

**Event:** U3A Deepdene (News and Views)

**Date:** Thursday 21 July
**Arrival time:** 1150
**Speaking time:** 35 minutes plus discussion

**Location:**

Alston Halls

Rear of Deepdene Uniting Church

958 Burke Road

Deepdene

(next to Deepdene Primary School)

Mel 45 K7

**Speech notes:**

Future Directions in Tertiary Education: Continuity and Change

Vice-Chancellor Professor Linda Kristjanson

**Welcome to country**

I would like to begin by acknowledging the traditional owners and custodians of the land on which we meet today, the Wurundjeri and Boonwurrung peoples of the Kulin Nation. I pay my respects to elders past, present and future.

**Introduction**

I am very pleased to have this opportunity to join you today.

I appreciate that you – more than many - understand and value lifelong education.

You have chosen to join more than 20-thousand other Australians in extending your understanding of the world through education.

Through participating in the marvelous and extensive range of programs offered by U3A, you not only reinvigorate your own educational journey, you are also a role model for others. Your children and grandchildren, as well as your neighbours and friends, all benefit from your dedication to a life of learning.

Thank you for that commitment, and I congratulate U3A in Australia for maintaining this unique educational model for more than 30 years.

Today I would like to share with you some of the research that we are using at Swinburne to inform our understanding of the social, political and economic forces that are shaping the future of education not only in Australia but internationally.

I will outline the major developments that are affecting tertiary education in Australia, including:

* Growth of the education sector
* Growing demand for international education
* Growing importance of employment outcomes
* Improved gender diversity
* Changing funding models
* Digital transformation and changing academic roles

We are so very aware of the vast changes that are happening in our communities. But before we look at change, I would like to start with the idea of continuity.

One of the strengths of the Australian tertiary education sector is that we remain focused on the unique contribution we make to society.

We stay true to our core business: research, teaching and learning. We are dedicated to maintaining excellence in education, to ensuring our research has impact, and to being responsive to the needs of future generations.

This is the commitment we make as educators.

Prime Minister Malcolm Turnbull reminded us of the importance of keeping future generations in mind, when he claimed victory in the federal election.

To paraphrase, he said:

Politics is not about the politicians, the media, the commentators, the pundits or the pollsters. It is about the Australian people, and it is not just about the Australian people today, it is about their children and grandchildren, because everything we do is about the future – everything.

We have to remember that it is the future of Australia that is in our hands and that is a glorious, heavy and inspiring responsibility… it is their future that we are working towards.

Similarly, Australia’s educators carry an important responsibility, to ensure that future generations are armed with the knowledge they need to solve global challenges; to support our children and grandchildren to learn the tools of the future; for life as well as work.

**Our history, our future**

As we look to the future, we draw on our history for inspiration.

I would like to share with you what that means to us at Swinburne.

This year, we are refreshing our vision for the future. This work has emphasised that amidst change, we are on a continuous journey. Our future is grounded in our past.

More than 100 years ago, our founder - Victorian Government Minister, business leader and philanthropist, George Swinburne - saw the need for an education facility that empowered, educated and inspired a new generation.

George and his wife, Ethel, worked tirelessly to drive innovation in business and education, to raise a family of four daughters and contribute to the public good through their many philanthropic activities.

At Swinburne, we strive to build on the contribution made by the Swinburne family to Melbourne and especially to our community in the eastern suburbs.

We continue the tradition of the past 100 years, aiming to:

* engage our students through high quality, career-oriented education that meets their needs;
* produce outstanding research that creates tangible social and economic impact; and
* be a partner of choice for the industries and communities we serve.

As a university, we must help each individual unlock the skills and capabilities they need to transform their own lives and the lives of others in their community.

We do this by providing a dynamic environment devoted to excellence in both education and research.

In recent years, Swinburne has progressed to become one of the world’s leading universities, and is ranked as one of the top 400 universities in the world by the Academic Ranking of World Universities.

And for the second time, in 2016, we also featured in the Times Higher Education Top 100 universities under 50 years old – noting that while we have been in business since 1908, we only attained university status in 1992.

These achievements speak volumes about our high standards of teaching and research and the outcomes that we deliver for our students.

In 2015 we were thrilled to officially launch our $100 million Advanced Manufacturing and Design Centre to students and staff at our Hawthorn campus.

By connecting design, manufacturing and technology, the AMDC is supporting students, researchers and industry to work and learn collaboratively.

It also creates a strong presence on our Hawthorn campus, which signals just how far Swinburne has come since its establishment as a local technical institute more than a hundred years ago.

We have a new development in the coming year: the fire station on William Street will be renovated, becoming the doorway to our latest initiative, the Innovation Precinct.

