

The 2015 Newman Lecture at Mannix College

# **The Golden Years Return: How will we change Australian higher education?**

**Professor Margaret Gardner AO**

President & Vice-Chancellor of Monash University



# Contents

Biography .....	1
'The Golden Years Return' .....	2
The Golden Years .....	2
Crisis in Education? .....	3
The New World .....	4
How We Teach .....	5
What we teach .....	8
To Begin Anew .....	10
Bibliography .....	13



## **Biography of Professor Margaret Gardner AO**

Professor Margaret Gardner became President and Vice-Chancellor of Monash University on September 1, 2014.

Prior to joining Monash, she was Vice-Chancellor and President of RMIT from April 2005 until August 2014. She has extensive academic experience, having held various leadership positions in Australian universities throughout her career, including at the University of Queensland and Griffith University.

Armed with a first class honours degree in Economics and a PhD from the University of Sydney, in 1988 she was a Fulbright Postdoctoral Fellow spending time at the Massachusetts Institute of Technology, Cornell University, and the University of California, Berkeley.

Professor Gardner currently chairs the Museum Board of Victoria and the Expert Panel of the Office of Learning and Teaching (Federal Government Department of Education and Training). She is also Deputy Chair of Universities Australia and Director of the Group of Eight Universities.

She has been a member of various Committees in the areas of the arts, education and industrial relations, including the Council of Australia Latin American Relations Board (COALAR), the ANZAC Centenary Advisory Board and International Education Advisory Committee, which led to the Chaney Report.

In 2007, Professor Gardner was made an Officer of the Order of Australia in recognition of service to tertiary education, particularly in the areas of university governance and gender equity, and to industrial relations in Queensland.

# 'The Golden Years Return'

## How will Australian higher education change?<sup>1</sup>

*Professor Margaret Gardner AO*

### Newman Lecture

*12 August 2015*

*Mannix College*

## The Golden Years

The prompt for this lecture comes from the closing paragraphs of a book called *To Teach the Senators Wisdom* written by John Cecil Masterman in the 1950s.

The novel is subtitled "An Oxford guidebook". It tells the story of a group of dons who come together to draft a document that will explain to some visitors what is quite so special about Oxford University.

Their enquiries stand as an allegory for a broader question: what is the value of a university education?

At the end of the book the wise author opines:

"As we have discussed Oxford and its different aspects, we have always tended to return to our own early days. Each of us sees it as it was when he was young, each of us thinks that his own age is by much the best, each of us thinks that his successors ought to enjoy the things which he enjoyed and to admire what he admired. But why should they? Isn't it right that every generation should live its own life and worship its own gods?"

The world's great age begins anew,  
The golden years return

The great age for us was our youth, but it seems to me that every October, when the freshmen arrive, the great age dawns for them and the golden years begin<sup>2</sup>.

The couplet in the centre of the quote "The world's great age begins anew/ the golden years return" is the opening lines from the final chorus of Shelley's poem 'Hellas':

The world's great age begins anew,  
The golden years return,  
The earth doth like a snake renew  
Her winter weeds outworn:  
Heaven smiles, and faiths and empires gleam,  
Like wrecks of a dissolving dream.<sup>3</sup>

---

<sup>1</sup> With many thanks to John Palmer and Felix Gedye, who provided valued assistance in the research and writing of this lecture.

<sup>2</sup> J. C. Masterman, *To Teach the Senators Wisdom or An Oxford Guidebook* (London: Hodder and Stoughton, 1952), 274.

<sup>3</sup> P.B. Shelley, *Hellas, A Lyrical Drama*, (London: C. and J. Ollier, 1822) retrieved from [ebooks.adelaide.edu.au/s/shelley/percy\\_bysshe/s54cp/volume16.html](http://ebooks.adelaide.edu.au/s/shelley/percy_bysshe/s54cp/volume16.html).

In the context of the book, it reinforces the idea that golden ages can return. It also stands as a warning to people like me: university academics and leaders, although it applies equally to others. We should not let our own experience unduly colour our conception of what a university education should be. Nostalgia should not distort the experience we offer our students.

