



Submission to

Review of Australian Higher Education

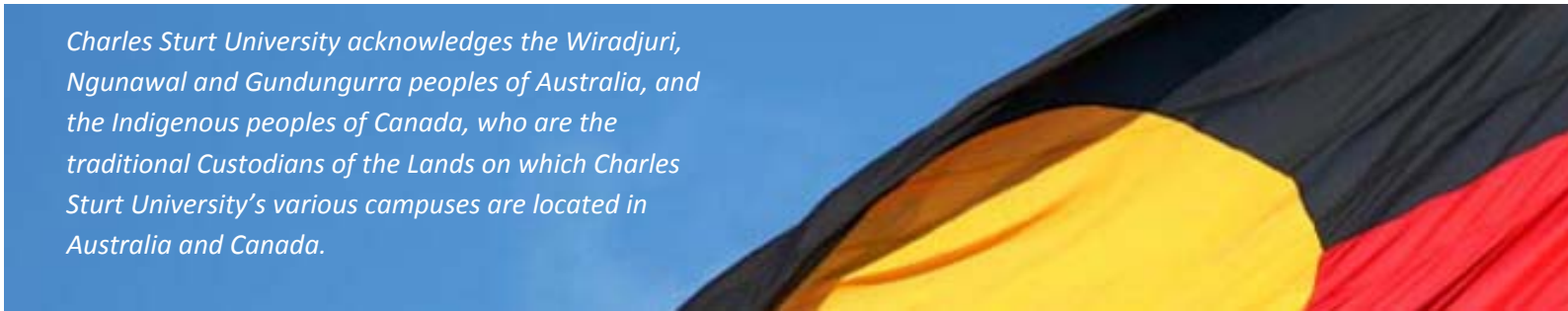
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The National University of Inland Australia

Table of Contents

Introduction	3
The Inland Context.....	6
The Significance of Territoriality	6
The Limits of Territoriality.....	7
The Sustainable System University	11
The Sustainability Problem	11
Why not mergers?	11
Characteristics of a Sustainable University System	12
What type of system might Charles Sturt University want to be part of?	13
Key challenges and issues for higher education	16
Meeting labour force need - distance and flexible learning	16
Building stronger pathways between TAFE and Universities	18
Addressing impediments to meeting labour force needs	18
Shifting the international paradigm.....	21
Improving Student Participation.....	23
Reinforcing the nexus between research and teaching	28
Modernising funding.....	30
Improving governance	33
Bibliography	34

Charles Sturt University acknowledges the Wiradjuri, Ngunawal and Gundungurra peoples of Australia, and the Indigenous peoples of Canada, who are the traditional Custodians of the Lands on which Charles Sturt University's various campuses are located in Australia and Canada.



Introduction

Charles Sturt University was established in 1989 with the object of promoting “scholarship, research, free inquiry, the interaction of research and teaching, and academic excellence” having particular regard to the needs and aspirations of the communities of inland Australia. Charles Sturt University is the largest non-metropolitan University in Australia. Charles Sturt University’s 35,000 students include more than 6,000 domestic students from every State and Territory outside New South Wales/ACT, making it Australia’s truly national University.

Driven by the need to expand educational attainment and professional capacity across a vast territory, Charles Sturt University developed the infrastructure and capability to address professional labour force needs at sub-national, national and international levels. Our key research strengths in food security, water security, bio security, policing and national security, inter-faith dialogue, education and ethics are informed by engagement across each of these levels and, in turn, inform practice and perspective at each.

The capacity to operate across sub-national, national and international levels is critical to generating multi-directional knowledge flows – bringing international and national innovation to inland communities, as well as informing national and international practice and perspectives through local innovation. As noted by the Productivity Commission in relation to health services reform (2005): “... [rural] areas have been an ‘incubator’ for developing and testing new models of care and expanded scopes of practice. Many such innovations have the potential to provide the basis for system-wide changes in health workforce arrangements in coming years. Indeed, for this reason, the Commission considers that it is very important that health workforce frameworks facilitate two-way articulation of policy change and workplace innovation between the major population centres and rural and remote Australia.” Multiple levels of interaction enhance the benefits of our geography and ensure that our inland communities, and our students, are engaged in a broader global community.

Like all Australians, our students define their expectations of Charles Sturt University according to their aspirations – the aspiration to be an actor, artist, agronomist, academic, dentist, economist, journalist, midwife, pharmacist, physiotherapist, radiographer, teacher, theologian or veterinary scientist. Our students aspire to find innovative ways to feed our growing world population in environmentally sustainable ways, to use water more efficiently, to reduce the incidence of mortality from cardiovascular disease and to resolve entrenched religious conflict. These aspirations, and the solutions to these challenges, are not limited by geography. Rather, to realise these aspirations demands meaningful engagement, and knowledge flows, across our inland, national and international dimensions.

Australia is facing a range of challenges that will have significant implications for its future economic growth and social harmony – climate change, water scarcity, food and energy inflation, global shifts in manufacturing, ageing populations, geopolitical instability and terrorism, religious fundamentalism, bio-security threats, health services reform and preventable morbidity and ill-health. To meet these, and other, challenges the Government has acknowledged the need to increase significantly the educational attainment and flexibility of its labour force; promote

creativity, innovation and invention; and maintain a harmonious and stable social environment in which communities and individuals can participate and thrive.

The solution to these challenges is not fixed in time. Australia must aim for a higher education system that is capable of addressing the challenges of the future, as well as those of today. Our universities must be enabled to look continuously beyond the immediate horizon. As the solutions to global warming may be found in some as yet undiscovered science or practice, so too the professional skills required by the Australian labour force may reside in occupational classifications or skill sets not yet conceived. Universities must be invested with the capacity, and the resources, to find not only the right answers for today, but the right questions for tomorrow.

The challenges facing the Australian community, well documented in the *Discussion Paper*, have specific implications for the universities as part of the higher education sector:

- Australia's school leaver population is forecast to decline significantly whilst demand for a broader range of professional skills increases. There is a need, therefore, to increase higher education participation across a broader range of the population to meet the future skills needs of the Australian economy and society.
- With the declining school leaver base, competition amongst higher education providers for students will increase. This will place increased financial pressure on all institutions, particularly institutions without a strong research concentration, comprehensive professional education base or a capacity to extend beyond their immediate catchments.
- Providers will also confront increased financial pressures arising from expanding global competition for international students, particularly institutions highly exposed to contestable international markets. The absence of indexation of public income, the abolition of domestic fee paying places and low levels of philanthropic support across the sector will also have an adverse impact particularly on smaller, less scaleable, institutions.
- To respond to the declining school leaver cohort, and the continuing need to expand enrolments to meet national labour force needs, Australia will need to increase higher education participation among poorly represented groups and invest in re-skilling its existing labour force for new types of employment. This will require increasingly more flexible forms of learning for students already engaged in the labour force (eg. distance and blended learning) and more closely integrated pathways to recognise prior learning (eg. TAFE).
- To ensure equitable access to the benefits of higher education, Australia must also address the chronic under-representation of some sections of the community in higher education, such as low social-economic status (SES), rural and remote and Indigenous students. In addition to the risks and costs of social exclusion, the participation of these populations will be needed if Australia is to grow its skilled labour force both for national, and sub-national, social and economic development.

There is a widely held view that if these challenges are left unattended, smaller and narrowly focussed institutions will need to scale back programs or close campuses to reduce their costs (reducing the range of programs available at a local level to meet increasingly acute labour force needs). Alternatively, the Government will need to subsidise the operation of these institutions drawing important resources away from the sector as a whole.

Even with current high demand for higher education, some institutions are already unable to fill student load or have lowered entry requirements below historical levels to remain competitive. This has affected both smaller institutions without a sufficiently diversified course profile as well as research intensive institutions that may be perceived as too narrowly focussed to attract students seeking labour force skills. If there is not a fundamental change in the way the higher education sector is organised, or if program and campus infrastructure is not maintained, by 2020 a future generation will inherit a degraded higher education infrastructure unable to cope with the renewed demand for participation, creating a new skills bottleneck for the next generation.

The Inland Context

In order to respond to the issues raised in the *Discussion Paper*, it is appropriate to provide a description of the context in which Charles Sturt University operates and challenge some of the assumptions in the Paper regarding “regional” universities.

The Significance of Territoriality

Charles Sturt University, like other non-metropolitan institutions, plays an important role in the social and economic development of its communities.

Retaining skilled professionals is critical to the provision of essential health, business and associated services and the overall amenity of inland Australia. The loss of skilled professionals has a domino effect across inland communities and their economies. In critical areas such as health services, it can lead to a systemic loss of professional services and support structures essential to community sustainability and growth. This is why Charles Sturt University places such importance on the training of professionals for practice in inland Australia across all our fields of endeavour.

Charles Sturt University successfully recruits inland students to its on-campus programs and to the professions in inland Australia. Over 70% of all Charles Sturt University on-campus students come from an inland home location. Similarly, 73% of Charles Sturt University’s graduates who were originally from an inland home location took up initial employment in a non-metropolitan location (approximately 20% of graduate students from Charles Sturt University with a metropolitan home location took up initial employment in a non-metropolitan location as well) (Western Research Institute, 2006). These retention rates are due to both the home location of the student and the fact that their education is provided in those inland locations in which they will practise.

