

5925 words/ 40 minutes

“From Canberra to Bloomington: Perspectives on Higher Education  
in Australia and the United States”

Australian and New Zealand Studies Association of North America Keynote

Remarks of Michael A. McRobbie

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The Embassy of Australia

Dramu Theatre

Washington, D.C.

Friday, February 24, 2017

11:15 a.m.

## 1. INTRODUCTION

Thank you very much, Professor Maglen.

I would like to thank you, your fellow officers, and the board members of the Australian and New Zealand Studies Association of North America for inviting me to speak.

I am very pleased to be here in our nation’s capital today at the Embassy of Australia to share some observations on the recent history and current state of higher education in the United States and Australia as someone whose career has spanned both countries.

The many eminent scholars from around the world who are here today, as well as the distinguished diplomats and government officials who have been part of this conference, speak to the importance and the enduring strength of the relationships between our countries.

## 2. IMPORTANCE OF AREA STUDIES IN THE 21ST CENTURY

We live in increasingly challenging times, when strident voices would shut us off from the rest of the world just at a time when the need to understand it and engage with it, is at its most acute and urgent.

The world in which our students will live will require more, not less knowledge about the world. So, we must ensure that our students gain international literacy and experience. We must ensure that our faculty are supported as they engage internationally. And we must do all that we can to support, encourage, and promote professional area studies scholarship—which enhances our knowledge of the history, cultures, religions, politics, economies, institutions, art, and literature of other countries.

It has been said that area studies scholarship in the United States has generated more knowledge and better knowledge than any earlier project to understand the larger world.<sup>1</sup> This is why the work in which the Australian and New Zealand Studies Association of North America is engaged is so critically important. Even among countries that have much in common, including a shared language, it is vital that we continue to learn about each other, from each other, and with each other.

## 3. HIGHER EDUCATION IN THE U.S. AND AUSTRALIA

As Professor Maglen said, I began my academic career in Australia at ANU. In fact, I recently celebrated the 20th anniversary of my arrival in the United States. By pure coincidence, it was on Australia Day—January 26th—in 1997 that my family and I

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<sup>1</sup> Jerry H. Bentley, “Globalizing History and Historicizing Globalization”, *Globalizations* 1 (1) (September 2004): 69-81. Reprinted in *Globalization and Global History*, Barry K. Gills and William R. Thompson. ed., (Routledge, 2006).

arrived in the United States. So that day also holds special significance for me as the anniversary of the beginning of the American phase of my career.

In 1975, when I first arrived in Canberra to begin a Ph.D., there were 19 universities in Australia.<sup>2</sup> Today, there are 43, all of which are associated in Universities Australia, which lobbies on their behalf. The major research universities have formed The Group of Eight, which is roughly the equivalent of the Association of American Universities, the AAU, of which Indiana University was one of the earliest members, joining in 1909. The AAU consists of the top 60 research universities in the United States and the top two in Canada.

The change from 19 to 43 universities in Australia may not seem like a dramatic change, but, in fact, this increase—and a large increase in the number of students enrolled—have resulted from major changes in government policy, in the structures and curricula of universities, and in available resources. There is, as I will say more about in a moment, an open question as to whether some of these reforms have been in the best interest of Australian higher education.

Higher education in the United States has also seen dramatic changes over several decades.

Having worked in higher education in Australia and the U.S. for more than 40 years as a computer scientist, a researcher and faculty member, and an administrator at a number of levels—including for the last decade as president of a major American research university—I have witnessed many of these changes firsthand.

So, today, I want to speak about some of the changes and reforms that have taken place in higher education in Australia and the United States. Because my experience

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<sup>2</sup> Michael Crossley, Greg Hancock, Terra Sprague, (eds.), *Education in Australia, New Zealand, and the Pacific*, (Bloomsbury Academic, 2015), 63.

has been in these two countries, I will limit my comments to higher education in the U.S. and Australia, with apologies to New Zealand. I will also speak broadly about the environment in which higher education in both countries finds itself today, and address some of the sustained and powerful criticisms higher education has faced in recent years regarding its quality, its costs, and its relevance.

