Creative Regional Development: Knowledge-Based Associations Between Universities and their Places

Abstract

The mere presence of a university in a region is no guarantee that it will be beneficial for a region's development prospects in a knowledge world. The past decade has seen universities become a greater part of the regional landscape in Australia. The author studied a diverse array of exemplary knowledge-based partnerships between universities and communities, and from this research reports on effective practices, benefits to the campus and to the community, and implications for policy.

University campus location has been a political and an equity tool for expenditure and employment injection in regions for many years. But such policies may not now be good value-for-money in a modern global knowledge-based environment. They undervalue the significance of the university as a vehicle for ideas and learning-based outcomes in regions, and they undervalue the significance of the region as a platform for international competitiveness.

The mere presence of a university in a region, while it intuitively sounds a good thing, is no guarantee that it will be beneficial for a region's development prospects in a knowledge world. University location does not automatically translate into greater university participation in a regional community. Moreover, even greater university participation locally does not automatically generate better regional outcomes.

This paper highlights some of the points about the relationship between universities and regional communities that have emerged from some recent research completed for the Commonwealth Government.¹ In particular it focuses on the factors behind the growing interest that we have seen recently in the relationship between universities and regional communities.² It discusses the concept of "good practice" in engagement, and identifies the benefits to the university and to the regional community that can occur through such action. Finally, it makes some policy suggestions to give impetus to the emerging trend in this area.

¹ Universities and their Communities: Creative regional development through knowledge-based engagement. Garlick and Pryor, 2003. Compendium of Good Practice University-Regional Development Engagement Initiatives. Garlick and Pryor, 2003.

² See for example, Section C: "Engagement of universities with their communities," *Higher Education at the Crossroads: A Review of Higher Education*. Nelson, 2002.

Factors Enhancing Engagement Between Universities and Regions

Three factors underpin a growing interest by government, universities, and regional communities in this country to encourage stronger relationships between universities and the regional communities in which they operate. These are:

- the regionalisation of university provision that has occurred over the last decade;
- the recognition that knowledge, creativity, and learning are now the main determinants of regional viability; and
- the need for universities to expand the tools they have at their disposal for enhancing their viability in a declining public sector funding environment.

Regionalisation and Participation

The past decade has seen universities become part of the regional landscape in Australia. They now have a presence of one form or another in many regional communities. In many regions, tertiary education institutions represent the only institution with the critical mass, longevity of presence, independence, and networks to make a significant difference to their futures.

Some universities have as many as ten campuses spread across a number of regions. With more than 150 campuses throughout Australia, as well as many other regionally located non-campus learning access centres and program delivery points-of-presence, a new regional community/university relationship is emerging. In some cases these new relationships have become significant in generating mutual benefits, in some cases the relationship is not as yet seen as important, and in a few cases the relationship is, unfortunately, mutually destructive.

For both government and universities, the regionalisation of university location during the 1990s was predicated on a belief that relatively low levels of university participation in non-metropolitan and disadvantaged peri-urban areas could be turned around through decisions about where campuses would be located. Following the Dawkins reforms of the late 1980s and the consolidation of higher education into a single university sector, these views about regional participation rate disparity were used during the early to mid 1990s to support an argument for more geographically equitable university access.

Research by James, et al. (1999), Stevenson, et al. (1999 and 2001), Blakers, et al. (2000), and others has shown, however, that proximity to a university campus does not by itself greatly influence local student participation in higher education. Indeed, as Stevenson, et al. (2001) conclude: "Much of the difference in participation [between regions] appears to relate to the ways regional communities relate to the education system."

And, as Blakers, et al. conclude:

...subject choice and academic ability, as measured by the student's University Admissions Index (UAI) are more important than access in the student's decision to move to undertake study.... The influence of socioeconomic circumstances such as economic resources, education and occupation structure, and unemployment rate of the area are reasonably significant factors in the decision to move.... Overall, the...greater provision of places in nonmetropolitan areas will not prevent students from leaving country areas. There is room for optimism in that some regional universities are attractive in niche areas.

Issues for government policy, university management, and community governance have arisen through the regionalisation of university campuses. For some areas of government funding policy, university regionalisation has raised issues to do with campus viability and return on public expenditure. For other areas of government funding policy, there are issues about how the publicly funded university can contribute more to enable regional communities not to be bypassed by the knowledgebased economy.

For the university, campus regionalisation has raised human, financial, and physical resource management concerns associated with being competitive and viable. The capital and operating costs associated with the establishment of campuses, learning access centers, and program delivery points-of-presence can be considerable. For local communities, the regional presence of universities raises the issue about the role the university might play, as knowledge and learning providers and facilitators, in their viability strategies.

By the late 1990s, there was an increasing realisation by government and universities that a simple structuralist strategy of locating university campuses on equity principles of proximity would not yield the student participation or viability returns that they had expected. In an environment of reduced public sector funding for higher education, many universities consequently reviewed the cost-effectiveness of the simple "McDonald's" approach to regional campus location.

The outcomes from this process of review have been fourfold.

