challenges faced by the higher education sector during the COVID times, the strategies adopted by universities/colleges to survive as an industry. The paper also explores the future of the higher education sector and the role digitalization may play in post- COVID times.*

*Keywords: hybrid teaching and learning, change management, strategic management, agile teaching and learning, COVID-19 as disruptor, higher education theory and practice*

## **INTRODUCTION**

Education is the Australia's third largest export industry which contributes to \$22.4 billion to the Australian economy (Universities Australia, 2017). In 2015, total export income generated by all international student activity was \$19.4 billion making this Australia's third largest export and largest services export industry. Of this higher education generated \$12.9 billion (Australian Government Department of Education & Training, 2016).

Distance learning systems have evolved over the years. COVID-19 made online learning suddenly a solution to the disruption created by the pandemic. This paper reviews the evolution of distance learning, movement towards blended learning and sudden move towards online learning. This paper is a qualitative research paper based on lived experience of the researcher while working in higher education sector in Australia during the pandemic.

The distance learning systems have been used in various levels of education for many years now. Traditionally this method of teaching has been used to help students living in regional and remote areas to study. The drop out rates of the students studying through distance learning programs had been very high. Massive Open Online courses (MOOC) had less than 10% completion rate. Six critical success factors were identified for success of distance learning. These dimensions are learners characteristics, instructors characteristics, institution and service quality, infrastructure and system quality, course and information quality and extrinsic motivation. ( Hsi-Peng Lu, Intan Dzikria, 2019).

The researchers found learner attributes like computer skills, availability of online collaboration had an impact on success of e-learning. Instructor's ability to use technology also had an impact on success of e-learning. E-learning systems to acquire curriculum quality certification from independent sources to both promote and bolster educational excellence (Hsi-Peng Lu, Intan Dzikria, 2019).

The initial part of the paper focuses on Australian Distance Education system as it evolved since 1900s till today, background of Australian University sector and the significant role played by Open Universities Australia in distance education and related advancements in the industry. This can be considered as pre-COVID era. In the second half of the paper the author reviews the changes in Higher Education system due to COVID at national level/industry level. Last section of the paper reviews the changes due to COVID at an institutional level.

## **BACKGROUND OF AUSTRALIAN UNIVERSITIES**

Australia has 40 public universities, two international universities and one private University serving approximately 1.41 million students (Australian Government Department of Education and Training 2016, 2017 a,b). Out of these 1.4 million students 350,000 were international students. There were 172 registered higher education providers in Australia in 2015 as per TEQSA (National Register of Higher Education Provider) reports.

The Federal department of Education statistics do not include distance education as a separate category but they do record off campus and mixes of on and off campus and enrolments. Most universities have some online enrolments but six regional universities are the major off campus providers serving twenty-nine thousand students. These universities include University of Southern Queensland, University of New England, University of Tasmania, Deakin University in Melbourne and Central Queensland University.

Students who join off campus distance education courses have generally been working in industry and have usually been older students or are more likely than full time school leavers. It is estimated that 60% of the students are enrolled in courses in higher education sector which can be taught wholly online. Post graduate courses make greatest use of off campus studies. Business and IT courses have only mid-range levels of off campus enrolment. Architecture, science and engineering and creative arts are the fields where off campus study is the least common (Colin Latchem, 2018 cited in A. Qayyum and O. Zawacki-Richter, 2018).

There has been a decline in the number of international mainly Asian students studying off campus from 24,000 in early 2004 to 11,000 in 2011. Immigration rules has had an impact on how international students have been making choices related to the distance education versus on campus courses. Asian families regard on campus study as a real University education and attendance being obligatory for some degrees especially at advanced level and changes to migration rules in 2003 (Norton et al., 2013).

As per a report published by Department of Education and Training, Canberra 2015, the proportion of Australian working age population with a Bachelor's degree or higher qualifications tripled since 1989 to just over 25 percent. This report also found that the direct Australian government funding for teaching, learning and research has grown both in absolute and real terms, rising from \$3.2 billion in 1989 to \$15.4 billion in 2014. As per Universities Australia report, in real (inflation -adjusted) terms, funding per university place grew by less than 1 per cent each year between 2009 and 2015 (Universities Australia, 2017).