Each generation faces its own challenges and imperatives. Our task is to ensure that the education students enjoy, and the experiences they have, equip them to meet “...the necessities of the age”<sup>4</sup>.

## Crisis in Education?

Yet public commentary about universities is thick with references to a previous golden age, where students and academics were more brilliant, more dedicated to learning, and education was more challenging - a world of smaller classes, deeper knowledge, and livelier campuses.

Recent commentary from the United States<sup>5</sup>, as always so influential in shaping public debate beyond its borders, suggests that higher education is failing its students through undemanding teaching and low learning standards. Elements of this narrative are evident in the United Kingdom and here in Australia<sup>6</sup>.

These are serious claims that go to the heart of what education in universities should be. They also intersect with debates about the government policies and funding that support our universities<sup>7</sup>.

In contrast in this lecture I want to present the new golden age for university education that is before us, particularly the way student learning and experience is shaped, and the value of this education for our society. It is a vision being realised more quickly than we might suppose. And while it is affected by government policy and funding, its realisation is not dependent on them.

We are in the midst of a profound change in the way we teach and students learn, responding to the changing nature of the world for which we are educating and enabled by advances in technology or digital education.

While general commentary suggests crisis, I want to show a grander, more golden future for university education is in our grasp.

---

<sup>4</sup> K. Murray, Report of the Committee on Australia's Universities (Canberra: Commonwealth Government Printer, 1957), 91.

<sup>5</sup> M. C. Taylor, *Crisis on Campus: A Bold Plan for Reforming our Colleges and Universities* (New York: Alfred Knopf, 2010); D. Bok, *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should be Learning More* (Princeton New Jersey: Princeton University Press, 2010); M. M. Crow and W.B. Darbars, *Designing the New American University* (Baltimore: John Hopkins University Press, 2015).

<sup>6</sup> R. Gaita, "To Civilise the City," *Meanjin*, 71, 1 (2012), url: [meanjin.com.au/essays/to-civilise-the-city/](http://meanjin.com.au/essays/to-civilise-the-city/); R. Manne, "The University Experience - Then and Now," *The Conversation*, Oct 19, 2012. [theconversation.com/the-university-experience-then-and-now-10135](http://theconversation.com/the-university-experience-then-and-now-10135); Philippa Martyr, "Failing by Degrees," *Policy*, 28 (Winter 2012): 55-57.

<sup>7</sup> Since public universities dominate higher education in Australia, government policy and funding settings are integral to debates about any purported decline in quality in learning and teaching in ways that are not analogous to the United States.

## The New World

So, pivoting from the northern hemisphere's October commencement to the Southern Hemisphere's February, what will the 'golden years' look like for a student beginning in 2016?

Let us imagine such a student. Let us call her Lucy.

Lucy is enrolled in a double degree in Arts and Engineering.

Her first year engineering courses work something like this: Before each class, she works through a tranche of material online. Some of it is filmed lectures, some of it is reading.

Other parts are much more interactive, on the model explored by the Massive Online Open Courses, or "MOOCs". These involve short snippets of material – perhaps three to five minutes presented in the most engaging way possible, with the help of graphics and high-quality video.

The content is interspersed with regular diagnostic testing – problem questions that ensure that, by the time she walks into the classroom, Lucy has a firm grasp of the underlying theory and concepts.

This testing also allows her lecturer to know exactly where the class is up to. What does the class understand? Where are they shaky? The lecturer can then use this knowledge to nuance the opening ten or fifteen minutes of the class: a short lecture, recapping what has been learnt.

Lucy then finds herself assigned to a group of four students. This will be her workgroup in this class for the semester. Together, they will work through a series of problems set for them by the expert, the academic in charge of content for this unit.

One class might involve building a trebuchet with meccano, attempting to launch a projectile at a target with the greatest consistency. The instructor is on hand to ask probing questions: what is the importance of this piece? What happens if you make it shorter or longer?

Another might entail building a bridge, then placing weight on it in ever-greater increments. The aim is to predict exactly when and where it will break, and most importantly why.

