COMMUNITY-CAMPUS PARTNERSHIPS AND SERVICE-LEARNING IN RURAL AND REMOTE AUSTRALIAN CONTEXTS:

Moving From Intervention to Engagement with Communities in Their Health Service Design and Workforce Development

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A thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy

Faculty of Health Sciences
The University of Sydney

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SUPERVISOR'S STATEMENT

SUPERVISORS STATEMENT

This is to certify that the thesis entitled "COMMUNITY-CAMPUS PARTNERSHIPS AND SERVICE-LEARNING IN RURAL AND REMOTE AUSTRALIAN CONTEXTS: Moving From Intervention to Engagement with Communities in Their Health Service Design and Workforce Development" submitted by Debra Maria Jones in fulfillment of the requirements for the degree of Doctor of Philosophy is in a form ready for examination.

Professor Lindy McAllister
Faculty of Health Sciences,
The University of Sydney.

Signed: [Signature] Date: 14/1/2017
STATEMENT OF AUTHORSHIP

I, Debra Maria Jones, hereby declare that the work contained within this thesis is my own and has not been submitted to any other university or institution as a part or a whole requirement for any higher degree.

I, Debra Maria Jones, hereby declare that I was the principal researcher of all work included in this thesis, including work published with multiple authors.

In addition, ethical approval from the University of Sydney Human Research and Ethics Committee, Public Schools New South Wales State Education Research Approval, La Trobe University and New South Wales Catholic Schools Education written approval were granted for the study presented in this thesis. Participants were required to read a participant information document and informed consent was gained prior to data collection.

Debra Maria Jones

Signed: [Signature] Date: 15/01/2017
ABSTRACT

Providing children with the best possible start in life is critical if they are to achieve their optimal outcomes and be afforded the opportunity to become valued community members. The Australian Charter of Health Care Rights (Australian Commission on Safety and Quality in Health Care [ACSQHC] 2008) stated that health care access is a fundamental human right for all Australians. However, children residing in rural and remote Australian communities are more likely than their metropolitan counterparts to experience socio-economic, educational and health disadvantages that contribute to developmental vulnerabilities and delays. These same children are less likely to have access to essential allied health services, such as occupational therapy and speech pathology, to prevent, identify and intervene early to address these delays. For some families, this inequity of access to allied health services is an intergenerational experience. A failure to address developmental delays can result in lifetime disadvantage; higher cost burdens for health sectors, individuals and communities through curative interventions and remediating social and educational strategies in later life; and continuing cycles of intergenerational poverty.

Even though rural and remote health has been the focus of Australian policy for a number of decades, these communities continue to be confronted with simultaneous and multiple health disadvantages. Contributing factors include: geographical isolation; lower socio-economic status of populations; resource allocations that fail to address existing health needs; a lack of focus and health expenditure on prevention, health promotion, early identification and intervention strategies; limited community engagement in their health care agendas; health workforce mal-distribution and shortages; and the development of poorly equipped health professionals for population health practice in these contexts. Strategies to address these challenges have typically been undertaken by health and higher education sectors in isolation from each other and the intended recipients of their health service and workforce strategies, the rural and remote communities themselves.

Health sector reforms are required. These reforms need to ensure health care alignment to community needs and priorities, the design of care that enhances service
accessibility and acceptability across diverse rural and remote contexts, and care that is provided by responsive health professionals. This will necessitate the provision of 'the right care, in the right place, at the right time' (NSW Ministry of Health 2015, online), provided by health professionals who have received the 'right education' and 'right practice exposure' to rural and remote Australian communities, their health care expectations and aspirations.

In seeking to achieve these outcomes, it is recognised that no single policy or government sector, has the capacity to overcome all of the challenges that contribute to developmental vulnerability and service inequities in rural and remote Australian locations. New approaches to health care design and workforce development are required. These approaches need to be informed by perspectives that consider issues in their entirety, drawing on collaborative partnerships with communities in determining their health needs, solutions identification, implementation and evaluation. It is imperative that communities are meaningfully engaged in their health care agendas. Civically engaged health care has the potential to enhance service accessibility, acceptability and sustainability, contributing to improved health outcomes for disadvantaged communities.

Several Australian University Departments of Rural Health—key stakeholders in rural and remote health service design and workforce development—are already engaging in the formation of community-campus partnerships, that include communities in the identification of their health issues, potential solutions and strategies for solutions implementation. Community-campus partnerships underpin the development of service-learning programs. Service-learning programs align health student placements with the provision of student-led services that address the identified unmet health needs of communities through emerging approaches to collaborative partnerships, service provision and the education of health students in Australia. These emerging partnerships and service approaches within the Australian context are heavily informed by international experiences and evidence. Despite the benefits associated with participation in community-campus partnerships and service-learning programs for universities, students and community agencies, limited evidence exists that describes who initiates these partnerships and for what purposes, how these
partnerships are formed, and whether these partnerships and service models provide substantive gains for communities and quality learning outcomes for students, specifically evidence informed from community and rural and remote Australian perspectives. This thesis discusses community and campus participant perspectives and experiences of participation in the formation of a community-campus partnership and the development of an associated service-learning program. This partnership sought to address the unmet allied health needs of children residing in far west New South Wales, Australia, through the development of a service-learning program that aligned the delivery of student-led allied health services, occupational therapy and speech pathology to address the unmet developmental needs of these children.

In the latter half of 2008, primary school principals in far west New South Wales approached the University of Sydney’s Broken Hill University Department of Rural Health to express their concerns about the detrimental educational, social and health outcomes experienced by children with developmental delays who were unable to access allied health services, in the first instance, speech pathology services. The department facilitated the formation of a local partnership between health and school education sectors to explore the challenges faced by allied health service provision, past strategy failings and potential solutions. The department then drew on its organisational relationship with the University of Sydney to engage the Faculty of Health Sciences, which has carriage of allied health education, in contributing to solutions identification and implementation. The result was the formation of a community-campus partnership where community and campus participants worked collaboratively on the development of an allied health service-learning program, the Allied Health in Outback Schools Program. The program was operationalised in early 2009.

In the initial stages, the program aligned senior speech pathology student placements with the provision of speech and language services to Broken Hill primary school children. These services were delivered on school sites in Broken Hill to enhance service accessibility. The program was expanded in 2010 to include occupational therapy students, extending the type of allied health services available to children and providing students with the opportunity to participate in an inter-professional service-
learning model. The geographical coverage of the program was expanded to include the remote outlying communities of Menindee and Wilcannia. Serial cohorts of speech pathology and occupational therapy students now participate in the program as inter-professional teams. Students undertake placement in the program across the four school terms contributing to service continuity and consistency. Under the supervision of qualified clinicians, students provide screening, assessment, services and referral activities in 12 primary school campuses across three regional communities. Approximately 150 school children access these student-led allied health services annually.

Although not explicit in the early stages of partnership formation and program development, a developmental evaluation approach was adopted. Local partners were aware of the challenges associated with developing and sustaining innovative approaches to addressing complex and protracted rural and remote health service inequities. External representatives from the Faculty of Health Sciences were cognisant of the additional challenges of ensuring quality educational experiences for their students within an emerging rural and remote Australian service-learning initiative.

However, the potential benefits of partnership and program participation were identified early. These benefits included: improved allied health service accessibility; enhanced developmental outcomes for children; growth in rural and remote placement capacity for allied health students; enhanced allied health student learning outcomes through ‘real-world’ practice experiences; and allied health student exposure to alternative health care practices such as population health in community-based settings. Despite these perceived benefits and internal program evaluations, no formal research had been undertaken to explore: the conditions that made the partnership necessary; the processes associated with partnership formation, service-learning program development and evolution; or the clinical, professional and civic impacts of partnership and program participation for community and campus participants.

In answering these questions, this doctoral study has been guided by three primary research goals: 1) to describe and understand the formation of the community-campus partnership; 2) to describe and understand the development and adaptation of the
service-learning program (with [1] and [2] from the perspectives of community and campus participants); and 3) to develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants.

Four key questions were posed to inform the study design and approach. These questions focused on understanding:

1) What factors contributed to the initiation, formation and participation of community and campus partners in the community-campus partnership and associated service-learning program?

2) What were the impacts of participation in the partnership and program for community and campus participants and for the civic and higher education sectors in which they were located?

3) How did community and campus participants interact with each other to fulfil the shared purposes of enhancing allied health service accessibility and allied health student educational outcomes?

4) How did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants?

In order to achieve these goals and answer these questions, this pragmatic qualitative study was designed and conducted. The study explored community (school principals and senior managers from local facilitating agencies) and campus (allied health students and academics) perspectives and experiences of partnership and program participation.