First, some universities have sought to reduce capital and recurrent outlays in their new campus locations through:

- resource sharing with other regional stakeholders such as local government, for the provision and operation of infrastructure such as libraries and laboratories;
- building campus partnerships with further, technical, community and secondary education institutions; and
- at the extreme end, campus closure or campus downgrading to access centre status.

Second, there have been attempts at specific strategies to boost local student participation by:

- deliberate course design to meet local student needs;
- holding open days;
- careers and course counseling;
- special entry requirements for local students; and
- partnerships with local industry for student practicums, scholarships, and other work experience initiatives.

Third, there have been initiatives by some universities to expand the market reach of their regionalised campuses far beyond the area they are located in through the use of Information and Communication Technology (ICT) for tele-education and teleworking, and through agency and franchise arrangements for off-shore program delivery.

Fourth, and more fundamentally, there have been efforts by some universities at trying to build more substantial engagement bridges across the full spectrum of their academic activities with the various attributes and goals of their local communities. This is the area on which the present paper focuses most of its attention on.

Creativity and Regional Development

The second set of pressures operating to strengthen the knowledge-based association between universities and their regional communities is the growing importance of knowledge and creativity for regional development. Access to knowledge and learning, and the generation of ideas and the entrepreneurial action to implement them, is now the main attribute underpinning the success of regions in the global environment (Florida 2002).

Structural factors, such as location-specific infrastructure, enabling programs, institutions, firms, and the size of the local market are no longer regarded as the silver bullet for regional success once thought (Plummer and Taylor 2000). Neither in this regard are organisational behavioural determinants, embedded in the culture, rules, and power relationships that influence the responsiveness of institutions and firms. The regional location of the university campus, and its behaviour once it has been located there, in many cases has been a clear example of this for many regions (Garlick 2000).

Vulnerable regions in a knowledge world are not only those that make themselves unattractive to new knowledge accumulation, but are also those places that do not make the effort to mobilise the knowledge and learning resources they already have. While all regional communities have creative "ideas people" of one kind or another, resilient regions increasingly will be those that are able to extract the full extent of this knowledge and promote learning around it to meet their regional priorities.

Without this focus, the growing divide between wealth creating and welfare creating regions will only continue to widen. As Storper (1997) has warned, without proper bottom-up building of knowledge creation, a new type of peripherality can occur that is predicated on access to knowledge.

The *creative region* is one where innovative people come together and pool their ideas to generate non-linear solutions to issues that contribute to their local communities becoming better places. The creative region will be one that has the ability to generate and implement new ideas, by *actively* linking its structures and processes of innovation and learning to regional needs (Florida 1995 and 2002, Maskell et al. 1999). Creative regions exhibit enterprising behaviour (Plummer and Taylor 2000). Effective relationships with universities will be a significant feature of the creative region.

The creative region will:

- know the knowledge resources it has, including skills, specialist knowledge (both tacit and codified), specialist equipment, and knowledgeoriented networks;
- have a strategy plan that specifies the way knowledge and learning will be linked into regional objectives;
- have initiatives in place that enable all education sectors to meet specific skill needs locally;
- have collaborative mechanisms in place that enable links to be formed between a region's knowledge workers, universities and regional priorities; and
- have initiatives in place that encourage lifelong learning across a wide spectrum of the region's population (Garlick 2001).

Regional communities are replacing the business enterprise and the institution as the organising framework for creative people to realise their objectives.

Place has become the central organising unit of our time, taking on many of the functions that used to be played by firms and other organisations...today corporations are far less committed to their employees and people change jobs frequently. In this environment, it is geographic place rather than the corporation that provides the organisational matrix for matching people with jobs...it determines where companies will choose to locate and grow, and this in turn changes the ways cities must compete. (Florida 2002)

The core business of universities is knowledge creation and distribution; therefore, the public university has a responsibility in facilitating the processes that underlay the creative region.

University Viability

The third set of pressures operating to strengthen the knowledge-based association between universities and their regional communities is the need for universities to expand their list of strategies to boost their viability, in an environment of reduced public sector funding. As an additional strategy, universities have been slow to recognise that regions, because of their diversity, provide a potential global platform to aid their own distinctiveness and competitiveness in research and teaching. There have been several reasons for the slow uptake in this area (Ohmae 1996, Giddens 1998). First, some universities have seen engaging with their regional communities as an additional task on top of their pressures for being corporately efficient, publicly accountable, and academically competitive, rather than one that can add to their ability in meeting all of these (Clark 1998, Gallagher 2000, Trow 2000).

Second, for some strange reason a tension between an international role and a regional role is seen as being contradictory. Whereas the two roles are strongly connected, many universities believe the regional role to be somehow inferior to a national, international, or business focus (OECD 1999).

Third, many university staff members can be introspective, whereas engaging with the local and regional stakeholders requires skills in working collaboratively and openly with others who are outside the university's discipline areas.

Fourth, human, financial, and strategic management systems in place in universities generally do not recognise the regional partnership role of the university.

Fifth, regional communities themselves are not well organised and do not have a strategic approach to recognising the importance of knowledge and learning to their futures, thereby making them a difficult group for universities to engage with.

