# The Engagement of an Urban-Based, Comprehensive University with Rural Communities

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### **Abstract**

The University of Sydney has a long-standing record of commitment to social inclusion in tertiary education. The Australian government agenda has brought into sharp focus the importance of universities engaging with rural and remote communities. The University of Sydney provides placement opportunities and pathways to attract more undergraduate students from rural and remote backgrounds. To facilitate interdisciplinary placement opportunities, the establishment of rural hubs has proven to be an effective model for creating inter-professional learning and interactions. Such learning and interactions develop students' self-awareness and worldliness, and it benefits rural communities by providing professionals-in-training for short periods and by increasing the possibility of these students taking up full-time employment in rural areas upon graduation.

By Australian standards, the University of Sydney is a large, comprehensive research university with approximately 33,000 undergraduate students enrolled in 230 degree programs across sixteen faculties. The overwhelming majority of the undergraduate courses offered by the university are taught at Sydney's main campus, in addition to several smaller satellite campuses located elsewhere in Sydney. Beyond these urban sites, the university has a presence in rural New South Wales (NSW) through its Camden campus (veterinary science teaching and the Plant Breeding Institute), its Dubbo campus (School of Rural Health), its Broken Hill campus (Department of Rural Health), its Lismore campus (Department of Rural Health), its Narrabri campus (the Wheat Breeding Institute), and a few other small rural sites. Historically, the undergraduate population at the University of Sydney is dominated by students from the Sydney's eastern and northern suburbs. In 2008, approximately two-thirds of the commencing undergraduates were from these areas (The University of Sydney, 2010a). According to Australian government's Department of Education, Employment, and Workplace Relations (DEEWR) data for 2008, only about 6 percent of the University of Sydney's students were from regional and remote locations, whereas the average proportion of 2008 students from regional and remote locations was approximately 17 percent for all the universities in New South Wales (2011).

Despite the dominantly urban background of its students, the university is committed to expanding its social inclusion and rural engagement, as defined in its recently released University of Sydney White Paper (The University of Sydney, 2010b). This paper suggests that its ". . . engagements with both local and rural communities are diverse and valuable," and that a key strategy is to increase the proportion of students

from low socio-economic backgrounds by "... focusing on improving the preparation and aspiration of intellectually qualified students, including indigenous students and students from rural and remote areas." This strongly aligns the university with the Australian government's commitment to increase aspiration and participation of regional and remote students in tertiary education (Australian Government 2009; DEEWR 2009).

The university's engagement with communities spans the gamut of teaching, research, and extension activities carried out by staff and students, but probably the most widespread form of community engagement practiced by the faculties and schools is that of student placements. In some faculties, such as Agriculture, Education, and Veterinary Science, compulsory student placements or "professional experience" has been part of the undergraduate curricula for decades. In some cases, this includes mandatory rural placements, while in other faculties the popularity and desirability of rural or regional placements has only relatively increased recently. While field experience, including that in rural areas, is widely seen as valuable professional learning for students, there is the potential for these student placement programs to make other significant contributions to rural communities. Thus, although student placement programs are not designed to be a marketing strategy for the university, anecdotal evidence suggests that the visibility of these placement programs in rural centers may assist in altering the tertiary education aspirations of rural and regional high school students.

The value of rural and regional placements for the University of Sydney undergraduates is reciprocal: Urban-based undergraduates with perhaps little experience of life beyond Sydney have an opportunity to undergo training and build professional and life experience in a new environment, while the hosting rural communities receive the benefit of having professional trainees working with them for varying periods, along with a prospect of being able to encourage some undergrads to return upon graduation. One of the greatest challenges of sustainability for rural and regional towns is that few urban-raised and trained professionals willingly accept employment opportunities in those areas. Most graduates prefer to remain in the highly urbanized coastal fringe of eastern Australia or in large regional centers. As a consequence, rural and regional centers have found it extremely difficult to attract professionals in a variety of disciplines including medicine, dentistry, teaching, veterinary science, and engineering (Narrabri Chamber of Commerce 2007; Dubbo City Council 2011). Thus, one of the more meaningful engagements that the University of Sydney, and indeed all Australian universities may make with rural and regional communities, is the systematic encouragement of students to undertake rural/regional placements and to consider future employment in those areas. Similarly, the training of students with a rural or regional background and a willingness to return to their communities to work is another meaningful way in which the Australian Government's social inclusion agenda (DEEWR 2011) is supported by the university.

