Australian universities: neither down nor under

An interview with Michael Gallagher, Executive Director of the Group of Eight coalition of Australian universities

EMBO reports (ER): As Executive Director of the Group of Eight coalition, why do you think it was necessary to form a kind of lobbying group to seek more public support for universities?

Michael Gallagher (MG): There are three reasons why the Group of Eight came together. The first is that Australia made a decision in the mid-1980s to merge the polytechnics with universities to form a unitary system in higher education—with a sub-degree-level technical stream. In these circumstances, the differences between institutions in terms of mission and quality began to blur, so it was inevitable that groups would form within that system to represent different types of universities, missions, interests and capacities.

Second, since the 1980s, there has been concern about Australia's approach to higher education and research policy of spreading the resources fairly across all institutions. This has created an expectation that all institutions called 'universities' will emulate a comprehensive research model. The problem is that this results in some leveling down, especially when the rest of the world is intensifying its investment in leading universities. For Australia to keep pace, it is necessary to differentiate the investment and concentrate the money in the areas that perform best. To advocate that to the government, we had to take a different view than the collective view of the other universities, which would tend to support the lowest common denominator.

Third, as we internationalize the reputation of an institution in terms of its qualifications, and its attractiveness to students and

scholars, we need to differentiate our brand. The Group of Eight formed itself with a view to brand recognition at the elite end of the Australian system, which we think can provide something of a 'halo effect' for Australia as a whole—although that is contentious within our country. Of course, the networking also provides an opportunity for our rectors to talk to one another in areas where there is a lot of common ground—more so than if all 38 met because their institutions would represent very different orientations.

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ER: Is the goal of the Group of Eight to attract more support for Australia's leading or elite universities, rather than for all Australian universities?

MG: Australia accounts for 2% of the world's population. Even if we generate 2% of the world's new knowledge, we still need access to the other 98% and to be connected to the frontiers of research. To do this, we need some of our institutions to be able to operate at the leading edge—this is important for our country and is not an elitist thing, it is an elite thing. It is important for the country to keep pace with the world's elite, especially in fundamental research, and to create the relationships among researchers that naturally follow from peer judgments of who is good. This then leads to spill-over benefits for the other

institutions in terms of the reputation that a country gets from what its best can do.

ER: Is there any likelihood that the Group of Eight could expand to a 'Group of Nine', or more, if other universities raise their standards in response to your lead?

MG: This is something that is always subject to evaluation because it is a dynamic environment. It is true that in some fields of research there are Australian universities that would perform better than a number of the Group of Eight universities. However, when you assess the whole performance of all universities, the eight are a long way ahead of the ninth. The eight represent about three-quarters of Australia's research effort and university research income, and they provide about two-thirds of Australian PhD training. Additionally, the bulk of Australian publications—in particular, our highly cited output—predominantly comes from the Group of Eight.

Within the Group of Eight, the biosciences are very strong, and this reflects their tradition of having medical schools around which medical research and the biosciences developed. Additionally, agriculture, mining, material sciences and Earth sciences are all Australian research strengths in which the Group of Eight excel. There are additional institutions, like Wollongong and Newcastle, which are very strong in engineering, for example, and the Group of Eight meets with the deans of engineering as the 'Group of Eight plus two'. It is an issue for us not to be too exclusive—we should try and represent to the world what Australia does best, and if

it is outside the Group of Eight, then we would be silly to pretend that we cannot include the others.

ER: Australia seems to be very successful at marketing itself as a good place to get a decent tertiary education—the number of foreign students studying in Australia has increased significantly over the years. Do you see Australia as an exporter of education?

MG: This is a double-edged sword. One of the reasons why Australia developed—some would say aggressively—the international export of education services was to compensate for a reduction in government funding of student places. It was also partly to globalize our economy. A lot of the action has been on the part of institutions that have sought to increase their student numbers at a competitive price, rather than to market Australia as a high-quality destination. So, while it seems impressive when you look at Australia's education export volume—particularly higher education exports—our group would be concerned that in some markets, the reputation is for high-volume low-price education, not for high-quality high-price education. In fact, we are probably rated second best, after the United States, for graduate studies, and that is something that we need to improve to attract top talent from China, India and Europe. Some of the visiting students may want to become residents and migrate to Australia—which we would welcome—but the majority will return to their own countries and develop networks of influence, whether in business or in diplomatic sectors, which is important in the longer term for our country. But there is a vulnerability about our success in education exports: some of our institutions are very dependent on the income, and a number of other countries are now becoming competitors. Pricing education also becomes more difficult when exchange rates have an impact, or accommodation costs, travel costs or general living costs. So we really need to continue to go up-market in our marketing of international education, and our group in particular is looking to increase postgraduate, masters and PhD numbers. I think most Australian universities would now say that we are big enough at the baccalaureate level.