Sixth, and significantly, there is no policy and funding recognition for the regional role that a public university might have, ensuring any initiatives that are undertaken by universities need to be supported from other budget areas.

Understanding the

Concept of Engagement

In our research we used the concept of *mutual engagement* to describe the quality of the relationship between a university and its regional community that will generate the best returns for partners. It is the kind of relationship where there is ongoing and active dialogue over a long period on a whole-of-organisation basis that yields a learning benefit for both the university and the community.

Underlying mutual engagement we found seven criteria to be important. These are now briefly discussed.

Time and Resource Commitment. A strong engagement association between a university and the regional community needs time to evolve. Mutual associations do not occur overnight. Such relationships have an initial set-up phase where all stakeholders are identified, agreements are reached on objectives, values and capacities are understood, and trust is built through dialogue. A period of maturity follows when processes become embedded and qualitative and quantitative results begin to appear. Finally, a phase emerges when review and improvement are undertaken. A longer relationship is indicative of a good engagement occurring.

We found a number of good practice engagement initiatives in our research, which have been in operation for between eight and 15 years. Some of these include the Conservatorium of Music, the Legal Centre, the Family Action Centre, and the Sustainable Program at the University of Newcastle, and the RICE initiative at the RMIT. These initiatives have been able to detail specific quantitative and qualitative process and outcome measures of impact for their local communities.³ Another group of initiatives, such as the UTS Shopfront and the UWS Cooperative Programs, have been in operation for five to eight years and have also begun the process of review and improvement.

The second element of this criterion relates to resource sharing. A commitment at the regional level to share human and financial costs associated with the particular initiative was also seen positively in an engagement relationship. The COIN Internet Academy at Central Queensland University is a good example where this occurs as a partnership between the University, the Rockhampton City Council, and various community groups.

Good Leadership. Some respondents in the study believed the key to the success, or otherwise, of their regional initiatives was the availability of sufficient government funding. There was, however, recognition among this group that an initiative with this as its foundation would only live for as long as the funding was available. Other respondents saw that long-term engagement required processes that were not altogether dependent on the uncertainty of external project funding availability for their survival. Strong leadership, commitment, enthusiasm, and an ability to focus on regional needs were identified as a key success factor underlying engagement initiatives. It involves facilitating broad stakeholder involvement, where local knowledge and skills and university knowledge and skills are brought together. Social leadership of this kind does not imply any form of paternalism, but rather being interested in achieving something constructive in a collaborative manner. A number of initiatives at the University regarded this as important.

...visionary leadership to establish the initiative, adoption of an inclusive, collaborative strategy, strong community support, willingness of CEOs of the University and the Hunter Area Health Service to commit to the initiative and publicly support it. (HMRI response, University of Newcastle).

Dialogue. A number of universities saw having a mechanism for regular dialogue with the community as an important basis for an effective working partnership as it contributed to better understandings about respective response capacities and enabled concerns to be resolved before they threatened the initiative. There were different approaches to this. The Vice-Chancellor at the University of Sunshine Coast not only

³ Many of these initiatives are described in the *Report Compendium of Good Practice University-Regional Development Engagement Initiatives* (Garlick and Pryor, 2003).

http://www.dotars.gov.au/rural/rdp/research_reports/Compendium.doc

has a weekly column in the local newspaper, as a number of other Vice-Chancellors do, but also has around 400 meetings with the regional community to discuss university and regional community engagement priorities and opportunities. Some universities have regular bulletins and magazines, such as the *Sunshine Coast Review* at the University of the Sunshine Coast, while others have regular leadership level meetings to explore opportunities for collaboration. Examples include the University of Western Sydney and Charles Sturt University and their respective local council officials and elected representatives.

Written Agreements. Many communities and their universities believed a written agreement between the parties, if constructed in sufficient detail and followed up regularly, not only provided a formal demonstration of commitment, but also spelt out respective capacities, roles, expectations, and resource contributions. Charles Sturt University and the Wagga Wagga City Council, for example, have a joint Cultural Services Agreement that specifies the objectives and working arrangements for the next five years to "…enhance the planning and delivery of cultural services for the mutual benefit of the University and the community." Other universities, such as the University of Sunshine Coast, University of Newcastle, and the RMIT have developed MOUs with key actors and agencies in the regional community with which it works.

Monitoring and Continuous Improvement. Regular review of partnership arrangements was seen as important to ensure understandings about respective capabilities and capacities of the partners, to ensure outcomes are acceptable, and to ensure there is continuing improvement. Monitoring mechanisms need to include qualitative as well as quantitative measures of impact; take into account matters of scale, complexity, and time horizon; distinguish process and outcomes; be authoritatively refereed; and involve regular reporting back. The COIN Internet Academy initiative at Central Queensland University, the Sustainable program at the University of Newcastle, the UWS Cooperative Programs, the RICE initiative of RMIT at Hamilton, and the UTS Shopfront initiative all have review and improvement processes in place along these lines.