Although many parts of the University of Sydney have student placement opportunities embedded in their curricula, there has not been a systematic institutional

approach to the implementation and support of these placement programs. Most faculties, schools, and departments have independently operated such programs, thereby, denying possible synergies brought about by inter-professional learning, shared facilities, and shared experiences. In this paper, we review the student placement activities currently offered within the undergraduate programs of the University of Sydney; suggest interdisciplinary strategies for improving the viability, quality and value of these placement programs; and discuss how these community interactions may assist the university in achieving its social inclusion goals.

# An Analysis of Engagement of Rural Communities by the University through Student Placements

All but one of the sixteen faculties at the University of Sydney offer some form of embedded student placement opportunity for undergraduates (see Table 1). These opportunities vary widely in duration, location, academic staff involvement, financial support, logistic support, and the stage of the degree at which the placement is undertaken. In some faculties (Agriculture, Food and Natural Resources, Medicine, and Veterinary Science), rural placements are mandatory components of degree programs, while in others mandatory placements may be taken in rural or urban locations (for example. Education and Social Work, Engineering, and IT) or placements may be optional (for example, Arts and Social Sciences, Business). As reported by Trede (2010) for the fieldwork education opportunities offered by a regional Australian university, the majority of the university's rural placement programs have been developed within discipline groups, with little or no consultation or collaboration with other discipline groups offering similar programs. In general terms, there are more placement opportunities in the so-called "professional faculties" such as Veterinary Science and Medicine, than in the larger "generalist faculties" such as Arts and Science.

Perhaps the most variable aspect of the student placement programs offered by the University of Sydney's faculties is the duration and timing. Some placement programs are as short as one week and can be run during a semester, whereas others are as long as thirty-two weeks and include both semester and holiday periods. The longest placement programs are by the faculties of Health, Medicine, Education, and Social Work. In each of these cases, government initiatives and professional bodies have vigorously supported the education and training of undergraduates in rural settings, enabling (and in some cases, mandating) more lengthy student placements or internships in rural and regional locations. In recognition of the considerable time some students spend on these placements, most faculties have now embedded these placements within the units-of-study. An example of this relates to the professional experience program in the Faculty of Agriculture, Food, and Natural Resources. For decades this program has been a "hurdle requirement" with no credit point value for students to graduate, but in recent years the program has been incorporated into a compulsory professional development unit-of-study with a credit point value that contributes to the weighted average mark of the students' final year.

Academic staff support of student placements and internships varies from post-placement assessment only to almost daily monitoring and mentoring. In those programs where students are responsible for organizing their own placements and work in a variety of enterprises and in many locations (for example, in agriculture and veterinary science), it is logistically impossible for academic staff to be assigned to monitor the work of each student. Instead, the faculty's involvement is restricted to assisting students in locating a placement—through databases of potential workplaces and personal recommendations—and assessing their reports or portfolios upon placement completion. In those programs where students are placed by the faculty (for example, medicine and health science), there is generally more supervision by academic staff because multiple students can be placed in the same or nearby workplaces, and/or possibly accommodated in the same location.

The financial support of students undertaking rural placements in their degree programs remains one of the most uneven and vexatious issues that faces the university's faculties. Programs that align with government priorities and strategies provide generous grant schemes and subsidies to reduce the expense of accommodation and travel, but for students in programs without support from government or professional bodies, these costs fall upon the student. The latter scenario is made all the more burdensome if students are paying Higher Education Contribution Scheme (HECS) fees for the unit-of-study in which the placement program is placed, and/or paying rent for their Sydney accommodation while undertaking a rural placement. Apart from cultural and social reasons, such financial considerations are believed to be the main cause of variable uptake of rural placement opportunities by undergraduates at the University of Sydney. Although the Financial Assistance Office offers interest-free loans and some bursaries for students undertaking rural placements, these are insufficient to meet the potential demand from students of all faculties.

