

#### **Professor Pip Pattison AO**

Deputy Vice-Chancellor (Education)
Office of the Deputy Vice-Chancellor (Education)

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Emeritus Professor John Halsey Chair, Independent Review into Regional, Rural and Remote Education

By email: <a href="mailto:IRRRRESecretariat@education.gov.au">IRRRRESecretariat@education.gov.au</a>

Dear Professor Halsey,

The University of Sydney welcomes the opportunity to be part of this important review tasked with identifying innovative and effective approaches to improving the educational outcomes of students residing in regional, rural and remote Australia.

Since its establishment in 1850, the University of Sydney has had a strong commitment to improving prosperity and well-being in regional NSW and beyond. Initially our engagement with regional communities occurred mostly through the disciplines of agriculture, veterinary science and medicine. While very strong regional linkages continue in these fields, they are now also present across all of the disciplines the University offers today: the physical and natural sciences; law; the arts (including the creative and performing arts); the social sciences; teacher education; social work; architecture, building and design; engineering and information technology; dentistry; nursing; pharmacy and allied health.

The University of New England in Armidale NSW was formed as a college of the University of Sydney in 1938, becoming fully independent in 1954. Our Faculty of Agriculture delivered education and research programs from a campus in Orange in the Central West of NSW from 1994 until 2000.

Today, our physical presence in regional NSW remains strong. In 1996 we established the <u>Broken Hill University Department of Rural Health</u>, and in 2001 we created the Northern Rivers University Department of Rural Health (now the <u>University Centre for Rural Health North Coast</u>). Our <u>School of Rural Health</u> commenced operations in Dubbo in 2002. In 2004, we opened a new, purpose-built clinical school in Dubbo, as well as a new Orange campus of our School of Rural Health. Major capital works were finalised in Orange in 2014, providing total accommodation for 64 third- and fourth-year medical students in Dubbo and Orange at any given time.

A minimum 25 per cent of students commencing in the Sydney Medical Program (SMP) are recruited from a rural background. More than 25 per cent of our total domestic medical student intake completes a full year of immersive training in the Central West of NSW during their studies. By the end of this year we will have educated 800 SMP students in Dubbo or Orange. Twenty academic staff and 23 professional staff of the University of Sydney live locally in these two centres.

In addition to the contribution we make to educating and training medical students in regional NSW, we deliver pre- and post-registration courses in a large number of other health disciplines. This enables us to provide a coordinated interdisciplinary approach to health workforce education through our Rural Clinical School, and through the Departments of Rural Health at Broken Hill and Lismore. A key reason for the success of these sites is the strong collaboration that occurs with other

universities, local health districts, primary health services, early learning providers and schools, state and local government agencies, businesses, and community organisations.

We encourage the review to visit our centres in Orange, Dubbo, Broken Hill and Lismore to experience first-hand the innovative approaches to education, research, and the provision of health services we are delivering in close partnership with rural and remote communities.

Under our Widening Participation and Outreach and Wingara Mura – Bunga Barrabugu programs, we have a suite of University-wide strategies in place to lift higher education participation and completion rates for students from low socio-economic and Aboriginal and Torres Strait Islander backgrounds. While currently relatively small in scale and coverage, independent evaluations of our outreach, access, and participation programs supported by the federal government's Higher Education Participation and Partnership Program (HEPPP) suggest great potential for them to be expanded in regional communities. The main factor holding us back from making more of our widening participation programs accessible to students in regional areas is limited and uncertain funding.

Noting the review's terms of reference and the main purposes of the discussion paper, please find attached summary information and web-links to some of our initiatives relevant to the review's themes of 'improving school access and achievement' and 'improving transitions to further study, training and employment'. These include programs funded by governments, philanthropy, University funds, or through a combination of these sources.

Please do not hesitate to contact me should the review see value in visiting any of our rural campuses, or discussing with us any of the idea or projects mentioned in our submission.

Yours sincerely,

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Professor Pip Pattison AO Deputy Vice-Chancellor (Education)

**Appendix** 

Examples of University of Sydney education and research activities aimed at improving educational and other outcomes in regional, rural and remote Australia

Examples of University of Sydney innovative initiatives relevant to the review themes of 'improving school access and achievement' and 'improving transitions to further study, training and employment'

1. The Broken Hill Department of Rural Health (as one example of our approach to community-engaged education, training and research in regional, rural and remote NSW)

Established in 1996 with support from the federal government, the <u>Broken Hill University Department of Rural Health</u> (BHUDRH) was created to improve health care in far western NSW by providing high quality support, education and training for rural and remote health workers.

Its focus is to establish relevant teaching and support environments, promote opportunities for student placements in the region, encourage experienced academic staff to spend time in rural and remote communities and foster partnerships to improve the quality of health care for rural Australians.