Lucy's work group is diverse, and this is deliberate. Engineering, in common with most STEM disciplines, has long suffered from underrepresentation of women, who make up around a quarter of our first-year Engineering intake. Likewise, each group of four contains one international student, reflecting their proportion in the Faculty.

This is important because we know that a good deal of the learning that students do is from each other. Engaging with a diverse range of viewpoints and with people from a variety of backgrounds enhances this process preparing them for working effectively in teams.

This mix is particularly important in a large university like Monash, where most students live off campus. Left to their own devices, an individual will find it is easier to forge relationships with people like themselves. But on a large scale it can undermine the richness of learning if student groups break up by ethnicity or geography, sharing the

same facilities and teachers but rarely if ever actually interacting with each other.

At a university as diverse as Monash to squander the opportunity that diversity presents would be to diminish the preparation of students for the future.

In the Arts component of her degree, Lucy takes a unit called “Forms of Identity” that is jointly taught with Warwick University in the UK. Thanks to a high-speed internet link, half of her classmates are at the other end of the world, their likenesses projected life-size on the wall. The academic can take questions and comments from students in Melbourne and in Coventry, giving each an insight into the other's perspectives. It also allows students access to the leading expertise of both Monash and Warwick academics.

Lucy's experience is not yet every student's experience – we still have some way to go. But it is a real life experience. The combination of internet-based pre-learning before class and the use of class time to apply that learning – which is called the ‘flipped classroom’ – characterises a number of large classes at Monash and at other Australian universities.

And the ability to draw on material and experience from across the globe through the internet is permeating learning and teaching. It ranges from simple internet search for information through to the complex high intensity synchronous class in two hemispheres that I just described.

It is easy to forget just how new some of these techniques and technologies are. Indeed, this golden age is still dawning.

## How We Teach

Prior to this, the basic pedagogical fora of universities – the lecture, the tutorial, the seminar and, more recently, the laboratory – remained essentially unchanged for centuries.

Imagine what would have confronted Lucy had her first day been only twenty-five years earlier.

Her first introduction would have been enrolment day, long queues snaking across the baking tarmac as she stood for hours waiting for someone to confirm her courses. Queues have been as traditional and formative an experience in university education as the crowded lecture theatre.

Lucy would have been issued with a reading list and some course materials for each unit, but most of the delivery of content would have been done via ‘stand and deliver’ lectures, complemented by a lab, tutorial or seminar. If the books or journals for the reading list weren't in the library, then accessing material to expand learning became difficult.

The backbone of lectures set the course content and direction. And while there is nothing wrong with the lecture per se, it works better for the exposition of a concept than it does for learning to apply that concept.

As we transition to the ‘flipped classroom’ model, diminishing the role of the lecture we see improved learning. If we track recall of knowledge this innovation has not produced much change – people take in about the same amount through the ‘flipped’ model as they did through lectures. However, in student achievement on problem-based questions, we

are seeing improvements of anywhere between twenty and sixty per cent<sup>8</sup>.

So why did we persist so long with lectures as one of the defining pedagogical forms of the university?

You might think we were unaware of their limitations. Yet, if we go back and look at the literature around learning and teaching from the pre-computer age<sup>9</sup>, we see research and exhortations to provide a more active engagement with learning and the teacher than a lecture normally provides.

And rather than rely on our own experiences of the lecture form, here is John Williams in his magnificent 1965 novel *Stoner*, describing the titular character's experience of teaching his class. Stoner is deeply in love with his subject matter and utterly unable to convey that love to his students:

"But in the first classes he met, after the opening routines of rolls and study plans, when he began to address himself to his subject and his students, he found that his sense of wonder remained hidden within him. Sometimes, as he spoke to his students, it was as if he stood outside himself and observed a stranger speaking to a group assembled unwillingly; he heard his own flat voice reciting the materials he had prepared, and nothing of his own excitement came through that recitation."<sup>10</sup>

Williams, the novelist, was also an academic at the University of Denver for thirty years, so we can trust his description has some basis in reality.