Table 1. Undergraduate student placement opportunities offered by faculties of the University of Sydney.

Faculty	Courses/ Majors	Location of Placement	Nature of Placement	Support of Students
Agriculture, Food, and Natural Resources	Agricultural science, agricultural and resource economics	Rural, rural potential	Mandatory forty days during holidays and semester breaks; twenty days on-farm, twenty days off-farm	Student organise own placements; no financial support given, although some students are paid by their "employer"
Arts and Social Sciences	Arts, indigenous studies, media and communications, social science	Urban, rural potential	Ten days to fifteen days/ 210 hours	Placements organized by departments or students, most placements are Sydney-based, no financial support given

Business	Business, accounting	Rural potential	Optional eight to twelve week placements over summer holidays, but generally no credit towards the degree	Student organize own placements; no financial support given, although some students are paid by their "employer"
College of the Arts	Visual arts	Urban, rural potential	Up to two weeks	Students organize own placements, but with oversight of the faculty; no financial support is given
Conservatorium of Music	Music	Urban	Mandatory eighty days of placements in high schools spread over Years 2, 3 and 4; credited to various units	Placements generally organized by the faculty and have been Sydney- based; no financial support is given
Dentistry	Dentistry, oral health	Rural, urban	Optional four-week rural placements for dentistry, mandatory four-day urban placements for dentistry, and mandatory two-week urban placements for oral health	Placements organized by the faculty; from 2009 dentistry students have been funded by Department of Health and Ageing (DOHA), and oral health students are partly funded by the New South Wales (NSW) Government
Education and Social Work	Early childhood, primary and secondary teaching, social work	Rural, rural potential, urban	Five to eighty days, rural location is optional	Placements generally organized by the faculty, limited financial support through NSWDEC "Beyond the Line" funding
Engineering and IT	Civil, electrical, chemical, and aeronautical/ mechanical engineering	Rural potential, urban	Four weeks to six months in urban or rural locations usually during holidays	, ,
Health Sciences	Physiotherapy, occupational therapy, speech pathology, radiography, orthoptics, nuclear medicine, exercise physiology	Rural, rural potential, urban	Four to eight weeks	Some student travel and accommodation is subsidised through NSW Rural Allied Health Clinical Placement Grant scheme, and some scholarships are available, but the majority of students meet their own costs

Medicine and surgery  Nursing	Urban, rural potential  Rural, urban  Urban, rural potential	One day per week for a semester in a public interest/social justice legal organization  Mandatory Year 3 rural placement of either four weeks or a "clinical year" of thirty-two weeks at either Dubbo or Orange  900 hours of clinical placements across a range of clinical settings is required of all students, rural placements are possible but not mandatory	A small number of travel scholarships are awarded, but mostly organized and funded by the students  Student travel and accommodation is subsidized through DOHA  Some scholarships from NSW Health and the faculty to support rural placements; most placements organised by the faculty through NSW
Nursing	Urban, rural	placement of either four weeks or a "clinical year" of thirty-two weeks at either Dubbo or Orange  900 hours of clinical placements across a range of clinical settings is required of all students, rural placements are possible	accommodation is subsidized through DOHA  Some scholarships from NSW Health and the faculty to support rural placements; most placements organised by the faculty through NSW
	rural	placements across a range of clinical settings is required of all students, rural placements are possible	NSW Health and the faculty to support rural placements; most placements organised by the faculty through NSW
Pharmacy			Health, although students can organise their own
	Rural, urban	Rural clinical placement of six weeks in the optional fourth year rural major, urban or rural placements of one to two weeks to meet requirements of some Year 3 and Year 4 units	Most placements are organized by the faculty, and all students' travel and accommodation costs are subsidised by the Pharmacy Guild of Australia
Chemistry	Urban	Optional year of employment with an industry partner after Year 2	Students are paid a salary, these placements are competitive and students are chosen by the employer after an interview process
Veterinary cience, animal cience	Rural, rural potential, urban	Vet science—Mandatory seventy-two days of practicum in Year 5, of which thirty-six days must be in a rural location Animal science— Mandatory sixty days of placements over four years	Placements organized by the faculty, no financial support is given
V	eterinary cience, animal	eterinary Rural, sience, animal rural sience potential,	employment with an industry partner after Year 2  Rural, Vet science—Mandatory seventy-two days of practicum in Year 5, of which thirty-six days must be in a rural location Animal science—  Mandatory sixty days of placements over four