ER: In the long term, do you see China and India, who are investing huge amounts of money into university education, as competitors in your region for international students?

MG: China is already exporting education services, as is Singapore, and even traditional markets for Australia like Malaysia, Indonesia, Thailand and Vietnam are now actively recruiting international students. Germany—which is offering degree programmes taught in English—is a competitor, and so are the UK, the USA and Canada. But the Asian markets are becoming more contested, partly as other Asian countries are investing in their own capacity, and also as more international players are getting involved. The investment at the top Chinese

universities and Indian institutes of technology, and the investment in infrastructure and talent, are certainly on a scale that Australia is finding daunting.

ER: What can Australia offer a prospective graduate or PhD student that would attract them away from Harvard or Stanford, or from leading Asian institutions?

MG: The problem with our image of educational exports is that we have tended to market not only for volume and price, but also for lifestyle. We have marketed an easy-going culture and friendly outgoing people, which is great, but we have also marketed beaches and beer, and other things that are not really intellectual images. I think too much of our 'brand Australia' is caught up in a tourist image. Our group is conscious of the

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fact that we need to provide fun, obviously, and relaxation and enjoyment and friendship, but we also need to market these things with an intellectual challenge. In a number of fields, Australia has some real strengths, for example, the geosciences, the social sciences and the humanities, and we have unique biological species and geographical conditions that allow for unique research. We have talent and facilities, and we can offer first-rate research training. We can offer small class sizes and personalized supervision with a focus on good standards. That is the kind of reputation we need to build.

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ER: Do you think that the new Australian Prime Minister, Kevin Rudd, is good news for the Australian education system?

MG: He is a breath of fresh air, to be frank. We had 10 years of a very ideological government that was pretty anti-intellectual, in the sense that it used anti-intellectualism as a political device. The old government was very much against new ideas, particularly those that did not sit comfortably with its own view of the world, and it generally demeaned intellectualism on radio and television. Kevin Rudd has opened the intellectual arena up again and has brought on new ideas. He has indicated an interest in opening up relationships with Asia in foreign languages, science and innovation, and has gone back, in quite a number of public policy areas, to first principles, asking where we should be going as a nation in these areas, which is refreshing. The intellectual community is responding to that quite well.

There is some wish, I suppose, that the government will honour its rhetorical statements financially. It has inherited a booming economy, but there is a lot of pressure on inflation and housing interest rates, which have a serious effect on families—and political consequences—so the government is trying to 'hose down' domestic demand by containing spending in fiscal-policy terms. This means it has not been able to increase its expenditure on education as much as we would like. Higher education is therefore struggling to get its 'place in the sun'. The

good news is that the government has commissioned a national review of the innovation system and is taking a long-term view, and is valuing basic research, not merely research that leads to commercialization. There is a chance to get a wider understanding of the role of universities in contemporary society, and hopefully longer-term investment in the human capital and research underpinnings.

ER: Is it your feeling that the investment will be of the traditional across-the-board kind or will the government focus on the Group of Eight, for example?

MG: I do not think that they will focus on the Group of Eight institutionally. I think that the money will go—and I think this is the right call—to those areas where the best research is being done. It will happen that the Group of Eight will pick up the majority of the funding anyway because we are the strongest across most of the fields. But it will also allow other institutions to be recognized and reinforced, and give them a chance to develop their potential—the money will not simply be locked in on the basis of past performance.

These are really contentious debates in Australia at the moment. We are an egalitarian society, so when you concentrate on excellence, and if this is seen to be at a cost to others, it causes some anxiety. We need to construct ways of defining the roles of other institutions in which their best performance is valued—not in a stratified way. We need institutions that can contribute to Australia's regional problems, indigenous problems and farm problems, and specialize in those areas, as well as in general social inclusion and economic development.

ER: Do you think that the public supports the extra funding, and has a fairly good relationship with research and science in Australia?

MG: I think there is much more that we could do. Australia is a country that values achievement in sport, theatre and film, the creative arts, music, and invention and design—there are a lot of Australian inventors of the strangest things. But, we find it hard to value intellectual achievement. For example, there was a level of Western Australian, and some national, pride when Barry Marshall, the Australian physician, won the 2005 Nobel Prize in Physiology or Medicine with Robin Warren for their discovery of the bacterium *Helicobacter pylori* and its role in stomach

ulcers, but it did not take the sports heroes off the front page and went largely unnoticed.

ER: Do you see an active research university as vital for providing a quality education?

MG: For our group, the research informs the education, so it is vital, not just at the graduate level, but also at the undergraduate level. There is a lot of discussion among our institutions about how to enrich the discovery nature of undergraduate learning by bringing research methods into the classroom and exposing students to stuff that is not yet in the text books—just to try to challenge and stretch them.

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ER: Traditionally, universities are places of research and education, but an alternative view is that higher education is a service to provide in return for income. Do you see a danger that if you focus too much on education as a paid service, it will be to the detriment of research, or do you see a long-term split between institutions that provide education and those that focus on research?