This doctoral research contains six papers: a descriptive paper and five papers that discuss findings from this research. The descriptive paper, Paper 1, contextually locates the study, describing the formation of the partnership, and the development and adaptation of the service-learning program between 2009 and 2015. This paper has been co-authored by executive representatives from partner organisations, school education, health and higher education sectors, and the University Department of Rural Health. Paper 2 presents community participant perspectives of the conditions and catalysts that influenced their participation in the partnership and program, as well
as the civic impacts of participation, Paper 3 presents campus participant perspectives of the conditions and catalysts that influenced their participation in the partnership and program, as well as civic impacts of this participation. Paper 4 addresses campus perspectives on the participation impacts on allied health student acquisition of work-readiness attributes and their future employability. In Paper 5, campus perspectives on the impact of participation on students’ inter-professional skills, knowledge and practice are presented. Paper 6 describes the key features that contributed to community engagement in the partnership and program sustainability within this context.

This doctoral research extends our current understanding of community-campus partnerships and service-learning pedagogy as a community engagement strategy and educational approach. It provides deep insight into who initiated the partnership and for what purposes, how the service-learning program was developed and adapted, and the impacts of participation from the perspectives of community and campus participants, specifically within a rural and remote Australian context. A conceptual framework is presented in Chapter 4 and provides a comprehensive and more nuanced approach to informing health and higher education sector approaches toward the engagement of rural and remote communities in health service design and the development of their health workforce. The framework has been informed by study findings and an exploration of existing theories and principles. Importantly, this framework has been informed by community perspectives and experiences of health care engagement.

As a complete thesis and series of papers, this research forms a body of evidence that can be drawn upon by health and health workforce policy makers, health and higher education sectors, and other rural and remote communities. The thesis and associated papers can contribute to informing health sector processes in the formation of community engaged community-campus partnerships and the development and adaptation of service-learning initiatives. In addition, this thesis describes the challenges and benefits of engaged approaches as they pertain to these contexts.

This thesis adds to the evidence base to support: the alignment of health care to rural and remote community needs and contexts; the need for new community engaged
approaches to enhance health service accessibility, acceptability and sustainability; the imperative to align health workforce skills, knowledge and practice to rural and remote community contexts; with, the ultimate aim of improving the health outcomes of rural and remote Australian communities.

ACKNOWLEDGEMENTS

A number of individuals and organisations have contributed to this doctoral research: for this investment and input, I am honoured and grateful.

To the school principals, academics and senior managers who participated in this research, I thank you for your time and deep insight into the role of rural and remote communities and campus partners in improving the health, education, social and later-life outcomes of some of Australia’s most vulnerable children. Your contribution to the development of our future allied health workforce and their approaches to health care delivery are inspirational. I hope that this doctoral research accurately reflects your perspectives and experiences.

To the allied health students who participated in this research, thank you for your participation, your insights into your clinical, professional and civic learning experiences, and the services that you have provided to our children in far west New South Wales (NSW). Without you, the future for many of our children would not be as bright. For every small gain you have made towards improving the life outcomes of our children, we are extremely grateful.

To my colleagues at the Broken Hill University Department of Rural Health (BHUDRH), thank you for your support in minimising my workplace demands over the last 12 months. Your commitment to enhancing the educational outcomes of allied health students, to how they perceive rural and remote health care, and to their role in the provision of services is inspirational. Equally inspirational is your commitment to ensuring that children living in rural and remote Australia are afforded every opportunity to be the best that they can be.

To the universities who promote the participation of their students in the service-learning program, without your investment and belief in our region’s capacity to
provide your students with a valuable learning opportunity, this initiative would be neither possible nor sustainable.

To my supervisors, Professor Lindy McAllister and Professor David Lyle, you have travelled with me from when I initially railed against the rigid research paradigms to which our studies are meant to conform through to the culmination of this doctoral study and, hopefully, the development of a rational, relevant and impactful thesis. Lindy, I deeply appreciate your guidance and ability to distil my somewhat entangled thoughts so that they made sense to readers when placed on paper. I thank you for not expecting me to focus on one small issue in isolation: one strand of spaghetti doesn’t make a meal and I hope this meal is worth all of your effort.

To David, your support in finding me time to focus on writing is greatly appreciated. Without this space, I would still be far from completion. I have enjoyed our academic discourse which has enabled me to clarify how I have approached this study, interpreted findings and drafted for publication. I hope we have managed to polish what was potentially a rough diamond.

To Professor Michelle Lincoln, your input into the conceptual framework chapter was invaluable in ensuring the clarity of concepts and their associated components. To Angela Winders and Deanna Spicer, thank you for your support in completing the images associated with the conceptual framework. To Veronica Barlow, your librarian skills have been much appreciated.

I would like to acknowledge the contribution of Valerie Williams in copy-editing and proofreading this thesis. Valerie provided advice on theses structure, grammar and syntax, the clarity of language used, connections between sections and paragraphs, voice and tone, verbosity and repetition. Her assistance has been greatly appreciated.

To my fellow PhD students, especially Karen Wylie who lives and works in sub-Saharan Africa, your shared passion for rural and remote health equity, has made my doctoral trips to Sydney more enjoyable. It was great to not be the lone rural and remote voice.
To my children, Shelby, Logan and Jessie, your constant faith in my ability to complete this thesis and pride in the work that I do have been driving forces for this study. To Shelby, thank you for my beautiful grannie Abbie who arrived halfway through this thesis despite me telling you to hold on. Abbie has been a real joy and a great distraction. To my mum, hang in there: this journey is nearly finished and you need to be there for the official pomp and ceremony.

To my loving and supportive partner Tony: you have tolerated every flat surface in our home being littered with journal articles, reports, texts and drafts for the last 18 months. You have constantly encouraged me, left me alone to concentrate, cooked for me and made sure that I stopped to eat. Without your support, tolerance, love and shared passion for improving the health outcomes of the people of our rural and remote Australian communities, this research doctorate would not have happened.
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<td>Australian Council of Social Service</td>
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<td>ACSQHC</td>
<td>Australian Commission on Safety and Quality in Health Care</td>
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<td>AEDI</td>
<td>Australian Early Development Index</td>
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<td>AHOBSP</td>
<td>Allied Health in Outback Schools program</td>
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<td>AHPA</td>
<td>Allied Health Professionals Australia</td>
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<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<td>America Speech-Language Hearing Association</td>
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<td>BHCC</td>
<td>Broken Hill City Council</td>
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<td>BHUDRH</td>
<td>Broken Hill University Department of Rural Health</td>
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<td>CCA</td>
<td>Constant comparative analysis</td>
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<td>Community-Campus Partnerships for Health</td>
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<td>CDC</td>
<td>Centers for Disease Control (US)</td>
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<td>CoA</td>
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<td>MoH</td>
<td>Ministry of Health (NSW)</td>
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<td>MRC</td>
<td>Medical Research Council (UK)</td>
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<tr>
<td>NAPLAN</td>
<td>National Assessment Program – Literacy and Numeracy</td>
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<td>NHHRC</td>
<td>National Health and Hospital Reform Commission (Australia)</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>NRHA</td>
<td>National Rural Health Alliance (Australia)</td>
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<td>NSW</td>
<td>New South Wales</td>
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<td>OT</td>
<td>Occupational therapy</td>
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<tr>
<td>RHMT</td>
<td>Rural Health Multi-Disciplinary Training (program)</td>
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<td>SCoH</td>
<td>Standing Council on Health</td>
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<td>SMS</td>
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<td>Speech pathology</td>
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<td>University Department of Rural Health</td>
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### TABLE OF PAPERS

Papers are presented in the order that they appear in this doctoral research.

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<td>2. Jones, D, McAllister, L &amp; Lyle, D 2016, Challenging Remote Community Deficit Perspectives: An Australian insight into the role of these communities in the design of their health services and the development of their health workforce.</td>
<td>Published</td>
<td><em>International Journal of Practice-Based Learning in Health and Social Care</em>, vol. 4, no. 2, pp. 19-34.</td>
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<td>4. Jones, D, McAllister, L, &amp; Lyle, D 2015, Stepping Out of the Shadows: Allied health student and academic perceptions of the impact of a service-learning experience on student’s work-readiness and employability.</td>
<td>Published</td>
<td><em>Journal of Teaching and Learning for Graduate Employability</em>, vol. 6, no. 1, pp. 66-87.</td>
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ORGANISATION OF THE THESIS

This thesis by publication is organised into an introductory section and five chapters, with the discussion and conclusion presented in Chapter 5. Signed documentation required for the thesis examination; the thesis abstract; acknowledgements; statement on the positioning of the author in the research; study goals and questions; and the description of my approach to the research are presented in the introductory section.