# **Enhancing the Student Experience of Rural Placement through Inter-Professional Learning**

In recognition of the importance of rural placement opportunities for University of Sydney students, a cross-university Rural Focus Group was established in 2008. A key focus for this group has been the facilitation of clinical, field, and professional experience placements in rural communities for students from a range of faculties and professional discipline areas. Central to this work are initiatives to establish and maintain a number of rural hubs across NSW. While the hubs are in practical terms physical sites offering group accommodation and shared resources, beyond this they are envisaged as encapsulating elements that have broader intent with respect to professional learning. In particular, they aim to encourage the flow of information, thus providing opportunities for interactions that build students' inter-professional awareness. The rural hub initiative seeks to encapsulate three dimensions: a focus on rural contexts, support for site- or community-based professional experiences, and the facilitation of the formation of professional learning communities comprised of university students from a range of faculties and discipline areas. These three dimensions are key to conceptualizing rural inter-professional learning.

Inter-professional learning (IPL) or education (IPE) has been variously defined in the literature, but can be thought of as: "Occasions when two or more professions learn with, from, and about each other to improve collaboration and the quality of care" (Barr et al. 2005). This definition signals the fact that much of the current literature relates to health and social care systems (D'Amour et al. 2005; McNair et al. 2005). However, in recent years examples of other discipline areas, such as teacher education incorporating inter-professional learning opportunities, are emerging (Rutherford, Whiting, and Smits 2008; Trede 2010). The terms of reference for the Rural Focus Group indicate a trans-university brief, namely to: "Increase awareness among staff and students of the university of the needs of rural communities, and rural and remote students' and as key to this aim; 'to encourage all University of Sydney students to experience rural and regional communities, particularly through student placements and internships". Thus, rural hubs are seen as ideally supporting rural placements across all the university's faculties that formally or informally can orientate their students to a rural professional learning experience. For many students, particularly those from an urban university, the rural community can be seen as a place and experience 'beyond the line' (McConaghy and Bloomfield 2004). This phrase arose in relation to a key rural experience program funded by the NSW Department of Education and Communities and available to all teacher education students across NSW. The "line" in fact has a geographical sense signalling the boundary between urban and more remote teaching contexts. However, more than a geographical marker, the "line" also can be seen as circumscribing identity boundaries—both personal and professional, and encircling comfort zones of self and experience. Part of the rural hub's vision is that it provides a collaborative space where the group can provide a safe haven as students experience and learn about being 'beyond the line'—that is building socio-cultural knowledge of rural communities and the possibility of the self in these contexts.

Thus while the provision of resources that facilitate supportive environments for student engagement in learning experiences is a key element of a rural hub, so also is the provision for inter-professional learning. A major guiding principle of the Rural Focus Group is that for undergraduates and graduates to contribute to rural communities, they need to develop more diverse understandings and capacities beyond those defined by their discipline. Rural communities commonly are more isolated and bounded, and function as microcosms of wider societal structures. This exacerbates the need for professionals working in these communities to develop capacities to participate in cooperative and collaborative networks. D'Amour et al. (2005), in referring to interprofessional collaboration in the health sector, claimed that commonly professionals throughout their education "are socialized to adopt a discipline-based vision of their clientele and the services they offer. Each discipline develops strong theoretical and discipline-based frameworks that give access to professional jurisdictions that are often rigidly circumscribed. Collaboration requires making changes to this paradigm and implementing a logic of collaboration rather than competition."