MG: As I said at the beginning, we closed the binary divide between education and research, and we cannot unscramble the omelette. Instead, we have to rely on competition within the unitary system. The problem is that we still have the vestiges of a government-control model of regulation and supply. We probably need to think more radically about a market-driven model, which is funded on the demand side; that is, it funds the students rather than the institutions. But, you have to accept, as we now have in Australia, that you have a mix of higher-education providers, including foreign providers, private providers and universities. The issue for Australia is to realize the fact that universities are not just higher-education providers, but that they exist as institutions, and those institutions have societal roles other than just education. Then the issue is: what are the different societal roles of universities? Some will have regional development roles, whereby they contribute to the

local community, the regional economic development, or the local environment or culture. Others will have an international orientation, servicing the nation by being linked internationally.

Then you get into difficult discussions about the spectrum of research. All the distinctions that we currently use about pure, basic, fundamental or applied research tend to blur. A number of countries will justify their binary divide, like their polytechnics and universities, on the basis of applied research versus fundamental research, vocational versus theoretical, and professional versus academic, and yet we all know that in reality those things blur. The irony that all educators face, whether we have binary divides or not, is that we can define what a research-intensive university is—and this definition applies to probably 20% of a national system—but we cannot describe the other 80%, other than in terms of what they are not. They are not research intensive, but we have not found a way of describing them in a positive way that excites the imagination of other institutions to want to be like that—they all still want to be research orientated. We have a real policy challenge to think through the validity of these other roles for universities, without fraudulent divisions between pure and applied research, or vocational and professional. At the moment, we all run the risk of simply designating some institutions as teaching-only, which is a stupid concept: you cannot be a teaching-only institution if you are going to be a university. I think there is a chance for us all to rethink what contemporary universities mean and what the spread of them is, without saying we are real universities and the rest are not.

ER: Is taking a lead in that debate something that the Group of Eight is trying to do?

MG: Yes, but when we do, we cause a problem by the very fact that we are taking the lead: the other universities think that we are only concerned about our own self-interest, and to some degree we are. But there are bigger questions than our own self-interest,

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and we have a responsibility by virtue of our position to show leadership.

ER: Given the success of research-intensive institutions, like the California Institute of Technology (Pasadena, CA, USA), do you see a desire in Australia to build similar research-focused laboratories?

MG: Actually, we already have them in the medical field and some niche areas, and they are very strong research institutions. The Australian National University, for example, was initially established as a research university, and did not have an undergraduate faculty until the 1960s. Since then, we have not had a push back in that direction—I think that if you were to draw a diagram of the traditional Australian university, it would be the traditional pyramid with a large undergraduate base. Probably the inverted pyramid is where some of our universities would like to be, to be more like graduate schools, with an elite undergraduate group. In that way, they could access the best students from other institutions in the country, and the academic staff of the other institutions could do their research using the facilities of the specialist research laboratories. That seems like a workable model because a university that is not strong in a

particular field and cannot sustain the infrastructure, or does not have the volume of talent and expertise in a particular area can borrow the facilities and knowledge of the research institution. Alternatively, an academic teaching an undergraduate course in physics at one university could spend time in a laboratory at another institution that is strong in physics research, and then go back and teach at their own university as an active scholar in the field. The Americans have developed that model and Australia probably needs to do the same thing.

ER: To what extent does the Asia-Pacific International Molecular Biology Network (Seoul, Korea), of which Australia is a member, have an influence on your research and education?

MG: It is beginning to have an influence, but the traditional connections are still Anglo, with the USA and Europe. However, China, India and Southeast Asia are critically important to Australia. A lot of alumni from Australia are now in those countries in key positions in universities, government and businesses. If we are clever, we will build on those relationships. Some of the things we are beginning to do are to develop relationships between young researchers and post

docs—we need to build the next 25 years of networks between Australia and Asia. In some ways, I suppose, Australia is able to bridge the Asian culture with European-Anglo culture. We are not the only ones who would claim to be able to do that, but it is a good position to be in.

ER: Australia seems to specialize in—and has relatively liberal legislation for—stem-cell research. Do you see this as a chance to lead in a select research area with a friendly legislative climate?

MG: I think that is true. These matters have been subject to debates in our parliaments and, by and large, our parliaments have decided by a conscience vote. The members have been allowed to vote individually, rather than being blocked to their parties, and that has led to a fairly permissive approach—with proper ethical controls—which has given us an advantage internationally. We have been able to develop relationships with other countries that have similarly open attitudes. It is always a contentious issue, though, and we need to keep

the dialogue with the civil society open; but it has given us an opportunity to develop a capacity that other countries have been constrained from doing, or have had to develop in other countries to get around their own national limits.

ER: Michael Gallagher, thank you for the interview.

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