Responsive Organisation Structures and Processes. We found engagement examples were prolific where university management functions explicitly included community engagement objectives. This meant the regional community was a recognised element in university strategic planning, influenced campus structures, was embedded in staff reward and development programs, and was included in financial budgeting. We found only two universities that used management performance agreements and staff appraisals tied to financial rewards for staff that embraced community engagement objectives. While a number of universities include words in their strategy plans that suggest they have a goal of partnering with their regional communities, very few of these plans are operationalised in terms of monitoring and reporting arrangements, and even fewer are constructed and reviewed in collaboration with the communities themselves.

Virtually no campus explicitly specified a particular part of their budget allocation for

knowledge-based regional economic development engagement activities. An exception was the University of Western Sydney, which has recently put in place a community research fund to encourage collaborative research partnerships between community groups and the University. The fund, totalling \$250,000 per annum, calls for partnership projects up to \$20,000 that relate to priorities in the Greater Western Sydney region. Some universities claimed they had particular organisational arrangements or units that had the specific responsibility of being the campus link to the region. There was no uniformity in the mechanisms used here and in most cases there was a confusion of different contact points depending on the nature of the inquiry.

Celebrating and Sharing Success. The rewards from regional development engagement initiatives may be some years in being realised. To ensure the momentum is not lost it is important to regularly report on the successes that are being achieved to maintain commitment and enthusiasm for the goals. The initiatives we came across at the University of Newcastle and those at RMIT have significant visions for their communities that are very long term and they have a regular community reporting of successes.

For example, at the University of Newcastle the goal of the Sustainable Program is to:

Contribute to a significant re-positioning of the lower Hunter from a dirty, outmoded manufacturing region towards becoming a diversified, innovative, progressive economy, based on more sustainable principles—economic, environment and social (University of Newcastle: *Working Towards a Sustainable Future* program, project response).

The RMIT's RICE initiative at Hamilton in Victoria has a similar long-term goal of building the social and cultural sustainability of the Hamilton community to be able to deal with severe economic downturn.

The Engagement Spectrum

Based on the criteria outlined in the previous section, universities and their regions might broadly be identified as being either fully engaged, partially engaged, or not engaged at all. These concepts are now discussed.

The Fully Engaged University. This type of university has a formal set of statements that mark engagement with the community as fundamental to its operations. Underpinning this set of formal statements is a management commitment that runs throughout the institution. The FEU will have:

- a committed leadership;
- a course structure that links with regional priorities;
- staff contracts that acknowledge these aspects of their research and teaching work;

- faculty arrangements that facilitate interdisciplinary operations and budgetary allocations;
- consultative mechanisms with the regional community;
- monitoring and feedback mechanisms for all involved that demonstrate the engagement process is operating successfully or allows for early detection when this is not happening;
- conflict resolution mechanisms for when differences arise; and
- simple and accessible entry points and contact mechanisms for the local community at all levels.

We found only three universities moving in the direction of having such comprehensive practices towards regional engagement. There were several others approaching this situation. In all cases, however, there was still some way to go and not all aspects of engagement management were being fully adopted. It is important to note that institutional structural characteristics, such as size, degree of rurality, financial strength, or regional structural characteristics, such as strength of economy, do not appear to be the drivers for this. What appears most important are behavioural factors, in particular the attitude and initiative of key local people.

The Partially Engaged University. While some engagement activities are in place in this situation, they tend to be sporadic and incidental to the mainstream institutional operations. The institutional environment is not supportive of engagement, and it is not formally recognised in the institution's management structures and processes. Where there are good examples of engagement, they are supported at an institutional level because of the success they bring to the university rather than for the contribution they make to the regional community. Success is also strongly associated with guaranteed external funding for the specific activities.

In formal terms, there may be documentation that includes some statements of social obligation while in daily practice, staff struggle to find ways to fulfil their interest in community engagement. There are key people throughout the university who are part of a variety of community bodies, and some of these bodies will certainly involve key individuals from significant organisations within the region. The university usually regards this participation as part of its social obligation only, and not a mutual engagement partnership based around mutual learning and outcome achievement. The rhetoric of community partnership usually outruns performance by those institutions in this group.

We found a number of universities and their regional communities where there is evidence of a healthy engagement relationship. However, these are only found in single initiatives. They tend to revolve around the efforts of enthusiastic individuals and groups rather than through institutional or community-wide support.

The Non-Engaged University. The non-engaged university will put forward a number of arguments as to why it is not an engaged university, if pushed to think about the issue. The first of these arguments will be that it is a university with a goal of attaining

or retaining a reputation of international academic excellence, and that, by some logic, a regional role does not equate with this.

Second, it may argue there is no identifiable community for it to be a partner with. This is more likely to be an argument in metropolitan locations; however, as universities like UTS have shown through their Shopfront initiative, and UWS has shown through its Cooperative Programs, this is not an argument that has substance.

Third, it may argue that the surrounding region is either too poor or not large enough to sustain a focus on a regional engagement initiative. Engagement, however, is not a "one size fits all" approach and different regions will have different engagement requirements.

Finally, we found that there are a number of universities that do not take their regional role particularly seriously at all, possibly because they see no immediate value in it compared to existing strategies. This situation is not confined to metropolitan universities and their communities.