#### 4. GOALS OF HIGHER EDUCATION IN AUSTRALIA AND THE U.S.

Let me begin by saying that the primary missions of institutions of higher education whether in Australia or the United States—or, indeed, around the world among leading institutions of higher education—are very much the same.

These are to provide an education of the highest quality that prepares graduates for productive and fulfilling careers—and one that prepares them for active, engaged citizenship—and to conduct research that contributes solutions to some of the world's most pressing problems and improves the quality of peoples' lives. These two missions are, of course, inextricably linked.

#### 5. HIGHER EDUCATION REFORMS IN AUSTRALIA

The higher education landscape in Australia once consisted of a small number of publicly-funded universities. In 1960, there were 10 universities. As I said a moment ago, that number had grown to 19 by 1975.<sup>3</sup>

Australia's public universities are established under state legislation. Prior to 1974, the public universities were "creatures of the states." They received funding primarily from the state governments, with some Commonwealth funding. This changed in 1974, when

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<sup>3</sup> Ibid.

the Commonwealth government, under Prime Minister Gough Whitlam, assumed the public funding of colleges and universities. This was the first major restructuring of higher education in Australia.

Although they receive public funds and policy guidance from the Commonwealth government today, public universities have a great deal of autonomy when it comes to their curricula, matters of capital development, and international engagement.<sup>4</sup>

In the 1980s, the Australian government undertook another major restructuring of higher education.<sup>5</sup> Up until 1988, Australia's higher education system consisted of two tiers. In the higher tier were a small number of universities. In the so-called "lower tier" were institutions known as "colleges of advanced education," or CAEs. CAEs historically provided qualifications for entry-level jobs in the more applied professions. CAEs were generally former teacher's colleges that had, over time, expanded their course offerings to include not only instruction and qualifications for teaching, but also in areas including nursing, accounting, fine arts, and information technology.<sup>6 7</sup>

In 1988, the government merged the CAEs with the universities to create, for the first time, a unified national system of higher education.<sup>8</sup> This was done, in part, to encourage wider participation in higher education. At the time, only about ten percent of 18- to 21-year-old students in Australia went on to higher education.<sup>9</sup>

It was also, in part, a response to the effects of globalization. As professors of education Shelia Slaughter and Larry Leslie, both formerly of the University of Arizona, write: "The Australian Labor government saw the rising productivity of nearby Asian countries as

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<sup>4</sup> Ibid., 64.

<sup>5</sup> Denise Bradley, et al., "Review of Australian Higher Education: Final Report," (Commonwealth of Australia, 2008), xii.

<sup>6</sup> "Colleges of Advanced Education," Wikipedia.

<sup>7</sup> Shelia Slaughter, Larry Leslie, *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*, (The Johns Hopkins University Press, 1997), 49-50.

<sup>8</sup> Ibid., 50-51.

<sup>9</sup> Ibid. 50.

making Australian labor less competitive in southeast Asian markets. Australians were highly paid, (but) relatively poorly educated... The Labor government saw reorganization of higher education as stimulating preparation of students in high technology fields and contributing to economic growth.”<sup>10</sup>

Higher education was generally overseen at the time by the Department of Employment, Education, and Training (DEET), which gives you a sense of the emphasis the government placed on the important role universities play in economic development. That department has gone through a number of iterations, and today is simply known as the Department of Education and Training, and it oversees all areas of education from early childhood education through higher education. It was led at the time of the 1988 reforms by John Dawkins. In fact, these reforms have become known as the “Dawkins Revolution.”

These reforms certainly had the effect of increasing the number of universities and the number of students enrolled. But many of the CAEs that merged with the universities simply were not of comparable quality. In Canberra, ANU was to merge with the Canberra CAE, which later became Canberra University. The ANU faculty, and many in the administration, fought this merger vigorously. They saw a potential influx of faculty who would become their colleagues and, in some cases, superiors. The majority of these faculty, under normal circumstances, would not be appointable to ANU. That merger was eventually voted down, but the year spent fighting it was very much considered a “lost year” by the ANU faculty. Some of the CAE/university mergers made sense, but by the mid-1990s, a number of these mergers were seen as expensive, unworkable failures and were undone. There has been a sober assessment of whether these reforms were the right direction for higher education to go in Australia or whether the adoption of a tiered model, along the lines of the University of California system, would have been more practical and effective.