Such a view is reiterated in a recent Australian health report (Australian Institute of Health and Welfare 2010, 245), with particular focus on rural communities namely "that a major barrier to sustainable health service delivery is the rigidity of professional demarcations that limit innovation in roles and scopes of practice to better meet consumer and community needs." The importance of improving support and connection with rural communities in the health area is a priority in Australia, given this same report indicates that compared to major cities currently there is a ten percent higher mortality rate in the regional, rural, and remote areas of Australia. Rural hubs aim to provide spaces in which students undertaking clinical or field placements as part of their course work have the opportunity to share perspectives and experiences while living within a rural community, as well as to develop collaborative capacities. McNair et al. (2005, 3), in advocating for multidisciplinary clinical placements for rural primary health care, identify as key outcomes the development of understanding and respect for roles, the ability to work across boundaries, and the learning of collaborative skills. These, they claim, are strengthened when the site for this professional learning is not de-contextualized, but is within the site of future professional practice, potentially the rural community itself. In arguing against what they term "uni-professional education," McNair et al. draws on social identity theory to suggest that "identifying with a particular group actively determines interpersonal attitudes and behaviour towards other groups. Uni-professional course work perpetuates such stereotypes and resulting behaviours." They advocate interprofessional education as a way to challenge existing attitudes and to forge collaborative relationships and awareness beyond discipline boundaries.

It is pertinent to a rural-focused program to consider the National Indigenous Reform Agreement developed by the Council of Australian Governments (COAG) in 2008, which is relevant to both urban and rural contexts. Its targets signal clearly the intersections between professional areas needed to be engaged in order to work towards "Closing the Gap" and social inclusion agendas. These targets can be read as

presenting the impetus for universities to engage in inter-professional learning, their reach spreading across the fields of education, health, and housing in particular:

- To close the life-expectancy gap within a generation
- To halve the gap in mortality rates for Indigenous children under five within a decade
- To ensure access to early childhood education for all Indigenous four years olds in remote communities within five years
- To halve the gap in reading, writing, and numeracy achievements for children within a decade
- To halve the gap for Indigenous students in Year 12 (or equivalent) attainment rates by 2020
- To halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade

These targets were developed to guide initiatives with respect to Indigenous gaps. However, there is another gap that has significance in particular for teacher education and engagement in inter-professional learning, namely "the educational divide between rural and urban students" (Piccoli 2011). According to the Organisation for Economic Co-operation and Development (OECD) 2010 report, the Programme for International Assessment (PISA) results for children in rural schools are now one and a half years behind those of city students (OECD 2010). In response to such confronting data, the current NSW Minister for Education, Adrian Piccoli, spoke of the need "to address the specific needs of those schools in remote areas that struggle to attract and retain staff." It is significant that in April 2011, as part of a restructuring undertaken by the newly elected NSW government, the previously named Department of Education and Training was renamed the Department of Education and Communities. The current website for the NSW DEC has a banner that conveys its broad brief around education, namely: *The Department's goal is to improve the social and economic wellbeing of the people of NSW through a responsive and innovative education and training system*.

This state government structure signals a more networked approach to education in offering new orientations between the Offices of Education, Citizenship, and Communities; Aboriginal Affairs; as well as Sport and Recreation. For teachers, this realignment has significance in terms of signalling how education and the work of teaching need to be situated. Education and teaching is now clearly linked not only to communities, but also to agencies with broader agendas that aim to address individual and societal well-being. Teachers and other professionals in these allied fields need to not only be effective in their specific discipline area but also to have understandings and capacities that match the increasingly linked social, educational, and health priorities. Thus, as in many other professions, teachers are increasingly needed to be inter-professional workers, and there is pressure on universities and teacher educators to reconceptualise what is needed in preparing teachers for current priorities. In today's classrooms, teachers encounter a myriad of physical, economic, social and emotional challenges. In reflecting on teaches and teaching, Rutherford et al. (2008, 323) state:

"No one profession can face today's societal challenges in isolation from other professions or from the communities in which they work. . . . Teachers need to picture themselves within the context of a larger community of professionals just as they need to picture their students within the context of their lives and the communities in which they live."