## **EVOLUTION OF AUSTRALIAN DISTANCE EDUCATION**

One-third of Australia's population lives in rural and regional Australia. Only 7% of the students enrolled in higher education from the remote areas 12.5% of the students are from the outer regional areas and 12.7% of the students enrolled are from the inner regional areas (McKenzie, 2016). There are studies which have looked at the success of mobile learning, online distance learning and MOOC (Massive open online courses). MOOCs started in Australia in 2013.

## **AUSTRALIAN DISTANCE EDUCATION CAN BE DIVIDED INTO THREE PHASES**

### **Phase 1- 1910- 1960s**

Phase 1 included the phase of correspondence/ external studies. These students studied by means of mail unlike direct student interaction with the teacher, the course notes were usually posted to the student's home and the student engaged in self-study.

### **Phase II (Early 1970s to Mid 1980s)**

In this phase, distance education used multimedia and two-way communication to improve effectiveness of teaching and learning.

### **Phase III (Mid 1980s to the Present Day)**

Open flexible and online learning - this method included the use of Internet and digital technologies and provided increased student teacher interaction, student- student interaction, collaborative group work and flexibility for the learners (Colin Latchem, 2018 cited in A. Qayyum and O. Zawacki-Richter, 2018).

This included the blended learning format which has been developed over the last few years and refined to make online learning much more interactive and effective. Six critical success factors were identified for success of distance learning. These dimensions are learners characteristics, instructors characteristics, institution and service quality, infrastructure and system quality, course and information quality and extrinsic motivation (Hsi-Peng Lu, Intan Dzikria, 2019). Top management support is essential for success of the online teaching and learning program. Content ownerships or intellectual property inside distance learning systems are important issues. Copyright laws apply. The content needs to be reviewed and updated regularly. Australian universities adapted well to the technological changes in teaching and learning space and have been upgrading the use of technology in the classroom. For nearly a decade, the progressive Australian universities have been encouraging the recording of lectures for students who could not attend the live lecture in the classroom. Various Learning management systems like Moodle, Blackboard, Leo were adopted early on as part of the change towards blended teaching and learning.

Amongst the most popular trends in distance education are discussed below.

### **Open Universities Australia**

Originally founded as Open Learning Australia in 1993, it became Open Universities Australia (OUA) in 2004. It is a not-for profit organisation. It is a consortium of leading public universities and other higher or vocational education providers. Open Universities offers 2056 online subjects and more than 371 qualifications in arts and humanities, business, education, health, information technology law and justice, and science and engineering provided by Australia's leading universities. OUA is the only non-university organisation in Australia that offers government funding for individual units of study. (<https://www.open.edu.au/>)

### **Open Education Resources (OER)**

Charles Sturt University, University of Tasmania and University of Technology and the Australian government Department of Education and training higher education group have developed a national road map to support policies for the reuse and production of open education sources (OER), promote innovative pedagogical models and respect and empower learners as corporate users in their lifelong learning. The University of southern Queensland (USQ) has made a commitment to OER. USQ is also founding anchor partner of the global open educational resource is universities (OERu) (Colin Latchem, 2018 cited in A. Qayyum and O. Zawacki-Richter, 2018).

### **MOOCs**

Massive open online courses (MOOCs) are on the rise as people want to learn in different ways. Australian universities like ANU, Monash, UNSW, UQ, Swinburne are developing their own MOOCs. (The Good Universities Guide, 2016).

**U3A ONLINE** - The University for the third age. You 3A online Inc became the world's first virtual University of the third age. It is offering online courses and basic computing skills for the elderly and disabled in homes, age care facilities and retirement villages.

## **COURSERA**

More than 200 leading universities and companies have come together to bring flexible, affordable, job-relevant online learning to individuals and organisations worldwide. More and more Australians are becoming aware of courses offered by Coursera in online platform and taking advantage of it. (<https://www.coursera.org/>)

## **CHANGES DURING COVID-19**

This section of the paper discusses the changes in the Higher education industry during COVID-19 period.

