

A Brief History of Australian Universities*

STEPHEN LAKE, RENAUD JOANNES-BOYAU, ADAM LUCAS,
ADRIAN McCALLUM, JUSTIN O'CONNOR, ALESSANDRO
PELIZZON, PETER TREGEAR AND OLIVER VODEB

This article aims, firstly, to provide a sketch of the humanistic tradition of education from Classical Antiquity through to the present, as the cultivation of the whole person as an individual and as a responsible citizen, which arguably still underpins European and other western education systems but which has been eroded in Australia. Secondly, this article aims to provide an outline history of universities in Australia from 1850 to the present, highlighting by way of examples consistent patterns and failures, and the sources of challenges now facing the sector. Thirdly, this article provides a brief summary of those challenges, some of which have been exacerbated but not caused by COVID-19.

KEYWORDS: Australian universities, history, history of education, history of universities, educational systems.

Pedagogical Prelude

The dominant western tradition of education is around 2,500 years old and originated in ancient Greece (Jaeger 1944). As it evolved in Antiquity, it comprised a 'liberal' (and comprehensive) education in philosophy, which included the natural sciences and medicine, and other Arts. Its primary purpose was to prepare individuals to be responsible citizens (Dewey 1916), and increasingly, since the Italian Renaissance, the 'formation' of the whole human person and the development of their potential and talents. The original meaning of a 'liberal' education had nothing to do with direct employment. William of Conches, for example, wrote in 1147/9:

[...] those who could advance in science [i.e. knowledge, scientia] if they devoted themselves to studying [...] follow a different path in life: they crave wealth and profit and, while impoverishing their minds, only labor to enrich their coffers (Ronca and Curr 1997: 4)

This remains the governing conception in most European education systems today, and is the understanding of education embedded in UN human rights (ICESCR 1966, art. 13). To varying degrees, this traditional conception of tertiary education has also shaped Anglophone education systems (Rudolph 1990).

The modern university is a direct heir of its medieval foundations (Ridder-Symoens 1992, 1996; Rüegg

2004, 2011), both in constitution and in conception. The medieval appellation *universitas* referred primarily to the body of students, who collectively enjoyed certain legal privileges. Universities were then chartered by the papacy or a monarch, and were governed by their academic community. They generally consisted of one undergraduate faculty of philosophy, and three higher faculties of canon and secular law, medicine, and theology. Admission to a higher faculty required completion of a baccalaureate in philosophy. The philosophy curriculum was based upon the seven *artes liberales*, comprising the *trivium* of Latin grammar, rhetoric, and logic, and the *quadrivium* of arithmetic, geometry, astronomy, and music (Koch 1959; *Artes libérales* 1969; Wagner 1983). Curricula from the thirteenth century onward illustrate the breadth of philosophy, including the natural sciences, ethics, and the linguistic Arts (Thorndike 1944: 64-5; Hamesse 1974; Lafleur 1988). The Arts and the natural sciences were thus traditionally united within a single conception of knowledge, and they remained so (in some sense) until the earlier twentieth century (e.g. Taylor 1975; Rohs 1991; Lessing 2011). The Scientific Revolution (Mandrou 1973; Butterfield 1957; Cohen 1987; Grayling 2016; Kuhn 1970) and the Enlightenment (Dupré 2004; Israel 2001, 2006, 2012; Kondylis 2002) would have been unthinkable without their participants having been educated in both discipline areas, and areas such as law (Bloch 1961; Haakonssen et al. 2006) and the Arts (Summers 1987) were profoundly influenced by a new and changing understanding of Nature [i.e. natural sciences] through the early modern period (Beiser 2002, 2003; Blanning 2010;

Rousseau 1750). Therefore, the polarisation between ‘the two cultures’ that appears in the Anglophone world since, for example, Snow (1959/1964; Leavis 1962; Berlin 1974) is of very recent vintage.

As Campbell and Proctor note, every national education system reflects its longer history of, its attitude towards and its notions of, the importance of education (*Griffith Review* 11/2006). Since the 1980s, Australia’s university system has progressively departed from the traditional western history and philosophy of higher education to become increasingly anomalous, rejecting both its humanistic and civic importance and orienting itself almost exclusively towards purported economic needs. The early settlement history, the ‘tyranny of distance’ (Blainey 1966), and initial economic under-development have arguably always disposed Australian society in this direction. Notwithstanding the original influence of British, American and German universities on Australia (Forsyth 2014: 7-14; Coaldrake and Stedman 1998: 7-11), the modern ‘idea of an Australian university’ (Watts 2002; Duke 2004) is no longer a reflection of those traditions.

Colonial Beginnings

In Australia, three periods of university foundations can be readily identified: firstly, the four universities established before Federation, and the two more a decade later; secondly, from the ‘Menzie’s era’ to the Whitlam years, with the establishment of twelve universities; thirdly, the Hawke-Keating era. Beginning with Bond University in 1987, there were also attempts to establish other private institutions: some failed, while others struggled and needed government funding to survive. While there are now four private universities, overall the attempt to create a diverse public-private university landscape in Australia on an American model has not succeeded (Maslen and Slattery 1994; Coaldrake and Stedman 1998; Forsyth 2012, 2014; Macintyre 2010).