Benefits for the University

One of the key benefits to universities of having stronger connections with their regional communities is that it can be a means for focusing some of a university's research and teaching around regional characteristics, thereby generating a specialisation not likely to be replicated in other universities throughout Australia. Other benefits include gaining better access to local students, building economies of scale savings through infrastructure and resource sharing, having access to regional community social capital, and gaining access to information, marketing, and promotion.

Some of the benefits for the university are briefly discussed below.

Focusing research and teaching around regional characteristics. Universities can generate distinctiveness in their research and teaching by designing new and existing programs around the key attributes and needs of the region in which they are located. Not only does this attract local students and students from elsewhere with an interest in a particular specialisation, but it can also lead to local business and industry partnerships and joint venturing opportunities.

We found many examples of these occurring in existing programs, where new programs have been initiated, or where programs had been changed to better reflect local need. The Swinburne University partnership program at its Lilydale campus, Italian language and arts courses at the University of Sunshine Coast, manufacturing management courses at the University of South Australia, public policy programs at the ANU, University of Canberra, and the Northern Territory University are all examples of teaching courses focussed around local need. The medical research, black coal, bulk materials handling, and energy research programs at the University of Newcastle are based around the attributes of the regional economy. Similarly, the fishing and aquaculture research at Flinders University, innovative manufacturing at Wollongong University, tropical wildlife management at the Northern Territory University, tourism at the University of Canberra, and wine research at Charles Sturt University are examples of research initiatives focused around regional economic development priorities. Some good examples of student-oriented connections being made with the regional community include the UWS Cooperative Programs, the RICE initiative at RMIT, and the UTS Shopfront.

Gaining access to local students. Department of Education Science and Training (DEST) data on student flows (Cumpston, et al. 2001, Garlick 2000), and regional higher education participation rate research (Stevenson, et al. 1999 and 2001) suggests considerable imbalance in net student flows across regions. There are a number of strategies that can be employed by the university to attract local students to their regional university. Charles Sturt University offers scholarships each year to local school students to attend the university. The University further encourages local students to attend the University by relaxing the entry requirements. Through the Principals List it provides opportunities for the best high school students to enter the local university based on the school principal's recommendation of their ability, rather than based on usual examination assessment. Similarly, the University of Newcastle Industry Scholarship Scheme (UNISS) facilitates industry support for student scholarships that enables student placement for 84 weeks over a five-year period. There are some fifty scholarships receiving industry backing under UNISS.

When Griffith University established its campus at Logan it made special efforts to encourage local students to attend, despite a historically low history of higher education attendance in the local community. Initiatives at Logan have included locally sponsored awards and scholarships, open days, transition programs between Year 12 and university, counselling on course selection, and vocation opportunities. More than 80 percent of undergraduates at the campus now come from the local Logan area. The *Science and Engineering Challenge*, organised each year by the University of Newcastle, ensures the University contacts around 3,000 year 10 and year11 students across the Hunter region with interests in science, engineering, mathematics, and technology.

Economies of Scale: Savings Through Infrastructure and Resource Sharing.

Economies of scale savings can be achieved by the university campus by sharing regional resources and engaging in joint activities with local councils, TAFE, and secondary schools in the provision and operation of libraries, business incubators and technology parks, recreation amenities, laboratories, and marketing and promotion programs. Multi-partnered campuses with Institutes of TAFE, community colleges, and senior secondary schools have been a popular means of local resource sharing for universities over the last decade (Shoemaker, et al. 2001).

The Rockingham campus of Murdoch University, in association with Challenger TAFE and the City of Rockingham, contributed to jointly establish and operate the

Rockingham Regional Campus Community Library. The Library caters to university and TAFE students as well as the local community, and is a much more significant resource than could have been provided by any of the partners by themselves. Charles Sturt University, in partnership with the Wagga Wagga City Council, has developed a full commercial laboratory facility as a regional commercial resource to boost industry development in the region.

The Joondalup Learning Precinct is a partnership between Edith Cowan University, the West Coast College of TAFE, and the Western Australia Academy of Police. The Learning Precinct aims to increase student numbers and maximise staff training and development through joint programs, joint marketing, sharing infrastructure, and joint program development and delivery.

Similarly, the Caboolture Community Campus is a joint venture between the Queensland University of Technology, North Point Institute of TAFE, and the Caboolture Shire Council. The partnership enables the sharing of library, IT, laboratory and student facilities, articulation of courses between the TAFE and Queensland University of Technology (QUT), integrated campus administration, and joint marketing.

Access to Regional Community Social Capital. The university can tap into a potentially significant pool of *pro bono* local knowledge and expertise, political connections, leadership, and other skills relevant to the university's activities. Such connections also reinforce local ownership of the university.

For example, the University of Newcastle Legal Centre utilises the services of the local legal fraternity who give their time to help with mentoring and mock trials in the law degree course. The University also utilises the environmental management expertise of the Hunter Region local councils and green groups for the ongoing sustainable development program for its campus. The University of Sunshine Coast has found linking into knowledge workers in various discipline areas particularly valuable in the development of course structure and materials, as an addition to teaching capability through workshops and guest lectures, for student practice and internships, and for joint research initiatives.