COVID -19 acted as a trigger for change. COVID-19 hit Australian Higher Education sector in March 2020. COVID-19 acted as a huge disruptor. Changes were observed at three levels in the Australian economy in context of Higher Education sector.

- National Level
- Industry Level
- Institutional Level

### **National Level Changes**

At the national level COVID has helped identify many weaknesses at structural level in higher education system in Australia. Amongst the highlights have been high dependence on international students for the revenue. Universities are predicted to lose further \$553 million decline in international student revenue (Tim Dodd, The Australian, 2021).

Australia competes with 4 major countries of the world to get international students. These countries include USA, UK, Canada and New Zealand. As per reports, Higher education sector revenue in 2017 was \$37.9 billion (TEQSA report, 2018). Higher education overseas revenue was up by +\$1 billion from 2016 to 2017.

International revenue was 7 billion Australian dollars in 2017 for the Australian Higher education sector (TEQSA report, 2018). COVID also exposed the sector's need to reduce dependence on grants coming from foreign countries. The University of Queensland had been accepting course funding from the Confucius Institute. The relations between Australia and China changed during the pandemic and had an impact on the funding for such universities (Tim Dodd, The Australian, 2021).

The Australian Government passed a Higher Education Bill. Job-ready Graduates Package legislation passed parliament (19 October, 2020) (<https://www.dese.gov.au/>). Education Minister announced changes to the funding of Higher Education sector in 2020. Humanities degrees are set to double in price as Parliament passes higher education bill in 2020. This could lead to a huge shift in the type of courses being offered by the universities and preference of domestic and international students.

Government announced coronavirus relief package for higher education with focus on domestic students. (<https://www.abc.net.au/news/2020-04-12>)

Universities bolstered their emergency financial assistance for international students struck by the coronavirus pandemic, but there were calls for more support from the federal government. \$110 million was pledged by universities but that was not considered enough by the international students who had reached the verge of homelessness (<https://www.sbs.com.au>).

The Australian Government announced emergency \$1bn boost to research funding. The biggest winners of this emergency relief will be the Group of Eight universities in Australia which will be given \$660 m of the \$1 bn extra research money (Tim Dodd, The Australian, 2021).

## Industry Level Changes

Following are some of the changes that happened at the industry level. WHO announcement related to COVID-19 came in March 2020. Australian borders were closed soon after due to spread of pandemic across the world. International flights were stopped. International students could not come to Australia. Student enrolments dropped dramatically across board. Mass job losses across all the universities in Australia. (Table 1). Many of the smaller colleges offering courses like ELICOS have shut down as no new students have come since the pandemic started in early 2020.

**TABLE 1**  
**UNIVERSITY JOB AND REVENUE LOSSES- 2020 DUE TO COVID-19**

University job and revenue losses, 2020				
	University*	Number	Comment	Revenue loss (\$m)
THIS WEEK	RMIT	605	355 voluntary, 250 compulsory	175
	UNSW	493	237 voluntary, 256 compulsory	370
	ANU	465	250 voluntary, 215 compulsory	192
	Sydney	ND	Call for voluntary redundancy	184
PREVIOUSLY ANNOUNCED	Melbourne	450	Compulsory or voluntary redundancy, TBC	1000
	Queensland	ND	Call for voluntary redundancy expected Sep	100
	Monash	277	Voluntary redundancy, most from admin	350
	Adelaide	200	Voluntary redundancy, natural turnover	nil **
	Victoria	100	Voluntary	70
	Macquarie	ND	Voluntary	70
	Deakin	300	Compulsory	250

\* Selective list \*\* Revised from earlier \$100m ND=not disclosed SOURCE: FINANCIAL REVIEW

[https://images.jifo.co/2328195\\_1600385168234.jpg](https://images.jifo.co/2328195_1600385168234.jpg)

The sector went through extensive restructuring and redundancies. Departments of the Universities which were geared to service international students were affected more than others.