The University of Sydney was founded in 1850 following closure of two earlier colleges and demand for locally qualified barristers. The University of Melbourne followed soon thereafter in 1853. The establishment of these colonial universities was not a response to widespread public demand, but the initiative of some leading citizens to provide professional education, to prepare young men for future leadership positions, and to have a ‘civilising’ influence on the colonies. The Universities of Sydney, Melbourne, and Adelaide (1874) reflected a combination of influences of traditional Oxbridge, and innovative London (1836) and Scottish universities. The Universities of Tasmania (1890) and Queensland (1909) looked increasingly to progressive regional British universities, and the University of Western Australia (1912) to ‘land grant’ American universities. ANU’s (1946) conception

as a research-oriented university was a response to war experience and the anticipated needs of the Cold War for more trained researchers.

By 1895, four universities enrolled 0.16% of the population. By 1914, 3,300 students (almost 1.0% of the population) were enrolled at six universities. By 1939, however, universities enrolled only 14,000 students, or 0.20% of the population. From 1881, women were admitted to universities, and, in some disciplines, by 1914 constituted 50% of enrolments. In this early period, half or more academic staff came from Britain, or were Australians trained there. The first Australian PhD was awarded by the University of Melbourne in 1948. Universities received initial private endowments, but depended upon continuing state government funding, which was unreliable and insufficient, especially during the Depression era. With some exceptions, little research was done, and was not regarded as important until the post-war period. Early attempts to establish practical disciplines such as engineering in universities had little success.

The ‘Menzie’s Era’

Post-war developments in education were influenced by an influx of returned servicemen into universities. Enrolments rose to 32,000 by 1948, and increased by 30,000 again through the 1950s, although the program supporting returned service personnel ended in 1953. Tertiary education, it was then argued, needed to support economic development, and more teachers for the ‘baby boom’ generation were needed. However, universities lacked sufficient resources to manage such expansion.

As a result, in 1951, the Commonwealth provided the first grants to universities, and in 1957 established a committee on universities, which produced the *Murray Report*. Among other things, this found overcrowded lecture theatres, high attrition rates, underpaid staff, a dearth of university-based research, a lack of adequate equipment and funding, a culture (in some disciplines) that viewed postgraduate work as unrelated to their interests, and that education needed to prepare graduates for different types of career, but also to strengthen a democratic civil society and to preserve culture. The report recommended increased funding, and then Prime Minister Robert Menzie’s established a permanent *Australian Universities Commission*. By 1960 there were ten universities, including the newly established University of New South Wales (1949), University of New England (1954), and Monash University (1958).

Attention then turned to state-based technical and agricultural colleges, institutes of technology, and teacher training colleges. The *Martin Report* (1965) established a binary system of post-secondary education divided

between universities awarding degrees, and Colleges of Advanced Education (CAEs) providing vocational training to diploma level. CAEs would be funded by the Commonwealth, and by the 1980s their enrolments exceeded those of university students. University enrolments doubled through the 1960s, primarily due to the 'baby boom' generation reaching university age, with such growth continuing into the 1970s. Pressure for more university places led to a host of new universities: La Trobe (1964), Macquarie (1964), Newcastle (1965), Flinders (1966), James Cook (1970), and Griffith (1971).

The Martin Report also found that university staff numbers had increased by 350% over the previous decade, and expected this would continue for another decade, although it doubted that Australian universities were capable of providing sufficient graduates for that purpose. Expansion and funding challenges increased pressure on management: the first full-time Vice Chancellors (VCs) appeared at Sydney in 1927, Melbourne in 1934, and Adelaide in 1948. At first, their role was primarily dedicated to raising money and administering relatively independent departments. Furthermore, it became seen as necessary to appoint senior professors on merit to permanent administrative positions as Deans. Reform of management practices in the 1960s-1970s led to the establishment of student consultative committees, the overall reorganisation of distinct disciplines as schools and large departments, and the general reduction of the previously wider powers of professors to designated positions of responsibility.

The Whitlam Years

Post-war growth slowed by the early 1970s, and university revenues were scarcely greater than their costs. Under such circumstances, universities could not sustain indefinite rapid growth. In 1974, the Commonwealth thus assumed full responsibility for funding tertiary education, and established the *Commonwealth Tertiary Education Commission*. Demographic pressure for continued growth remained, but some students were channelled into cheaper CAEs and Technical and Further Education (TAFE) colleges. Murdoch University was established in 1973, Deakin University in 1974, and the University of Wollongong in 1975. In 1974, the Whitlam government removed student fees for university. However, free education, even accompanied by generous scholarships, failed to result in the hoped increase in university enrolments, which only occurred in the late 1980s, when free education was replaced by the *Higher Education Contribution Scheme* in 1988.

Throughout the period 1960-1975, funding for academic staff kept pace with student enrolment numbers, and an acceptable full-time teacher–student ratio was maintained.

In 1982 this ratio was around 1:11, but by around 1992 it had fallen to 1:15, and it is now on average 1:30.5, with sixteen universities higher than this in 2021 (THES 2021). While student numbers remained stable through the same period, recurrent grants per student fell by 6% between 1980-1984, and academic appointments were then frozen.