The Precinct will bolster the university’s position as a centre of entrepreneurial activity, integrating research, new business development and commercialisation.

Within the Precinct, a Business Incubator will support at least 10 start-ups each year, and a Student Entrepreneurship Experience programme will provide opportunities to students through interdisciplinary university teams and partnerships with business and industry.

I am excited about our future. And, as I collaborate with my peers in the Australian education sector, I see that we stand together in our commitment to navigate a course through the tremendous changes that are affecting all aspects of our society.

Let us turn, now, to change. As part of Swinburne’s work refreshing our vision for the future, we have drawn on a great breadth and depth of research and analysis of the changes faced by the Australian education sector.

**Growth of the education sector**

The education sector has experienced significant growth over the past 50 years, within Australia and around the world.

Globally, enrolments have doubled over the past 15 years.

Much of the growth in the number of university students has taken place over the past 50 years. In Australia, the number of people pursuing higher education has more than doubled since 1990.

The Australian experience of recent growth reflects an international trend.

UNESCO data shows that global higher education enrolments have doubled over the past 15 years, to just over 200 million people.

Forecasts show that in the next ten years, that number will increase: it is predicted that by 2025, 267 million people will be enrolled in higher education globally.

There are a number of reasons for the growth in university enrolments.

In developing economies, these include:

* a growing youth population; and
* economic development leading to a larger middle class

In more developed economies, such as ours, we see:

* low-skilled jobs becoming automated;
* increasing focus on skilled work for employment growth; and
* university becoming increasingly accessible over time

As an educator, I am very pleased to see the growth in tertiary education: I believe in what we do.

I believe in the new opportunities presented with greater access to knowledge. I am excited by fresh perspectives we have on the world. I am heartened by the human connections that are being forged across the globe through international collaborations.

**Growing demand for international education**

Indeed, the internationalisation of education is one of the significant forces of change influencing the Australian education sector.

In the past 30 years, we have seen significant growth in the number of international students on our campuses.

In 1988, only four per cent of students at Australian universities were international students.

In 2013, 25 per cent of students were international students.

The internationalisation of our universities provides a terrific opportunity for us to engage with the world, to grow our economy and to develop positive relationships across cultures.

As well as inviting international students to join **us** for an education, Australian students need to be supported to seek knowledge through exchange and study abroad programs.

The sector peak body, Universities Australia, has been conducting surveys of its members’ international agreements since 1990, when there were 220 formal agreements in place.

The latest survey, in 2014, revealed that the number of agreements is now more than 8,500.

These agreements encompass study abroad programs, staff and student exchanges and research collaborations.

It is our responsibility to build strong relationships with our international staff and students, to grasp the possibilities these connections present.

As the university sector forges new and deepening relationships internationally, we have exciting new opportunities to contribute to Australia’s economic development.

This task is not to be taken lightly. Forging and maintaining a thriving multicultural community takes commitment from all participants. Commitment to share our unique cultural perspectives, to learn from each other, and to collaborate for social and economic good.

To this end, at Swinburne, we have appointed a Director of Multicultural Engagement – we are the first university to do so.

Chin Tan joins us as former Victorian State Government Chairperson of the Multicultural Commission.

His appointment provides a clear indication of Swinburne’s intention to build our capability and public voice in facilitating stronger multicultural relationships for the benefit of all in our community.

**Improved gender diversity**

Social changes in the way we live and work have also led to improved gender diversity at Australian universities.

The number of women studying at university has grown from 20 per cent mid last century, to more than 50 per cent today.

I note that while many of us in universities may take for granted that women are in our lecture theatres; it is really only in the past 30 years that women have joined men in equal numbers.

Many women still face barriers to tertiary education, and for this reason I am passionate about programs such as Swinburne’s Young Mums Program.

This award-winning program provides mothers aged 15 to 20 years a Victorian Certificate of Applied Learning, which is an equivalent to Year 11 and Year 12 studies.

The program is designed to meet the specific educational needs of these young women. For example, as bonding and attachment are important to both mother and child, the babies are in the classroom with their mothers.

Universities are also developing specialist programs to ensure participation in specific disciplines.

A report by the Australian Industry Group published in 2015 highlighted the unfortunate reality that, both in the school system and the tertiary education sector, participation in the disciplines of science, technology, engineering, maths and medicine – the STEM disciplines - is in decline.

This is particularly the case for girls, many of whom have terrific aptitude for scientific thinking but often drop these subjects as they progress.

A lack of women studying science presents challenges to developing women researchers in science.