Charles Sturt University’s capacity to retain graduates in practice in inland Australia peaks in the critical area of agricultural science and management with 88% of agriculture and environment graduates with a non-metropolitan home location taking up employment in a non-metropolitan location and 44% of graduates with a metropolitan home location taking up employment in a non-metropolitan location (Western Research Institute, 2006). Equally important, more than 70% of health graduates with a non-metropolitan home location took up employment in a non-metropolitan location and more than 20% of health graduates with a metropolitan home location took up employment in a non-metropolitan location (Western Research Institute, 2006).

Since 1995, the percentage of non-metropolitan students initially employed in a non-metropolitan location has grown at an average rate of 1.3% per annum (Western Research Institute, 2006). To demonstrate the significance of this statistic, between 1995 and 2000 (before the first Charles Sturt University pharmacy graduates) an average of 3 metropolitan trained pharmacists located to non-metropolitan areas in NSW each year. Every year since Charles Sturt University’s first pharmacy graduates, 35 graduates or more have chosen to practise in rural and regional settings, that is, 117 new pharmacists in inland and rural Australia in just 3 years. Without Charles Sturt University, many more towns and communities would not have a local pharmacist, leading to a further decline in professional services and overall liveability across inland Australia.

The proportionate impact of a large university on a small economy has greater significance in comparison with that of large institutions positioned in large economies. In a study by the Western Research Institute in 2005, it was found that the economic impact of Charles Sturt University expenditure, combined with the expenditure of staff, non-local and international students, on the regions surrounding its four main campuses was \$264 million in gross regional product, \$164 million in household income and over 3,100 full-time equivalent jobs (FTE) when flow on effects are taken into account (Western Research Institute, 2005).

To put these findings into perspective, Charles Sturt University and international and non-local students attending the University generate the equivalent of 9% of Wagga Wagga's employment in the Murrumbidgee statistical division; the equivalent of 12% of Bathurst's employment in the Central West statistical division; and the equivalent of 3% of Albury-Wodonga's employment in the Murray and Ovens-Murray statistical divisions (Western Research Institute, 2005).

The activities of the University also contribute to the social development of communities. For example, the University operates National Radio News to provide journalism students with a work based environment in which to develop their skills. National Radio News is also offered as a subscription news service for rural and regional radio stations across Australia using its own resources and the services of Australian Associated Press and Sky News Australia. More than 100 regional stations now subscribe to National Radio News. The service provides access for thousands of rural Australians to up to date news.

Charles Sturt University has established a range of primary health clinics to enable students to meet clinical practice requirements in a range of professional fields. Charles Sturt University has established a Podiatry Clinic and a Diabetic and Cardiovascular Screening Clinic in Albury-Wodonga, a Functional Rehabilitation Clinic in Bathurst, a Psychology Clinic in Bathurst and is establishing Dental Clinics in Albury-Wodonga, Bathurst, Dubbo, Orange and Wagga Wagga. Students also work within inland communities in a range of clinical contexts including speech pathology, physiotherapy and aged care nursing. These services not only provide up to date clinical experience for students, but also supplement the provision of health services to our inland communities in areas of critical need.

The Limits of Territoriality

Territoriality describes the context within which Charles Sturt University operates. It is, however, too limiting an explanation of the role of the University itself.

While territoriality might adequately explain the history of an institution, and influence its focus and the balance of key relationships, it is by no means a complete explanation. As noted by the OECD: "All [Higher Education Institutions] embrace some notion of territoriality within their mission statements and institutional plans; these range from general notions of contributing to "society" and international research to more precise commitments to local and regional communities" (OECD, 1999, p. 15).

In Australia, all universities were founded to one extent or another on meeting the social and economic needs and aspirations of a definable regional area. The University of Melbourne notes on its website that its establishment "was a conscious move by the raw and young community to cloak itself with some of the culture and sophistication of the parent country, and to assert its equality

with Sydney whose university opened in 1852. Melbourne's University was also intended to be an agency of civilisation - to improve the moral character of the colony."

Similarly, the enabling statute of Charles Sturt University states that its object is to promote "scholarship, research, free inquiry, the interaction of research and teaching, and academic excellence". The statute also obliges the University, in fulfilling its primary object, to give "particular regard to the needs and aspirations of the people of western and south-western New South Wales".

All higher education institutions "... operate within multiple and overlapping territories and usually manage a portfolio of activities ranging from global to local" (OECD, 1999, p. 17). This is particularly the case for modern universities with multi-campus/multi-national operations and extensive distance and flexible education capabilities.

Territorial categories do not always do justice however to the principal functions of universities. For example, the reliance in the *Discussion Paper* on local "business", "industry" and "employers" to describe the key relationships of universities in meeting labour force needs, particularly with respect to "regional" universities, does not adequately reflect, for example, the priority role of the professions as a whole and of the public sector in the activities and relationships of universities.

The majority of Charles Sturt University's courses and its graduates are linked to professions. Here the primary relationships for the University are to professional associations and/or professional accrediting bodies. Likewise key communities for the University in this context are communities of professional practice. In this context it is important to note that professional relations and linkages and accreditation operate at state, national and even international levels as much as (or in many cases even more than) regional levels.

Further, many of Charles Sturt University's courses serve the major public sector systems of health, education, criminal justice, child welfare and social security. Key relationships in this context are with state and national governments and their agencies.

Characterisation of "regional" universities exclusively in terms of territory in the paper does not reflect the multi-faceted and national and international roles and responsibilities of universities, such as Charles Sturt University, which are based in non-metropolitan locations. As a result the paper does not adequately convey, or potentially undervalues, the roles of these universities within a national system of higher education.

This is highly problematic in the context of the capacity of distance and other forms of flexible learning to address future national labour force skills requirements. It is very important to acknowledge that universities in non-metropolitan locations play national and international roles, especially in contexts where distance and flexible learning are involved.

Universities in "regional" locations can rarely develop the critical mass of staff and resources needed for good quality learning and teaching and research if they rely on enrolments from their geographical locations. To develop and sustain critical mass, they must successfully take on broader roles. At Charles Sturt University this has included national and international roles and, critically, a leadership role in "inland Australia". Charles Sturt University, for instance, has more than 6,000 domestic students from outside NSW/ACT, which makes it truly national. Charles Sturt University is

Australia's major provider of programs in law enforcement, library science and wine science, and one of the major providers of teacher education, early childhood, IT and agriculture.

Similarly, Charles Sturt University's research is engaged across a number of levels. For example, informed by our work in the Murray-Darling and Murrumbidgee Irrigation Area and the increased importance of applied hydrology to the management of increasingly scarce global water resources, Charles Sturt University formed the Hydrology Research Group in 2005. Within 2 ½ years the Group's contribution to the improvement of integrated water resource management within rural, peri-urban and irrigation communities in Australia, Pakistan, China and elsewhere was recognised through the creation of the new International Centre of Water for Food Security which has been designated the Asia-Pacific headquarters for UNESCO's Hydrology for the Environment, Life and Policy (HELP) initiative. Located within Charles Sturt University, this UNESCO Centre brings together scientists from the Commonwealth Scientific and Industrial Research Organisation (CSIRO - Australia), Charles Sturt University (Australia) and a number of visiting scientists from a range of International organisations. The former Director of the Centre, Professor Shahbaz Khan, was recently appointed as UNESCO's Chief of Sustainable Water Resource Development and Management and head of the UNESCO Hydrology for Environment, Life and Policy program in Paris, co-ordinating international scientific research into water resource management. Scientifically, the key area of interest is to study the hydrology of agricultural water systems under stress and societal responses (socio-economic, technical and governance) to overcome production and environmental issues. This Centre works on national and international water problems by seeking local solutions for global impacts. It also endeavours to assist development of appropriate policies and practices for environmentally sustainable and economically viable food production through international networking among scientists and the transfer of information and new scientific knowledge to stakeholders and the general public.

Charles Sturt University's Cardiovascular Research Group is leading the world in research into the therapeutic role of folic acid in protecting the heart muscle of diabetics. Diabetes is a major contributor to cardiovascular disease around the world, and is increasing in prevalence at alarming rates in Australia – particularly in regional communities. This work, coordinated by Charles Sturt University Professor Lexin Wang, is being done in conjunction with the Clinical School of Taishan Medical College, in China, where Professor Wang holds an Honorary Professorship.

Charles Sturt University makes a significant and tangible contribution within its territory, but it does this not only by addressing distinct education and research needs but also by being a successful national and international (over 6,000 international students) University.

In this context it is important to re-emphasise that the impact of the University on its communities is not simply the result of meeting local workforce needs or supporting local service providers and industry with research. It is the result of the success of the University itself as a large enterprise. It is also the result of the strong links the University develops with professions and the public sector and with national and international organisations and communities.

As noted by the OECD: "The advantage of the presence of one or more [Higher Education Institutions] in a region, is that expertise from these different scales can be a major asset to the communities. The challenge is to manage simultaneously the various territorial portfolios and

international connections of [Higher Education Institutions] can be mobilised to the benefit of the region” (OECD, 1999, p. 17).