The 1979 *Williams Report* under the Fraser government anticipated radical shifts in policy and attitudes in the 1980s. The Federal Government ceased to regard education as a right or as being concerned with culture and a broader civilising project, and rather was increasingly seen as serving national economic growth by directing it towards workforce needs. The re-introduction of student fees was proposed, some amalgamations of CAEs occurred, academic tenure was attacked, and concerns about credentialism were raised.

The Dawkins 'Reform'

The most radical transformation of the Australian higher education sector occurred under then Minister for Education (1987-1991) John Dawkins. Its concerns included globalisation, increasing use of technology in workplaces, international trends away from manufacturing towards a post-industrial 'knowledge society', Australia's lack of international competitiveness (Jones 1983), a renewed concern about the need to support economic growth and development, the 1982-3 recession, tensions in the binary university-CAE system, an overall trend towards the privatisation of public entities, and public sector reforms involving further cuts to public funding and government restructuring, which inevitably also affected universities. Dawkins imposed a top-down reform only superficially informed by various consultative processes, with particular reliance on the 1985 *Review of Efficiency and Effectiveness in Higher Education*. In 1987, he released a 'green discussion paper', and six months later, in 1988, a little amended 'white policy paper'.

According to Dawkins's plans, the university sector would be streamlined, with fewer and larger institutions. The federal education department would negotiate a profile of activities with each university in terms of national needs and priorities and allocate funding on that basis. All universities would compete for public research funding, via the *Australian Research Council* (established in 1988) grants. At the same time, government divested itself of tight control over internal governance of universities, which, via their State-based enabling legislation, progressively and increasingly passed to their VCs, boards, and substantively increased managerial levels of Pro-Vice Chancellors (PVCs), Deputy-Vice Chancellors (DVCs) and Deans.

The implementation of this 'reform' was rapid, and resulted in eighteen universities and forty-seven CAEs in 1985 becoming thirty universities by 1991, and thirty-five by 1995.¹ Criticism of these changes was considerable but largely ineffective. Notwithstanding initial flaws becoming readily apparent, the larger implications of this 'reform' did not become very visible until the COVID-19 pandemic. Government and other reviews of the Dawkins 'reform' did not in fact identify many of its implications as being problems at all (Croucher et al. 2013).

The Howard Government

In 1996, the federal budget imposed 'efficiency dividends' on universities. Over a four-year period, \$2 billion was cut from university funding. The Federal Government refused to pay university salary increases based on Enterprise Bargaining Agreements above a minimum safety-net figure. These measures imposed unprecedented constraints on universities, which were then forced to pay salary increases beyond the government base level themselves: this necessitated cutting either academic staff costs or other expenditure. Concurrently, degrees in excess of \$100,000 were introduced for international students. To ensure the maintenance of quality of education, three 'quality assurance rounds' were held, with short institutional visits by a small group of experts. However, Coaldrake and Stedman assert that this process was flawed due to its extreme rapidity, and resulted in no permanent regulation (Coaldrake and Stedman 1998: 21).

The subsequent *West Review* (1998) was intended to provide strategies for the sector for the next two decades. It emphasised the importance of quality teaching, the need for research to contribute to economic growth, some deregulation and flexibility in administration, increased competition in the sector and the need to adapt to new technologies, further consideration of the relationship between university and Vocational Education and Training (VET) sectors, and that the sector could not continue to be funded as it had been.

The government did not immediately address its recommendations, and the *Nelson Review* (2002) further found that course delivery costs were increasing, while disadvantaged students remained under-represented and attrition rates were around 30%, universities were over-enrolling, graduation rates reflected an OECD average but PhD graduation rates were comparatively high, the teacher–student ratio was higher in Australia than in other countries, universities in Australia were more dependent on student contributions for funding than many (though not all) comparable countries, and total expenditure as GDP% was lower in Australia at 1.5% than in America, NZ, Canada and Sweden (but higher than in the UK). Furthermore, the report found a lack

of financial and corporate expertise in the governance bodies of universities (despite already enormous changes in governance towards greater business orientation). As a result, it was recommended that government should determine overall numbers for places across disciplines and universities, and fees should be deregulated, allowing institutions to increase their fees over base rates determined by government.

The government responded with *Our Universities: Backing Australia's Future* (2003), and legislated some measures to take effect in 2005. These focussed upon some increased funding while allowing universities to raise more funding from student fees, new scholarship programs for disadvantaged students, support for more Indigenous involvement as academic staff and in a policy advisory capacity, and measures to improve the overall quality of teaching. The principle of calculating government funding accruing to enrolments across various discipline areas was established, and enshrined in the 2003 *Higher Education Support Act (Cth)*, which defined categories of providers, the framework for funding, and the overall aims of universities. This system was recently modified by the 2020 *Higher Education Support Amendment (Job-Ready Graduates and Supporting Regional and Remote Students) Act (Cth)*.

The 'Enterprise University'

The 'enterprise university', as defined by Marginson and Considine (2000), denotes the managerial transformation of Australian universities already underway through the 1990s as part of the Dawkins 'reform' into their modern structure. Notwithstanding considerable variations in stages of transition and structures, the authors suggest, all tertiary institutions tended to reduced diversity, leading to increased competition while at the same time minimising differences upon which one might be preferred over another.