I am honoured to work with many talented women in science, technology and engineering research and education, including:

* Director of Factory of the Future, Professor Bronwyn Fox;
* Director of the Innovation Precinct, Professor Sally McArthur;
* Associate Professor Baohua Jia from the Centre for Microphotonics; and
* Jacqui Savage, a product design engineering graduate who has recently joined to Swinburne’s Innovation Precinct to take her start-up, MedCorp, to the next stage.

But we cannot take equity and diversity for granted.

It is essential that Australian universities support young women to study and work in the science disciplines.

At Swinburne, one of the actions we have taken is to join a pilot program to improve the promotion and retention of women and gender minorities in STEMM studies.

Science in Australia Gender Equity – or SAGE – is a partnership between the Australian Academy of Science and the Australian Academy of Technological Sciences and Engineering.

The initiative, led at Swinburne by Dean of Science, Professor Sarah Maddison, will address the fall off-in representation of women in STEMM areas at senior levels.

I am pleased to say that for each of the past seven years, Swinburne has been recognised by the Workplace Gender Equality Agency as an Employer of Choice for Gender Equality.

As major employers in Australia, universities such as Swinburne have a responsibility to provide workplaces that are flexible, fair and safe.

In February this year, we launched a sector-wide campaign to prevent sexual assault and harassment.

The campaign, called ‘Respect Now Always’ highlights that Australian universities have zero tolerance to sexual assault and harassment. It includes a review of policies, reporting procedures and support services for victims and survivors of sexual assault.

This work is a team effort and involves staff from across our universities: in health, security, policy and governance, and communications. It also involves student leaders.

We want safety and respect to be central to our university culture.

**Growing importance of employability outcomes**

As work has become more complex, an increasing number of people are in ‘knowledge jobs’.

Universities are keeping step with society’s increasing need for knowledge workers. Many employers expect their employees to have specific qualifications, whether that be a certificate or diploma or a university degree.

While we see a growing demand for science and engineering graduates globally, arts and non-science subjects continue to be popular with students, with the most popular subjects studied at universities being social sciences, business and law.

It is increasingly important for universities to make sure their students are ready for the workplace. Having a degree is no longer a guaranteed path to a job.

So what does a university do to support its graduates to get jobs?

At Swinburne, we’re very proud of our success in producing work-ready graduates. Last year, Swinburne was ranked in the world’s top 200 universities in the first ever QS Graduate Employability Rankings.

For more than 50 years, we have partnered with leading Australian and global organisations to offer students authentic workplace experiences.

Swinburne has always been an ‘industry-connected’ university and we continue to build on our past as we develop new relationships, and new ways of working with industry.

Our vocational and higher education courses as well as our strong research focus ensures we are well connected with a broad range of industries.

Many of our staff – including our researchers - have industry experience. This helps us connect our students with the real world of work.

We have now expanded our workplace experiences with a new program called The Swinburne Advantage.

This programguarantees all undergraduate students work-based learning experiences.

We work with students and industry to develop programs including:

* Professional degrees, where a 12-month full-time professional placement is built into the degree
* Paid work placements of six or 12 months full time
* Professional internships, pairing a student with a host organisation for a minimum of 18 days
* Industry-linked projects, enabling students to work as teams to fulfil a client brief from start to finish
* Accreditation placements, where students fulfil degree requirements while getting experience with well-regarded organisations
* Industry study tours, supporting students to take up industry-related travel experiences.

The impact of these activities on students’ experience of university cannot be underestimated.

One of the things we have learnt about our students is that many feel uncertain about the future. They wonder what the future will hold for them in terms of work prospects, the affordability of their education, and the state of the world they inherit.

Professional experiences – teamed with intellectual endeavours and community engagement – help a student shape a vision for their future.

The adventure of university offers an opportunity for students to gain greater clarity about themselves, and about the world around them.

**Digital transformation**

Today’s school students do not know a world without Google or smart phones.

The tools used by Australia’s primary and secondary school students include personal computers, iPads and interactive whiteboards.

When they join us at university, our students expect that they will be able to use these tools to learn, in a collaborative environment with their peers and their teachers.

Australian universities are facing a period of profound change, as we adapt to meet the needs of our students.

Increasingly, students are demanding to learn in a way that makes sense to them, which can be very different from the way that students have been taught for decades.

Traditional teaching methods such as the lecture may have stood the test of time until now, but they may not endure for much longer.

Academic roles are also changing. Students used to look to their lecturer as the keeper of knowledge.

As content has become ubiquitous and knowledge more accessible, the skill of the modern academic has shifted away from being an imparter of knowledge to being an integrator of knowledge, creating more personalised conditions that help students learn.

Learning has always been a social activity and technology is creating new ways for students to engage with content and with each other.