In 1931, the well-known American educator Hamilton Holt described the academic lecture as "...that mysterious process by means of which the content of the professor's notebook are transferred by means of the fountain pen to the pages of the student's notebook without passing through the mind of either."<sup>11</sup>

Fast-forward 50 years to 1971, and Donald Bligh in his influential book entitled 'What's the use of lectures?' concludes the lecture is no more effective than any other method for transmission of information; not as effective as discussion for promoting thought; and, relatively ineffective for teaching values associated with subject matter, for inspiring interest in a subject or for teaching behavioural skills<sup>12</sup>.

---

<sup>8</sup> Kris Ryan, in conversation (Melbourne, July 15, 2015); Faculty of Pharmacy and Pharmaceutical Sciences, (Melbourne, July 20, 2015). Monash results are confirmed by studies elsewhere: Cynthia J. Brame, "Flipping the classroom," (2013), accessed July 30, 2015 <http://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/>; C. H. Crouch and E. Mazur, "Peer Instruction: Ten Years of Experience and Results," *American Journal of Physics* 69 (September 2001): 970-977; L. DesLauriers, E. Schelew, and C. Wieman, "Improved Learning in a Large-Enrollment Physics Class," *Science* 332 (May 2011): 862-864; R. Hake, "Interactive-Engagement Versus Traditional Methods: A Six-Thousand-Student Survey of Mechanics Test Data for Introductory Physics Courses," *American Journal of Physics* 66, 64 (1998): 64-74.

<sup>9</sup> W. McKeachie, "Procedures and Techniques of Teaching: A Survey of Experimental Studies," in *The American College: A Psychological and Social Interpretation of the Higher Learning*, ed. N. Sandford (New York: Wiley, 1962); D. A. Bligh, *What's the Use of Lectures?* (Middlesex: Penguin, 1972).

<sup>10</sup> John Edward Williams, *Stoner: A Novel*, (London: Vintage, 2012), 26.

<sup>11</sup> H. L. Miller, *Creative Learning and Teaching* (New York: Charles Scribner Sons, 1927), 120.

<sup>12</sup> Bligh, *What's the Use of Lectures?* 20-50.

So why did we persist for so long to teach by relying so heavily on such a flawed tool?

Inertia and scale.

Before the Second World War, the number of people attending university in Australia was tiny. In 1914, it sat around 0.1%, or 4,724 students<sup>13</sup>. Since there were only six universities in the country, this is an average of 712 students per university.

Many modern high schools are bigger.

At that scale, education can be based on individualised attention. Lectures are part of the mix, but it is possible to have a small tutorial and a directly personal relationship with the lecturer.

The Canadian writer Stephen Leacock described the scene at Oxford around that time as follows:

“We go over to his rooms,” said one student, “and he just lights a pipe and talks to us...” From this and other evidence, I deduce that what an Oxford tutor does is get a little group of students together and smoke at them. Men who have been systematically smoked at for four years turn into ripe scholars...A well-smoked man speaks and writes English with a grace that can be acquired no other way.”<sup>14</sup>

Remove the pipe smoke, as well as the all-male scene, and the experience conjured up is the romantic image of university education that fuels so much commentary.

It allows for many of the types of teaching and learning that we know today to be effective.<sup>15</sup>

It enables micro- and peer teaching; where students teach each other in small groups, then discuss the lesson afterwards. It enables feedback from the student to the tutor, enabling them to individualise learning approaches. It enables the deep exploration of questions, texts and values, and it encourages the student to seek their own answers and interpretations.

However, Australia established more universities and by 1960, there were 53,000 students at university.<sup>16</sup>

This process was the forerunner of the “massification” of higher education that developed from the 1980s with the incorporation of Institutes of Technology and Colleges of Advanced Education into the Australian university system - and mass education requires teaching at scale.

One would have to be a peculiar kind of elitist to regard the broadening of access to university education to a wider cross section of society as anything other than a major benefit.

---

<sup>13</sup> Commonwealth Bureau of Census and Statistics, *Official Year Book of the Commonwealth of Australia 1916* (Melbourne: McCarron, Bird & Co, 1916), 815.