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<sup>10</sup> Ibid.

So, for many years, Australia's system of higher education was "supply driven." The government allocated a certain number of student places to the public universities based on negotiation between each institution and the government.

In 2008, the Australian government initiated a comprehensive review of higher education in the country. Named informally for its chair, Emeritus Professor Denise Bradley, the former vice chancellor of the University of South Australia, the Bradley Review of Higher Education issued a landmark report. Among its key recommendations were that: the nation will need more well-qualified people to meet the demands of a rapidly moving global economy; achieving this will require greater enrollment by the less-advantaged; and that additional funding was needed to reverse a decline in the quality of the educational experience and to provide a greater quantity of higher education.<sup>11 12</sup>

As the Bradley Report noted, Australia was losing ground. In 2008, within the Organization for Economic Co-operation and Development, Australia ranked 9th out of then-30 member nations in the proportion of its population aged 25 to 34 with a college degree. Ten years earlier, it had ranked 7th. At that time, in 2008, 29 percent of Australians in that age range had degree-level qualifications, but many OECD countries had set targets of up to 50 percent.<sup>13</sup> In 2009, in keeping with the Bradley Report's recommendation, the Australian government set a target that by 2025, 40 percent of people aged 25 to 34 would have a bachelor's degree or higher.<sup>14</sup>

In 2012, in response to the Bradley Report, the government enacted a major change that would give universities the flexibility to respond to student demand. The government implemented a new funding policy that removed the cap on the number of university places made available at each of the public universities. This "demand driven"

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<sup>11</sup> Crossley, et al., 62.

<sup>12</sup> Bradley, xi.

<sup>13</sup> Bradley, xi.

<sup>14</sup> "Future Demand for Higher Education in Australia," (Group of Eight).

system replaced the “supply driven” system. Public universities are now allowed to enroll as many students as they want, based on their determination of eligibility and qualification for particular fields of study.<sup>15</sup>

This new policy led to an immediate increase in university enrollment. A 2013 review noted that “Universities offered thousands of new student places in anticipation of the demand driven system. In 2013, the equivalent of 577,000 full-time students received Commonwealth support in paying their tuition costs, an increase of more than 100,000 over 2009. These new places have been widely distributed,” the review continued. “There are more students from the major cities and from regional and remote areas, more students from all socio-economic backgrounds, and more Indigenous students. There are more undergraduate students in all major fields of education. Every public university increased its number of Commonwealth-supported students between 2009 and 2012.”<sup>16</sup>

By last year, there was evidence that this growth had levelled off and that the initial surge of unmet demand for a university education has been steadily absorbed during the first few years of the shift to a demand-driven system.<sup>17</sup>

In 2014, further reforms were proposed that would deregulate tuition fees. Under these reforms, universities would be allowed to set their own fees, and 20 percent of anything the universities raised above previous levels would be channeled into a national scholarship fund. This fee deregulation proposal has since been abandoned. The education minister, Simon Birmingham, said a couple of weeks ago that the government will finalize all of these higher education reforms soon—and would not “throw the baby

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<sup>15</sup> Conor King, Richard James, “Creating a Demand-Driven System,” in Simon Marginson, *Tertiary Education Policy in Australia*, (Centre for the Study of Higher Education, University of Melbourne, 2013), 11.

<sup>16</sup> The Hon. David Kemp, Andrew Norton, “Review of the Demand-Driven Funding System,” (Australian Government, Department of Education and Training, 2013).

<sup>17</sup> Belinda Robinson, as quoted in “Fact Check: Has Growth in New University Enrollments Flat-lined?” The Conversation, Web, Accessed February 10, 2017, URL: <http://theconversation.com/factcheck-has-growth-in-new-university-enrolments-flat-lined-53737>.



out with the bathwater” when it comes to university funding or the allocation of places for students. Minister Birmingham said the government would soon finalize reforms, in his words: “...firstly to make sure (higher education is) affordable and sustainable for the taxpayer, secondly to make sure that we are incentivizing universities to perform at the highest quality in terms of decisions they make about enrollment practices—how many students they enroll, what they enroll them in, holding them accountable for the outcomes of those students in terms of them successfully completing their courses to a high standard and having good strong employment outcomes.”<sup>18</sup>

One could argue that recent Australian public policy with regard to higher education has placed little emphasis on the importance of research.