The University of Sydney's rural hub initiative provides a case study of a metropolitan university seeking to better prepare its student teachers to address gaps, both in learning outcomes for indigenous students and for all students in rural communities. Across the past three years, rural hubs have provided a number of pre-service teacher opportunities to not only experience rural communities and schools, but also in many cases to live in groups during placements with students from other faculties. In university-subsidized accommodation provided at present in the towns of Broken Hill, Dubbo, and Forbes, pre-service teachers are guided by their university mentors, complete their professional experience requirements, and have opportunities to interact with university students studying in areas such as medicine, physiotherapy, and social work.

Students who have been supported within one of the university's rural hubs have commented in ways that indicate both the inter-personal and inter-professional benefits of the rural hub program:

- Talking with other prac teachers and other students at the accommodation by sharing our experiences offered different perspectives, helping me to understand the school environment and how I fit into the picture. It was a comfort having people in a similar situation staying with me, and also helped with group morale.
- I had a great time and learnt a lot about the teaching profession in regards to being a part of a community in a country town.
- I have gained a deeper and more realistic picture of the situation that families experience and how schooling is valued here. This has resulted in an expansion of my pedagogy. (Year 3 BEd [Secondary] students).

# **Achieving Social Inclusion Goals**

In addition to providing opportunities for urban-based students to undertake placements in rural communities and providing environments where inter-professional learning may prosper, another meaningful way in which a large urban university may engage rural communities is through the provision of entry pathways to undergraduate degrees. A finding of the Review of Australian Higher Education (Bradley et al. 2008) is that certain groups in the Australian population, including people from regional and remote areas, are under-represented in higher education and that there is scope to improve the participation of such groups. As a consequence, a key platform of the Australian government's current policy on tertiary education is that higher levels of access and attainment are required for all sectors of the community, including low socio-economic groups (Australian Government 2009). Although not all rural and remote areas are over-represented by low socio-economic groups, many are and there is recognition that people from non-metropolitan areas are "historically disadvantaged"

in relation to accessing tertiary study (Edwards and Coates 2011). The University of Sydney has an important role to play in assisting the government in meeting its participation targets.

Table 2. Numbers and proportional changes of domestic, regional, and remote undergraduates (DRRU) enrolled in University of Sydney faculties in 2011 and 2006.

Faculty	Number of DRRU in 2011	Proportion of DRRU in 2011 (percent)	Change in proportion of DRRU since 2006 (percent)
Agriculture, Food, and Natural Resources	89	20.4	2.4
Architecture, Design, and Planning	16	3.6	-0.9
Arts and Social Sciences	342	5.5	-0.2
Business	79	3.9	0.2
College of the Arts	28	5.6	0.4
Conservatorium of Music	54	8.5	1.2
Dentistry	8	2.3	0.3
Education and Social Work	68	3.4	-1.5
Engineering and IT	134	5.2	0.2
Health Sciences	123	4.6	-2.9
Law	17	2.6	0.2
Medicine	59	6.3	-2.3
Nursing	16	4.7	-2.0
Pharmacy	25	2.8	-1.1
Science	211	5.0	0.8
Veterinary Science	62	8.4	-7.7
All faculties	1403	6.1	-0.4

Currently, the University of Sydney attracts the majority of its undergraduate students from greater Sydney (The University of Sydney, 2010a). The majority of Sydney-based students that attend the university are from the city's northern and eastern suburbs. Of the sixteen faculties at the university in 2011, only Agriculture, Food, and Natural Resources had a domestic undergraduate cohort comprising more than 10 percent of regional or remote students (Jones 2004; see Table 2). From 2006 to 2011,

there was a slight decrease in the proportion of domestic regional and remote students enrolled at the university, with a drop in student numbers (from 1,624 to 1,403) due to a concomitant decrease in total domestic undergraduate enrolments. The most notable decrease in a faculty's proportion of regional and remote undergraduates between 2006 and 2011 was 7.7 percent for the Faculty of Veterinary Science. During this time period, the faculty altered its undergraduate degree offerings and a second veterinary science program (in NSW) was established at a regional university, accounting for much of the decline in regional and remote student numbers. The six faculties with the largest numbers of domestic undergraduates, Arts and Social Sciences, Science, Health Sciences, Engineering and IT, Business, and Education and Social Work, each had proportions of regional and remote students between 3.4 and 5.5 percent in 2011.