The Sustainable System University

Charles Sturt University is of the view that a reorganisation of the higher education sector will be required in order to ensure the sustainability of existing institutions and to address critical labour force and innovation needs at a sub-national and national level. Charles Sturt University is of the view that a *University Systems Model* is the most feasible and pragmatic pathway for sectoral reform that will deliver strategically cohesive institutions with the internal diversity, balance and scope to ensure long term relevance and quality in research and teaching.

The Sustainability Problem

In Charles Sturt University's view, the problems of the sector are multifaceted, but are fundamentally about long term (and in some cases, short term) sustainability:

- the sustainability of institutions in a declining school leaver environment that have insufficient scope or reach to continue to meet the needs of their immediate communities;
- the sustainability of research institutions that are too narrowly focussed to attract enough students to feed into research programs and activities;
- the sustainability of traditional research and teaching universities in a student market marked by greater product differentiation and increased competition;
- the sustainability of campus based institutions that do not have the technology to extend their offerings to a market demanding more flexibility and responsiveness;
- the sustainability of institutions driven to market on price;
- the sustainability of institutions that will need to rely more heavily on their immediate geographic catchments as student mobility is constrained by rising transport and living costs.

It would be incorrect, however, to assume that the problem is the financial solvency of institutions, future student load or research income quantum – these are symptoms of the problem.

The problem arises, in Charles Sturt University's view, because institutions lack geographic and mission coherence and Government funding has not supported or valued the development of the infrastructure and capacities to address them. To this extent, the fault lies with both the sector and the Government.

In Charles Sturt University's view, therefore, the answer to the challenge of sustainability is not to simply grow institutions through mergers or other forms of conglomeration along historical or hierarchical lines, but to configure and fund institutions around a distinctive mission. Charles Sturt University strongly endorses the position of the Government on mission based funding.

Why not mergers?

While the idea of a new round of mergers has been raised a number of times, Charles Sturt University does not believe that this represents a realistic solution for today. Mergers risk distancing universities from their immediate communities, loosening these unique relationships and undermining the potential benefits that collaboration brings to course planning, applied research and innovation. At a political level, mergers are likely to produce resistance and unnecessary

competition between communities (and institutions) regarding resource allocation. This is particularly so where institutions remain constituted under different State and Territory laws.

Characteristics of a Sustainable University System

Australia is in the middle of a skills crisis that will worsen with a changing school leaver base from 2010 onward. It also needs to urgently address the broad impacts of climate change, and other challenges, for our society and economy through innovation. The pathway forward therefore must be practical and effective in ensuring sustainability in the short-medium term.

Charles Sturt University believes that organising universities into geographic and mission coherent systems will address the dual challenges of strategic focus and critical mass.

Charles Sturt University is uniquely placed to comment on systems, as the only successful major institution to arise from a system model in Australia. The model would need to be distinct from the model pursued by Charles Sturt University in the past, and must address the lessons of other unsuccessful networked or federated institutions in Australia. However, Charles Sturt University has a significant corporate knowledge of successfully building its geographic, professional and research scope in cooperation with other institutions and communities.

In our view, sustainability that is addressed solely to the issues of resources and critical mass (eg. combining big with small; combining research intensive with teaching intensive; combining lots of smaller institutions together) without regard to mission will fail. Addressing mission, but without the resources and structure to support achievement of the mission, will also fail.

A sustainable University System would, in our view, have the following characteristics:

Geographic and mission coherence

The mission must address the research and teaching focus and delivery approach. To one extent or another, all universities have been established to serve particular communities. Geography (which may be expressed in sub-national, national and/or international terms) is important to ensuring an alignment of values, strategic purpose and stakeholder engagement.

Economies of scale

The system must operate at a sufficient scale (expressed in terms of student numbers and per capita funding) to enable it to invest and re-invest in research and teaching quality, curriculum development and (where relevant) delivery technologies. It must promote the streamlining of processes, consolidation of systems (eg. Finance, IT), harmonisation of courses and coordination of research capabilities.

Balanced teaching and research

An effective system must affirm the essential nexus between teaching and research and must therefore ensure a balance of teaching and research capability across all parts of the system. A system that promotes consolidation of research and teaching in separate locations will risk breaking this essential nexus and causing unnecessary internal tension that will distract the system from its core mission.

Enhanced capabilities

The system must enhance the capabilities of each institution (the whole is greater than the sums of the parts). For example, each institution must bring unique strengths (eg. distinct programs) or add to the collective strengths (eg. research cooperation) of the other participants.

Strong governance

The governance structure must be appropriate to the geography and needs of the participants and ensure the long term stability of the system. The system must have the resources to provide the incentives to build a common vision and the legislative framework to prevent internal fragmentation.

An outcome of the approach is that the system must retain the capacity for meaningful engagement and responsiveness with the distinct communities served by each institution. While harmonisation and streamlining must produce economies, this must be balanced by a flow-through of real benefits to each community (eg. extension of a unique program from one institution to that other community through multi-nodal delivery; growth of relevant research capability etc). Engagement is essential to informing the University's strategy and maintaining community support.

What type of system might Charles Sturt University want to be part of?

Charles Sturt University has defined itself as 'The National University of Inland Australia'. This description derives from the unique mix of our geography and delivery capabilities. Any system in which Charles Sturt University might participate would need to address itself to the same context.

Charles Sturt University would participate in a University System serving inland Australia that is also one of two national distance and flexible education providers. A commitment to scale, reach and quality in distance and flexible education would ensure that the System could continue to support a dispersed campus base, and promote improved participation rates for under-represented groups (including regional and remote communities) and assist in re-skilling the national labour force.

Charles Sturt University believes such a system should have the following characteristics:

- **Geographic coherence:** Inland Australia is a major source of national economic wealth. Rural and mining commodities continue to account for around "... 60 per cent of Australia's total exports" (Productivity Commission, 1999, p. 50). However, the effects of climate change, and its implications for food, water, energy and bio security, all of which are national and international concerns, will demand more productive and sustainable uses of our resources, requiring a renewed investment in skills and innovation across inland communities. In geographic terms, inland Australia incorporates both metropolitan and non-metropolitan constituencies. Given the

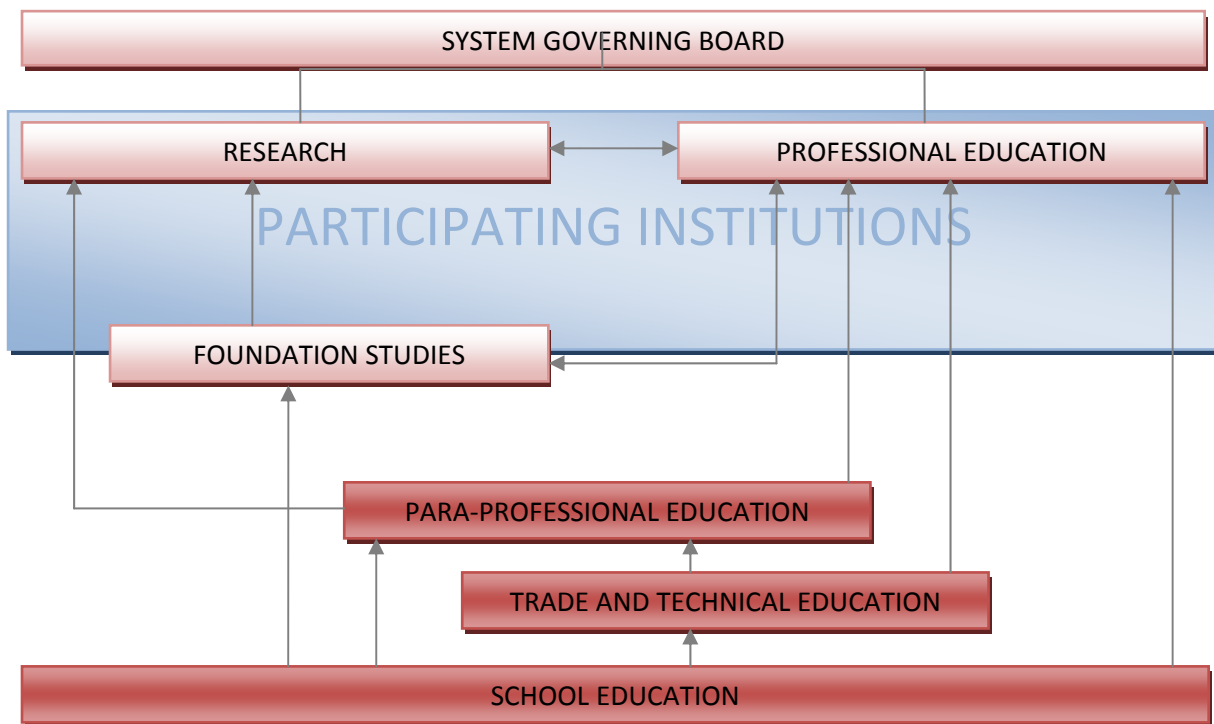
important issues confronting inland Australia, and its significance to the future prosperity of Australia, a geographic focus in this area would be consistent with Charles Sturt University's existing commitments.