## 6. FUNDING AMERICAN HIGHER EDUCATION

While America’s public universities are funded differently and structured somewhat differently than Australian universities, I think those of you in American higher education can see some parallels in what I have described thus far. One of the principal aims of both the 1988 reforms and the more recent reforms in Australia was to increase the number of citizens with college degrees in order to strengthen the nation’s economic prosperity.

Across the United States, state legislatures and higher education commissions have, in recent years, called on universities to produce more graduates who are state residents or who will, it is hoped, remain in their states to help to close the skills gap and to contribute to the economic growth of their regions. There have been calls for increased affordability, access, accountability, and quality from the federal and state governments. In many states, as has been the case in Indiana, appropriations to public universities by

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<sup>18</sup> Simon Birmingham, as quoted in Bernard Lane, “Higher Education Reforms Coming ‘Pretty Soon,’ Says Minister,” *The Australian*, January 30, 2017.

the state are now determined by the universities' achievements on performance metrics established by the state. In Indiana, for example, those metrics are designed to specifically address the issue of degree attainment, the number of students graduating with high-impact degrees (such as those in STEM fields), student persistence, on-time degree completion, and degree completion of so-called "at-risk" students who are in danger of academic failure.

I am sure that most of you are aware of how public research universities like Indiana University are funded, but let me address this briefly. IU obtains its revenue from five primary sources:

- the Indiana state government, through funds appropriated by the state legislature;
- tuition paid by students;
- the federal government, through grants from agencies like the National Science Foundation and the National Institutes of Health;
- clinical revenue from physician practice plans (assuming the university has a medical school);

and

- private philanthropy.

As most of you also know very well, every one of these sources of revenue is under pressure or threat.

State government funding for public universities was severely affected by the Great Recession. The recession resulted in billions of dollars in funding cuts to state universities and had the effect of being a major national disinvestment in public higher education. My own university suffered cuts of over \$100 million during this period. In 2011, per-student funding reached a 30-year low. Many great public universities in the U.S. suffered damage from which it will take many years to recover. Some may never recover. In fact, as of last fall, per-student funding was above 2008 pre-recession levels

in only four states: Montana, North Dakota, Wisconsin, and Wyoming.<sup>19</sup>

Most universities now understand that major increases in tuition are out of the question: the market and public will simply no longer bear them. A growing number of students are saddled with unmanageable debt on graduation. This has been an area of intense focus for us at Indiana University in recent years. IU is at the forefront in pursuing initiatives to help students manage the debt they take on for college. We have pioneered path-breaking student financial literacy and other programs that are national models and have resulted in savings to students of \$100 million over the last four years.

Research funding is becoming scarcer and more competitive in spite of the record \$614 million IU obtained last year in external funding for research and other activities. I will say more about the research enterprise in both countries in a moment.

With regard to clinical revenue, Indiana University is home to the largest school of medicine in the nation, and partners with IU Health, our allied health system, the largest hospital system in Indiana and one of the largest in the country. A decline in reimbursement rates for medical services provided by IU Health endangers the support it provides for the IU clinical enterprise. And, of course, the uncertain future of the Affordable Care Act puts this very important source of revenue under considerable pressure.

Private philanthropy is one of the great glories of the American system of higher education. I confess I was amazed, as I observed from the inside after moving to the U.S., how it had been elevated almost to a science. My experience on four continents convinces me that there is nothing anywhere else in the world to compare with the affection in which alumni and supporters of American universities hold their alma

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<sup>19</sup>Michael Mitchell, Michael Leachman, Kathleen Masterson, "Funding Down, Tuition Up: State Cuts to Higher Education Threaten Quality and Affordability at Public Colleges," August 15, 2016, Center on Budget and Policy Priorities, Web. Accessed February 14, 2017, URL: <http://www.cbpp.org/research/state-budget-and-tax/funding-down-tuition-up>.

maters, and how they demonstrate this repeatedly with their commitments of their time and their personal philanthropy. It is a uniquely American phenomenon.