Arguably, Dawkins sought to simplify the landscape of post-secondary education, increase completion rates of secondary schooling and facilitate greater access to tertiary education, while reducing both government funding of the sector and responsibility for it. This created a fraught environment necessitating stronger economic management and more effective means of attracting other sources of funding. Traditional academic structures of governance were thus viewed as something to be removed. The suggestion emerged, without substantive evidence, that academics required more pervasive evaluation and control to ensure their performance (Forsyth 2014: 99-100), and this alleged academic laziness was used to attack tenure. Academics were routinely characterised as 'god professors', 'elite boys' clubs', 'dead wood', and as impediments to effective

management (Forsyth 2014: 80). This simplistic definition of an entire professional cohort in such simplistic terms nonetheless justified its removal from any governance body, including its own areas of expertise.

Executive power has thus been progressively concentrated in the person of the VC, who delegates powers only to a limited cohort of PVCs/DVCs and Deans; at the same time, academic, student, union, and general community representation on decision-making bodies has been reduced to a largely powerless minority, with many boards effectively 'managed' by VCs. The principal orientation of this governance is financial, not pedagogical or civic, and its model and performance metrics are those of business corporations. Yet, although the entire Australian public is the principal 'stakeholder' in universities, the concept of the university as a public service and resource has been all but destroyed.

Marginson and Considine found that the systems that have replaced the 'community of scholars' in order to achieve both more effective governance of increasingly complex institutions in a changing and challenging environment and a better interface between universities and the economy, have in fact tended to suffocate the very activities they are dependent upon. Allegedly, universities should provide the best possible education to Australian students across all discipline areas, education should prepare graduates for suitable employment, and some university-based research should serve national economic development and needs: overall, such priorities were not new in the 1990s; they emerged in the 1940s.

From the Rudd-Gillard Government to the Abbott-Turnbull-Morrison Liberal Coalition

The 2008 *Bradley Review* was a substantial attempt to examine, yet again, the interface between the tertiary education system and national economic needs, and made forty-six recommendations on funding issues, disadvantaged and regional access to higher education, and issues relevant to improving research capability. It identified as problems diminishing government funding (which needed to be increased by 10% on the base rate), high teacher–student ratios, declining student satisfaction, and risks inherent in over-dependence upon the international student market. The government issued its response in 2009 with *Transforming Australia's Higher Education System*, which accepted many but not all of those recommendations. It commissioned the *Lomax-Smith Review* of 2011 into base funding, and established the *Tertiary Education Quality and Standards Agency* (TEQSA) in 2011 as a national regulator.

TEQSA is primarily responsible for accreditation of providers, determining acceptable use of the appellation

'university', ensuring quality and standards, and addressing other *ad hoc* issues. TEQSA has no more specific sectorial expertise than university governing bodies, nor has it publicly agreed minimum definition of standards, or of mandatory curricula content for degrees to be maintained by all institutions.

In 2014, the incoming Liberal Federal government conducted an overall audit with a view to eliminating duplication and increasing efficiency that also affected universities. Recommendations included reducing funding and increasing the percentage of student contributions, deregulation of fees, and more tightly directing research funding towards national priority areas. The *Kemp-Norton Review* of demand-driven funding further examined these issues and was concerned with overall reduction of government funding while ensuring that the sector remained sustainable within a limited domestic market.

The *Higher Education Support Amendment Act 2020 (Cth)* aimed to induce more students to take STEM and other 'priority' subjects by uncoupling the relationship of fees to costs of course delivery and instead offering lower fees as an incentive, while increasing fees for courses deemed professionally profitable or economically unnecessary. Since 2016, the Coalition government has cut an estimated \$12 billion from higher education funding (Lucas, personal communication). In order to improve regional access to higher education, a network of Regional University Centres (currently 25 since 2018) and Country University Centres has been established. These centres provide local access to video lectures, some tuition, and other resources, but do not all offer full degree programs.

Overall, Australia has long hosted some foreign students under various schemes, beginning with the Colombo Plan in 1950. From modest numbers of international students in the 1980s, numbers have continued to increase at a steady pace since. However, the largest increase of international students at both undergraduate and postgraduate levels and the partial transformation of our university sector into an export industry have occurred over the past decade. This now includes offshore campuses of fourteen Australian universities, and other international partnerships. The number of students thus increased almost exponentially over a very short period of time. In 1960, 53,000 students were enrolled in ten Australian universities; in 1975, the number had tripled to 148,000 students over almost twice as many (eighteen) universities; in 1985, 175,000 students were in nineteen universities; in 1997, over 650,000 students were enrolled in thirty-six universities. In 2019, there were 1,609,798 domestic and 758,154 full-fee international student enrolments at forty-three universities.

Compounded by other problems of university management and inadequate regulation discussed elsewhere in this issueⁱ, the increased reliance on a growing number of international students has rendered Australian domestic higher education profoundly vulnerable, as became apparent at the onset of the COVID-19 pandemic. The pandemic has had further problematic effects on our universities, including enormously increased dependence on distance teaching, increased academic staff workloads, mass redundancies of both full-time and casual academic and support staff, and increased financial constraints (Littleton and Stanford 2021). These problems, however, have not been directly caused by the pandemic, and their causes may be traced directly to the implementation of the Dawkins 'reform'.