- **Mission Coherence:** This might encapsulate three areas: (1) comprehensive professional education (with particular regard to expanding the availability of professional courses for inland students); (2) applied research (that might address relevant issues for inland Australia such as agriculture, water, food, bio-security, rural health – but also promote other areas of national and international strength eg. ethics/theology); and (3) national distance and flexible delivery capabilities (to promote improved participation of people unable to access campus-based opportunities by reason of distance or other commitments).
- **Economies of scale:** to realise the economies necessary to invest and re-invest in curriculum development, research and quality of delivery, a student load of approximately 75,000 students in total with commensurate resources to significantly expand distance technologies and course reach.
- **Balance of teaching and research:** Charles Sturt University is a comprehensive professional education provider with key research strengths in the areas of agriculture, security, rural health, education and ethics/theology. Reflecting these capabilities, any system involving Charles Sturt University should focus on institutions with allied capabilities to support a coherent mission.
- **Enhancement:** flowing from the above, the types of institutions that might enter such a system would need to have complementary capabilities (eg. offers some different courses or has complementary research areas) that would, in combination, grow the strength, scale, reach and quality of the system and demonstrate the benefits of the system to its communities.

The governance model would reflect the nature of the participants. It might be expected that a high level of strategic direction would come from a newly constituted System Board that would exercise control of finances and infrastructure. However, if the formation meets the criteria above, it might be expected that each participant would be able to clearly identify the benefits to its stakeholders through its improved sustainability, growth in capacity and services and enhancement of quality and reputation.

Sustainable community engagement is an outcome characteristic. It presupposes that with the economies of scale and reach of the system, the existing campus footprint and service catchment of each institution would be sustainable and would grow. For any community, such a commitment would be a pre-requisite. If regional and rural participation rates are to be addressed, and all Australians have equitable access to higher education (particularly regional and remote students) the concept of campus closures must be dismissed (see later discussion on Student Participation). The model must sustain geographic presence, not compromise it.

Diagrammatic Representation of System Model



The lighter areas constitute the System. To ensure 'balance' and 'mission coherence' the system is organised around the categories of 'research', 'professional education' and 'foundation studies' rather than 'institutions'. Within such a system, 'institutions' or components would contribute to each area within an agreed mission and strategic framework.

Key challenges and issues for higher education

This section addresses some of the particular issues identified in the *Discussion Paper*. The responses assume a System Model; however, they can be read independently as well.

Meeting labour force need - distance and flexible learning

Charles Sturt University endorses the assertion in the *Discussion Paper* that meeting labour force needs will require increased participation in higher education of adult learners. Australia will not be able to rely on education of recent school leavers for this purpose.

In non-metropolitan areas such as inland Australia, it is already the case that labour force needs are only fully met where the skills of those already living in a community are able to be upgraded (eg. Enrolled Nurses to Registered Nurses).

Distance and flexible education, which allows students to study whilst working and remaining in their communities and in the labour force, can therefore be expected to play an increasingly important role nationally in addressing labour force needs in supporting entry to the professions. It will also enable career change opportunities for existing employees interested in shifting to higher demand skill areas.

This trend will be reinforced if there is a significant shift to graduate degrees as the basis for entry to professions. Many studying for graduate degrees will prefer or need to study flexibly and off campus.

The national role of Australia's major distance education providers, particularly those which are able to support preparation for the professions through their scope and reach, should be acknowledged and reaffirmed in this context.

However, in Charles Sturt University's view, this will require a paradigm shift in our understanding of the role of distance and flexible education, as well as the foundations required for its success. Distance and flexible learning continues to be viewed in some quarters as a low-cost way to increase access to higher education, or to cross-subsidise other activities, rather than as a distinct pedagogy. Given the importance of distance and flexible education to meeting future labour force skills requirements, this perspective must change.

Charles Sturt University is of the view that the Government will need to address itself to building the national scope, reach, quality and standing of distance and flexible education if it is to be a successful contributor to labour force skills development.

In this context it is necessary to recognise the importance of the link between distance education and non-metropolitan location. Critical mass is essential for quality in University learning and teaching and research. Charles Sturt University has demonstrated that critical mass can be built in non-metropolitan locations by effective integration of resources in multi-campus locations, national success in distance and flexible learning and productive partnerships. Charles Sturt University believes that it would be appropriate to consider the possibility of extending this balanced model of building critical mass to the benefit of other non-metropolitan, especially inland, communities and to the benefit of the national system of distance and flexible learning for the professions.

Charles Sturt University is of the view that the Government should support the establishment of two national institutions (regardless of whether a Systems approach is adopted), with the following characteristics:

1. **national and comprehensive** - Australian industry requires a diverse range of professional skills with potentially significant variations across sub-national zones. The strategic goal therefore is to expand national access to, and participation in, a broad spectrum of professional disciplines – expanding distance and flexible delivery alone, without expansion in the range of offerings, will not be sufficient. Given the urgency of the skills crisis, the Government should therefore support provision that extends delivery of a comprehensive range of professional disciplines rather than provision that is focussed principally on low cost/high enrolment distance delivery (eg. business, IT programs);
2. **scale** – distance and flexible education requires significant investment in curriculum, learning technologies and streamlined administration. To be viable, distance and flexible education needs to operate at a scale that will generate sufficient resources for continuous re-investment in these areas. Equally, scale provides the capacity to aggregate national and sub-national demand in what would otherwise be low-enrolment programs and provide the capacity to address sub-national variations in demand. Charles Sturt University believes that enrolment of 75,000 (incorporating on-campus and distance students) would ensure the critical mass necessary to support sustained investment in distance and flexible education.
3. **well resourced** – distance and flexible learning have at times been viewed as a low cost method of expanding access and participation to higher education. While distance and flexible education generates some economies of scale, existing funding formulas are inadequate. For example, funding based on EFTSU assumes that distance students, nearly all of whom enrol part-time, consume University services proportionate to their enrolment fraction. Charles Sturt University’s analysis suggests that distance and flexible education, and multi-campus delivery, add approximately 10% to the total operating cost of the University. Anecdotal evidence suggests that, in areas such as learning support, distance students consume a greater proportion of services than the fraction of their enrolment because they lack access to the interactional learning that occurs between students in a campus environment. Part-time distance and flexible education needs to be funded at a level that reflects actual costs and predicted establishment needs if quality, scope and reach are to be maintained. If funding is to support quality provision, formulas need to take account of both total headcount as well as EFTSU.
4. **reputation** – underpinning the success of a national shift to distance and flexible education is building and promoting quality. Like all areas of professional learning, this must be based on international benchmarks. A national distance and flexible learning approach must be underpinned by a Government guarantee to fund comparability in the quality and international reputation of professional programs to maintain student engagement and employer confidence. A strong research profile relevant to the professions will also be essential. Given the global challenge of meeting labour force needs, this also represents an opportunity to expand international distance and flexible education markets.

Recommendations

1. The Government should examine the creation of University Systems as a model for the sustainable future development of universities that are mission and geographically coherent.
2. The Government should steer the creation of two national comprehensive distance and flexible education institutions that operate at a sufficient scale (eg. around 75,000 students) and scope (eg. comprehensive course offerings) to support continued investment in quality and reach.
3. The Government should make a significant investment in these providers to enhance teaching delivery, online distance technologies and curriculum development across a comprehensive range of programs.
4. The Government should undertake an urgent review of the funding model for distance and flexible learning students and develop options for ensuring that funding reflects the true cost of delivery and continuous development (for example, by using headcount as a multiplier).

Building stronger pathways between TAFE and Universities

Charles Sturt University does not support the creation of dual sector institutions in “regional” locations. Charles Sturt University believes that such institutions would add complexity and impede effective educational delivery for both sectors. The TAFE sector and university sectors have distinct missions, stakeholders and teaching and learning cultures. In this context it must be borne in mind that, notwithstanding the recent growth in Diploma level studies, the major activities of the TAFE sector will remain at sub-Diploma level. In particular, the role of TAFEs in trade training reinforces this complexity, representing a barrier to any form of integration given the lack of any meaningful intersections.

In the experience of Charles Sturt University, University-TAFE collaboration does not need the framework of a unified institution to be effective. The harmonisation of exit and entry points through robust articulation arrangements between the paraprofessional training activities of TAFE and the professional education activities of universities is already established. At Charles Sturt University over 20% of students enter on the basis of TAFE qualifications. Charles Sturt University offers TAFE-University articulation programs in collaboration with a range of TAFE or equivalent providers operating across NSW and other States/Territories. Charles Sturt University has also used close relationships with TAFE institutions to establish University Study Centres on TAFE campuses in communities which do not have a university campus.

Sharing of resources and the development of joint activities can be pursued effectively within current frameworks. Charles Sturt University considers that collaboration is most successful and efficient where universities and TAFE sector organisations are able to concentrate on their distinctive missions, collaborating as is necessary to achieve these. A unified institutional structure in Charles Sturt University’s context would not add efficiency or enhance collaboration. It would, instead, add unnecessary complexity and lead to loss of identity and lack of clarity in mission.

Recommendations

5. The Government should encourage the expansion of articulation pathways where they address local labour market needs and reflect the distinct missions of TAFE and university organisations.

Addressing impediments to meeting labour force needs

The strategic direction of universities is effectively determined by the Commonwealth Government through funding models. Charles Sturt University agrees that a centrally directed approach is no

longer appropriate to meeting the labour force and innovation needs of the nation or achieving a world-class university sector. This concern is recognised in the Government's decision to introduce mission based funding.