Since 1997 BH UDRH has worked closely with the Far West Local Health District (FWLHD), Maari Ma Health Aboriginal Corporation, the Royal Flying Doctor Service (South Eastern Section) and Divisions of General Practice to deliver a successful rural attachment program for medical, nursing and allied health students. It also provides comprehensive research training for general practitioners, primary health care workers, Indigenous mental health trainees and professional development support for local health professionals.

More recently our BHUDRH joined forces with the Population Health Division of the FWLHD to expand the existing capacity of population health research and development in the region. Together they operate the Broken Hill Centre for Remote Health Research, which undertakes epidemiological research and surveillance and other research relevant to population health and the delivery of health services in far western NSW. The centre also aims to enhance national expertise in rural and remote health research and translate research into policy and practice.

BHUDRH has a strong population health focus and supports existing health providers to improve health service development especially in public health and primary health care.

Examples of BHUDRH activities:

# **Community and student Engagement**

The BHUDRH's vision is to build healthy, resilient and sustainable communities where all students have the opportunity to achieve to the best of their ability. Its partnerships enable it to focus our collective energies and resources to address the factors that hinder educational, health and career attainment of children in far western New South Wales.

By 2020 the BHUDRH aims to address the inequities confronted by rural, remote, and Indigenous students living in our region through the implementation and evaluation of best practice models that integrate health, education and career choices.

The <u>'Health Career Academy Program Manual: Aspiration and Promoting Health Careers for Rural and Remote Secondary School Students'</u> was officially launched at the BHUDRH in 2015. The Health Career program and supporting manual aims to build aspirations for health careers amongst secondary students in rural and remote Australia.

#### **Extended Clinical Placement Program**

Offered since 2009, the <u>Broken Hill Extended Clinical Placement Program</u> is an innovation in undergraduate medical education. It enables students from different medical schools to come together and learn in a combined program for an extended period. The BHECP Program equips students with additional and special skills, in addition to providing the highest quality core clinical learning.

## Primary Health Care Undergraduate Nursing Elective

The BHUDRH's undergraduate nursing program is designed and delivered in partnership with Maari Ma Health Aboriginal Corporation and the Far West Local Health District and Remote Clusters. The program also works in collaboration with Justice Health and Aboriginal Medical Services within far west NSW to enhance student placement opportunities.

#### **Cross Cultural Education Program**

The BHUDRH, in partnership with Maari Ma Health Aboriginal Corporation and the far west Local Health District New South Wales, has developed a program of <u>Cross Cultural Perspectives in Aboriginal Health</u> for health science students, new employees to the region and organisation groups within the area.

The training is a fundamental foundation for those working in health with local Aboriginal communities. It aims to raise the awareness of health issues faced by Aboriginal people today, and enhance knowledge and understanding of Australia's history from an Aboriginal perspective and how this affects the health of communities.

#### Mental Health Academic Program

The BHUDRH receives funding under the Council of Australian Governments (COAG) National Action Plan on Mental Health to employ a mental health academic. The position involves academic work, teaching and management of students undergoing clinical placements. The academic position is also encouraged to increase direct service delivery of mental health services within the local community.

#### **Broken Hill Centre for Remote Health Research**

Established in 2003 as a joint initiative with the former Far West Area Health Service, the Centre for Remote Health Research (CRHC) aims to enhance the national expertise in rural and remote health research and the translation of research into policy and practice.

The Centre's activities are informed by local research needs in Far Western NSW, while also using its base in Broken Hill as a 'natural laboratory' of national significance. The partnership between the Centre and the local health service providers aim to jointly plan and undertake research into issues of importance to the health outcomes of the residents and communities in western NSW.

The principles which underpin the Centre's objectives, work and approach are: working with communities; promoting an environment of mutual respect; commitment to ethical research; commitment to excellence in research; commitment to supporting remote health researchers.

# 2. Examples of University of Sydney widening participation and outreach activities that are having an impact on educational access and outcomes in regional, rural and remote communities

# **Education and Training Out West (ETOW)**

Our Transition to Uni program is a partnership between our Compass Program, Dubbo Senior College and the Dubbo-based Education and Training Out West (ETOW) organisation. The program provides additional mentoring and advice about alternative entry pathways, student support services and scholarships to Year 11 and 12 students to support their transition to higher education. Through one-on-one mentoring and group workshops, the program aims to address the specific needs and concerns unique to pre-tertiary students in regional areas, specifically Central West NSW.

Each student receives between 5-25 face-to-face contacts with program staff. Six workshops with small groups of students requiring more support than others were organised and well attended. A workshop with Centrelink was well attended by parents and students.

Evaluation of the program in 2015 indicated that 38 percent of the participating students progressed to enrol at a university. A further 40 per cent of the cohort took take a gap year, primarily to undertake work to ensure they have sufficient funds to attend university and/or qualify for Independent Youth Allowance through Centrelink. An additional 20 per cent are either enrolled at TAFE or have stable long-term employment.