In the United States, private philanthropy provides highly flexible funding for major enhancements to student financial aid, endowed faculty positions, specialized buildings and infrastructure, and support for path-breaking academic initiatives. In short, it allows American universities to do things no other universities in the world can do.

Indiana University is no exception. We are the beneficiary of extraordinarily generous alumni and friends—generosity that has made many of our gains possible. In fact, during the last fiscal year, IU received a record \$493 million in total private individual and other support—the highest total in the university’s history, and one of the highest for a public university in the U.S. Our endowment has bounced back from the depths of the recession and now stands at nearly \$2 billion, 16th in the nation among public universities. In 2013, we completed and exceeded the goal of a major \$1.25 billion campaign for our Indianapolis campus. That campaign raised \$1.39 billion. In 2010, we concluded a campaign for IU’s Bloomington campus that raised \$1.14 billion, exceeding its goal of \$1 billion. And we are now in the midst of a university-wide campaign known as *For All: the Bicentennial Campaign for Indiana University*. It has the goal of raising \$2.5 billion by Indiana University’s bicentennial in 2020, and is ahead of schedule. This is the most ambitious fundraising goal in IU’s history and one of the largest ever for a public university in the United States. These three campaigns together will have raised more than \$5 billion for IU in just over a decade.

But this pillar of university funding is under threat as well. In spite of careful management, our endowment—like the endowments of universities across the nation—remains vulnerable to the state of the national and the global economy. Of course, research also shows that charitable giving is closely tied to the economy and to consumer confidence. And endowments are vulnerable to political pressures. There have been calls for American universities to use their endowments to make college more affordable. These calls, of course, do not take into account that for the vast

majority of donations, universities cannot override the charitable intent of the donor and use the funding for an alternative purpose such as tuition reduction.

American philanthropy is widely studied and widely envied elsewhere in the world, and many seek to emulate it. I have to say that I long found it unfortunate and disappointing that in a country as rich and prosperous as Australia, a true culture of extensive private philanthropy had yet to emerge. But this seems to be beginning to change. The most recent Charitable Giving to Universities in Australia and New Zealand Survey by the Council for Advancement and Support of Education found a 26 percent increase in giving to Australian universities since 2014, with the nation's universities raising almost \$539 million in 2015.<sup>20</sup> But again, compare the fact that IU alone raised \$493 million in roughly the same period. Australian universities also reported that the number of “transformational gifts,” those over \$1 million, increased by 72 percent over the same period.<sup>21</sup> <sup>22</sup> In addition, the total number of donors and the number of alumni donors grew by 23 percent and 16 percent respectively.<sup>23</sup> And if we go back even further, Universities Australia reports that donations to Australian Universities increased by 83 percent between 2005 and 2013.

I was delighted—especially as an ANU alumnus—to learn of the extremely generous donation in 2013 to ANU by a fellow alumnus, Graham Tuckwell, an eminent global commodities trader, of \$50 million to establish a major scholarship program. This was, at the time, the largest philanthropic gift ever to an Australian university. The Tuckwell Scholarship Program is now the most prestigious undergraduate scholarship program in all of Australia. It provides approximately \$100,000 per student for up to five years of study. Mr. Tuckwell and his wife, Louise, followed that gift up last year with a gift of \$100 million to ANU to fund two new residence halls and an expansion of the scholarship

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<sup>20</sup> “Charitable Giving to Universities in Australia and New Zealand Survey,” Council for Advancement and Support of Education, October 27, 2016.

<sup>21</sup> *Ibid.*

<sup>22</sup> Sue Cunningham, “The Rise of University Philanthropy in Australia,” *HIGHER EDUCATION, the Newsletter of Universities Australia*, December 16, 2016.

<sup>23</sup> *Ibid.*

program.

## 7. THE RESEARCH ENTERPRISE IN AUSTRALIAN AND AMERICAN HIGHER EDUCATION

Let me now turn to the research enterprise in higher education in Australia and the United States.