Despite significant efforts, improving participation rates for lower socio-economic and Indigenous groups, especially those outside major metropolitan centres, remains challenging. Serious national shortages of engineers, doctors, dentists, optometrists, nurses, agricultural scientists, teachers, accountants and other vital professions point to a failure of central planning to interpret appropriately and address the skills required by the national economy or indeed sub-national economies. Maldistribution of skills at a sub-national level, and variable participation rates across the country, has exacerbated the problem. These factors indicate a lack of capacity to interpret sub-national economic contexts and opportunities and a failure to integrate higher education policy with sub-national development approaches.

These challenges can be expected to grow. For example, with increasing demand for food internationally, reflected in sharp increases in commodity prices, the relative importance of inland communities to the national economy will grow. Despite this opportunity, there is a critical shortage of agricultural professionals and a serious maldistribution of the skilled labour force to support the health, business and associated needs of these communities. Distinctive and innovative solutions to these challenges require a more informed, integrated and contextually nuanced approach (a bottom up approach) than is possible through a national planning process (top down).

Charles Sturt University is of the view that impediments to universities effectively addressing national labour force and innovation goals can be successfully addressed in the following ways:

1. **Improving responsiveness to sub-national economic needs** – Charles Sturt University supports the aim of diversifying the higher education sector. If diversity means increasing specialisation across 38 higher education providers then there is a risk of narrowing the field of expertise of institutions in inappropriate ways. Some communities may be excluded from the full benefits of access to higher education. Charles Sturt University strongly supports the concept of *mission and geographically consistent* higher education systems to address labour force and research needs, provided such systems are able to operate at sub-national, national and international levels for each system. Such systems should each be configured to ensure that each component meets international benchmarks in professional education and research.
2. **Improving local labour market forecasting** – the national labour market is actually constituted by a series of sub-national labour markets. Current labour market forecasting by State and Commonwealth agencies tends to be better in metropolitan markets. Universities outside metropolitan centres could therefore play a meaningful role, in collaboration with the professions, industry, government and other education providers in the sector, in conducting labour market research to inform course and program development to ensure this reflects the needs of the professions and industry at a sub-national level.

3. **Reducing lag times in responding to emerging skills shortages** – despite more than a decade of data evidencing a critical shortage of dentists and oral health professionals in non-metropolitan markets, there was a significant lag in investment in the development of new educational programs and infrastructure to meet that demand. A more sophisticated system needs to be developed to identify and respond to skills shortages in a timely way. There should be a dedicated fund to support rapid investment to expand existing provision or build new capabilities where required. University funding does not include provision for major new and expanded program development, and therefore the Government should not expect universities to fund solutions from their own pocket. There is evidence that the failure of Government to invest proactively in a skills market ultimately leads to escalating costs to Government (eg. increased unnecessary hospitalisation due to poor primary dental care) and negative outcomes for communities. Any funding must address both the capital costs of expansion or new developments, and the transitional recurrent costs as programs build to full capacity. Universities can provide solutions to skills needs, if they are supported to work with Government, the professions and industry in a proactive way.
4. **Evidence based decision making** – there is substantial evidence of the nexus between home location, where students undertake study, and location to practise after graduation. As previously noted, more than 70% of health graduates from Charles Sturt University who were originally from a non-metropolitan home location took up initial employment in a non-metropolitan location (Western Research Institute, 2006). This success is due to both the location of the student and the fact that the program is delivered almost, if not completely, in a non-metropolitan location. By comparison, a recent study of metropolitan based programs to facilitate relocation of medical graduates to regional practice found little evidence to demonstrate systemic improvements in relocation to rural practice using a ‘rural outreach’ model (Ranmuthugala, G, 2007). If Government is seriously to address labour force needs, it is important it base decision making on present evidence.
5. **Investing in innovation** – there is a need for Government to drive innovation in professional education to enable universities to expand enrolments in critical areas. Lack of access to clinical placements, for example, is a major reason universities are unable to increase enrolments in areas of key shortage. Opportunities, such as the use of clinical simulation to develop competency in core clinical skills, require national leadership and investment.
6. **Minimising negative market distortions through funding** – Government funding decisions directly impact on the capacity of institutions to address existing and emerging labour market demand. For example, differential funding of clinical placement across health disciplines distorts the decision-making of higher education institutions by limiting enrolments in high cost courses of national significance. The increasing practice of charging universities for access to clinical and other forms of professional practice experience by State Governments and private providers impacts on the investment decisions of universities in addressing labour shortages. Funding policies should support institutions in making decisions that address labour force needs.

Recommendations

6. The Government should fund universities, in consultation with other education providers and local industries/professions, to conduct research into labour force demand where existing services are insufficient to provide appropriate forecasting.
7. The Government should establish a National Professional Skills Development Fund that quickly releases funds to universities to expand or generate capacity to meet identified or emerging skills shortages at a local level.
8. The Government should undertake a study to determine the most effective strategies for addressing maldistribution of skills across the nation.
9. MCEETYA should be asked to review higher education funding and the extent to which funding arrangements (eg. clinical experience funding and charges) distort the capacity of universities to address labour force needs.

Shifting the international paradigm

“Internationalisation” in the Australian higher education sector has typically been undertaken with a focus on international student recruitment and/or transnational education. With the rapid decline in public funding of higher education, a major goal for many universities has been the generation of additional revenue to support core activities. This has resulted in a higher education sector that is not “internationalised” in the broader context, but rather a sector that has a large number of international students.

Progress in other integral aspects of “internationalisation”, such as internationalisation of the curriculum, creating globally connected graduates and significant increases in outbound student mobility have not been given priority, nor are any significant revenues generated from international student recruitment typically reinvested for internationalisation of universities.

The increasing competitiveness has resulted in positive outcomes for student choice; however, it has also resulted in some unintended outcomes. These include:

- perceptions by some international students that they are not valued as students but as revenue sources for universities;
- inconsistencies in the way in which providers apply recognition of prior learning, particularly with regard to credit arrangements;
- poor representation of the Australian higher education sector arising from the practices of some agents;
- large groupings of international students in some universities in a narrow range of disciplines, limiting effective integration of international and domestic students.

In the short term, Australia needs to address itself to the increased level of competition in the international higher education sector. This level of competition will only increase as domestic demand flattens and competitors such as Malaysia, Singapore and China become increasingly desirable locations for international students.

Given this experience and the access to international students and global partners, the Australian higher education sector is, however, in a position to become the most internationalised higher education system in the world and to supply graduates who are mobile, skilled and connected to

work in a global environment. Discussion in the sector regarding this “third wave” of internationalisation is very positive and should be supported.

In Charles Sturt University’s view Australia should align with, or be the architect of, an Asia-Pacific Higher Education System rather than focusing on alignment with the European Higher Education System. On current trends, the Asia-Pacific will be the largest supplier of global skills in the future. The region will increasingly be a location of demand for students from Europe and North America who wish to obtain a “global education”. The increase in demand for Western students to study in China is already pointing to this.

Charles Sturt University provides significant financial scholarships (ranging from \$500 to \$1,800 per student) to assist local students to undertake an international experience as part of their studies. The funding assists students to participate in opportunities such as:

- semester exchange
- short term programs
- overseas placements
- international conference attendance

While this funding covers some of the costs of the international experience, there still remain significant costs to be financed by the student. For low SES students this financial hurdle can be an insurmountable barrier to participation.

One example of good practice at Charles Sturt University is the program offered to allied health students to undertake placement at an orphanage in Vietnam. Since 2001, the University has been undertaking a student training program that sends final year students of speech pathology, occupational therapy and physiotherapy to work at the Phu My Orphanage in Ho Chi Minh City, Vietnam. The Phu My Orphanage was founded in 1875 by the Sisters of St. Paul de Chartres and since 1976 has been run by the Vietnamese Government as a home for approximately 300 children with disabilities. The goal is for the students to support and train the staff at Phu My to care for and rehabilitate the often severely disabled children in their care. The program received a Carrick Award in 2007.

Recommendations

10. The Government should evaluate options for the creation of an Asia-Pacific Higher Education System, including continuing the focus on government to government relations for qualification recognition and scholarship opportunities.
11. The Government should promote and maintain international student consumer protection via the ESOS Act.
12. Australian Education International should continue its role in conducting research and analysis of international activities.
13. The Government should consult with State and Territory Governments to promote consistency across the higher education sector as a whole, eg. remove barriers to operating across state boundaries; facilitate enrolments across University/TAFE sectors.
14. The Government should fund universities to undertake internationalisation or to free revenue from international student recruitment to be reinvested in internationalisation activities of universities.

15. The Government should direct more funding for student mobility to low SES groups who typically are not in a financial position to undertake an international experience.

Improving Student Participation

As a university based in inland Australia, Charles Sturt University is particularly concerned about the lower participation rates of regional and remote students, including Indigenous students, in higher education. One of the greatest untapped sources of potential labour force skills growth in Australia is low socio-economic background (low SES) students.