In Chapter 1, the overview situates the study in the rural and remote Australian context. This includes: discussion on the health of rural and remote Australians, specifically their children; approaches to rural and remote health care design and workforce development; the role of University Departments of Rural Health; community engaged health care; systems thinking; health partnerships, including community-campus partnerships; and the educational pedagogy of service-learning. A brief overview of the community-campus partnership and service-learning program at the centre of this study is then provided, and Paper 1 is introduced. Paper 1 provides a description of the formation of the community-campus partnership, the development and evolution of the associated service-learning program, the Allied Health in Outback Schools Program, between 2009 and 2015.

Chapter 2 describes in detail the research design used, and the methodology and methods applied in this study. This includes the rationale for the selection of a qualitative and pragmatic approach to the study. The research methods utilised, that is, focus groups and individual semi-structured interviews, research questions asked, and the data analysis strategy, a constant comparative method, are then described.

In Chapter 3, four papers are presented that describe the study findings. These papers have been published in national and international peer-reviewed journals. Chapter 4 introduces a new conceptual framework, one that has been informed by the study findings; the exploration of complexity, social and organisational theories; and the principles of community engagement, population health, health partnerships and health literacy. This framework seeks to inform health and higher education sector approaches to the engagement of rural and remote communities in the design of their health services and the development of their health workforce. To better illustrate the
framework, a conceptual model is included as a visual representation. Paper 6, currently in review, is included in this chapter as it describes components associated with a key framework concept, Concept 2, Features of Engagement. This paper describes concept components that contributed to community engagement in the partnership and program sustainability. These components comprise: 1) identifying and responding to community need; 2) services of value; 3) community leadership and innovation; 4) reputation and trust; 5) consistency; and 6) knowledge sharing and program adaptation.

Chapter 5 presents the discussion and conclusion. In addition to delineating the limitations of this study and possible areas for future research, this section discusses the study’s implications and the new contributions that it provides to the community engagement, community-campus partnership and service-learning knowledge and literature, specifically from community and rural and remote Australian perspectives.

**Positioning of Self in the Research**

As a generalist registered nurse, I have over 30 years of clinical, management and academic experience in rural and remote Australian locations. I have worked in state-funded health systems in rural and remote New South Wales, Queensland and the Northern Territory. I currently hold a senior academic position in a federally-funded UDRH, the Broken Hill UDRH (BHUDRH), which is an affiliated department of the University of Sydney.

As a registered nurse, I have worked in the fields of generalist nursing, renal dialysis, discharge planning, domiciliary care and aged care services. As a senior manager, I have held positions with multi-portfolio responsibilities for health care delivery to geographically dispersed and diverse rural and remote communities in far west New South Wales, Australia, covering a geographical area of 270,000 square kilometres.

In my current academic position, I have carriage of portfolios that include: cultural education; pre-registration allied health and nursing clinical placements and associated education programs; community partnership initiatives focused on population health and primary health care practice; health career development programs for regional
secondary school students; and service-learning initiatives in rural primary and secondary schools and residential aged care facilities.

I interpret health care from a systems perspective (Sallis et al. 2008). This perspective recognises that: multiple influences are located within diverse sectors that directly impact on the health of individuals and communities; these influences can be political, policy, funding, organisational, social and economic in their orientation; that diverse sectors are interconnected and interact with each other to influence the health of populations; that health strategies need to identify and respond to these influences as well as to the needs of individuals and populations to enhance health and well-being; and health partnerships are necessary with communities to identify health needs and develop sustainable solutions to address these needs.

As a researcher, my previous areas of research interest have included the evaluation of rural and remote primary health care experiences for pre-registration nursing students and the exploration of health career development strategies for rural and remote secondary school students. As a rural and remote clinician, senior manager, academic and intergenerational resident in far west NSW, I have extensive professional and lived experiences of health care delivery and service utilisation. I have personally experienced the complexities that contribute to the disadvantages confronted by rural and remote individuals, families and communities in accessing sustainable health care in these contexts. I have witnessed the provision of care by highly competent health professionals and by those poorly equipped to practice rurally. As the mother of children who identify as Aboriginal, I have direct experience of health professional displays of racism and paternalism, displays that can act to further exclude sub-populations from health care.

I have seen senior health managers and professionals enter and leave rural and remote communities and the impact this has on fragmenting care and disrupting professional, service and community relationships. I have witnessed senior managers who are new to rural and remote locations embark on ambitious initiatives that will enable them to ‘leave their mark’ on these communities. These endeavours have been undertaken with limited insight and knowledge of the historical failings of similar approaches, cultural sensitivities, local political dynamics, fragile social and professional networks, and the
complex and interconnected relationships that exist within these communities. I have seen the lack of sustainability of isolated, individualised and externally-driven health care that fails to provide substantive improvements in the health outcomes of populations and the resultant blaming of communities for a lack of conformity to health care interventions.

As a health professional, I have experienced the introduction of ‘evidence-based’ programs that have no capacity for adaptation, being poorly designed for translation into rural and remote contexts. I have seen the frustration of policy makers and program coordinators when communities employ high levels of creativity in rejecting or avoiding health initiatives that lack relevance for them. At times, I have personally displayed these same characteristics in rejecting imposed models of health care for myself and my children.

Over the last 30 years, I have seen health policy shift from a focus on the health of communities to care that is curative, individualised and hospital-centric. These approaches can undermine community capacity to collectively identify health issues and to find solutions of relevance. I have seen health sector demands for curatively orientated health professionals influence the learning experiences of our future health workforce. In parallel, I have witnessed the failings of the health sector to address the significant and protracted disadvantages and workforce shortages experienced by rural and remote communities.

I believe that access to health care is a fundamental human right for all Australians. However, this right is dependent on the provision of ‘the right services, at the right time and in the right locations’, with services being provided by health professionals who have received the ‘right education’ and ‘right exposure’ to rural and remote communities, their preferred models of care and health care expectations. If we are to achieve substantial improvements in the health outcomes of these communities, I believe that significant health sector reforms are required. These reforms need to be informed and driven by rural and remote community experiences and perspectives of health care. If we continue to fail to engage communities in their health care agendas, we run the risk of adopting and implementing sector-led reforms for sector-centred
improvements that further contribute to a mal-alignment of care and health professional practice to community needs and contexts.

My experiences as a rural and remote registered nurse, senior manager, academic, community member, mother and health care consumer have motivated this doctoral research. Due to my multiplicity of roles and health experiences in rural and remote Australian contexts, I have employed several strategies to avoid the influence of these experiences and my position on data collection and interpretation. These strategies are described in detail in Chapter 2.

This research is concerned with increasing our knowledge and understanding of rural and remote community engaged health service design and workforce development, and of the role of communities in informing and reforming health sector approaches to ensure accessible, acceptable and sustainable health services that meet the unique and diverse needs of rural and remote communities.

Research Goals and Questions

This doctoral research had three primary goals, to:

1) Describe and understand the formation of the community-campus partnership from the perspectives of community and campus participants

2) Describe and understand the development and adaptation of the service-learning program from the perspectives of community and campus participants

3) Develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants.

In order to achieve these three study goals, four key questions were posed to inform the study design and approach. These questions were designed to explore:

1) What factors contributed to the initiation, formation and participation of community and campus partners in the community-campus partnership and associated service-learning program?
2) What were the impacts of participation in the partnership and program for community and campus participants and for the civic and higher education sectors in which they were located?

3) How did community and campus participants interact with each other to fulfill the shared purposes of enhancing allied health service accessibility and allied health student educational outcomes?

4) How did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants?

To achieve these goals and answer these questions, a pragmatic qualitative research study was designed and conducted. The study explored community (school principals and senior managers from local facilitating agencies) and campus (allied health students and academics) perspectives and experiences of participation in the community-campus partnership and associated service-learning program.

Strategies of Inquiry

A research paradigm, or world view, is defined as ‘a basic set of beliefs that guide action’ (Guba 1990, p.17) and is a way of considering and making sense of real-world complexities. A researcher’s paradigm is influenced by the context in which they live and work and their previous research experience. Paradigms guide the selection of strategies used for inquiry, the research methods and data analysis strategies adopted, and the interpretation of findings (Creswell 2009, Guba 1990).

Three major strategies of inquiry can be drawn on when studying the social and the individual world (Patton 2002, Creswell 2009). These three strategies are quantitative, qualitative and mixed-methods approaches to inquiry. A mixed methods approach draws on quantitative and qualitative strategies to explore a complex phenomenon and answers questions that focus on group-and individual-level issues, or to explore different aspects of the same phenomenon (Morse and Niehaus 2009).