During roughly the second half of the 20th century and the early 21st century, the relationship between the federal government and America's research universities has, in general, been exceptional. The years following World War II were, in particular, a period of tremendous growth for American higher education. In 1945, Vannevar Bush, a legendary American engineer, inventor, and science administrator, issued a landmark report on U.S. science policy. This truly visionary report, *Science, the Endless Frontier*, linked the research capacity of America's colleges and universities with long-term national interests, and argued that instead of carrying our basic research in isolated elite academies on the European model, the federal government should instead make major investments in basic research at the nation's universities determined by peer review and with a special mission to fund graduate studies. This report also called for the creation of the National Science Foundation. Thus began a period of federal government investment in research that catapulted the quality and standing of the American system of higher education to the best in the world. It is to the leading American research universities that the mantle of renown and openness to the world of the legendary ancient institutions of learning has now fallen. These are the institutions that now lead the world in research and scholarship and that attract faculty from all over the globe. The Bush report on science policy and the establishment of the NSF were major factors in this transition.

This period of investment contributed to an era of national prosperity and national security with discoveries ranging from the laser to the MRI, from the algorithm for

Google searches to Global Positioning Systems, from fetal monitoring to advanced surveying techniques, along with thousands and thousands of other inventions and innovations.<sup>24</sup>

The same is also true, to some extent, of investment in university research in Australian universities, which has led to the development of the cochlear implant—the so-called “bionic ear”, anti-flu medication, the cervical cancer vaccine, and an understanding of the causes of stomach ulcers. It has led to the development of ultrasound, Wi-Fi, a means of safely storing radioactive waste, spray-on skin and many, many other innovations. All world-class achievements.

The Bradley Report in Australia and numerous reports from the American National Academies, including an excellent 2012 report from the National Research Council, underscore the fact that great research universities are essential to any nation that values and wishes to improve long-term economic prosperity, health, and security.

And yet, today we find ourselves in an environment where federal funding for university research has been unstable, at best. In real terms, funding from the U.S. government for university research has actually declined.

Late last year, the Higher Education Research and Development (HERD) Survey by the National Center for Science and Engineering Statistics within the National Science Foundation reported that federal funding of American higher education research and development had declined in both current and constant dollars for the fourth straight year. When adjusted for inflation, federal funding for higher education R&D declined 1.7 percent between Fiscal Year 2014 and Fiscal Year 2015, and has fallen almost 13 percent since its peak in Fiscal Year 2011. Federal research funding to universities (from the NSF, the NIH, and other agencies) totaled about \$69 billion in Fiscal Year

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<sup>24</sup> This series is borrowed from Jonathan R. Cole's *The Great American University: Its Rise to Preeminence Its Indispensable National Role Why It Must Be Protected*, Volume 1, (Perseus Books Group, 2009), 4.

2015. But this decrease continues the longest multiyear decline in federal funding for academic R&D since the beginning of the annual data collection for this series in Fiscal Year 1972.<sup>25</sup>

In Australia, research spending has tripled in the past two decades.<sup>26</sup>

A recent Universities Australia report shows that the total amount of real government spending on science, research, and innovation increased from \$6.7 billion in 2000 to around \$10 billion in 2014. Support to encourage innovation in business more than doubled to around \$3.2 billion a year. Funding for research block grants and other higher education research appears to have declined in value by around 20 percent to \$2 billion a year, but this may be, in part, affected by the manner in which this funding was estimated prior to 2004. Funding from the National Health and Medical Research Council and the Australian Research Council has increased to nearly \$1.8 billion a year.<sup>27</sup>

In addition to combining universities and CAEs in 1988, the Australian government also enacted reforms that changed the way university research was funded. The 1988 reforms “clawed back” resources from universities and used that money for research for which professors across the unified system then had to bid competitively. The government also instituted a policy of targeting research priorities, so that research that advanced the country’s political and economic goals, (for example, technological research to stimulate job growth, research to protect the environment, and research that would lead to energy self-sufficiency) was more likely to be funded.<sup>28</sup> These goals and priorities, of course, changed to varying degrees with each subsequent administration.

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<sup>25</sup> Rhonda Britt, “Universities Report Fourth Straight Year of Declining Federal R&D Funding in FY 2015,” *InfoBrief*, National Center for Science and Engineering Statistics, November, 2016.