According to the Australian Bureau of Statistics *Survey of Education and Work*:

“ ... in 2006, 59% of Australians aged 25-64 years had a non-school qualification, up from 46% in 1990. This was largely due to an increase in the proportion of people in this age group whose highest non-school qualification was a Bachelor degree or above, from 10% in 1990 to 24% in 2006. Despite the overall increase in the proportion of the Australian population with a non-school qualification, improvements in educational attainment have not been evenly distributed across different geographic regions. While there was an increase between 1996 and 2006 in the proportion of people with a non-school qualification across all geographic regions, the gains were greatest in Major Cities (from 44% in 1996 to 57% in 2006) and smallest in Very Remote areas (from 30% in 1996 to 36% in 2006). In 2006, the proportion of people with a non-school qualification declined with increasing levels of remoteness.

The relatively low proportion of the population with non-school qualifications in Remote (43%) and Very Remote (36%) areas is in part due to the higher proportion of Aboriginal and Torres Strait Islander people living in these areas ... and their lower levels of educational attainment. The lower rates of the population with a non-school qualification outside of Major Cities may also be related to post secondary education being perceived as less relevant to life and career opportunities by some people living in rural and remote areas (quoting (James R. , 2000)” (Australian Bureau of Statistics, 2007).

A 1999 study of regional participation noted: “A higher education participation rate of barely 19 per cent versus a national population share of nearly 30 per cent should concern all those with an interest in the future development of the intellectual assets and potential of all Australians, regardless of where they live” (National Board of Employment, Education and Training, 1999, p. i). The same remains true today.

The observations made by the study in 1999 include:

- “tertiary education participation rates are very much higher in metropolitan regions than in non-metropolitan regions;
- this pattern is evident for both university and TAFE participation;
- the variation in regional university participation is much higher than in TAFE participation;
- in general, participation in TAFE at the regional level does not offset low university participation...;

- equalising university participation rates between metropolitan and non-metropolitan areas would make an important contribution to removing overall inequality in regional participation rates, but by no means would remove that inequality...” (Department of Education, Training and Youth Affairs, 1999)

A number of studies have examined the factors influencing student choice to attend university among regional and remote students. James notes that the most “... profound effects ... are a combination of both family socioeconomic background and location. Rurality and lower socioeconomic status combined to produce the greatest education disadvantage” (James, 2001, p. 469).

The study summarised various factors that may influence the participation of regional and remote students:

- “lower school retention rates in country areas”;
- “difficulties and costs imposed by distance” to a university;
- “higher opportunity costs”;
- “cumulative generational effects associated with lower overall levels of educational attainment”
- “student perceptions of the career opportunities available to them in their locality” (James, 2001).

Notwithstanding the range of factors that bear upon educational participation in regional and remote communities, James’ study concludes that the “...present imbalances in higher education participation reflect in the main part differences in family and community attitudes towards the relevance of higher education. The effect of these powerful social influences are apparent well before the final years of senior schooling or eligibility for university entry” (James, 2001, p. 470). As noted in the *Discussion Paper*, “...most educational disadvantage is experienced long before the point at which participation in higher education could even be considered.”

The factors influencing participation of regional and remote students in higher education, therefore, appear to relate to family and community values and the extent of encouragement and direction provided during schooling.

This is not to suggest that universities do not have a role in expanding low SES participation more generally. Proximity of universities to student populations is an important factor in participation. As noted by the Australian Bureau of Statistics: “Reflecting the location of educational institutions, the gains in participation for 20-24 year olds occurred in the more accessible areas” (Australian Bureau of Statistics, 2007). The flow on effects are not limited to the immediate campus geography of institutions. In Charles Sturt University’s case, distance and flexible education plays an increasingly important role in extending the participation of students in more remote communities. Over the 1996-2006 period it has been noted that among “... 15-19 year olds, the gains, although modest, were greater in Outer Regional and more remote areas” (Australian Bureau of Statistics, 2007).

In terms of recruitment and retention, Charles Sturt University’s approach focuses mainly on the ‘transition from school’ and ‘learning support’, although general ‘community awareness raising’ through a range of interactions with the public and schools aims to enhance familiarity and confidence in higher education choices. The general benefits of having a university located in inland

Australia itself in influencing community, parental and student views about the opportunity of higher education cannot be underestimated.

The university has identified, however, a number of other critical requirements for promoting opportunity:

Transition from School

Charles Sturt University's performance in access, participation, retention and success of low SES students is achieved through a range of targeted programs to promote access to University, assist student transitions and learning support whilst at University. Student take-up of these programs has steadily increased since their inception. Enrolment figures, most notably in the University's StudyLink enabling program, have increased by more than 50% between 2000 and 2007.

Almost 500 students are enrolled in Charles Sturt University Connect, a bridging program to provide an alternative pathway to university study for educationally disadvantaged students who may not have the educational qualifications required for admission. The Koori Admissions Program allows Aboriginal and Torres Strait Islander students who might not otherwise be in a position to meet Charles Sturt University admission requirements to demonstrate their capacity to succeed at tertiary study. These, alongside a range of other programs, are aimed at promoting opportunities for low SES students.

Student Accommodation

Students who live on-campus during their study are more likely to complete their course successfully than students who do not. In 2005, students who were living in on-campus university supported accommodation were less likely to drop out of their studies than students who lived off-campus (around 3% compared to 15%). The provision of an extensive residences program within Charles Sturt University is significant in attracting and retaining low SES students. Many low SES students are required to relocate to access higher education, imposing significant costs on families and students. Extensive research has also indicated students are working more hours in paid work. Charles Sturt University's residential fee system is in the lowest 25% for all Australian universities and has been structured to maximise access for students. Students can opt for a 30 week accommodation package that allows them to return home during breaks and maintain important links with their local communities and reduce their total living costs of study. Maintaining connectedness with community is also a factor in retaining highly skilled professionals in inland communities.

Distance and Flexible delivery

Charles Sturt University's commitment to distance and flexible delivery is also significant in improving participation for low SES students. Charles Sturt University is the largest national provider of distance and flexible education in Australia. In terms of low SES access and retention, flexibility in learning and teaching environments allows students to combine competing financial pressures with successful study. Improving access and retention for low SES students involves improving participation for mature aged students as well as recent

school leavers. Distance and flexible learning is the most important means of providing access to university education for adult learners.

As the following figures outline, at Charles Sturt University more low SES students study by distance than on-campus and, as Charles Sturt University continues to blur the division between distance and internal study, these students will benefit from the increased options available.

			2000	2001	2002	2003	2004	2005	2006
Arts	DE	Low SES	1,245	1,141	981	785	746	763	811
		not Low SES	4,317	4,186	3,605	2,927	2,865	3,017	3,114
	Int	Low SES	404	366	371	381	358	337	319
Commerce	DE	not Low SES	1,391	1,306	1,317	1,321	1,358	1,281	1,275
		Low SES	798	811	811	835	771	772	794
	Int	not Low SES	3,315	3,557	3,594	3,500	3,278	3,130	2,960
Education	DE	Low SES	238	242	248	245	260	288	306
		not Low SES	706	834	868	1,039	1,067	955	937
	Int	Low SES	339	451	478	562	574	501	474
Health	DE	not Low SES	1,172	1,442	1,519	1,725	1,669	1,522	1,488
		Low SES	533	572	599	691	707	728	762
	Int	not Low SES	1,051	1,180	1,346	1,493	1,644	1,703	1,734
Sci Ag	DE	Low SES	656	655	611	571	545	557	536
		not Low SES	1,674	1,691	1,663	1,536	1,555	1,506	1,540
	Int	Low SES	401	447	501	576	600	654	693
Other	DE	not Low SES	1,034	1,114	1,213	1,376	1,436	1,523	1,640
		Low SES	891	927	930	957	934	913	980
	Int	not Low SES	2,880	2,970	3,064	3,261	3,150	2,958	3,085
Other	DE	Low SES	292	318	322	290	301	278	293
		not Low SES	701	779	812	789	756	745	691
	Int	Low SES	163	706	751	305	119	111	263
Other	DE	not Low SES	715	1,694	1,824	800	319	308	598
		Low SES	10	3	4	4	1	4	2
Other	Int	not Low SES	14	16	8	11	8	8	9
		Low SES							

Campus Footprint

Charles Sturt University's extensive campus reach, combined with its outreach programs, is able to expose non-traditional students to the potential of higher education over a large geographic area (eg. Academic Preparation Workshops for Rural Enrolled Nurses, to encourage upgrading to degree status). For many low SES students, the move to a regional location represents a more readily attainable solution, with cheaper living expenses, local transport options, access to home and a more easily accessible community support structure than for metropolitan institutions. The willingness and ability of a low SES student to move to a regional location, however, is heavily dependent on the course that the student wishes to study being available at that location. The course profile must be sufficiently broad to make that "access" real in terms of opportunity and choice.

Through a range of approaches, Charles Sturt University is performing well above national benchmarks in the access and participation rates of low SES students overall. The total number of low SES students enrolled at Charles Sturt University has been increasing over the last 6 years.

As might be expected, participation rates for regional students at Charles Sturt University substantially exceed national averages with around 44% of students from regional areas compared to a national average of 18%. Remote student participation at Charles Sturt University is around one and a half times the national average.