In response to this under-representation of students from regional and remote locations, the University's White Paper (The University of Sydney, 2010a) asserts that "... pathways, special admissions programs, and ATAR bonuses . . ." should be reviewed to increase participation by these student groups, and that

"... targets for recruitment and retention of low SES, Indigenous and rural and remote students" should be set. These actions form part of a broader strategy to 'attract and support promising students from a diversity of social and cultural backgrounds." Already, faculties including Pharmacy, Veterinary Science, and Health Sciences have rural student entry schemes where students who have completed at least four years of secondary education at a rural school, who have had a permanent home address in a rural location for at least four years prior to applying, and who have achieved an ATAR within five points of the cut-off score for entry into a degree, may apply for a place.

Other social inclusion initiatives designed to widen the participation of underrepresented student cohorts, including rural and remote students, also are in progress at the University. Such initiatives include the direct engagement of academics and undergraduate students with high schools in order to raise the aspirations of high school students for a tertiary education, and the provision of scholarships for rural students. An example is the set of Rural Sustainability Scholarships offered by the Faculty of Agriculture, Food, and Natural Resources to students from nonmetropolitan areas who "may have considered taking a university degree financially unattainable." Of all of the possible impediments to rural and remote students accessing an education at the university, the cost of moving to and living in a large, expensive city appears, anecdotally, to be the most significant. Regular feedback from university staff involved in marketing is that, given a choice, many rural and regional students will choose a course in a closer, regional university because of the lower cost of accommodation and travel, and the more ready access to family and peer support networks. As Scull and Cuthill (2011) report, the under-representation of people from low socio-economic backgrounds at university is due to a complex mix of factors including cost, lack of support networks, lack of understanding of university life, lack of social and cultural capital, and lack of aspiration for tertiary study. So while programs to raise aspirations of rural and remote students, plus rural student entry

schemes and scholarships, would appear to be useful strategies, these are just part of what must be a multi-faceted approach by the university.

#### Conclusion

The University of Sydney is a large, urban, research-intensive university that draws the bulk of its student population from greater Sydney. Over recent decades the number of rural and remote students studying at the university has decreased, while the interaction of student cohorts with rural and remote communities has depended on the priorities and resources of the host faculties. However, with the social inclusion agenda of the Australian government now taking hold in the tertiary education sector, there is a strong commitment from the University of Sydney to embed rural and remote placement opportunities in the curricula of all undergraduate degrees. Reciprocal benefits for communities and the university are clear from such an institutional approach; communities benefit from having the services of partly trained professionals and an opportunity to attract these students back to their community for full-time employment following graduation. In the process, the university benefits by having its student profile raised beyond its city catchment and by the raising of aspirations among rural and remote students for studying at the university. The placement students themselves benefit through inter-professional learning that is facilitated by concurrent placements within well-resourced rural hubs. As numerous government reports attest, the work of professionals, particularly within remote and rural contexts, is increasingly reliant on their capacities to work within multidisciplinary networks. Added benefits for students include the development of selfawareness and worldliness, as well as opportunities to identify and explore possible rural job prospects. The biggest impediment to the successful implementation of a university-wide placement scheme is that of cost, and particularly the cost of accommodation. The concept of a "rural hub" is being promoted by the University of Sydney to address this issue, with inexpensive housing and ICT facilities being sought in a number of rural centers. Similarly, the biggest impediment to the successful inclusion of greater numbers of rural and remote students into the undergraduate courses at the University of Sydney is believed to be the cost of relocating to, and living in, a large and expensive city. Both these issues are being pursued to engage the university in mutually productive ways with rural and regional communities.

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Iven Klineberg is professor and head of prosthodontics, faculty of dentistry, and has had a commitment to sustainability of rural communities and subsequently initiated and chaired for five years the Rural Initiatives Group within the Health Faculties formed to increase awareness of rural placement opportunities for students of health faculties. He has oversight responsibility for external placements for students in the faculty of dentistry.

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