Quantitative and qualitative research approaches have differing epistemological, theoretical and methodological foundations that influence the research design, the
questions asked, data collection methods, data interpretation and application of the research findings. Quantitative research is defined as ‘research that explains phenomena according to numerical data which are analysed by means of mathematically-based methods, especially statistics’ (Yilmaz 2013, p. 311). Epistemologically, quantitative research is objectivist as it seeks to develop universal laws that explain social and individual behaviours through statistical analysis (Yilmaz 2013, Patton 2002). Quantitative research measures and analyses correlative and predictive relationships that exist between isolated variables, using value-free, logical, reductionist and deterministic approaches that are based on pre-determined theory. Researchers in quantitative inquiry use standardised instruments or pre-determined categories for responses ‘into which the participants’ varying perspectives and experiences are expected to fit’ (Yilmaz 2013, p. 313). Reality is studied objectively by those undertaking quantitative research, requiring a distancing of the researcher from the phenomenon under investigation and neutrality in the researcher’s approach to the study and data interpretation (Patton 2002).

In quantitative research, large numbers of participants are generally randomly selected to enable the researchers to generalise their findings. Large numbers of responses to a limited set of pre-determined questions facilitate comparison and the statistical aggregation of data collected through questionnaires, surveys and measurements (Patton 2002). Quantitative methods are considered appropriate when undertaking large-scale research on large numbers of individuals, cases and situations, providing statistical data that can then be used to identify, describe and predict major patterns and their variables (Patton 2002). As quantitative approaches are deductive and draw on standardised responses, they fail to shed insight into the context of the study, individual feelings, thoughts and experiences.

In contrast, qualitative research is ‘an emergent, inductive, interpretive and naturalistic approach to the study of people, cases, phenomena, social situations and processes in their natural settings in order to reveal in descriptive terms the meanings that people attach to their experiences of the world’ (Yilmaz 2013, p. 312). Epistemologically, qualitative research is constructivist, exploring socially constructed and dynamic realities through value-laden, descriptive, holistic and context-sensitive approaches
Qualitative research seeks to understand social experiences and their meanings from the perspectives of participants, acknowledging that reality and knowledge are social constructs (Patton 2002). The qualitative researcher is meant to develop empathic relationships with study participants and to consider process, context, interpretation and meaning as inductive approaches (Creswell 2009, Patton 2002). The aim of qualitative research is to ‘describe and understand the phenomenon studied by capturing and communicating participants’ experiences in their own words via observation and interview’ (Yilmaz 2013, p. 313).

Qualitative research emphasises the context that influences people’s actions and/or interactions and the meaning that these individuals ascribe to their experiences. This approach to research requires an in-depth study of individuals or the issues they experience without drawing on standardised and pre-determined categories of analysis. Instead, qualitative inquiry uses interviews and open-ended questioning as a means of data collection (Patton 2002). The use of open-ended responses enables the researcher to better understand and present the experience of a phenomenon as perceived by participants.

Participants in qualitative research are purposively selected and ‘nowhere is the difference between quantitative and qualitative methods better captured than in the different strategies, logics, and purposes that distinguish statistical probability sampling from qualitative purposeful sampling’ (Patton 2002, p. 46). Qualitative inquiry routinely focuses on small sample sizes where participants are selected to enable in-depth inquiry. The selection of information-rich participants promotes the researcher’s capacity to learn as much as possible about the issues of central importance in illustrating and answering the study goals and questions (Yilmaz 2013, Patton 2002).

In qualitative research, the capacity to generalise findings to alternative settings or situations is limited (Yilmaz 2013). Data collection in qualitative research is undertaken through observation, in-depth interviews and focus groups (Patton 2002). This results in the collection of highly context-and case-dependent data, necessitating the avoidance of judgments by the researcher on the situation in which they are involved as being appropriate or inappropriate.
Several key researcher and study factors influenced the adoption of a qualitative and pragmatic approach to this doctoral study. The context of the study, the study goals and questions, and my world view were considered of central importance to the research. This study sought to understand the ‘who’, ‘why’, ‘how’ and ‘what’ aspects of the phenomenon under investigation, that is, the community-campus partnership and the associated service-learning program from the perspectives of community and campus participants. Approaches to answering these questions are better suited to the use of data collection methods that employ open-ended questioning. This research was concerned with exploring the perspectives and experiences of a range of participants engaged in the partnership and program to gain a comprehensive, complex and more nuanced understanding, with this being an acknowledged aim of qualitative research. Tobin and Begley (2004) stated that:

Completeness is important to qualitative inquirers, as it allows for recognition of multiple realities. Inquirers are thus not using triangulation as a means of confirming existing data, but as a means of enlarging the landscape of their inquiry, offering a deeper and more comprehensive picture (p. 393).

In pragmatic terms, the selected research methodology needed to be able to accommodate the time limitations associated with access to the purposively selected participants and to allied health students undertaking their clinical placement in the region. The methodology also needed to be attuned to the busy schedules of senior managers, academics and school principals, as well as to the researcher’s knowledge and skill set (as well as those of my co-researchers), while ultimately staying true to the core components of the research, its description and exploration.

**Conclusion to Introductory Section**

In this section, I have provided the necessary documentation for the thesis examination; the thesis abstract; acknowledgements; the table of contents; lists of tables and figures; list of abbreviations; the table of publications (papers) from this study; and the outline of the organisation of the thesis. I have positioned myself within the research, provided my research goals and questions, and outlined the different
strategies of inquiry and, in particular, the selected strategy. Chapter 1 now presents the contextualisation of this doctoral study.
References


CHAPTER ONE

CONTEXTUALISING THE THESIS

1.1 Chapter Introduction

This thesis reports on a doctoral research study that explored the formation of a community-campus partnership; the development and adaptation of an associated service-learning program, the Allied Health in Outback Schools Program (AHO BSP), in far west NSW, Australia; and the impacts of partnership and program participation for community and campus participants. The partnership sought to address the unmet allied health needs of primary school children residing in this region who experienced developmental delays and inequity of access to allied health services. The service-learning program aligned occupational therapy and speech pathology student placements with the provision of student-led services to these children to address their unmet allied health needs. A pragmatic qualitative study (Morgan 2014, Hall 2013, Smith et al. 2011, Sandelowski 2000) was undertaken to explore conditions and catalysts for community (primary school principals and senior managers from local facilitating agencies) and campus (allied health students and academics) participation in: partnership formation; program development, implementation and adaptation; and the impacts of partnership and program participation from the perspectives of community and campus participants. Through the exploration of these perspectives and experiences, I hoped to gain a comprehensive, complex and more nuanced understanding of the nature of the partnership and program in order to address substantial gaps in our knowledge of community engaged health care, community-campus partnerships and service-learning initiatives, specifically from community and rural and remote Australian perspectives.

In this chapter, I contextualise the thesis; describe the health and well-being of far west NSW populations, Australian children and, specifically, far west NSW children; discuss Australia’s rural and remote allied health workforce; explore the concept of community engaged health service design and workforce development; describe the role of Australian UDRH and, specifically, of the Broken Hill UDRH (BHDRH); expand
on systems perspectives in health care; discuss health partnerships, including community-campus partnerships, and service-learning as an educational pedagogy; provide an overview of the partnership and AHOBSP; introduce and present Paper 1; and then provide a summary of the chapter.

1.2 Contextualising the Thesis

The Australian Charter of Health Care Rights (Australian Commission on Safety and Quality in Health Care [ACSQHC] 2008) states that access to health care is a fundamental human right for all Australians. However, rural and remote Australians can experience simultaneous and multiple health disadvantages and service inequities that directly impact on health care accessibility, acceptability and sustainability (Health Workforce Australia [HWA] 2013a, Standing Council on Health [SCoH] 2012, Humphreys and Wakeman 2009). These disadvantages and inequities contribute to the poorer health outcomes experienced by these populations (Australian Institute of Health and Welfare [AIHW] 2008). In many instances, the lived experiences of these disadvantages and inequities can be intergenerational (McLachlan et al. 2013) and amplified in Indigenous populations (Australian Bureau of Statistics [ABS] 2015). The SCoH (2012) stated that:

The combined impact of fewer resources, poorer access to services, limited availability of key health professionals, poorer health status, lower socioeconomic status, distance and travel mean that rural and remote communities and the health challenges they face are significantly different from those confronted by metropolitan Australians (p. 19).

Recognition is growing that the disadvantages that contribute to poorer health outcomes can originate within sectors beyond the direct influence and control of communities and health authorities (World Health Organization [WHO] 2008). These influences can be politically, educationally, socially, culturally and economically located (National Rural Health Alliance [NRHA] 2011, WHO 2008). Furthermore, health authorities can lack the skills required to effectively engage with these external sectors in order to address the harmful health and social equity effects that impact on community health outcomes (WHO 2008, Gilson et al. 2007), Gilson et al. (2007)
stated that health authorities themselves may perpetuate socially determined injustices and inequities:

There are examples of health systems that fail to apply their expertise to address the social determinants of health; institutionalise health care arrangements that create financial and geographic barriers to access for disadvantaged groups; alienate disadvantaged groups through culturally insensitive and sometimes antagonistic health worker and institutional practices (p. viii).