This is particularly the case for the under 25 age group where there is a significant difference in the access and participation ratios which have been maintained over time (23.85% against the national average of 15.17%). Charles Sturt University also maintains a strong position in retention and success ratios generally, which are consistently above national and state averages, indicating success in providing pathways for students to gauge their suitability for tertiary study in a supported way.

Charles Sturt University is of the view that a number of factors are critical to improving low SES participation in higher education:

1. **Investment in supported low-cost residential accommodation** – this is one of the most critical components of Charles Sturt University’s ability to attract and retain low-SES students;
2. **Improving family and community confidence** – this must be underpinned by regular, meaningful and appropriate engagement between the University and the relevant families and communities (eg. Charles Sturt University’s OurSchools scheme and stakeholder relations programs of the Centre for Indigenous Studies);
3. **TAFE articulation pathways** – TAFE is a more appropriate or financially affordable option for many low SES students to access higher skills. Effective relationships with TAFE and structured articulation pathways provide opportunities for enhanced higher education participation for many low SES groups;
4. **Distance and Flexible Education** – Charles Sturt University’s success in recruitment of low SES students through distance and flexible education demonstrates the capacity of this mode of delivery to enhance participation, particularly for remote students or students who do not have the financial means to support themselves through on-campus education.

Charles Sturt University also notes that many regional young people are ineligible for Youth Allowance due to stringent eligibility criteria. The income and assets thresholds for Dependent Youth Allowance are much too low for regional families, who have higher living costs and additional tertiary study expenses than urban Australians. Further, the definition of ‘Independence’ means that many regional young people are forced to defer their tertiary studies to be eligible as an Independent through Workforce Participation. Alternatively, some regional young people work very long hours while studying to support themselves financially and meet the criteria, significantly affecting their educational performance, health and well-being. The criteria considerably disadvantage regional young people.

A recent study on the costs of higher education titled *Regional Young People and Youth Allowance: Access to Tertiary Education* (Godden, 2007) found that the annual living costs for a regional young person studying away from home were between \$15,000 and \$20,000, plus relocation and start-up costs of \$3,000 to \$6,000. To assist students, Charles Sturt University has invested in strategies to maximise casual employment opportunities for students through university activities (bar work, cleaning, furniture removal, data processing). However, existing income support programs discriminate against regional and remote students and their participation in higher education.

Recommendations

16. The Government establish a Student Residential Accommodation Construction Fund to assist universities to build low-fee accommodation for low SES students based on the institution's capacity to demonstrate improved participation.
17. The Government support universities to conduct outreach programs aimed at improving family, student and community confidence in higher education options.
18. The Government support integrated pathways that target low SES student articulation from TAFE to university.
19. The Government invest in comprehensive national distance provision (see above).
20. The Government review the income support schemes for students, with particular regard to the needs of regional and rural students.

Reinforcing the nexus between research and teaching

If Australia is to have a world-class university system, all institutions must be engaged in scholarship and the creation of new knowledge which informs both teaching and curriculum development. Arguments for the consolidation of research in an elite handful of universities are unhelpful, in terms of both innovation and educational quality. As noted in the University's *Submission to the Review of the National Innovation System* (Charles Sturt University, 2008):

'[A] highly trained workforce is essential to the creation, application and diffusion of knowledge.

Mowbray and Sampat (2003) argue that the:

... joint production of trained personnel and advanced research may be more effective than specialization in one or the other activity. For example, the movement of trained personnel into industrial or other occupations can be a powerful mechanism for diffusion of scientific research, and demands from students and their prospective employers for 'relevance' in the curriculum can strengthen links between the academic research agenda and the needs of society (Mowbray & Samprat, 2003, p. 4).

The extension of knowledge to undergraduate and postgraduate students by universities, and knowledge transfers between universities and private collaborators, create and sustain the knowledge workforce that supports continuous micro-innovations in the workplace environment. Equipping graduates with the necessary innovation skills through exposure to research environments at university is essential to addressing critical innovations in health delivery and promotion, export expansion and agricultural extension on the ground.

The importance of graduate skills for continuous innovation within society was highlighted by Mejjia who claimed that the graduates employed in Silicon Valley were the single most influential factor in its innovative capacity and success:

While the transfer of technology takes many forms, the most common form is the education and technical know-how that students take with them when they graduate. That form is overlooked in discussions about Silicon Valley and start-ups.

But, it is one that probably has the greatest fiscal and social impact on the broader economy because a lot of bright young people are being put to work to create value for existing companies by improving existing products and creating new ones. In a word, they are the young innovators that will create the next generation of wireless phones, digital cameras, cancer therapeutics, and many other great things (Mejia, 2001, p. 6).

Charles Sturt University strongly recommends that the National Innovation System acknowledges the essential role of education in continuous innovation and that the link between education and research is strengthened to ensure graduates have the necessary skills to transfer and apply knowledge and innovation into the workplace environment.'

In addition, research plays a direct role in the capacity of institutions to meet professional accreditation standards for their courses. Professional associations have correctly identified the importance of academic staff engaging in research relevant to the discipline to inform curriculum and practice. Any adjustment or removal of support for research in university operating grants will compromise the capacity of universities to undertake research to support professional accreditation, undermining labour force objectives.

Charles Sturt University acknowledges that universities should focus and consolidate resources on their areas of research strength. In its view, the Excellence in Research for Australia (ERA) outcomes will provide Government with data that will enable it to identify each university's research strengths in terms of international and national standing. These data could be used to broker, develop and appropriately fund integrated collaborative networks.

In funding collaborative networks, however, Charles Sturt University does not support a narrow interpretation of the hubs and spoke model of engagement. For research to be effective, all participants must have ownership of their particular area of contribution. Imbalances created by resource inequities or access to infrastructure will create unnecessary and counterproductive tensions that will undermine collaboration and innovation. Research collaboration should be multi-nodal and infrastructure appropriately distributed based on areas of strength to maximise capacity across institutions.

As further noted in the University's *Submission to the Review of the National Innovation System* (Charles Sturt University, 2008), proximity should also be a key component of any research and innovation system:

'Research suggests that proximity is a critical factor in generating innovation, particularly in the early stages of knowledge creation. Morgan argues that, notwithstanding the enabling capacities of information and communication technologies, it fails to facilitate "...social reciprocity, which is the essential prerequisite for deep learning" (Morgan, 2004, p. 5). He identifies factors such as face to face communication, mutual understanding, cooperation and trust as necessary underpinning of learning and innovation (Morgan, 2004, p. 8). He argues that "...one of the most serious gaps in the classical [National Innovation System] literature was its silence on *sub-national* institutions, mechanisms which can play an important role as bridging institutions in diffusing knowledge and keeping local firms abreast of new practices" (citing Cooke and Morgan, 1994, 1998). In the agricultural context,

extension activities and industry collaborative research are a good example of how universities build understanding, and encourage the take-up, of new innovations.

Commenting on the Silicon Valley, Brown and Duguid state (quoted in Morgan, 2004, 12):

For the ecology to flourish ... it evidently needs not just a range of capabilities, but a *close* range. The informal links ... develop directly and in close quarters. In the Valley, people live in and out of each other's pockets, and this helps them see what's doing, what's doable, and what's not being done. This close proximity not only shows how to attack a particular niche, it provides the ability to see a niche before it is visible to the eyes ... density of firms, practices and practitioners also promotes reliable risk – and trust – assessment.'

Government must also recognise that resources are needed to seed new ideas and innovations. Returning to the introductory comments to this submission, universities must be "invested with the capacity, and the resources, not only to find the right answers for today, but the right questions for tomorrow."

To maintain standards in national accreditation, private providers should not be permitted to offer research degrees without clear demonstration of the capacity of their teaching staff to contribute to the creation of new knowledge through research creative endeavours and scholarly writing. Charles Sturt University supports the view that university status and title require demonstrable research strengths and an expectation of staff to make scholarly contributions to their discipline.

Recommendations

21. The Government reaffirm its commitment to the essential nexus between the creation of new knowledge and scholarship and teaching at a university level.
22. The Government maintain operating grant funding to support teaching and research.
23. The Government establish programs to ensure the appropriate development of research capability across institutions.

Modernising funding

Charles Sturt University is of the view that the current cluster funding model is largely effective in meeting the needs of universities and should be supplemented to address identified deficiencies, rather than fundamentally changed. The model ensures that students in the same discipline areas are funded at the same rate at different institutions. In the past, funding of student places without adequate reference to the cost of delivery of different disciplines stimulated investment in low cost-high volume courses, rather than courses that were focussed on meeting labour force needs. The cluster funding model removed the distortions created by the old funding structure and should be strongly endorsed by the Government as the basis for future compact funding agreements.

However, the Government should address the following:

1. **Indexation of grants** – the failure to index grants has shifted the cost of higher education from the Government to universities, forcing institutions to deploy resources to expanding alternative sources of funding. This distracts institutions from their primary purpose and will undermine the capacity of smaller institutions to absorb the costs. In the long term, it may reduce teaching and research quality.