Patterns and Problems

This section extrapolates from the foregoing overview (and is supported by the evidence cited there) to posit questions for further consideration. Over the last 50 years, the predominant discourse has focused on an attempt to achieve all tertiary educational goals at the cheapest possible cost. While seeking to limit expenditure, the Menzies and Whitlam governments accepted responsibility to provide what funding was necessary to support higher education as far as possible, and in some cases increased it. It was only with the Fraser and then decidedly with the Hawke government that a fundamental shift occurred, whereupon governments no longer accepted that responsibility in full. This shift has, in turn, forced universities to develop alternative sources of income, including full fee-paying foreign student enrolments, but has also resulted in direct negative consequences for the overall quality of academic employment. High levels of attrition and student dissatisfaction can readily be correlated to the above trend.

Despite many government and other reviews and 'reforms' of the sector over the past 70 years (all of which have been purportedly motivated by the concern to increase accessibility and quality of higher education and to ensure it helps the country to meet national economic challenges), those objectives have never been fully met, and underlying problems, even when recognised by such reviews (such as poor teacher–student ratios, mediocre academic quality and standards), have never been fully and/or, successfully addressed. Instead, a continuous process of sectorial reorganisation, establishment of new bodies, and changes to funding conditions has marked the governmental responses to the various reviews, and yet none of such rapid and often radical changes has resulted in a durable and efficient system.

A variety of government and collaborative agencies now exist that are intended to ensure quality in higher education, including the *Office of Learning and Teaching* (dese.gov.

au) and the *Quality Indicators for Learning and Teaching* (QILT, quilt.edu.au). These reflect recommendations of reviews of the sector, and provide some useful data. Direct input by front-line university academics, however, is conspicuous by its absence, and is consistently mediated by a host of managerial structures. As a result, we posit that the manner in which problems are defined, outcomes and productivity measured, and solutions proposed, fails to fully understand and address the direct causes of those problems as experienced by those who regularly and routinely deal with them (the academic and professional staff, as well as the students), while measures ostensibly intended to address them have instead compounded them.

Regular comparisons with selected overseas tertiary education systems (overwhelmingly other Anglophone countries), rarely appreciate the radical difference in their public funding, governance, academic employment, standards, curricula and accountability, which remain vastly different, as do their underlying philosophy of education and supporting public secondary school systems.

The idea of a 'liberal' education as a defining trait of universities began to be challenged internationally in the nineteenth century by a demand for more technological and scientific teaching and research to support industrialisation.² The commodification of knowledge that has followed increasingly considers education as a consumer product that finances its own economic sector. This has inevitably led to an increasing inability to accommodate multiple conceptions and spheres of knowledge, with the result of rendering any knowledge not perceived to contribute to economic growth redundant. Over the last few decades, such threats to 'liberal' education in America have provoked a considerable response from academics (e.g. Bloom 1987; Donoghue 2008; Nussbaum 2010; Roth 2015; Zakaria 2015; also Collini 2012, 2017; Nichols 2017; Connell 2019; Fleming 2021).

Furthermore, the concept of 'demand-driven' teaching ignores the importance of permanently maintaining universities as a nation's largest concentration of knowledge and expertise, a reservoir of academic experts across a wide range of disciplinary areas for national benefit irrespective of fluctuating 'demand' or the vagaries of international markets and changing intellectual fashions, and the necessity of protecting it precisely in order to be capable of meeting increased 'demand' when it occurs. Such an approach also effectively denies that that reservoir makes any other contribution to the community other than its alleged economic benefit, thus erasing any notion of 'the public university'.

Notions of scholarly community, independence and collegiality have become obsolete and redundant, without a full appreciation of how they contribute to the teaching and research activities of the university, as well as the overall wellbeing and health of a well-informed 'public'. Concepts such as 'lifelong learning', 'critical thinking' and 'problem solving' skills cannot be adequately achieved by universities increasingly deprived of a thriving, responsible, and largely independent academic community.

Conclusion

There is now widespread consensus among academics and within the general community that the Australian university sector needs major reform (Howard 2021). Yet, the precise nature of such reform is open to debate. This article (and others in this issue) has sought to demonstrate that the increased managerialism of university governance has fundamentally failed to ensure the need for a stable and sustainable reform, notwithstanding a host of rapidly subsequent reforms that have not only regularly (and radically) altered the sectorial landscape, but also enshrined a 'demand-driven' discourse that is in direct contrast with the historical notion of a 'public' university and a 'liberal' education.

Numerous reports over decades have identified problems in the universities, yet the ongoing repetition of similar problems throughout all reviews and reports reveal that these problems have not been resolved. This may very well be because the actual causes of problems have been misdiagnosed, and the attempts to resolve them may have instead compounded and perpetuated these problems. For example, the currently much-debated 'national skills shortage' has apparently persisted for thirty years, and is a problem the Dawkins 'reform' was supposed to preclude, not cause (or, at least, perpetuate).