<sup>14</sup> S. Leacock, “Oxford as I See It,” *Harpers*, 144, (May 1922): 741.

<sup>15</sup> J. Hattie, *Visible learning: A synthesis of meta-analyses relating to achievement* (London: Routledge, 2008).

<sup>16</sup> B. Jongbloed, “Higher Education in Australia: IHEM Country Report,” *Center for Higher Education Policy Studies, The Netherlands* (January 2008): 17.

Although university students are still overwhelmingly drawn from higher socio-economic backgrounds, there has been a remarkable democratisation of access over the past fifty years.<sup>17</sup> Increased student access in Australia from the 1970s, followed by the truly revolutionary introduction of the contribution scheme (first known as HECS and now as HELP) that defers fees through the taxation system, has allowed merit and aspiration to play a stronger role in access to a university education.

But as universities and their classes became larger, the serendipitous individualised attention of smaller courses and small tutorials largely disappeared. While the whole university system increased in scale, the way we taught students remained focused on the lecture and tutorial system. It was the accepted form of teaching, and lectures could expand to meet the growing scale.

And so we can understand that not all the teaching methods of our earlier golden ages were either effective or exciting – and that it was the individualised attention possible in the small tutorial which was the gold standard of effective pedagogy.

Challenges to teaching due to the scale of university enrolments in degrees continue today, and are added to by the increasing diversity of students in those large classes. The ratio of staff to students across Australian universities went from 1:13 in 1990 to more than 1:22 today.

However, the changes in the way teaching and learning is being undertaken in the 21st century are on their way to providing a newly personalised, varied and exciting experience, which does deliver truly effective learning.

## What we teach

But before I turn to the way pedagogy is changing, there is another aspect of the ‘crisis’ in university education that is also commonly raised as a departure from an earlier golden age. This concerns what is taught in degrees. There are laments about an increasingly vocational, utilitarian and specialised focus – a decline in the challenge to and deepening of intellect that should be the hallmark of a university education.

Here is Masterman again:

“I believe a man who has been properly grounded in, say, ancient history, or indeed any Arts subject, has acquired the power of briefing himself from books. If, for example, he accepted a post in the cloth industry, he could educate himself on all that was essential in that particular sphere....A University education makes a man fit to take up any post because his brain is trained and adaptable”.<sup>18</sup>

Masterman’s words reflect the philosophy of education at Oxford (about which he was writing) and indeed this advocacy of a ‘liberal education’ is the essence of John Henry Newman’s classic work *The Idea of a University*<sup>19</sup>. In that book Newman contrasts his

---

<sup>17</sup> T. Pitman, P. Koshy, and J. Phillimore, “Does Accelerating Access to Higher Education Lower Its Quality? The Australian Experience,” *Higher Education Research and Development*, 34, 3 (2015): 609-623.

<sup>18</sup> Masterman, *To Teach the Senators Wisdom*, 166-167.

<sup>19</sup> J. H. Newman, *The Idea of a University* (Dublin: Ashfield Press, [1889] 2009).

ideal with the development of a professional skill, or a utilitarian end to education. The liberal education he champions is one in which the student.

“.. apprehends the great outlines of knowledge, the principles on which it rests, the scale of its parts, its lights and its shades, ... A habit of mind is formed which lasts through life...”<sup>20</sup>

And Newman concludes that a university education has a purpose, but not one that is described by those who require it to serve business or economy. It is to serve a greater good:

“.[it] is the great ordinary means to a great but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at supplying true principles to popular enthusiasm and fixed aims to popular aspiration, ..., at facilitating the exercise of political power and refining the intercourse of private life.”<sup>21</sup>

The romanticism of ivy clad halls, smoky tutorial rooms and grand pursuit of knowledge for its own sake are the tropes and touchstones of a golden age against which much of the criticism of current university education is measured.

And yet by the time Monash was founded in the 1960s, it was clear that our universities were charged with providing graduates ready to step into the professions and to drive the productivity of the twentieth century economy<sup>22</sup>.