## **mOTor Skills Program**

<u>Motor Skills</u> is partnership between our Compass program, the Faculty of Health Sciences, our School of Rural Health, and partner primary schools in Central Western, Far Western and Northern NSW.

Occupational Therapy students complete clinical placements at partner primary schools, providing practical OT support to Early Stage 1 and Stage 1 students and their teachers. As part of the clinical placement, the OT students develop both remedial programs for students identified by the school as well as advice and resources to teachers for additional strategies to further develop students' fine and gross motor skills through classroom-based activities.

Evaluation completed by service learning placement students and classroom teachers following the completion of the program found that 100 per cent of those surveyed agreed that the program effectively increased students' confidence completing school tasks and increasing students' motivation. 100 per cent of surveyed service learning placement students felt that their placement had a positive impact on the students, teachers and staff at the school. 100 per cent of surveyed service learning placement students agreed that the OT clinical supervisor provided practical feedback and positive support, which helped them to further develop their Occupational Therapy skills.

#### **Madmaker Regional Tours**

Developed by our Faculty of Engineering and Information Technology in collaboration with Microsoft, <u>Madmaker</u> involves using Arduino Esplora boards with school students to investigate fun and interactive ways to use science, technology, engineering and maths to solve real-world problems.

Our MadMaker regional tours deliver student workshops and accredited teacher training sessions in high schools. Surveys conducted following the program indicated students were much more likely to pursue a career in science or engineering as a result of participating in this activity, and would like to continue doing similar activities after the experience. Teachers indicated overwhelmingly that the activities and platform would be easy to deploy in their schools.

#### National Computer Science School Challenge

Our <u>National Computer Science School (NCSS) Challenge</u> is a computer programming competition for primary and secondary school students designed to provide students with an intensive step-by step inschool program to learn how to code and improve their digital literacy.

Run by <u>Grok Learning</u>, a new education start-up at the University of Sydney, the NCSS challenge teaches students how to code using Python 3.4 — an easy-to-learn scripting language used by major online companies such as Google and Facebook for many different purposes including infrastructure and web applications as well as scientific research. In 2016, we also offered teachers from partner schools professional development ahead of the NCSS Challenge.

100 per cent of participating teachers surveyed agreed that the workshop helped them think of new ways, to teach, research or manage the topic and enable them to reflect effectively on their own practice. Whilst participating schools are currently predominantly metropolitan-based, with funding support this program could readily be scaled up for delivery in regional Australia.

# Career and post-school training/study apps

We have developed two pre-tertiary outreach apps, <u>Subject Finder</u> (year 10) and <u>Career Finder</u> (year 7-10), both of which aim to link students' interests with careers and key learning area's (KLA's). Both are available for download by students regardless of their geographic location. Feedback from users and the families suggest these apps are viewed as very worthwhile and helpful, and with funding these

technologies could be promoted more widely to students from regional, rural and remote schools.

## **Preparation for Senior Study Regional Program**

Our Year 10 Preparation for Senior Study Regional Program aims to assist Year 10 students in developing good study habits in preparation for their senior years of high school. It involves Year 10 students at schools in Dubbo and Forbes spending a day in-school attending workshops, conducted by University academics, Compass staff and mental health experts, designed to increase their preparadness for the HSC and university. The three workshops cover general study skills, English examination preparation and mental health in relation to exam pressure and anxiety.

## **Thinking Ahead Regional**

Thinking Ahead Regional is a two phase workshop delivered to students in regional areas that introduces them to the criteria they will need to address when applying for university scholarships or alternative entry pathways. The workshop focuses on helping Yr 11 students understand the nature of scholarships and their criteria; the value and need for extracurricular involvement; and how to articulate, in writing, the leadership skills and qualities they have developed through their experiences. The writing exercises in Phase 2 of the program are preceded by some general information about what scholarships are and how they can help students at university, and some school-specific content around extracurricular activities available in Phase 1.

96 per cent of participating students felt that as a result of the program they knew how to articulate their leadership skill and qualities that they had developed through extra-curricular involvement. 92 per cent of student agreed that completion of the program motivated them to apply for equity scholarships to a university.

#### **Promote Yourself Regional**

<u>Promote Yourself Regional</u> is a scaffolded scholarship application writing workshop we provider specifically for Year 12 students. Students practise writing persuasively about themselves and receive support in drafting scholarship applications, using the University of Sydney's E12 Early Offer application as a resource. The Promote Yourself workshops are designed to build upon students' learning about scholarships and scholarship-writing developed through the Year 11 Thinking Ahead workshops.