The capacity to address the complex challenges that contribute to poorer population health outcomes, in this instance, the health outcomes of rural and remote Australian children, lies beyond any single policy statement, sector, program or discrete funding stream (Aragon and Garcia 2015, HWA 2013a, Wouffe et al. 2010). However, linear approaches and interventions, those undertaken by discrete sectors working in isolation not only to each other but also the rural and remote communities that are the intended recipients of their services, continue to be applied (Kernick 2004).

Health authority command-and-control approaches to disease management have been identified as a ‘worrisome trend’ (WHO 2008, p. xiii) that can contribute to fragmented, narrow, specialised and curative-orientated services with limited investment in population health and primary health care models of care (WHO 2008).

The WHO (2008) stated that:

While urban health by and large revolves around hospitals, the rural poor are increasingly confronted with the progressive fragmentation of their health services, as ‘selective’ or ‘vertical’ approaches focus on individual disease control programmes and projects (p. 12).

These command-and-control approaches and individualised and curative models of care conflict with current population health literature that describes linear interventions as no longer being sufficient to address the ‘messy complexity’ (Ilot et al. 2013, p. 3) that confronts health care delivery within increasingly complex health and social environments (Aragon and Garcia 2015, Hyett et al. 2014, HWA 2013a, Wouffe et al. 2010), as reflected in rural and remote Australian contexts. Health authorities are increasingly being criticised for their contribution to the mal-alignment of health care
with community needs, the lack of acceptability of health services and the loss of community faith in health service provision (Aragon and Garcia 2015, WHO 2008).

The failure to reform how Australian health authorities and higher education institutions, referred to as the health sector, engage with rural and remote communities to address health inequities, poorly prepared health professionals for rural practice and protracted workforce shortages has the potential to result in a worsening divide between metropolitan and rural and remote health service accessibility (HWA 2013a). In addition, it leads to continuing failure to impact on the life expectancy and quality of life of rural and remote Australians and to address community avoidance or rejection of care, service fragmentation and the ongoing mal-distribution of Australia’s health workforce. These failings contribute to poorer health outcomes and higher cost burdens to health care authorities, individuals and communities (HWA 2013a). The Australian National Rural Health Alliance (NRHA) (2013) proposed that:

A coherent national plan and framework for rural and remote health services is required as a matter of urgency. The piecemeal approach to rural health challenges – with divided government responsibilities – is not delivering adequate or fair levels of care to the 32 per cent of Australians who live in rural and remote communities (p. 2).

1.3 Health and Well-being of Far West NSW Population

Far west NSW, Australia, is a sparsely populated area with many of the region’s small communities located along the Barwon-Darling River System, the traditional homelands of the First Nations Paakantji people (see Figure 1.1). The largest regional centre is Broken Hill with a population of approximately 19,000 residents (Broken Hill City Council [BHCC] 2015). The region as a whole has approximately 30,000 residents, 10.1% of whom identify as Indigenous compared to 2.1% statewide (ABS 2011).
Figure 1.1: Far West New South Wales

People residing in the region experience higher rates of morbidity and mortality, insufficient physical activity and poorer dietary practices. Low levels of socio-economic status, incomplete schooling and high rates of unemployment have been identified as significant challenges in improving the health of far west NSW residents (Far West NSW Medicare Local 2013). The Far West NSW Medicare Local (2013) stated that:

By world standards our average health status may be good, but in many areas the statistics are alarming. The cost of doing nothing in preventing ill health is high. The higher incidence of preventable and chronic illness and avoidable death highlights the critical need for the (far west) to support more innovative collaborations and coordinated pathways to improve patient care and health outcomes (p. 3).

1.4 Health of Australian Children

Attainments in early childhood have implications for the quality of life that children experience as they transition to adulthood (Council of Australian Governments [COAG] 2009, Commission on the Social Determinants of Health [COSDH] 2007). The
literature both internationally and nationally identifies the need to provide children with the best possible start in life to ensure that they achieve their optimal potential and are able to contribute meaningfully to their communities and society more broadly (COAG 2009, Engle and Black 2008, Maggi et al. 2005). The AIHW (2009d) stated that:

The health and wellbeing of Australia’s children is at the centre of policy making in Australia today, in recognition that children are the key to Australia’s future. Ensuring children get the best possible start in life is central to the health, social inclusion and productivity agendas of the Australian government, with policy initiatives in these areas drawing on the principles of early intervention and prevention (p. 1).

Despite these intentions, in 2012, 17.7% of all Australian children lived in households with incomes considered to be below the poverty line (Australian Council of Social Service [ACOSS] 2014). ACOSS (2014) stated that:

Poverty is concentrated among the groups of people facing the most disadvantages. Poverty is bad for our social relationships, and for our sense of community. Most of all, it is bad for those who are experiencing it: for their sense of self-worth, for their physical well-being, and perhaps most importantly for their children, for our future generations (p. 5).

The associations between poverty, education and health attainment are broadly acknowledged (ACOSS 2014, AIHW 2009b, Engle and Black 2008). Children raised in low socio-economic families are at greater risk of developing academic and social problems, and of experiencing poorer health and well-being, further undermining their opportunities for educational engagement and achievement (Engle and Black 2008). Engle and Black (2008) stated that:

Poverty limits the chances of educational attainment, and at the same time, educational attainment is one of the prime mechanisms for escaping poverty. Poverty is a persistent problem throughout the world and has deleterious impacts on almost all aspects of family life and outcomes for children (p. 243).
1.4.1 Developmental Status of Far West New South Wales Children

Montoya (2014) identified that 22.45% of children residing in far west NSW lived in households with incomes considered to be below the poverty line. On one or more Australian Early Development Index (AEDI) domains on entry into the school setting (NSW Department of Education and Communities [DEC] 2013), 32% of far west children were identified as being developmentally vulnerable. In addition, these same children are:

- Less likely to read, or be read to, on a daily basis (NSW Ministry of Health [NSW MoH] 2014);
- Less likely to attend pre-school (NSW MoH 2014);
- Less likely to engage routinely in school education, reflected in poor school attendance rates (Lerace et al. 2014);
- More likely to have higher levels of developmental vulnerability across developmental indicators that include physical health and well-being, social competence, language, cognitive and communication skills (Commonwealth of Australia [CoA] 2012, NSW DEC 2013);
- More likely to perform poorly in the National Assessment Program – Literacy and Numeracy (NAPLAN) (NSW DEC 2013) tests for reading, writing, language (spelling, grammar and punctuation) and numeracy (Lerace et al. 2014).

The AIHW (2009b) stated that:

Children who enter school not yet ready for school-based learning have lower levels of academic achievement, and are at an increased risk of teenage parenthood, mental health problems, committing criminal activity and poorer employment outcomes (p. 51).

Statistics reflect these outcomes in far west NSW. Despite these significant challenges and barriers to educational attainment, these children are less likely to have access to essential allied health services, such as occupational therapy and speech pathology, to mitigate a number of developmental vulnerabilities and to identify and intervene
early to address developmental delays (Spiers and Harris 2015, HWA 2013a). A lack of timely access to these services can contribute to a lifetime of educational, social, health and economic disadvantage (Snow and Powell 2012, McAllister et al. 2011, AIHW 2009b, Baum et al. 2009).

Far west families with financial capacity would be able to travel up to 500 kilometres to larger regional or metropolitan centres to access allied health services. Financial barriers to accessing private and geographically-distanced allied health professionals can act to exclude socio-economically disadvantaged families from self-funded allied health service access (Allied Health Professionals Australia [AHPA] 2013), as was the case for many far west NSW families. Allied health services, when available through the public health sector, can be overwhelmed by extensive waiting lists while recipients of services may experience fragmented, duplicated or limited occasions of service. This lack of service access, continuity and consistency is further compounded by protracted allied health workforce shortages and challenges in the recruitment and retention of these professionals to rural and remote locations (Spiers and Harris 2015, AHPA 2013, HWA 2013a).

1.5 Australia’s Rural and Remote Allied Health Workforce

The number of allied health professionals practising in rural and remote areas is substantially lower than the number practising in public or private services within metropolitan Australia (Department of Health and Ageing [DoHA] 2008). In 2006, across the Australian Remoteness Areas, the number of health workers per 100,000 of population decreased as the areas increased in remoteness. The largest number of health workers was located in major cities with the smallest number of workers located in very remote and remote Australia (AIHW 2009a). The DoHA (2008) identified that traditional approaches to health workforce education and funding had contributed to the national mal-distribution of health care professionals.

A key strategy employed to address rural and remote allied health workforce shortages is the provision of pre-registration clinical placements in these communities (HWA 2013a). The literature suggests that when health students are provided with rewarding learning experiences in rural and remote locations, they are more likely to
consider practising rurally post-graduation (Spiers and Harris 2015, HWA 2013a). However, several barriers exist in the provision of rural and remote allied health placements. These barriers include: an undersupply of placements and inadequate knowledge of existing placements; a lack of allied health professionals to provide adequate student supervision; student isolation from peer support; and a lack of placement administration and coordination (Spiers and Harris 2015). The ongoing reliance on hospital settings as the predominant placement locations further restricts rural and remote placement opportunities within non-traditional settings and student exposure to alternative health care practices such as population health and primary health care (HWA 2013b).