<sup>26</sup> “\$2 Billion Research Support: How Teaching Funds Research in Australian Universities,” Grattan Institute, November 1, 2015, Web, Accessed February 17, 2017, URL: <https://grattan.edu.au/2-billion-research-support-how-teaching-funds-research-in-australian-universities/>.

<sup>27</sup> “Higher Education and Research Facts and Figures,” Universities Australia, November, 2015, 19.

<sup>28</sup> *Ibid.*, 50-51.



With more recent reforms in Australian higher education have come additional changes to research funding. As of January 1st, new funding arrangements replaced the previous six research block grants with two streamlined programs: one to cover systemic costs of research and one to support students. While total funding has not changed, the idea is that it will be distributed in less arcane ways. The new arrangements are also intended to encourage universities to place more emphasis on collaborations with industry. Safety net provisions are in place until 2020, so that no institution will receive less than 95 percent of its previous year's allocation of research funding.<sup>29 30</sup>

Previous Australian and American governments have invested heavily in research, recognizing that innovation and the creation of new knowledge can lead to vitally important developments that can improve the quality of life for citizens of the country, and indeed, for citizens of the entire world. It is essential to the prosperity and way of life of both the U.S. and Australia that they continue to do so.

## 8. GLOBAL ENGAGEMENT

We are, of course, living in a time of far-reaching global, political, social, economic, and technological change. Global literacy and collaboration have never been more important than they are now to higher education in the United States. This, of course, is true in Australia. But the situation for a public university in the United States is different in one important respect.

Students from outside of Indiana pay the same tuition no matter whether they come

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<sup>29</sup> John Ross, "Research Funding Changes Hailed Amid Some Criticism," *The Australian*, October 19, 2016, Web, Accessed February 14, 2017, URL: <http://www.theaustralian.com.au/higher-education/research-funding-changes-hailed-amid-some-criticism/news-story/817591f5fff5a89de83f2faf3a8158>.

<sup>30</sup> "New Research Funding Arrangements for Universities," Website of the Australian Government, National Innovation and Science Agenda, Accessed February 14, 2017, URL: <http://www.innovation.gov.au/page/new-research-funding-arrangements-universities>.

from Illinois or India. This is true of many other states. This tuition is considerably higher than tuition paid by in-state students, but there is no economic reason to recruit overseas rather than elsewhere in the U.S. Of course, the renown of U.S. universities means we are highly attractive to international students and they are a vital part of the diversity of a campus. For example, our Bloomington campus is ranked 17th in the U.S. out of 1,200 institutions ranked, for the number of international students we have at about 6,600 out of a total student body of about 43,000 degree-seeking students. Just over 14 percent of our student body on our flagship campus in Bloomington are international students, which is low in terms of Australian universities, but high by American standards. At ANU, for example, nearly 30 percent of students are international. Out-of-state students comprise about 20 percent of IU's total student body of 115,000 students. International students comprise less than eight percent of IU's total student body on all of its eight campuses.

Our major focus and that of many other American universities, has been, instead, to increase the number of our students who study abroad. We regard it as essential that all our students have some international component in their education and this is best fulfilled by studying abroad. On our Bloomington campus for example, over one third of undergraduates have studied abroad by the time they graduate. We graduate about 7,500 undergraduates each year. This level of study abroad ranks us 10th among American universities. As part of our Bicentennial Campaign, we are raising funds to endow at least 400 new study abroad scholarships, with an emphasis on supporting minority and low income students. Ultimately, we would like to increase the percentage of students studying abroad to 50 percent—no mean feat for a university as large as ours.

Because of our strong belief that it is vital for today's students to gain international understanding and experience, in 2013, we inaugurated the School of Global and International Studies at Indiana University.

The school is built on the longstanding foundations of IU's extensive strengths in global

studies.

IU offers instruction in more than 70 foreign languages—more than any other American university. A number of languages that are taught at IU are not taught at any other university in the U.S. And IU’s strength in international area studies dates back well over half a century.