Marketing and Promotion. Local councils, tourist bodies, cultural organisations, church groups, sporting groups, and others can all assist the university through partnership arrangements in this area. A number of universities have taken advantage of this by becoming part of regional marketing and promotion programs.

Benefits for the Region

In our investigation, we found the benefits for the regional community from universityregional engagement potentially occurred across a wide spectrum of activity. They included economic development; urban and rural regeneration; regional labour markets; cultural, health, and social well-being; environmental sustainability; Indigenous matters; student access; and regional governance and leadership. Some of these are summarised in this section.

Economic Development. A university can contribute to a region's economic development by providing local access to technical, consulting and professional services; through R&D collaboration; technology transfer infrastructure such as business incubators, business centres, and science parks; and assisting with staff and student secondments and practicums to local business, institutions, and projects.

In each of these areas, we found good examples of partnerships. The Cooperative Research Centre for Black Coal Utilisation and the Centre for Bulk Solids and Particulate Technologies enable the significant energy industry in the Hunter Region in NSW to have access to considerable R&D expertise from the University of Newcastle. Similarly, the wine-producing region of the Riverina in NSW benefits from the research and development being undertaken by the National Wine and Grape Industry Centre at Charles Sturt University. Tourism regions on the North Coast of NSW and the Australian Capital region benefit from the Sustainable Tourism CRC. The University of South Australia has a number of tailor-made manufacturing management teaching programs targeted to the specific needs of a range of Adelaide-based manufacturing employers, such as Mitsubishi Motors, Visy, and Inghams.

Flinders University's Lincoln Marine Centre was established in Port Lincoln to provide a regional facility for research, education, and training support for fishing and aquaculture, which are two of the region's core industry sectors.

In smaller regional centres, where there may not be the industry critical mass, the higher education institution can partner local business in project-specific areas that are relevant to the funding program objectives of government departments and institutional service providers. The *Gateway* portal in Albany, for example, is assisting segments of the region's business to develop and participate in the on-line regional economy. The CRC for Sustainable Tourism at the University of Canberra is working with smaller communities, such as the Snowy River Shire, Sapphire Coast Tourism, and Euobodalla Shire to help them build their local tourism industries.

Urban and Rural Regeneration. Through their building, property, and environmental management programs, as well as through their research and teaching programs, higher education institutions can boost a region's commercial, industrial, and household regeneration and investment. When tied in with local planning initiatives, universities can add substantially to the town planning amenity, services, and infrastructure of the urban centre and its suburbs.

University spin-off companies, technology transfer infrastructure, and the contracting out of daily university services such as catering, cleaning, gardening, accountancy and auditing, etc. can add to the employment base of urban and rural areas. The Queensland University of Technology (QUT), for example, has partnered with the Queensland Department of Housing to redevelop an excess army site at Kelvin Grove

in Brisbane. The initiative aims to create an integrated urban village that would enhance both the University's campus at Kelvin Grove and the Department's housing development plans. The development, which will house more than 700 residential units, will incorporate residential, education, retail, community, and business and recreation facilities. In rural areas, university research and outreach programs can contribute to boosting farming productivity and enhancing the viability of rural communities. The Centre for Rural Communities at the Gippsland Campus of Monash University works with small local communities (under 10,000) in the region to build partnerships, access skills, undertake learning, set up participatory structures, and gain access to services to enhance their viability and sustainability. The Centre for Sustainable Regional Communities at LaTrobe University at Bendigo also works in partnership with small towns in rural Victoria to enhance their social, cultural, and environmental sustainability. The Centre for Tropical Wildlife Management in the Northern Territory University has formed a partnership with Aboriginal communities in the Northern Territory to manage native plant and animal species for conservation and for market through the use of sustainable practices.

Regional Labour Markets. Through their students and graduates, universities have a significant role to play in developing a region's human resource capabilities. Graduates provide a bridge between the university and regional businesses. With graduates, the local and regional community can retain innovative, entrepreneurial, and management skills that can foster new business, attract investment, and enhance the productivity, efficiency, and market competitiveness of existing businesses and institutions. Some universities have sought to retain greater numbers of local university graduates in their local regions by offering job-designed degree programs with local employers, graduate entrepreneurship programs designed to foster new business start ups, work experience programs, and mentoring initiatives.

In relation to undergraduate students, the University of Western Sydney Cooperative Program enables students to be placed with local employers to undertake vacation and academic session projects that are relevant to their studies and to businesses in the Greater Western Sydney region. More than 70 percent of students involved in the program obtain ongoing work as a result of the placement they have undertaken. During its five years of operation, the program has placed around 500 students with around 250 Greater Western Sydney enterprises and institutions. For small business in particular, it represents a "try before you buy" mechanism in the local labour market.

The University of the Sunshine Coast Communications Study course has established a strong relationship with Channel 7 in the region. The industry professionals from Channel 7 contribute to the content of the courses and also undertake some lecturing. In addition, each semester four students do internships with Channel 7. The Graduate Entrepreneurial programs at the University of Adelaide offer opportunities for recent graduates to move from university study into business using their specialist skills or project ideas. The programs provide a range of support including scholarships, training courses, and assistance for Ph.D. candidates to help convert their project and skills into a business enterprise.