99 per cent of participating students agreed that the workshop left them feeling more confident about writing a scholarship application and similarly, 99 per cent agreed that the workshop provided them with new knowledge about how to write about their skills and experiences in a scholarship style application. 87 per cent agreed the workshop motivated them to apply for scholarships in general.

#### **Spectacular Science**

Spectacular Science is a STEM-focused campus experience led by our Faculty of Science. Targeted at Year 9 students from low SES and Aboriginal and Torres Strait Islanders the programs offers them first-hand experience of the intriguing and up to the minute research that scientists are working on in a series of interactive activities. As a result of this initiative students become more familiar with the a university environment, build enthusiasm for science, and increase their understanding of the relationship between high school, university-level STEM subjects and future occupations.

3. Examples of University of Sydney initiatives specifically aimed at improving the health, education, training and employment outcomes of Aboriginal and Torres Strait Islander people

Guaranteed and subsidised accommodation, and peer mentoring, for commencing Aboriginal and Torres Strait Islander students

# Regional Hub Expansion project and STEMex

Educational outreach across regional and remote NSW to increase access for Aboriginal and Torres Strait Islander students to higher education and in STEM subjects:

http://sydney.edu.au/news-opinion/news/2017/05/31/sydney-travels-to-the-regions-.html http://sydney.edu.au/wpo/high-schools/regional/index.shtml

# Scholarship program, supporting local Aboriginal people to become the health experts in their own community

See <a href="http://sydney.edu.au/news-opinion/news/2017/06/30/first-cadets-from-poche-centre-for-indigenous-health-graduate-.html">http://sydney.edu.au/news-opinion/news/2017/06/30/first-cadets-from-poche-centre-for-indigenous-health-graduate-.html</a>

# Dental program in schools in rural and remote NSW, to improve health and educational outcomes for Aboriginal school students

See, for example:

 $\frac{\text{http://sydney.edu.au/news-opinion/news/2016/09/23/grinners-are-school-winners.html}{\text{http://sydney.edu.au/news-opinion/news/2017/02/21/water-flowing-into-remote-schools-and-parks-.html}{\text{http://sydney.edu.au/news-opinion/news/2015/11/20/school-water-program-to-brighten-smiles-in-remote-nsw.html}$ 

# Centre for Research Excellence: Indigenous Health an Alcohol

We are a key partner in the NHMRC Centre for Research Excellence: Indigenous Health and Alcohol, which is pursuing evidence- and community-based research to create the best opportunities for Aboriginal and Torres Strait Islander peoples to find solutions to alcohol problems that can have a devastating effect on families, children, education access and outcomes. Representatives of Aboriginal community-controlled health services regularly engage with our staff to share learnings for implementation in communities. As part of this collaboration, we are also supporting Aboriginal research students and trainees who work on alcohol and related issues.

# Aboriginal nutrition project node, to inform education programs for local communities

See <a href="http://sydney.edu.au/charles-perkins-centre/our-research/current-research/aboriginal-and-torres-strait-islander-health/aboriginal-nutrition.html">http://sydney.edu.au/charles-perkins-centre/our-research/current-research/aboriginal-and-torres-strait-islander-health/aboriginal-nutrition.html</a>

## **Service Learning in Community**

See:

http://sydney.edu.au/about-us/vision-and-values/aboriginal-and-torres-strait-islander-

participation/service-learning-in-indigenous-communities.html

 $\underline{\text{http://sydney.edu.au/news-opinion/news/2016/08/17/community-classrooms--students-meet-local-needs-while-learning.html}$ 

 $\frac{http://sydney.edu.au/news-opinion/news/2016/08/17/unique-learning-hubs-established-with-communities-in-nt-and-nsw-.html}{}$ 

# **Graduate Diploma in Indigenous Health Promotion**

The <u>Graduate Diploma in Indigenous Health Promotion</u> is one of the flagship courses of the Sydney Medical School's, School of Public Health. It teaches Aboriginal and Torres Strait Islander health promotion workers from around the Australia who, for the last 21 years, have come to Sydney for six one-week blocks. For the first time, in 2017, in addition to the Sydney cohort, we have offered the program in Lismore to 10+ Indigenous health workers in Northern NSW.

#### Wingara Mura-Bunga Barrabugu Summer and Winter Programs

Academic and cultural week-long workshop for Aboriginal and Torres Strait Islander high school students from across the country, equipping them to connect what they study now with their options for the future:

 $\frac{\text{http://sydney.edu.au/news-opinion/news/2017/01/16/aboriginal-teens-call-university-of-sydney-home-for-a-week.html}{}$ 

http://sydney.edu.au/wpo/indigenous/summer-program/index.shtml

 $\underline{\text{http://sydney.edu.au/news-opinion/news/2017/06/30/indigenous-students-prepare-for-final-exams-on-campus.html}$ 

http://sydney.edu.au/wpo/indigenous/winter-program/index.shtml