IU’s School of Global and International Studies is now home to leading departments, programs, and centers in international studies, including the Pan-Asia Institute, a partnership between Indiana University and the Australian National University. In 2009, then-ANU Vice Chancellor Ian Chubb and I launched this institute with funding from both universities in order to combine the complementary strengths of both universities in the study of Asia across a variety of topics, and also to provide language learning opportunities for students at both universities. The institute has been quite successful and certainly suggestive of greater and broader possibilities. In fact, early last year, our two universities agreed to hold an annual summit meeting. Last November, ANU Vice Chancellor Brian Schmidt and I held the first such meeting, during which we signed an agreement to develop a new dual master’s degree in arts administration. Our recent summit also identified new potential areas of collaboration in finance, public policy, public health, cybersecurity, and online language instruction in endangered and indigenous languages.

## 9. RESPONDING TO STUDENT DEMAND IN AMERICAN HIGHER EDUCATION

I have already spoken about the transition in Australia from a “supply driven” system to a “demand driven” one.

Across the United States, there has been an extensive debate recently as to whether higher education is effectively meeting student demand—whether it is providing what students and society need for the 21st century. The rising cost of higher education,

combined with the prolonged recession, has rekindled the perennial debate about the value and relevance of a liberal arts education.

Students and their parents are increasingly interested in majors that are most likely to result in jobs. And, increasingly, universities are asking whether they are educating students for the right jobs. It is estimated that there are about 5.6 million jobs in America that cannot be filled because candidates lack the required skills.

Like so many other universities in the U.S., IU has carried out an extensive overhaul of its academic programs in the light of these sobering facts. In the last six years or so, we have closed, merged, transformed, or established eight new schools out of about 20, including a new school of philanthropy—the first in the U.S., two schools of public health, a new Media School, a new School of Art and Design, a reorganized school of informatics and computing, and the new School of Global and International Studies, which I have already mentioned. This is more change than we have seen at Indiana University since the early 20th century.

## 10. CONCLUSION

Let me conclude with some observations about the future of higher education more broadly. American universities have, throughout their histories, faced a wide variety of questions and criticisms, and these have come from a wide spectrum of critics from inside and outside higher education. These universities, however, have proved amazingly resilient over nearly four centuries and remain the world leaders in education, research, and innovation.

But higher education is no longer any more immune to the pressures of global competition than is any other sector of the world economy. Countries around the globe are striving to build their own world-class universities, either by enhancing existing institutions or by creating new institutions that are modeled on American research

universities.

The success of these initiatives has yet to be seen, but, in seeking to imitate the success of the U.S., they are challenging in the first really serious way, the long period of American hegemony in higher education.

But is this “league table” approach to higher education and university quality really how the future looks? Information technology has completely transformed disciplines from anthropology to zoology. Global academic communities, enabled by the Internet, have made national borders all but irrelevant. This is driving greater and greater collaboration. Universities in the U.S., Australia, and elsewhere are diversifying internationally with considerable vigor. IU, for example, has opened three international gateway offices--in India, China, and Germany—and we will expand that number to eight by the time of our Bicentennial. And we are seeing increasingly more assured steps being taken to build true intercontinental institutional partnerships of genuine value based on complementary capabilities.

Many institutions around the world, of course, have such partnerships. They represent a breaking down of institutional walls, and as these partnerships get deeper and more complex, a simple “league table” approach to ranking institutions becomes both more difficult and, perhaps, is of questionable value.

While this is rather speculative, I believe it does point to an increasingly internationally intertwined and collaborative future rather than one of rising and falling hegemonies, but such a future would enormously strengthen higher education around the world.

While higher education has been remarkably resilient for so many years, there are certainly major challenges ahead. In the United States, the current environment is, in many ways, more challenging than any time since World War II. There is skepticism in certain quarters about the value and the validity of the results of science itself! And as a result of that skepticism stems a further threat to research funding, especially in areas

that generate political controversy, such as in the social sciences and climate change research.

Australia has seen these pressures, as well.

Then there is the tension between universities as truly international, globally engaged institutions and the rising tide of nationalism around the world, which we have witnessed in the U.S. in recent weeks with the executive order on immigration.

It is vitally important, then, for those of us in higher education to continue to make the case for universities as centers of independent, dispassionate research and as forces for global engagement, cooperation, and understanding. Only by doing so will the leading institutions of higher education in both Australia and the U.S. emerge from the current debates and reforms better equipped to meet the changing needs of our students and the needs of an increasingly global society.

Thank you very much.