This article began with the traditional function of tertiary education to facilitate the full development of the individual human person and to prepare students to be responsible citizens of a democratic society. Such development has traditionally been seen as independent of any employment considerations, even though, naturally, a liberal philosophy of education and a view of education as professional qualification should be able to co-exist (and have indeed co-existed throughout the centuries). Although it would be naïve to believe that the acceptance of the former would *by itself* have prevented the problems now embedded within Australian universities, the increasing absence of an appreciation of liberal education in Australia constitutes a growing threat to our collective respect for humanity and to the preservation of a healthy democracy.

Naturally, modern universities cannot replicate the exact structures of their medieval forerunners, but they should

strive to replicate the ideals of those institutions, insofar as those ideals have not changed and have benefitted society throughout the centuries. Modern universities should situate their students, their academics and the entire community at the centre of their governance, as the actual constituents and beneficiaries of universities. They should cease to regard education merely as an 'industry' or as a 'consumer product', and should instead re-discover education as a public good and service. Indeed, the concept of 'the public university' requires the resources which universities represent (primarily their academic staff, their students, and all those involved in supporting them) contributing and remaining accessible to the entire community in ways not reducible to national economic priorities or merely through the provision of individualised education.

References

- Artes libéraux et philosophie au moyen âge. Actes du IVe Congrès international de Philosophie médiévale* (Université de Montréal, 27 août-2 Sept. 1967) 1969 J. Vrin, Paris.
- Beiser, F.C. 2002 *German Idealism: The Struggle against Subjectivism, 1781-1801*, Harvard University Press, Cambridge MA.
- Beiser, F.C. 2003 *The Romantic Imperative: The Concept of Early German Romanticism*, Harvard University Press, Cambridge MA.
- Berlin, I. [1974] 1981 'The Divorce between the Sciences and the Humanities', repr. in idem, *Against the Current: Essays in the History of Ideas*, Hardy, H. (ed), Oxford University Press, Oxford, 80-110.
- Blainey, G. 1966 *The Tyranny of Distance: How Distance Shaped Australia's History*, Sun Books, Melbourne.
- Blankenstein, D. et al. (eds) 2019 *Wilhelm und Alexander von Humboldt*, Deutsches Historisches Museum, Berlin.
- Blanning, T. 2010 *The Romantic Revolution: A History*, Modern Library, New York.
- Bloch, E. 1961 *Naturrecht und menschliche Würde*, Suhrkamp, Frankfurt/Main.
- Bloom, A. 1987 *The Closing of the American Mind: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students*, Simon & Schuster, New York.
- Bradley, D. 2008 *Review of Australian Higher Education, Final Report*, Australian Government, AGPS, Canberra.
- Butterfield, H. 1957 *The Origins of Modern Science*, Bell & Hyman, London, 2nd edn.
- Campbell, C. and Proctor, H. 2014 *A History of Australian Schooling*, Allen & Unwin, Sydney.
- Coaldrake, P. and Stedman, L. 1998 *On the Brink: Australia's Universities Confronting their Future*, University of Queensland Press, St Lucia.
- Cohen, I.B. 1987 *The Birth of a New Physics*, Penguin, London, 2nd edn.
- Collini, S. 2012 *What Are Universities For?* Penguin, London.
- Collini, S. 2017 *Speaking of Universities*, Verso, London.
- Connell, R. 2019 *The Good University: What Universities Actually Do and Why It's Time for Radical Change*, Zed Books, London.
- Croucher, G., Marginson, S., Norton, A. and Wells, J. (eds) 2013 *The Dawkins Revolution 25 Years On*, Melbourne University Press, Melbourne.
- Dawkins, J. 1987 *Higher Education: A Policy Discussion Paper*, AGPS, Canberra.
- Dawkins, J. 1988 *Higher Education: A Policy Statement*, AGPS, Canberra.
- Dewey, J. 1916 *Democracy and Education: An Introduction*