Health Workforce Australia (HWA) (2013a) called for comprehensive reform in how we approach health workforce education to enable the development of rural and remote health professionals, stating that ‘education and training programs must match the needs of rural and remote communities as well as the complexity and challenges of living and working in them’ (p. 20). The WHO (2011) stated that:

Efforts to scale up health professional education must increase the quantity, quality and relevance of the providers of the future if they are to meet population health needs. Reforms in education must be informed by community health needs and evaluated with respect to how well they serve these needs (p. 3).

In responding to these calls for reform higher educational institutions need to re-conceptualise their approaches to teaching and curricula content to include the provision of theoretical knowledge and practice experiences that enable students to understand the demographic and epidemiological profile of rural and remote communities, their many determinants of health status and community health care expectations and preferences for health care delivery (HWA 2013a, Frenk et al. 2010).
1.6 Community Engagement in Rural and Remote Health Service and Workforce Design

In addressing the complex challenges that contribute to rural and remote health service and workforce disadvantages and inequities, the National Health and Hospital Reform Commission (NHHRC) (2009) stated that:

Consumers should not only be the focus of the health system, they should be at the centre of decision making in health; consumer experiences and preferences should help lead health system reforms, alongside the evidence base (p. 122).

However, consumer and community engagement in health service design and workforce development has been described as one of the most complex areas of health care practice and research (Sarrami-Foroushani et al. 2012). A lack of consensus on the definition of the term ‘community engagement’ is a contributing factor to this complexity. For the purposes of this doctoral study, the following definition from the Centers for Disease Control (CDC) (2011) was adopted:

[Community engagement is] ‘[t]he process of working collaboratively with and through groups of people affiliated by geographical proximity, special interest, or similar situations to address issues affecting the well-being of those people (p. 7).’

Participants in this doctoral study were defined by their geographical proximity or clinical placement experience in this location (rural and remote NSW communities); their special interest (the delivery of allied health services to children experiencing developmental delays and the development of a rural and remote allied health workforce); and their similar situation (direct and indirect experiences of inequity of access to these services).

Sarrami-Foroushani et al. (2014) described ‘community engagement’ as an umbrella term that encapsulates community participation, empowerment and involvement. Community engagement concepts can relate to engagement from client to clinician, client to client, and client to researcher (Johnson 2015). However, limited evidence has been identified of community engagement in health service design and workforce
development; thus, a lack of high quality evidence is apparent when seeking to support this engagement (Johnson 2015, Sarrami-Foroughani et al. 2012).

Community engagement frameworks can focus on principles of engagement, levels or continuums of engagement, and organisational structures of engagement (Johnson 2015). The principles of community engagement recognise: that those who are affected by health decisions have a right to be involved in decision making; that there is a commitment to ensuring that the public's contribution to health agendas will influence decision making; that information will be provided to communities that enables their meaningful participation in health care; and that communities are informed of how their input affects health outcomes (International Association for Public Participation [IAP2] 2011). The principles provide mechanisms of accountability for sector evaluation of their community engagement strategies. However, little evidence is available that describes how the adoption of community engagement principles impacts on the health outcomes of communities (Johnson 2015).

The levels of community engagement occur across a continuum of engagement. Bowen et al. (2010) describe strategies as transactional (communities as passive recipients of health care information); transitional (interactions are two-way between the health sector and the community; however, communities are not considered equal partners in decision making); and transformational (communities are considered equal partners with shared decision-making responsibilities). Despite a growing awareness of the need to engage communities in their health care agendas, decision making can remain firmly entrenched within the health sector, thus reflecting transactional levels of engagement (WHO 2008, Kernick 2004).

The three levels of organisational structure where community engagement can occur are at the micro, meso and macro levels (Travaglia and Robertson 2011). The micro level of organisational engagement relates to individual consumer to clinician engagement where consumers are viewed as equal partners in directing their health care (Wright-Berryman et al. 2011). The meso level of engagement reflects community engagement in service planning and delivery, including the design and direction of service evaluations and research. At the macro level, consumers are
engaged in health councils and state or national review processes (Crawford et al. 2002).

Community engagement is considered to be essential in ensuring the alignment of health care with community needs and the development of acceptable models of service delivery (SCoH 2012, Sarrami-Foroughani et al. 2012). Benefits associated with community engagement include efficient resource utilisation (SCoH 2012); shared responsibility for health decision making (Kernick 2004, Fudge et al. 2011); the alignment of professional practice to community contexts (HWA 2013a); and enhanced sector capacity to work with communities to address health disadvantages and workforce shortages (WHO 2008; SCoH 2012, HWA 2013a). However, rural and remote community perspectives and experiences of health care and professional practice can be marginalised. Health needs, and the identification of solutions to address these needs, can be controlled within the health sector and reinforced through sector policies and practices (Hyett et al. 2014, Kernick 2004). Health authorities and higher education institutions can be distanced geographically, strategically, socially and culturally from community contexts, lacking the guidance necessary to inform their engagement approaches (Hyett et al. 2014). A prolonged policy and research focus on defining and describing rural and remote community deficits can further marginalise communities from strategies that seek to address their health and health workforce needs (Bourke et al. 2010).

Recognition is increasing of the need to meaningfully engage communities in partnerships that seek to identify their health needs and that develop collaborative and inclusive solutions to address these needs. Community engagement underpins the provision of health care that is aligned with community needs, the development of services that are accessible, acceptable and sustainable, and the provision of care by responsive health professionals, with these contributing together to positive impacts on community health outcomes (Aragon and Garcia 2015, Hyett et al. 2014, SCoH 2012, HWA 2013a, Woulfe et al. 2010). However, developing strategies that are responsive to the unique needs of diverse communities is a complex endeavour. Aragon and Garcia (2015) stated that:
Because community health involves complex social systems, population health requires solutions that are more than evidence-based: solutions must reflect unique local circumstances to be impactful and sustainable. What worked in an intervention trial may not work in a different neighbourhood or social network, indicating that local stakeholders must be engaged in designing, implementing, and improving health interventions (p. 525).

Enabling rural and remote community voices to be heard, and the effective interpretation of these voices, requires political, health sector, professional and power barriers to be overcome (WHO 2008, SCoH 2012, HWA 2013a, Cruz and Giles 2000). Politically, Australia lacks a national strategy for the implementation of community engagement in health care (Sarrami-Foroushani 2012). The lack of strategy and associated policy to guide engagement contributes to the lack of political and organisational accountability for engagement outcomes (Hyett et al. 2014). At the health sector level, the engagement of community members requires open systems that promote two-way communication, community input and feedback (Kernick 2004). However, the health sector can be closed to community-level experiences and expectations.

Professionally, the health sector has to be receptive to engaging with communities, shedding centralised and sector-dominated decision-making approaches (Kernick 2004). However, Ansari et al. (2002) stated that:

"Bringing together communities and professionals is not an easy process. Health service interventions that ignore the capacity of local communities to solve problems consequently exacerbate the problem by focusing on providing services, rather than strengthening community capacity (p. 157)."

Power differentials between the health sector and communities need to be addressed. Empowered communities have greater capacity to challenge the policies and practices that fail to address their needs (Gregson and Court 2010), influencing ‘how’, ‘where’, ‘when’ and ‘by whom’ services can best be provided. Dunston et al. (2009) cautioned that community engaged health care can:

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Profoundly disturb many fundamental constructs that have long informed professional identity, defined and differentiated expert knowledge from lay knowledge and shaped the roles and rules that typically govern the ways in which health professionals and health consumers interact (p. 42).

Calls have been made for additional research to be undertaken that explores how best to engage communities in their health care agendas and the impacts and outcomes of this engagement, specifically research that is informed by community experiences and expectations of health care.

1.7 Australia's University Departments of Rural Health

Several Australian UDRHs—key stakeholders in rural and remote health service design and workforce development—are already engaged in the formation of health partnerships with communities to enhance the accessibility and acceptability of health services and workforce practices. Community partnerships enable these departments to better interpret health service needs and workforce challenges, and to identify collaborative solutions to address these challenges (Mason 2013).

The UDRH program was established in 1997 through the Commonwealth-funded National Rural Health Strategy (CoA 1996). This strategy sought to provide a framework for the coordination of Commonwealth, State and Territory rural and remote health initiatives. Currently 11 UDRHs are located in each Australian state and the Northern Territory, funded through the Rural Health Multi-Disciplinary Training (RHMT) program (DoH 2016). These departments are operationally affiliated with larger regional or metropolitan universities: multi-disciplinary in focus, they can engage with multiple universities and their associated faculties in health student placement coordination and facilitation, and support the provision of discipline-specific and inter-professional student placement opportunities (DoH 2016).