Not that long ago, group activities typically required students to arrange times to physically meet. Now, much of that work can be done remotely using the same cloud-based conferencing technologies that multinational firms use to solve problems across national borders.

At Swinburne, our strengths in technology and innovation see us well placed to participate in these developments.

We have partnered with industry and other universities to develop new tools for our classrooms and boardrooms.

For example, our design school uses an interactive table to workshop designs with industry clients.

Images can be moved from the wall to the table and back again, edits can be made and saved by people simultaneously… and new versions of design can be shared with the flick of a wrist with colleagues on the other side of the world.

Another example is the HigherEd mobile phone app. This was developed last year by a Swinburne accounting lecturer, Grainne Oates.

Grainne saw a need to improve the way she engaged first year students in accounting classes.

The app – which was built by a Swinburne graduate - is a simple concept: students are prompted to answer one multiple choice question each day.

The question is directly aligned with the classroom material. Those who get the answer wrong are prompted to review the relevant subject matter.

Students are more connected with their learning, and lecturers get immediate feedback – they know what students are struggling with.

The app is now in a second stage of development, including international distribution. It will be used in schools and other universities for a range of subjects.

We have also developed a wholly online entity, Swinburne Online.

The growth in online education has been fuelled by growth in the non-traditional student population including working adults and students from lower socio-economic backgrounds.

Since we launched Swinburne Online five years ago, it has grown rapidly in response to student demand.

Swinburne Online has allowed us to offer education to students who would never have found their way to a Swinburne campus, including a significant proportion of regional students and many students who are the first in their family to undertake university study.

Recently, Swinburne Online extended its offerings into state-of-the-art vocational courses.

A pilot delivery of select higher education online programs also took place in Malaysia, a positive move for Swinburne and something which over time has the potential to transform international education.

While digital transformation brings challenges, I am very excited about the opportunities we have as educators.

Now, more than ever before, we are able to connect with peers and students across the globe in the pursuit of knowledge and understanding.

There is tremendous opportunity to have real and meaningful impact on the future, through greater access to education, as well as through new collaborations with our peers.

**Changing funding models**

At the same time that these broader social, economic and technological trends are sweeping through education, the ways in which governments are supporting education are changing.

There has been a long term trend in tertiary education towards greater contestability of funding and the adoption of market principles.

Just fewer than ten years ago, the Australian government determined the number of places that each university could offer in each discipline.

While this meant that the system was very stable, this ‘central planning’ approach was quite unresponsive to changes in what students wanted to study, and the way they wanted to study it.

Innovation was stymied. Universities didn’t need to consider market forces and so they generally kept offering the same courses, and doing the same things, year after year.

In 2009, the Australian government started to open up the system by allowing universities to compete against each other for students, ending the system which centrally allocated student places, and allowing students to make choices.

This has been a very positive move, not just for students but also for universities.

It has had the immediate effect of making universities much more responsive to their students, and much more attuned to how they needed to change to keep up with changing expectations.

In vocational education (or TAFE), the long term trend towards greater market contestability has been the same.

In this case, however, it is arguable that governments have moved far too quickly, creating some profound problems in the process of trying to open up the system.

Over the last few years, the market for vocational training has been rapidly expanded. Previously, vocational training was dominated by public sector providers (TAFEs). Now, it is predominantly served by private, for-profit training providers.

This led to a classic “bubble” in which too many private colleges rushed into the market to access easy government money, followed by a number of crashes and closures, and ultimately a decision by the Australian government to act to re-regulate the market.

We’re still working through the implications of this today.

While there will be bumps in the road in how tertiary education is funded, all sides of politics understand the transformative power of education.

I am hopeful that governments will create positive conditions in which educational institutions like Swinburne can work to transform the lives of the people who depend on us.

One thing is certain. As people see the changes that are happening in society and technology, they will always depend on high quality education to give them the skills and the opportunities they need to adapt, to retrain for new industries or be in a position to take the next step in their career.

**Conclusion**

Today I have endeavoured to give you an overview of some of the major social and economic factors influencing higher education in Australia.

As is always the case with change, we must face the challenges and see the opportunities they bring.

The growth of the education sector, internationalisation and greater diversity of our staff and students bring new opportunities for us to solve the challenges of the future.

The growing importance of employability outcomes sees universities and students focused on ensuring that university study is connected with and applicable to work outside universities.

New digital technologies bring new opportunities to make education accessible and relevant to a broader range of students, as well as for researchers to collaborate across the globe.

We are fortunate in Australia to have a world-class education system. Our high standards for excellence in research and teaching are widely recognised, and in demand globally.

As we navigate our way forward, we will continue our tradition of providing an excellent education and research with impact.

Thank you.