Other initiatives that universities may undertake with their communities to strengthen the absorption of graduates into the regional labour market might include:

- the provision of careers advice to students about local opportunities;
- promoting graduate employment with local employers;
- the establishment of entrepreneurial business incubators for new graduates; and
- building partnership links between industry and university teaching and research.

The University of Newcastle *Science and Engineering Challenge* was introduced three years ago to reverse the decline in the number of students completing advanced mathematics, physics, and chemistry in senior secondary school at the regional scale and going on to university study.

Culture. Universities can make a contribution to the region's cultural base through culturally-based learning programs (e.g., in art, music, multi-media, archaeology, etc.); involvement with cultural bodies; and by making a range of cultural infrastructure (e.g., museums, galleries, orchestras, libraries, workshops and studios, sports facilities, radio and television stations, etc.) available for public access. The university might also sponsor local events and performances, take part in specific community cultural initiatives, and offer specialist expertise and performances on a pro-bono or other low-cost basis.

There are a number of very good examples in this area where real cultural benefits for the regional community were being fostered through university engagement activity. Some of these were the University of Newcastle Conservatorium of Music, the Sunshine Coast Art Director's Group, a palaeontology museum at Bathurst, archaeology initiatives at Armidale and Adelaide, and the Hamilton RICE initiative auspiced by RMIT.

Health and Social Well-Being. Through their learning programs, research, and infrastructure, universities can improve the health (geriatric care, hospital, nursing, medical, dental), safety, physical fitness, and general social wellbeing (legal, counselling, sociology, and welfare services) of the regional community. This may involve partnerships with existing public health and welfare institutions or with the private sector, community access to on-campus health and welfare facilities and services, the development and access provision of state of the art technology, and the provision of information for regional health and welfare planning.

There were more examples of good practice initiatives in this area than in any other category. They included the Legal Centre, Family Action Centre, and the Hunter Medical Research Institute at the University of Newcastle, the University of Western Sydney Music Therapy program, and the "Investing in Youth" program at Edith Cowan Bunbury campus. Others included the "Reconnect Program" and the "Childhood Triple P" parenting program at the Whyalla Campus of the University of South Australia, the

COIN Internet Academy at Central Queensland University, the UTS Shopfront, and partnership initiatives by RMIT and the University of Newcastle with various organisations such as the Salvation Army, Maremont Recovery, and Baptist Community Services.

Sustainability. Universities can contribute to the sustainable development of the regions in which they are located through a variety of academic, management, infrastructure, and student mechanisms. Through their teaching programs, universities can raise community awareness and skills in relation to the region's sustainable development activities and priorities. Staff and students with sustainable development expertise can also be seconded into the region to assist meeting specific objectives. Universities can use their infrastructure and specialist equipment to contribute to the sustainable development objectives of the regional community in a number of ways, and universities have research centres that are involved in aspects of the sustainable development through demonstration initiatives such as "green campus," responsible purchasing programs, and *pro bono* services related to sustainable regional development and other initiatives.

The University of Newcastle has put in place a substantial whole-of-university and local community partnership designed to enhance environmental sustainability on campus and in the rest of the Hunter Regional community. Through its extensive MOUs and partnerships throughout the region, the University has created initiatives to make energy savings, reduce carbon dioxide emission, recycle waste and grey water, use recycled materials, and enhance bio-diversity. Around 90 percent of all organic waste is recycled through a worm farm, energy savings of 50 to 70 percent in buildings have been achieved, and water consumption has remained constant despite a doubling in campus size over the last decade. Knowledge generated through the various initiatives is transferred through demonstration to other regional organisations, as well local property developers and students from the region's high schools and TAFE. Students on the campus (e.g., biology, geography, chemistry, engineering, etc.) use the innovative buildings and campus grounds as a living classroom.

Other Areas of Benefit. Other areas in which we saw regional benefits from university regional development engagement included in the general governance and strategic focus of the regional economy, Indigenous initiatives, and in enhanced student access. Several universities have special centres to encourage Indigenous teaching and research. The Umulliko Centre at the University of Newcastle is a key Indigenous higher education research centre of this kind. It provides support to the 200 Indigenous students on the campus, offers skill development for those seeking university entry, provides postgraduate studies for around 30 Indigenous students, and supports medical degree undergraduates. Research undertaken at Umilliko is both informed by the needs of the local Indigenous community and its outcomes are for the benefit of the community for the research that is carried out. The Centre also has a voice on all of the University's planning committees.

Policy Considerations

At present there are no policy initiatives in Australia that seek to facilitate engagement building relationships between universities and their communities. There are also no policies or programs that enable regions to directly access knowledge to meet their objectives. For regions and for universities these are serious shortcomings, given the growing importance of knowledge and learning as key drivers for regional development. To do nothing of a policy nature in this area is to facilitate further disparity between regions in their access to knowledge, and to deny universities an additional tool to build their distinctiveness, efficiency, and viability.