Sir Robert Blackwood, who became foundation Chancellor of Monash University, noted:

“... the rapid expansion in population and industrial investment in Victoria in the post-war years and the likelihood of even faster expansion in the years ahead. The community would need more graduates in all professions, teaching, administration, law, commerce, medicine and so on. Industry in particular would require far more trained at all levels in scientific and technological disciplines.”<sup>23</sup>

Universities have become the site for all professional education as they took over the apprenticeship models that formerly applied in fields from law to engineering, and health, through to the areas of commerce and management.

And knowledge proliferated and transformed the humanities, and expanded the social sciences and sciences so that there was a wealth of new fields to explore. When I began as an undergraduate, most of the fields that now crowd the curriculum of commerce or business degrees were not available as majors. It was expected that I would finish my degree with a full and deep understanding of economics. Today students can complete commerce or business degrees without ever completing a major in economics. My university was then still refusing to teach sociology because it was an upstart discipline not to be compared with anthropology, history, psychology or politics.

---

<sup>20</sup> Newman, *The Idea of a University*, 101.

<sup>21</sup> Newman, *The Idea of a University*, 177-178.

<sup>22</sup> Australian universities from their beginnings in the mid-nineteenth century have always been dominated by providing degrees for the major professions needed by a new and growing nation, rather than the liberal education of the founding universities of the United Kingdom or the United States.

<sup>23</sup> R. Blackwood, *Monash University: The First Ten Years* (Melbourne: Hampden Hall, 1968), 8.

The curriculum of most universities now bears little relation to the ideal of a liberal education advocated by Newman – and indeed in Australia it really never cleaved to this model. There are two main differences.

First there is a stronger emphasis on specialisation, including through majors in generalist degrees such as Arts and Science. Specialisation signals depth of understanding of a field and much (though not all) is directed to professional and vocational ends. Not just an engineer, but a civil or a mechatronics engineer, not only a lawyer but someone with another degree majoring in international relations or criminology or marketing, or a scientist specialised in astrophysics or computational science. There is a bewildering array of specialisations, which recognise the increasing complexity of knowledge and its applications in the work that we do in an advanced economy.

Second, there is greater choice and flexibility for students to choose where they will focus their interests and how they will combine them in the degrees they choose to study. While we have much further to go, there is more emphasis on ensuring that a student masters and develops the skills and capabilities that a particular degree requires, rather than insisting that they all study the same subjects or units.

And, as a consequence of increased specialism, a broader range and a larger number of academics interact with each student. The curriculum necessitates more relationships, which are probably by and large shallower. In this new world the single all-seeing, all-knowing guide is less possible and the student navigates the curriculum with more independence.

And more choice means that cohorts of students are not formed as easily by bringing the same group together in the same classes year after year. Curriculum choice means that many students will find themselves with different groups of students each year and for each unit. They will be exposed to more students with more varied experiences and backgrounds. There will be little opportunity for a student to suppose that the world is made up of people like them.

## **To Begin Anew**

University education is indeed not what it once was.

Access to a university degree is now more open than it has ever been. Access to the knowledge that supports understanding has democratised as the internet opens rich and diverse materials from across the world to a student at the far ends of the Antipodes. Instead of experiencing one university during a degree, many students get a chance to study at more than one. Some 25 per cent of Monash undergraduates will study abroad during the course of their degree, whether in the Americas, Europe or Asia.

And in order to access employment in the professions or major organisations, to tackle complex and wicked problems of society or environment, or to fuel the ideas and expertise that will build something new, a university education is more important than ever before.

So much is different, the scale of the university and its classes, the variety and diversity of its people and its offerings.

And yet.

Digital education, still in its early stages, is recasting the way we teach and students learn. Personalisation of education is upon us<sup>24</sup>; digital course material can be assembled and reconstituted to build more individualised pathways. We have the opportunity to build more flexibility and choice into the curriculum and how it is navigated to respond to the strengths and preparation, as well as the interests, of the students in a course or a class.

The broad exploration of material to be brought into the class for interrogation and discussion, which is crucial to Newman's vision, is facilitated by the flexibility, richness and personalisation available in the digital world.