Other cost saving measures were implemented industry wide. Staff who escaped redundancies faced work intensification. Mental and physical health issues were triggered for such remaining staff.

The casual academics and student support services hit the most. To cut the costs, the class size was increased multifold. This meant one teacher would teach the same class compared to four teaching the same subject across various campuses in face to face mode.

## Changes at Institutional Level

This section of the research paper is based on experiential learning of the author. The following process was used at institutional level for moving face to face teaching to online teaching during COVID in a private college located in a major city of Australia.

- Once COVID- 19 was realized as a real threat to the business, a sense of urgency was created due to NSW Health orders sent regularly to businesses. The Public Health orders were geared to prevent spread of virus.
- To keep the business moving, online teaching and learning was seen as a good solution by senior management.
- Management team quickly came up with a transition plan to move to 100% online teaching. This seemed to be the industry wide solution.
- Online learning Coordinator appointed.
- Train the trainer program established to train key staff in training rest of the academics on online teaching.
- Team of academics appointed as trainers gave series of training sessions to other teachers on how to teach online.
- After training on use of Zoom and Google Meet was used to teach online finished, teachers found that Google meet was much harder to use and, in a semester, or so majority of teachers moved to Zoom.
- All the teachers who were trained in teaching were assessed by the trainers for competencies achieved in online training.
- Online learning team established from amongst the train the trainers team to help the teaching staff who had any issues while teaching and the students who needed support.
- Students were sent out links to online training manuals with instructions on joining zoom classes.
- Teachers were encouraged to record lectures to allow students to view the lectures at later stage if they missed out due to technical glitches. These recorded lectures were made available on Moodle for students to access. Teachers recorded the lectures and uploaded into YouTube and then provided links on Moodle (Learning management platform)
- Senior management reviewed the COVID-19 situation regularly to see if any further changes were required and if revert to face to face teaching was a feasible option.

#### *Other Changes at Institutional Level*

The college went through other changes to support the move towards online teaching and learning. Those changes are listed below.

- Other changes to support transition to Online teaching and learning included move to Online Enrolment. The students were encouraged to enroll online. Current students generally took that opportunity using the training video given. This process added to the cost savings for the college.
- New students who came to campus were given support to enroll by the trained academics. A cross functional team was set up between admission staff, marketing, IT and academics to make enrolments seamless.
- College had to take new licenses for running classes on Zoom online for thousands of students and 4- hour block.
- New classes set up for off -shore students who were attending classes from different time zones to Australia- e.g, Nepal, Pakistan etc. These classes were scheduled to match the time zones in those countries.
- Organisation wide process changes were made in every function of the college to support the change- Academic Services, Marketing, admissions, finance etc
- Online assessments were designed and implemented. These included online, open book exams, Moodle quizzes, take home exams.
- Virtual graduation ceremonies to award degrees to students were organised.

#### *Positives of Change at Institutional Level*

The positives outcomes of designing and implementing change for the college included:

- 100% Online teaching and learning kept business going.
- Very few redundancies made.
- Business as usual but in a different format.
- No disruption to teaching. Semester break usually in Week 6 was moved forward to just after Week 3 teaching to prepare for the transition and training.
- Students who were stuck overseas as Australian international borders closed were able to attend the classes online using zoom.
- Mixed classes running currently- Off- shore and onshore students attending classes together online classes.

### *Students Reactions to Online Teaching and Learning*

Students tended to have a mixed reaction to online teaching and learning. Students who have experienced face to face traditional teaching models in the universities still preferred that option compared to online teaching and learning.

Students who joined the university system for the first time during COVID struggled the most to learn the new system as students had to learn the basics of Australian Education system like accessing teaching resources on Moodle. Online Orientation programs were designed to help students make the transition. Students studying courses like Architecture, IT and Medicine had issues accessing specialized softwares/laboratory which were made available in computer labs only. Universities/Colleges had eventually to come up with solutions to get around the access issue as some students did not have laptops at home.