2. **Clinical and professional practice funding model** – as previously mentioned, the failure to fund clinical placements consistently across the allied health professions is a direct barrier to institutions addressing labour force demand in some key areas of shortage. Coupled with this, State governments and private health service providers are increasingly charging students for access to health services to undertake clinical practice training. Similar issues arise in other disciplines with mandatory practice requirements (eg. teacher education). There is a risk of creating a ‘commercial market’ in practicum placement. This is a direct disincentive, particularly for low SES students, to engage in professional education in many areas that (paradoxically) are key areas of national shortage. An alternative model may be to tie Commonwealth Grants and/or Medicare funding to acceptance by providers of minimum numbers of clinical and other professional placements reflecting the total proportion of graduates employed by those providers. Clinical practice payments could be distributed as additional grants directly to providers to offset their costs, removing the need to charge students for placements.
3. **Differential cost of educating students** – universities with the most money and resources are also the institutions most likely to attract students with higher entry scores who in turn are the least expensive to educate. Students with lower university entrance scores, particularly students from low SES backgrounds, require additional assistance in a range of areas to transition to university life and support learning success. This differential cost should be recognised by a fund that rewards those universities which achieve success in attracting, retaining and graduating low SES students or through compact funding.
4. **Multi-campus operations** – participation rates increase with proximity to a university campus. For example, total participation rates in the western regions of New South Wales increase with proximity to a university campus (eg. Orange 3.5%, Northern Tablelands 3.4%, Albury 3.3%, Bathurst 3.2%, Wagga Wagga 3.2%, Dubbo 2.9%) but decline rapidly the further populations are from a principal campus (eg. Far West 2.1%; South Coast/Snowy 2.3%; Cowra/Parkes/Forbes 2.5%) (Spatial Data Analysis Network, 2004). While the benefits are self-evident, multi-campus systems cost more to operate than conventional single campus institutions or multiple campuses located across a small geographic footprint. Charles Sturt University estimates that the combination of dispersed multi-campus operations and a high proportion of part-time distance study adds around 10% to its operating costs. The Government should examine options to recognise the cost of geographically dispersed multi-campus operations, perhaps through compact funding;
5. **Learning and Teaching Performance Fund (LTPF)** – the recognition and support of excellence in learning and teaching is important to the promotion of quality in professional education. Charles Sturt University is of the view that LTPF would be better if it were administered by the Australian Learning and Teaching Council (ALTC). The ALTC has established itself as a highly credible and respected leader in promoting high quality learning and teaching and the LTPF would be greatly enhanced if it were linked.

6. **Community engagement funding** – Charles Sturt University supports funding that enables appropriate engagement between the community and the University’s research, teaching and student support programs. For example, research funding for agriculture might include a component for on-farm extension activities to assist farmers to incorporate innovations or new knowledge into practice. In the area of teaching, appropriately funding clinical and work experience would expand participation of students in provision of health and other services to the community. Charles Sturt University does not believe that universities should administer funds for community initiatives that are not directly relatable to its core functions of teaching, research or student support.

7. **Philanthropy** – there has been a view among some universities that institutions should be supported to engage in philanthropy more proactively to generate other sources of funds. The success of institutions in philanthropy is directly related to the type of research conducted, the wealth of its immediate communities, the size and wealth of its alumni and the existing wealth of the institution itself. In higher education, philanthropy has been a very successful way to generate additional income for a limited range of institutions. However, it is important to recognise that philanthropy is an indirect form of Government subsidy of universities. Because donors can deduct donations from their taxable income, the Commonwealth Government is effectively paying for a component of the donation through foregone tax revenues. The suggestion that the Government should match donations on a dollar for dollar basis would in effect mean the Government is matching its existing subsidy with another one. Charles Sturt University is of the view that Government funding of universities should be transparent and that the Government should avoid schemes that promote indirect and differential funding to universities through philanthropy. If the Government wants to subsidise some universities and not others, it should do so directly and transparently.

Recommendations

24. The Government should reintroduce indexation of operating grants.
25. The Government should provide funding to meet the cost of mandatory clinical and professional practice experience consistently across all courses and explore potential models for expanding industry support for clinical and other forms of professional experience in key sectors (eg. health, education).
26. The Government should fund, perhaps through compact funding, universities that achieve success in attracting, retaining and graduating low SES and similar types of students.
27. The Government should, perhaps through compact funding, recognise the cost of geographically-dispersed multi-campus operations.
28. The LTPF should be administered by the ALTC.
29. The Government should investigate the most effective way to incorporate community engagement funding that supports research and teaching and maximises flow on effects to the community.
30. Government funding of universities should be transparent and the Government should avoid schemes that promote indirect and differential funding to universities through philanthropy.

Improving governance

Charles Sturt University supports the incorporation of universities under Commonwealth legislation to reflect the realities of contemporary funding and control of the sector and to promote enhanced flexibility across national borders. This should also support a reduction in unnecessary reporting and duplicate compliance requirements at state and national levels, freeing resources to be focussed on quality in teaching and research.

State control also means that universities cannot flexibly engage outside their immediate jurisdictions. Differing professional accreditation requirements and standards limit the portability of degrees and add costs to universities to harmonise differentiated State requirements if they are to address national demand.

While Charles Sturt University recognises the benefits of Commonwealth incorporation, it does not support the creation of a Commonwealth Universities Commission or similar body to drive overall university policy and funding. Internationally, there has been a growing emphasis on enhancing sub-national social and economic capacity as a means to promoting economic diversity and growth at a national level. Higher education is critical to this process. However, this requires a more nuanced understanding of the relevant context in which universities operate than is available at a national level.

Our interest in the potential of University Systems to advance professional education and research is consistent with this view. Central planning driven by Government has tended to encourage uniformity rather than diversity. A 'bottom up' approach, in our view, would provide the 'local', 'professional' and 'research' contributions necessary for informed decision making. In this sense, mission and geographically consistent higher education systems, directly funded under a negotiated 'Systems Compact', may better enable institutions to address labour force and research needs of relevance to their mission.

The capacity to develop coherent systems that reflect appropriate sub-national, national and international contexts would be significantly more difficult if formal Commonwealth responsibility for the sector is not facilitated.

Recommendations

31. The Government should consult with the States and Territories on the transfer of universities to the Commonwealth jurisdiction.

Bibliography

- Australian Bureau of Statistics. (2007). *Australian Social Trends 2006*. Retrieved from Australian Bureau of Statistics: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter6002008>
- Charles Sturt University. (2008). *Submission to the Review of the National Innovation System*. 2008: Charles Sturt University.
- DEETS. (1998). *Learning for Life Report - Review of Higher Education Funding and Policy*. Canberra: Department of Employment, Education, Training and Sports.
- Department of Education Science and Training. (2002). *HECS and Opportunities in Higher Education: A paper investigating the Higher Education Contributions Scheme (HECS) on the higher education system*. Canberra: Department of Education Science and Training.
- Department of Education, Training and Youth Affairs. (1999). *Regional participation in higher education and the distribution of higher education resources across regions*. Canberra: Department of Education, Training and Youth Affairs.
- Department of Infrastructure, Transport, Regional Development and Local Government. (2008). *About Australia's Regions*. Canberra: Department of Infrastructure, Transport, Regional Development and Local Government.
- DEST. (2003). *Mobility: Why do University Students Move?* Canberra: Department of Education, Science and Training.
- Devlin, Y. (2004). *A Review of the Participation of Students from Low Socio-economic Background at the University of NSW*. Kensington: University of NSW.
- Geetha Ranmuthugala, J. H. (2007). Where is the evidence that rural exposure increases uptake of rural medical practice? *Australian Journal of Rural Health*, 285–288.
- Godden, M (2007) *Youth allowance and regional young people: Access to tertiary education*. Institute for Land, Water and Society, Charles Sturt University. Retrieved from: http://www.apo.org.au/linkboard/results.shtml?filename_num=191812.
- James, R. (2001). Participation disadvantage in Australian higher education: An analysis of some effects of geographical location and socioeconomic status. *Higher Education*, 455-472.
- James, R. (2000). *TAFE, University of Work? The early preferences and choices of students in Years 10, 11 and 12*. National Centre for Vocational Education Research (NCVER).
- Mejia, L. (2001). Innovation: Observations from Stanford University - Address to the Inaugural Ericsson Innovation Awards.
- Morgan, K. (2004). The exaggerated death of geography: learning, proximity and territorial innovation systems. *Journal of Economic Geography* 3-21

Mowbray, D., & Samprat, B. (2003). *Universities in national innovation systems*. Retrieved from Globelics Academy: http://www.globelicsacademy.net/pdf/DavidMowrey_1.pdf

National Board of Employment, Education and Training. (1999). *Rural and Isolated Students and their Higher Education Choices*. Canberra: National Board of Employment, Education and Training.

OECD. (1999). *The Response of Higher Education Institutions to Regional Needs*. Paris: Organisation for Economic Co-operation and Development.

Productivity Commission. (2005). *Australia's Health Workforce: Research Report*. Canberra: Productivity Commission.

Productivity Commission. (1999). *Impact of Competition Policy Reforms on Rural and Regional Australia*. Canberra: Productivity Commission.

Spatial Data Analysis Network. (2004). *Participation Rates in Western Regions*. Wagga Wagga: Charles Sturt University.

Western Research Institute. (2006). *The Destination of On-Campus Charles Sturt Graduates*. Bathurst: Western Research Institute Ltd.

Western Research Institute. (2005). *The Economic Impact of Charles Sturt University*. Bathurst: Western Research Institute Ltd.