Learning analytics or the analysis of the way students read and respond to material and to assessment is revolutionising the way an academic understands what their students know and what is capturing their interest.

With online materials and assessment in learning management systems, reports that show the lecturer who reads what, when and for how long are available. Assessment that is not just for grades, but is formative, that punctuates the material and makes student interactions available to the academic shows well before a final assignment or examination where more work is needed and by whom.

One advantage of the small tutorial was that it forged a deep relationship between the tutor and the student. The tutor could learn the student's way of thinking, their strengths and weaknesses, their interests and habits of mind. We have not been able to provide these insights and the motivation they provide to learning for all the students in our large classes. Nor indeed was the tutor of those earlier days always as perceptive or engaged as we might have wished.

The customised reports available through digital education provide insights and the opportunity to intervene effectively to improve learning. Discussion of learning analytics is strong and lively in universities and we will see its impact on how well students learn in the years ahead.

And it is not only personalised learning, but also the ability to make the group of students more active and more central to their learning than was ever possible in the large lecture, where too many times the fight to stay awake was the major activity.

Take the group learning that is emphasised in Lucy's first-year engineering lectures. Here is Masterman again:

"If you collect all these young men here together in ...the most impressionable years of their lives, they will learn from each other and gain much more than they will get from lectures or tutorials or even from instruction...in a laboratory."<sup>25</sup>

In the blended learning that is part of the 'flipped classroom' earlier described, the students spend more time as a group solving problems that require the application of the knowledge they gained prior to class. There is more time for this active learning as the lecture is curtailed.

---

<sup>24</sup> M. Brown, "Trajectories for Digital Technology in Higher Education," *Educause Review*, 50, 4 (2015): 16-28.

<sup>25</sup> Masterman, *To Teach the Senators Wisdom*, 57.

There is less time needed in class for the student to navigate the vast and tangled thicket of information out there and more time for them to test their understanding and skills with others – building broader and deeper capabilities. This gleaming new world is not only in the elusive digital realm, for digital education allows a university education that gives more time and emphasis to groups and projects, rather than lectures and examinations.

Campuses are transforming as spaces are designed for students to work independently in groups and on projects, as lecture halls are replaced by the lectorial where the lecturer becomes a guide, and where the Church of Secular Coffee on the Clayton campus provides spaces for study alongside the Science student common room and the Matheson Library.

Perhaps this new world sounds less romantic to some – although the romance of a gleaming new future is not to be abjured.

In 2020 when Lucy's cousin, Charlie, comes to Monash what will he find?

His mobile device will take him from enrolment through class to café. He will have a portal that allows him to navigate his degree and units, but will also aggregate feedback on his work from his tutors and the outputs of his assignments and projects. He will be able to access learning materials from the cloud on the lawn or in the library. He will see less of lecture halls and more of rich media classrooms and making spaces, in which he and other students will undertake their studies. He will have more choice of classes that span groups beyond his campus and location. He will be part of a more active, flexible, group-based educational experience than we see today.

Of course this is a supposition, the future will unfold in ways we cannot predict. And the level of funding for universities will affect the speed and richness of the transformation accomplished.

But this change will come because to meet the needs of an increasingly complex, mobile and urbanised society in a globalised and volatile economy in a fragile environment, we need many graduates with broad understanding and deep skills. This is not a world where an elite group can ponder our future. It is one in which many graduates must work to create and sustain the opportunities and possibilities we see before us and to mitigate or eliminate the fates we hope never to experience.

We have all the elements to bring forth a golden age of learning and teaching in universities that combines the depth and quality we have always sought, with a dazzling variety and openness that we have never seen before.

It seems to me that it is this golden age – at whose dawn we stand – that we must strive to support.

Some may yearn for a great age of some earlier century. But they are not our years, nor those of the students who will come next year to university. Our students face the possibilities of their great age. Let us make room for them and let their 'golden years begin'.