Students missed building the bonds with their classmates which happens in a face to face physical environment. They felt that the virtual environment is not the same.

Some students loved the freedom to be in bed and attending lectures, not having to travel to university, have more sleep-in time and still be able to study. Others missed going to a physical campus and avail of the libraries and other infrastructure. Students generally found listening to recorded video lectures boring and could not really listen through the whole recorded material. Live lectures were more interesting and motivating than recorded lectures which were posted by teachers on Learning Management System like Moodle. Some teachers tried to use Kahoot, Socrates, break out rooms to build engagement levels.

Students struggled with social isolation, group work. They missed the long- term relationships and friendships made in the university while attending classes together and having bonding sessions. Students missed the feel of being part of an institution with lots of student activities generally being organized on campus for their overall development. Uni life missing.

Mobile learning became popular with some teachers noting that students were logging in using mobile phones at work, in shopping complexes or while working in the gig economy like driving uber taxis.

### *Resistance to Change*

There was initial resistance to change from the students and the staff. Some students felt that they had paid for face- face teaching when they enrolled and online teaching is not the same. Some wanted discounts or wanted a trimester break. Student services managed such issues.

Some teachers who were used to traditional methods of teaching resisted online teaching. Some dropped out of teaching to be able to resume post COVID while others went through a steep learning curve. Inter-generational differences were observed in adapting to change. Though there were trend-busters too. There were examples of an academic in his late eighties adapting well to online teaching platform.

### *Teachers Reactions to Online Teaching and Learning*

Teachers found online teaching platform much more challenging than the face-to- face traditional class room. Students generally tend to keep their cameras off while attending lectures or tutorials. This makes engagement much more difficult as teachers have to assume that there are real people behind the names logged in the session. Teachers came up with strategies to counter these issues by randomly asking questions and asking students to answer specific questions targeted at them to be able to get attendance.

Use of break out room was helpful for engaging students in group work. Poll features in Zoom was used to engage students too. Some teachers used whiteboard function based on the type of subject they were teaching. Phenomenon of “Ghosting” was observed by some teachers. Students may be logged in on zoom but actually not attending as they may be busy working or doing multi-tasking while being logged in.

#### *Overall Results for the Case Institution*

Change management process implemented at college has been successful. Student voice surveys indicate overall high satisfaction rate. Attendance rates of the students are generally higher in online learning classes compared to traditional classes. No missed teaching sessions. Classes ran as usual. Students found it generally easy to use technology to attend classes from onshore or offshore. Teachers and support services adapted well to the change. A lot of cost cutting measures and good planning helped achieve these results. Those institutions who could not adapt to change still struggle to survive.

### **SITUATION IN HIGHER EDUCATION SECTOR IN AUSTRALIA IN EARLY 2021**

Situation is very fluid related to COVID-19. Across the world virus is still creating havoc and lots of people dying because of the virus. Australia and New Zealand have been more successful in their endeavors in fighting the spread of pandemic. Public Health strategy in Australia is more State based and each State’s Premier seems to be making decision to protect population living in their state.

Vaccine availability in the world has been a positive news but the arrival of new mutated strain of virus from South Africa and UK has put a spanner in the works.

Pilot programs being used by Universities like Charles Darwin University to get international students to come to Australia to study in Darwin. Special flights brought these international students to Australia.

Australian Health departments have designed a vaccine roll out strategy and vaccine will be rolled out in Australia in Feb/ March 2021 based on the priority plan set by the government.

Post vaccination, the international borders may open again. In the meantime, brick and mortar universities are still facing a bleak time with no new enrolments of international students since March, 2020. Universities will continue on the path of cost-cutting. Top heavy universities will need to cut layers of management further to cut costs.

### **POST-COVID**

#### **What Higher Education Sector May Look Like?**

There are predictions Higher Education sector in Australia will bounce back by end of 2021 and will be back on high growth path. Australia due to its good public health system has given a sense of security to parents of International students. Though some international students feel that they were not provided adequate support by the Australian government during the pandemic and hence they feel that future enrolments may be affected due to that. Such students feel they suffered a lot due to loss of job, income opportunity and they had no one to help during the crisis times. Australian government gave a clear message to them to go back home if they can’t sustain themselves in Australia.