- to the *Philosophy of Education*, Macmillan, New York.
- Donoghue, F. 2008 *The Last Professors: The Twilight of the Humanities in the Corporate University*, Fordham University Press, New York.
- Duke, C. 2004 'Is There an Australian Idea of a University?', *Journal of Higher Education Policy and Management* 26, 3: 297-314.
- Dupré, L. 2004 *The Enlightenment and the Intellectual Foundations of Modern Culture*, Yale University Press, New Haven.
- Fleming, P. 2021 *Dark Academia: How Universities Die*, Pluto Press, London.
- Forsyth, H. 2012 'The Ownership of Knowledge in Higher Education in Australia, 1939-1996', unpublished PhD dissertation, University of Sydney.
- Forsyth, H. 2014 *A History of the Modern Australian University*, University of New South Wales Press, Sydney.
- Grayling, A.C. 2016 *The Age of Genius: The Seventeenth Century and the Birth of the Modern Mind*, Bloomsbury, London.
- Griffith Review 11/2006 *Getting Smart: The Battle for Ideas in Education*, ed. Julianne Schultz, Meadowbank QLD, Griffith University.
- Haakonssen, K., Moore, J. and Lieberman, D. 2006 'Natural Jurisprudence and the Science of Legislation', in Goldie, M. and Wokler R. (eds) *The Cambridge History of Eighteenth-Century Political Thought*, Cambridge University Press, Cambridge, 251-375.
- Hamesse, J. (ed) 1974 *Les Auctoritates Aristoteles. Un Florilège Médiéval. Etude Historique et Edition Critique*, Publications Universitaires, Louvain.
- Higher Education in Australia: A Review of the Reviews from Dawkins to Today* 2015 Department of Education and Training, Canberra.
- Higher Education Standards Framework (Threshold Standards)* 2021 Department of Education and Youth, Canberra.
- Howard, J. 2021 *Rethinking Australian Higher Education: Towards a Diversified System for the 21st Century*, Howard Partners, Canberra.
- [ICESCR 1966] 'International Covenant on Economic, Social and Cultural Rights', in Sandy Ghandhi (ed) *International Human Rights Documents*, Oxford University Press, Oxford, 6th edn. 2008: 55-62.
- IP Report 2017 Australian Government, AGPS, Canberra.
- Israel, J.I. 2001 *Radical Enlightenment: Philosophy and the Making of Modernity, 1650-1750*, Oxford University Press, Oxford.
- Israel, J.I. 2006 *Enlightenment Contested: Philosophy, Modernity, and the Emancipation of Man, 1670-1752*, Oxford University Press, Oxford.
- Israel, J.I. 2012 *Democratic Enlightenment: Philosophy, Revolution, and Human Rights, 1750-1790*, Oxford University Press, Oxford.
- Jaeger, W. 1944 *Paideia: Die Formung des griechischen Menschen*, 3 vols, Walter de Gruyter, Berlin.
- Jones, B. 1983 *Sleepers, Wake! Technology and the Future of Work*, Oxford University Press, Melbourne, 2nd edn.
- Koch, J. (ed), 1959 *Artes liberales: Von der antiken Bildung zur Wissenschaft des Mittelalters*, E.J. Brill, Leiden.
- Kondylis, P. 2002 *Die Aufklärung im Rahmen des neuzeitlichen Rationalismus*, Felix Meiner Verlag, Hamburg.
- Kuhn, T. S. 1970 *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago, 2nd edn.
- Laffeur, C. (ed) 1988 *Quatre Introductions à la Philosophie au XIIIe Siècle. Textes Critiques et Etude Historique*, Institute d'Etudes Médiévales, Montréal.
- Leavis, F.R. 1962 *Two Cultures? The Significance of C.P. Snow*, Collini, S. (ed) Cambridge University Press, Cambridge.
- Lessing, H-U. 2011 *Wilhelm Dilthey: Eine Einführung*, Böhlau Verlag, Cologne.
- Littleton, E., and Stanford, J. 2021 *An Avoidable Catastrophe: Pandemic Job Losses in Higher Education and their Consequences*, The Australia Institute/Centre for Future Work, Canberra.
- Macintyre, S. 2010 *The Poor Relation: A History of Social Sciences in Australia*, Melbourne University Press, Melbourne.
- Mandrou, R. 1973 *Des humanistes aux hommes de science, XVIe et XVIIe siècles*, Éditions du Seuil, Paris.
- Marginson, S. and Considine, M. 2000 *The Enterprise University: Power, Governance and Reinvention in Australia*, Cambridge University Press, Cambridge.
- Martin, L.H. 1965 *Tertiary Education in Australia: Report of the Committee on the Future of Tertiary Education in Australia*, Australian Universities Commission, AGPS, Canberra.
- Maslen, G. and Slattery, L. 1994 *Why Our Universities Are Failing: Crisis in the Clever Country*, Wilkinson Books, Melbourne.
- Murray, K. A.H. et al. 1957 *Report of the Committee on Australian Universities, Committee on Australian Universities*, Commonwealth Offices, Melbourne.
- Nelson, B. 2003 *Our Universities: Backing Australia's Future*, Department of Education, Science and Training, AGPS, Canberra.
- Nichols, T. 2017 *The Death of Expertise: The Campaign against Established Knowledge and Why It Matters*, Oxford University Press, Oxford.
- Nussbaum, M. C. 2010 *Not for Profit: Why Democracy Needs the Humanities*, Princeton University Press, Princeton.
- Review of Efficiency and Effectiveness in Higher Education* 1986 Commonwealth Tertiary Education Commission, AGPS, Canberra.
- Ridder-Symoens, H. de (ed) 1992 *A History of the University in Europe, I, Universities in the Middle Ages*, Cambridge University Press, Cambridge.
- Ridder-Symoens, H. de, (ed) 1996 *A History of the University in Europe, II, Universities in Early Modern Europe (1500-1800)*, Cambridge University Press, Cambridge.
- Rohs, P. 1991 *Johann Gottlieb Fichte*, C.H. Beck, Munich.
- Ronca, I. and Curr, M. (eds) 1997 *William of Conches, A Dialogue on Natural Philosophy (Dragmaticon Philosophiae)*, University of Notre Dame Press, Notre Dame IN.
- Roth, M. S. 2015 *Beyond the University: Why Liberal Education Matters*, Yale University Press, New Haven.
- Rousseau, J-J. [1750] 1993 *A Discourse on the Arts and Sciences*, trans. in idem, *The Social Contract and Discourses*, Cole, G.D., Brumfitt, J., Hall, J.C. Jimack P. (eds), J.M. Dent, London.
- Rudolph, F. 1990 *The American College and University: A History, Introductory Essay and Supplemental Bibliography* by Thelin, J.R. University of Georgia Press, Athens GA.
- Rüegg, W. (ed) 2004 *A History of the University in Europe, III, Universities in the Nineteenth and Early Twentieth Centuries (1800-1945)*, Cambridge University Press, Cambridge.
- Rüegg, W. (ed) 2011 *A History of the University in Europe, IV, Universities Since 1945*, Cambridge University Press, Cambridge.
- Snow, C.P. 1959/1964 *The Two Cultures*, Collini, S. (ed) Cambridge University Press, Cambridge.
- Summers, D. 1987 *The Judgement of Sense: Renaissance Naturalism and the Rise of Aesthetics*, Cambridge University Press, Cambridge.
- Taylor, C. 1975 *Hegel*, Cambridge University Press, Cambridge.
- Tertiary Education Quality and Standards Agency Act 2011*, Compilation 2021, Australian Government, AGPS, Canberra.
- Thorndike, L. (ed) 1944 *University Records and Life in the Middle Ages*, Columbia University Press, New York.
- THES 2021 <https://www.timeshighereducation.com/student/best-universities/top-universities-best->