Additional benefits associated with the presence of these departments in rural and remote Australian regions include the presence of educational and student accommodation infrastructure and the provision of professional and social supports to reduce health professional and student isolation (Mason 2013). Each department is
unique in the way in which it engages within its footprints, promoting its relevance and responsiveness within its rural and remote context. These departments form the most significant rural and remote health academic consolidation within Australia.

1.7.1 Broken Hill University Department of Rural Health

The Broken Hill UDRH (BHUDRH), an affiliated department of the University of Sydney, was the first department established in Australia in 1997. This department is located in Broken Hill far west NSW, Australia. The role of the department has been to: work collaboratively with regional health providers in the provision of education and training for existing health professionals; provide academic and strategic support in the development, delivery and evaluation of health services; and coordinate health student placements across the region. The department annually coordinates clinical fieldwork placements for over 400 allied, medical and nursing students from over 20 Australian universities. The role of this department was described in a peer-reviewed publication in 2006, of which I am a co-author (see Appendix 1 Lyle et al. 2006).

Prior to 2006, student placements facilitated through the BHUDRH were heavily influenced by the external curricula requirements of multiple metropolitan and larger regional universities, their individual faculties and discrete disciplines. A limited programmatic approach to models of student placement and educational experiences contributed to students being placed on an individual basis, predominantly in hospital settings. Many of these placements were of short duration, 2–3 week time frames, with medicine and nursing heavily represented in student placement activity.

Between 2005 and 2006, the department commenced a review of student placements, including student learning experiences and educational outcomes. This review also sought to identify the impact of these placements on host sites across the region. The findings identified a ‘disconnect’ between external curricula requirements for students and the primary health care placement opportunities available within the region. Students identified challenges in taking their theoretical knowledge of health care, predominantly that of curative care, into primary health care sites, resulting in students feeling poorly prepared for an alternative learning experience. In parallel, host sites raised significant concerns about the impact of short duration placements on their
agencies and communities. In addition, short-term placements were perceived as contributing to perceptions of student burden and limited opportunities for students to meaningfully engage with communities in the development of primary health care theoretical knowledge and practice skills.

In response to these findings, the department implemented broad strategic and operational changes, which I was strategically involved in, across the student placement program through the adoption of the following principles for student placement activity:

- Development and promotion of student education and practice experiences that reflected rural and remote models of care and contexts;

- Development of placement models that promoted a greater diversity of health disciplines and mutually beneficial outcomes for host sites, communities, students and their universities;

- A focus on developing models that engaged cohorts of students in a shared placement experience, enabling the delivery of structured educational programs and peer support during the placement;

- Promotion of longer duration placements across all disciplines; and

- The provision of pastoral care and social supports to overcome potential professional and social isolation.

In achieving these outcomes, the department further extended its placement activity into non-traditional community-based sites through the establishment of relationships with several community agencies. Through this extension, the department was better positioned to identify broader areas of unmet community identified health needs. These systems changes and diversification in student placement locations provided greater opportunities for health students to be engaged with agencies that were seeking to address socially determined inequities that contributed to poorer health outcomes of regional communities (Baum et al. 2009, COSDH 2007).
1.8 Systems Perspectives

A systems perspective shifts the focus from individuals and their health behaviours to systems, rules, and social and environmental factors that affect health outcomes. Systems perspectives enable community agencies to express solidarity in the identification of health needs and solutions of relevance to whole-of-population health outcomes (MacKintosh 2000). This contrasts with curative care approaches that are focused on the remediation of individuals in isolation to external factors that influence and impact on health attainment. Systems perspectives acknowledge the existence of connections within and across multiple sectors and social relationships and the impact that these have on health behaviours. According to Woulfe et al. (2010), systems thinking is essential in organising and sustaining efforts that seek to improve population health outcomes. Sallis et al. (2008) informed us that ‘educating people to make healthy choices when environments are not supportive can produce weak and short-term effects, which are common’ (p. 467).

As no one sector has full control or influence over the determinants that influence the health attainment of populations, or the capacity to address multiple, simultaneous, complex and interconnected challenges, calls are increasing for partnerships that include communities. Woulfe et al. (2010) stated that:

> Effective solutions require inter-organizational coordination and collaboration. By pooling resources, talents, and strategies from a broad range of actors, each of these sectors can more effectively carry out its responsibilities as they affect population health (p. 2).

1.9 Health Partnerships

The growing prominence of community engaged partnerships is acting to focus research attention on the identification of conditions that facilitate community engagement in these initiatives and the characteristics of communities that influence the success of collaborations (Woulfe et al. 2010, Bryson et al. 2006). Bryson et al. (2006) identified several conditions that can activate community collaborations, with these conditions including: geographical isolation; resource constraints; socio-
economic disadvantage; poorer health outcomes; the prior existence of networks and relationships; previous experiences of positive interactions across sectors; and experiences of health sector failings, where failings in one sector directly impacts on the functionality of other sectors (Bryson et al. 2006).

Health partnerships can contribute additional gains beyond the health improvement of populations. These additional gains are reflected in the shared effort and enhanced communication required across sectors to highlight challenges and shift resources to address these challenges. Wouffe et al. (2010) stated that:

Studies of multisector health partnerships should be alert to such catalytic changes and spillover effects as researchers pursue a clearer view of the connections between partnerships and population health improvement (p. 1).

As collaborative partnerships gain momentum, new approaches to issues identification and solutions development are required. Kania and Kramer (2011) stated that:

Under conditions of complexity, predetermined solutions can neither be reliably ascertained nor implemented. Changes in individual and organizational behavior that create an ongoing progression of alignment, discovery, learning, and emergence (are required). Leaders of successful (partnership) initiatives have embraced a new way of seeing, learning, and doing that marries emergent solutions with intentional outcomes (p. 2).

### 1.9.1 Community-Campus Partnerships for Health

One such approach to the formation of health partnerships that seek to collaboratively identify health needs and develop acceptable community engaged solutions to address these needs, is through the formation of community-campus partnerships (Sessa et al. 2013, Butin 2010, Sandy and Holland 2006, Leiderman et al. 2002, Jacoby 2003). Community-campus partnerships are partnerships between community agencies and higher education institutions (Sessa et al. 2013, Leiderman et al. 2002, Jacoby 2003). As public resources become increasingly scarce and social needs increasingly more complex, community agencies are seeking out partnerships with these institutions to address these issues (Leiderman et al. 2002). Hallmarks of effective community-campus partnerships include: a focus on community assets and
strengths; the development of comprehensive and multi-sector cross-cutting strategies; mitigation of practices that privilege institutional partners; effective collaboration; and sustainable, long-term engagement (Leideman et al. 2002).

Benefits associated with the community’s participation in community-campus partnerships have been identified as enhanced access to academic expertise and the human and social capital located within higher education sectors that may not be routinely available to them. Higher education benefits of community-campus partnership participation are enhanced student access to ‘real-world’ civic and social learning experiences, and the development of socially robust research agendas (Sessa et al. 2013, Butin 2010, Sandy and Holland 2006, Leideman et al. 2002, Jacoby 2003).

On the other hand, Bringle et al. (1999) stated that community-campus partnerships can be high risk endeavours in which communities can be viewed as ‘pockets of needs, laboratories for experimentation, or passive recipients of expertise’ (p. 9). Proponents of community-campus partnerships identify the need for higher education institutions to reform their ‘traditional outreach paradigm that seeks to provide services to the community on behalf of the community’, stating that ‘what is needed instead is an engagement model that looks for opportunities to partner with communities to meet collective needs’ (Jacoby 2003, p. 6).

Cruz and Giles (2000) identified several barriers in the identification of benefits accrued to the community through its participation in community-campus partnerships, specifically the identification of benefits informed by community partner perspectives and experiences. These barriers included political, intellectual and practical challenges. Politically, higher education institution concerns can drive community-campus agendas to ensure their responsiveness to funding and policy requirements. These agendas can be narrowly focused on student placements and their educational outcomes. Intellectually, challenges in defining community engagement and the uncontrollable variables that exist within communities can confound higher education research agendas and restrict the generalisability of findings (Cruz and Giles 2000). Practically, communities may lack the resources required to explore the impact of partnership participation from their own perspectives. Furthermore, Gibbons (2003)
identified that many of the complex community issues that Australian higher education institutions are being called on to resolve have a 'provenance' which is far removed from the world occupied by academics and their lived experiences.

These concerns continue to warrant close attention within the community-campus partnership literature which is heavily criticised for its preference of higher education objectives and outcomes over those of communities (Cruz and Giles 2000, Butin 2010). Additional research has been called for to explore community experiences of participation in these partnerships, with this research to be informed by community perspectives, experiences and voices.