Analysts predict a mix of off-shore and on-shore international students in classrooms. There could be more acceptance of Online teaching and learning in future. In Pre-pandemic era, Blended teaching and learning was still an evolving field and there was a lesser acceptance amongst the students and teachers. Post -pandemic it may become the preferred option as students have experienced the convenience of studying from home. Teachers too have experienced the technology can be used from their homes to effectively conduct an online class. More and more teachers may demand an option to work from home or a remote location.

Many students may want to do courses while being overseas and may not have time or resources to fly to Australia to attend face to face classes. Both face to face classes and online classes will probably co-exist in future. Students will be given options to attend either. Tutorial labs for practical based subjects or courses may be the only face to face classes in future. This option will provide competitive advantage to those



institutions who offer it. Many universities may use recorded video lectures to cut costs of delivery. While others may have shorter live lectures to stay competitive. It is predicted that there will be a rise of college and universities who may target only off shore students using online teaching and learning model.

### **Upcoming Challenges for Universities**

The Higher education sector has gone through a tremendous change due to the pandemic. Some analysts predict that some universities may never come back to their formal glory. Some smaller private colleges in ELICOS (English Language Intensive Courses) sector have permanently closed due to disruption in flow of international students coming to the country.

These are some of the challenges that universities will face. Re-recruiting all those people who lost their jobs in the initial cuts. Some may have changed career paths by the time COVID finishes. Artificial intelligence may have taken over certain jobs permanently by the time world is clear of pandemic. International diplomatic relations between countries post-COVID-19 can dictate the trade relations and opening of borders for flow of goods and people including international students. Paradigm shift in thinking at the senior management level required to design new business models for teaching and learning. There may be mental blocks which may prevent change from happening.

Processing students for COVID-19 or its variants when international borders open and ensuring the virus doesn't spread to others in the campus if it is a-symptomatic case. Quality assurance of online learning provided to onshore and off shore students will be another challenge faced by the Higher education providers in Australia. Australian universities are self-accrediting and have reasonably high level of autonomy. TEQSA (The Tertiary Education Quality Assurance Agency) registers and evaluates the performance of higher education providers against the higher education standards framework (Threshold Standards) 2015 which all providers must meet in order to enter and remain with Australia's higher education system. New set of rules will need to be created to ensure same standards of teaching and learning apply in online delivery mode as they apply in face to face mode.

### **CONCLUSION**

In conclusion, higher education world in Australia will be different to what it was pre-pandemic. Pandemic exposed many weaknesses in the higher education system which need to be fixed going forward.

Agile teaching and learning could be the future of Higher Education in Australia. If supported by regulatory authorities in education space, offshore student market for the Australian Universities could expand exponentially. Barriers to online teaching and learning have been broken due to COVID-19 across the world. Advancements in Technology has become the key enabler for change. Teaching and Learning sector post-COVID will remain transformed forever. There will be no going back to the traditional teaching and learning model as the world knew it. Education beyond borders using technology may become the new norm. Colleges and universities need to learn to adapt and come up with new business models post-COVID. Regulatory authorities may need to revise their standards for quality assurance of courses being run in mixed mode, onshore and off shore. Australian government has a huge challenge ahead of it to bring economy including higher education sector back on track post -COVID. A wholistic approach will be required in future in consultation with the stakeholders involved.

### **LIMITATIONS OF THE STUDY**

Part of the study is experiential in nature, hence could have limitations based on subjective nature of lived experience. It is based on the lived experience of the author while working in the higher education sector in Australia during the pandemic. The experience cited related to change management is based on case of one institution only. Other higher education institutions may have gone through a different change journey due to COVID-19. The author has written based on their own experience and may not have insight into all the issues involved. Limited secondary research was used to support the author's argument. The situation is fluid and is still evolving. The post-pandemic scenario may be difficult to predict.

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