## Bibliography

- Blackwood, R. *Monash University: The First Ten Years*. Melbourne: Hampden Hall, 1968
- Bligh, D. A. *What's the Use of Lectures?* Middlesex: Penguin, 1972
- Bok, D. *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should be Learning More*. Princeton New Jersey: Princeton University Press, 2010
- Brame, Cynthia J. "Flipping the classroom." Centre for Teaching. Accessed July 30, 2015. <http://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/>
- Brown, M. "Trajectories for Digital Technology in Higher Education." *Educause Review* 50, 4 (2015)
- Commonwealth Bureau of Census and Statistics. *Official Year Book of the Commonwealth of Australia 1916*. Melbourne: McCarron, Bird & Co, 1916
- Crouch, C. H. and E. Mazur. "Peer Instruction: Ten Years of Experience and Results." *American Journal of Physics* 69 (September 2001)
- Crow, M. M. and Darbars, W.B. *Designing the New American University*. Baltimore: John Hopkins University Press, 2015
- DesLauriers, L., E. Schelew and C. Wieman. "Improved Learning in a Large-Enrolment Physics Class." *Science* 332 (May 2011)
- Gaita, R. "To Civilise the City." *Meanjin* 71, 1 (2012), [meanjin.com.au/essays/to-civilise-the-city/](http://meanjin.com.au/essays/to-civilise-the-city/)
- Hake, R. "Interactive-Engagement Versus Traditional Methods: A Six-Thousand-Student Survey of Mechanics Test Data for Introductory Physics Courses." *American Journal of Physics* 66, 64 (1998)
- Hattie, J. *Visible learning: A Synthesis of Meta-Analyses Relating to Achievement*. London: Routledge, 2008.
- Leacock, S. "Oxford as I See It." *Harpers* 144 (May 1922)
- Jongbloed, B. "Higher Education in Australia: IHEM Country Report." *Center for Higher Education Policy Studies*. (January 2008).
- Manne, R. "The University Experience – Then and Now." *The Conversation*, Oct 19, 2012, [theconversation.com/the-university-experience-then-and-now-10135](http://theconversation.com/the-university-experience-then-and-now-10135)
- Martyr, Philippa. "Failing by Degrees." *Policy* 28, (Winter 2012)
- Masterman, J. C. *To Teach the Senators Wisdom or An Oxford Guidebook*. London: Hodder and Stoughton, 1952
- McKeachie, W. "Procedures and Techniques of Teaching: A Survey of Experimental Studies." *In The American College: A Psychological and Social Interpretation of the Higher Learning*, edited by N. Sandford. New York: Wiley, 1962
- Miller, H. L. *Creative Learning and Teaching*. New York: Charles Scribner Sons, 1927
- Murray, K. *Report of the Committee on Australia's Universities*. Canberra: Commonwealth Government Printer, 1957
- Newman, J. H. *The Idea of a University*. Dublin: Ashfield Press (1889) 2009
- Pitman, T., P. Koshy, and J. Phillimore. "Does Accelerating Access to Higher Education Lower Its Quality? The Australian Experience." *Higher Education Research and Development* 34, 3 (2015)
- Shelley, P. B. *Hellas, A Lyrical Drama*. London: C. and J. Ollier, 1822 [ebooks.adelaide.edu.au/s/shelley/percy\\_bysshe/s54cp/volume16.html](http://ebooks.adelaide.edu.au/s/shelley/percy_bysshe/s54cp/volume16.html)
- Taylor, M. C. *Crisis on Campus: A Bold Plan for Reforming our Colleges and Universities*. New York: Alfred Knopf, 2010
- Williams, John Edward. *Stoner: A Novel*. London: Vintage, 2012

**The Golden Years Return:  
How will we change Australian higher education?**

Text © Margaret Gardner 2015

Published by:

**Mannix College**

Wellington Road  
Monash University  
Victoria 3800  
Australia

**[www.mannix.monash.edu](http://www.mannix.monash.edu)**

A missionary endeavour of the Catholic Archdiocese of Melbourne  
Mannix College is a residential college affiliated with Monash University.

The Newman Lecture, named in honour of Blessed John Henry Newman,  
commenced in 1981 and is delivered annually.