A number of considerations are relevant to any policy design to facilitate better university-region engagement. The first consideration is that university-region engagement in Australia at present is patchy at best, generally restricted to individual project-specific examples. Only a small number of universities could be regarded as having a whole-of-organisation commitment to community partnership in their management arrangements, and only a small number of regions see the need to better utilise their knowledge resources to meet their objectives. Few communities have undertaken any kind of knowledge resource audit, have any information about "ideas people" living in their communities, have a knowledge and learning strategy plan in place, or have developed strong network and partnership links with their various education providers.

Most universities and their regional communities either have a spasmodic, projectspecific knowledge-based engagement relationship or none at all. This patchy situation is likely to remain, unless there is designated government policy that recognises the need to boost knowledge and learning-based university-region connections. Policy recognition and support for this *third role* for universities and for enhanced knowledge access by regions is a serious impediment.

The second policy consideration is that regional engagement is a localized phenomenon that is based on the creative and enterprising behaviour and initiative of people in the regional and local community. As there are no designated regions or regional governance arrangements in Australia, there is no standout organisational focus for taking the lead in pushing community knowledge and learning agenda. This is not necessarily an impediment. Enterprising and creative regions, by their nature, ought to connote an eclectic mix of groups and coalitions that form and disband on a needs and expertise basis. There are sufficient local organisations (e.g., local councils, Area Consultative Committees, Learning City Committees, state government regional development commissions, and others) already in regions that could provide steerage of these processes. There is no need for any new regional organisation to be formed.

The third policy consideration is that high levels of engagement will only result and be effective through program initiatives that jointly target regional communities and universities, and not through initiatives that target one group over the other. A community-centred approach or a university-centred approach to funding policy for

university-region engagement will provide no ownership or guarantee of responsiveness from the other party.

The fourth policy consideration is that there is a need for continuous monitoring and benchmarking of university-regional community engagement practice in Australia using approaches that involve qualitative as well as quantitative assessment that capture knowledge and not simply transactions impacts (Charles and Benneworth 2000). To be taken seriously by resource decision makers, university-region engagement as a strategy needs to also go beyond analysis based around simple case study assessment to draw conclusions about systemic impact. Current impact assessment methods, based around the regional transaction impact of universities, are not effective in portraying the effectiveness of the regional role of the university in a knowledge world.

Suggested Policy Approach

This section suggests an approach to policy to enhance regional development through university engagement. It comprises three elements.

- 1. A general framework that would put in place mechanisms to strengthen the regional partnership platform between universities and the communities, where there is a commitment to engagement. Funding support through this mechanism would not be provided to universities or to regions but instead to the partnership that is formed between them. Funding would assist with the formulation of agreements that specify roles, regional objectives, and priorities and gaps that need to be filled through partnership building. Support would also be provided to carry out base-line evaluations of current engagement partnership process in each region entering the program. National dissemination of good practice engagement initiatives would also need to be facilitated to assist in building enthusiasm and confidence at the regional level as to what can be achieved when universities and communities partner to tackle regional priorities.
- 2. Two capacity-building programs introduced for universities and regions to facilitate the organisational change needed for them to be effective partners. For universities, it may include support to:
 - design teaching and collaborative research programs that target regional priorities;
 - construct community accessible directories of university knowledge resources;
 - establish an organisational interface with the community;
 - build a regional role into its strategic planning, staff training and awareness programs, and reward and recognition schemes for staff;
 - hold regional fora; and
 - enhance community access to university services, cultural programs, and infrastructure.

For regions, it may include support to:

- develop an organisational and strategic focus on knowledge and learning;
- undertake regionally accessible knowledge resource audits;
- undertake promotion and awareness raising in the community to enhance a learning agenda;
- undertake demand analysis of regional higher education needs; and
- develop regional data bases of skill and knowledge availability and shortages.
- 3. Amendments made to a number of existing specific purpose programs that in some way relate either to universities or regions, managed by various portfolios (including ARC programs), to enhance either community or university buy-in in the context of the partnerships formulated through the general framework.

Conclusions

University campuses may have been regionalised over the last decade, but the engagement between universities and the communities in which they have a presence is patchy and project-specific at best. There are only a small handful of universities at present that see a regional role as important, not only as a public responsibility but also as an additional strategy to build their uniqueness and viability. Where regional engagement is poor or passive, regional communities miss maximising knowledge and learning-driven opportunities, universities miss having an additional tool to build their viability, and the nation is short changed.

There are however some very good individual examples of university-regional engagement embracing aspects of mutuality in their arrangements. While many of these are still in their formatives stages, those that are more mature in their partnership point a way towards what can be undertaken and achieved at the regional and institutional levels, as well as how policy might better facilitate this becoming deeper and wider practice.

Stronger regional development returns, and consequent national benefits, will only emerge if there is *active* and *purposeful* engagement of a university in the community where it is has a presence. Higher education policy must embrace an active regional role—a *third role*, along with teaching and research. There has to be a shift from the current *structural* and *equity-based* location solutions for universities, to policies and university practices that seek to strengthen knowledge and learning-based regional *behavioural* connections in the existing system. Similarly, spatial policies need to recognise the importance of access to knowledge, creativity, ideas, and learning as significant determinants of regional viability in their design and delivery if the gap between wealth producing and welfare producing regions in a knowledge world is not to be exacerbated.

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