- student-staff-ratio-2021 (accessed 21/10/2021).
Transforming Australia's Higher Education System 2009
 Commonwealth of Australia, AGPS, Canberra.
 Wagner, D.L. (ed) 1983 *The Seven Liberal Arts in the Middle Ages*, Indiana University Press, Bloomington.
 Watts, R. 2002 'The "Idea of the University": Australian Conservatives and the Public University', *Critical Studies in Education* 43, 1: 25-48.
 West, R. 1998 *Learning for Life: Final Report, Review of Higher Education Financing and Policy*, Department of Employment, Education Training, and Youth Affairs, AGPS, Canberra.
 Williams, B. 1979 *Education, Training and Employment: Report of the Committee of Inquiry into Education and Training (Williams Committee)*, Department of Education and Training, AGPS, Canberra.
 Zakaria, F. 2015 *In Defense of a Liberal Education*, W.W. Norton, New York.

Notes:

* This article has been written in dialogue with – and in connection to – all other themed articles within this special issue. As a result, it is best read as part of the issue as a whole.

1. Curtin (1986), UTS (1988), Western Sydney (1989), QUT (1989), Charles Sturt (1989), Victoria (1990), Canberra (1990), Australian Catholic University (1991), Edith Cowan (1991), South Australia (1991), Central Queensland (1992), Southern Queensland (1992), RMIT (1992), Swinburne (1992), Sunshine Coast (1994), Federation (1994), Southern Cross (1994), and Charles Darwin (2003).

2. Dawkins (1987, 1988) and other papers and reviews continue to nod towards a 'liberal' concept of education. Bradley (2008: xi) for example, writes, 'If we are to maintain our high standard of living, underpinned by a robust democracy and a civil and just society, we need an outstanding, internationally competitive higher education system'. In practice, however, there seems to be no consideration as to how such a notion of liberal education should be maintained, and even the orientation of these documents is inimical to genuinely achieving that. 'An outstanding, internationally competitive higher education sector' taken literally, would mean establishing universities such as Oxford, Cambridge, Ivy League universities, the French *grandes écoles* and CNRS systems, endowing and funding them appropriately including for HASS disciplines.

Authors

Stephen Lake is an academic previously employed at the University of Paris IV-Sorbonne, the Universities of Bamberg and Constance, and at ACU, primarily in Late Antique and medieval history and philosophy.

Renaud Joannes-Boyau is an Associate Professor in the Faculty of Science and Engineering at Southern Cross University.

Adam Lucas is a senior lecturer in science and technology studies at the University of Wollongong, Australia.

Adrian McCallum is a lecturer in science and engineering at the University of the Sunshine Coast.

Justin O'Connor is Professor of Cultural Economy at the University of South Australia.

Alessandro Pelizzon is a senior lecturer in Law and Justice at Southern Cross University.

Peter Tregear is Director of Little Hall, a Principal Fellow of the Melbourne Conservatorium of Music, University of Melbourne, and an Adjunct Professor of Music at the University of Adelaide.

Oliver Vodeb is a senior lecturer at the RMIT School of Design in Melbourne.

The Sound of Colour

Since he became a cyborg, he can see the opulence of colour in sound. Spectacles occur by light frequencies, the intensity of Newton-metres, the innate sensitivity of hearing.

The city mall presents a concert, while supermarkets bedazzle his ears; each shopping aisle a new symphony – the cereal boxes, red majors and washing powders, minor blues.

Tonight, he will wear a melody to dinner – a trill of yellow tie, a riff of navy jacket. The implant in his spine will tingle and rise up like 'Ride of the Valkyries' or 'Stairway to Heaven'.

A walk through the park coaxes a lullaby from trees – while at night an opera unfolds in sombre violet shades. He hears his way to the bedroom – where the bed linen hails him with a Hallelujah chorus of shocking white.

CARY HAMLYN