1.10 Service-Learning as an Educational Pedagogy

Community-campus partnerships underpin the development of service-learning initiatives. As stated by Sandy and Holland (2006), 'in the absence of community-campus partnerships, it is difficult to imagine how service-learning might even exist' (p. 30). Service-learning has been an acknowledged educational pedagogy in the United States (USA) for a number of decades (Beatty 2010). However, providing an academically robust and uncontested definition of the term 'service-learning' can be problematic. Butin (2010) stated that:

Despite (or perhaps because of) the recent proliferation and expansion of service learning theory and practice, there is a troubling ambiguity concerning even basic principles and goals in the service-learning literature (p. 4).

For the purposes of this doctoral study, I have adopted Bringle and Hatcher's (1995) service-learning definition. Service-learning is a:

course-based, credit bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility (p. 112).
This definition of service-learning acknowledges the academic and curricular nature of service-learning; the importance of community voice in the development, implementation and assessment of the impact of service-learning participation; the key role that reflection plays in intentionally connecting the community service activity to targeted educational outcomes; and the importance of expanding educational objectives to include civic engagement. Bringle et al. (2009) stated that:

In service-learning, students are not only "serving to learn," which occurs in other forms of curricular engagement and applied learning such as clinical, fieldwork, internship, and practicum, but also "learning to serve," the unique civic dimension of the pedagogy (p. 38).

Service-learning provides opportunities for community agencies and the health sector to work collaboratively on initiatives that are mutually beneficial and reciprocal in nature (d’Arlach and Feuer 2009, Janke 2008). Communities benefit through greater access to university resources (Gelman et al. 1998) and the increased ability to address complex local issues (Nyden et al. 1997). Higher education institutions can address their civic responsibilities and establish ‘real-world’ practice opportunities for students engaged in service-learning initiatives (Jacoby 2003, Bringle and Hatcher 2002). These initiatives contribute to students’ development of professional knowledge and discipline-specific technical skills (Lenk 1997, Zlotkowski 1995) through student provision of services that address community-identified needs (Sessa et al. 2013, Jacoby 2003, Eyler and Giles 1999).

The goals of service-learning go beyond addressing the learning needs of individual students by focusing on civic engagement as a conduit to achieving learning outcomes. Service-learning engages community partners in students’ professional, technical and civic development (Cashman and Seifer 2008). A service-learning approach to experiential learning (Furco 1996, Kolb 1984) links theoretical knowledge acquired within curricula to the application of this knowledge in ‘real-world’ settings (Cashman and Seifer, 2008, Higgs and Titchen 2001). This enables students to engage in learning focused on poorly-defined problems that occur within real community contexts, problems that cannot be authentically replicated in hospital or higher education settings. Service-learning is considered compatible with other higher
education pedagogies that transition learning from the classroom and teacher-led approaches to student engaged and autonomous learning that occurs in collaboration with community partners, transitioning higher education to a public and democratic approach to academic work of meaning.

Several beneficial civic and professional educational outcomes have been associated with health student participation in service-learning initiatives. These benefits include: heightened awareness of civic and social responsibility (Kendrick 1996); increased student desire to be civically engaged (Jacobson et al. 2011); enhanced capacity for critical thinking (Eyler and Giles 1999, Astin and Sax 1998); development of self-esteem and personal efficacy (Astin and Sax 1998); and enhanced understanding of community issues and processes of solutions identification and implementation (Brown et al. 2007). The service-learning literature informs us that service-learning is intrinsically linked to engagement with communities and their contribution to student learning outcomes (Jacoby 2003, Bringle and Hatcher 1996). However, the emphasis within the service-learning literature has been on the identification of participation impacts on student learning outcomes. This focus has been attributed to the need to provide an academically robust argument for the inclusion, acceptability and resourcing of service-learning initiatives, validating service-learning as a meaningful educational pedagogy within higher education institutions (Jacoby 2003).

Service-learning in pre-registration education is gaining momentum across the Australian health sector (Coffey and Lavery 2015, Hammersley 2012, Birbeck 2012, Caspersz et al. 2012, Langworthy 2007). Various factors, including the following, are now driving the emergence of rural and remote Australian service-learning models: increased demands for non-traditional placements to meet the educational requirements of increased health student numbers (HWA 2013a, Mason 2013); the exploration of alternative placement models that promote positive student learning experiences in population health and primary health care settings (HWA 2013b); and the need for greater alignment between health education and contemporary rural and remote health care practices, community needs and expectations (SCoH 2012, HWA 2013a).
Much of the service-learning activity in Australia has been heavily informed by international literature and evidence (Coffey and Lavery 2015, Hammersley 2012, Birbeck 2012, Caspersz et al. 2012). If Australia is to adopt service-learning as a valid educational pedagogy for pre-registration health student education, theory development and practice implementation that accounts for Australia’s unique geography, vast population spread, differences in our health and education systems, and unique community contexts needs to be at the core of this movement. In addressing criticisms associated with service-learning pedagogies, what needs to be determined is whether service-learning activity can provide substantive, meaningful and long-term solutions for rural and remote Australian communities as well as quality learning outcomes for participating health students—the key aims of this study. The following section provides an overview of the community-campus partnership and associated service-learning program at the centre of this study, the Allied Health in Outback Schools Program (AHOBSP).

1.11 Allied Health in Outback Schools Partnership and Program

My first descriptions of the AHOBSP appeared in the literature in 2011 (see Appendix 2 Jones et al. 2011a; Appendix 3 Jones et al. 2011b). Within these articles, I identified the need to move beyond describing the partnership and program to develop a robust research agenda that explored participants’ perspectives and experiences of partnership and program participation and the impacts of this participation.

The AHOBSP was operationalised in 2009 in response to concerns raised by primary school principals about the detrimental educational, health and social outcomes for far west NSW children who were experiencing developmental delays as well as protracted lack of access to allied health services. The approach of the BHUDRH to its engagement in this initiative was influenced by the principles adopted in 2006 to inform student placement activity (see Section 1.7.1). The department facilitated the establishment of a local partnership between health and school education sectors. It then drew on its organisational relationship with the University of Sydney to engage the university’s Faculty of Health Sciences, which had responsibility for allied health education, to contribute to the identification of potential solutions to address this
service inequity. This resulted in the establishment of a community-campus partnership. An associated service-learning program was then developed that aligned clinical placements of senior speech pathology students, in the first instance, and occupational therapy students with the provision of student-led allied health services to address these unmet needs.

Although not explicit in the early stages of partnership formation and program consideration, a developmental evaluation approach was adopted (Patton 2011). Local partners with longstanding relationships and experiences within the region were aware of the challenging dynamics associated with developing innovative programs to address complex health service inequities. External representatives from the Faculty of Health Sciences were also aware of the additional challenges associated with ensuring quality educational and practice experiences for their allied health students within an emerging and rural-located service-learning initiative. Patton (2011) stated that:

Developmental evaluation supports innovation development to guide adaptation to emergent and dynamic realities in complex environments. Innovations can take the form of new projects, programs, products, organizational changes, policy reforms, and systems interventions (p. 1).

Developmental evaluation is informed by systems thinking and is responsive to complex non-linear dynamics. Social innovations, such as the AHOBSP, are considered to be non-linear pathways to change that can experience dynamic interactions, unexpected and unanticipated divergences, tipping points and critical mass momentum shifts. Patton (2011) informed us that:

Developmental evaluation accepts such turbulence as the way the world of social innovation unfolds in the face of complexity. Developmental evaluation adapts to the realities of nonlinear dynamics rather than trying to impose order and certainty on a disorderly and uncertain world (p. 5).

Serial cohorts of senior speech pathology and occupational therapy students, from four Australian universities, now participate as inter-professional teams in the program across the four school terms. These student cohorts provide screening, assessment,
services and referral activity, building upon the work of previous cohorts to enhance service continuity and sustainability, a student 'team continuum' model. Learning and service occur on site at the BHUDRH and at 12 school campuses across three regional communities. Students participate in an intensive five-day orientation and induction program and weekly professional and civic reflection sessions, with the BHUDRH as the facilitator. Services are delivered in pre-school and primary school settings. Students are supervised by clinicians from their discipline as well as interprofessional clinicians in the provision of individual, small group and class-based services for children with mild to moderate developmental delays. Supervision is provided through scheduled face-to-face contact throughout the students' 'working week' and via email, SMS and telephone contacts. Children identified with complex delays are referred to hospital clinicians for further assessment. Approximately 150 school children access these allied health student-led services annually. Service delivery takes a population health approach (Kindig and Stoddart 2003) in response to the needs of school children, parents and teachers (Wylie et al. 2013). Whole-of-class sessions support universal prevention approaches (Fairbanks et al. 2007) and enhance skills transference between teaching staff and allied health students (American Speech-Language Hearing Association [ASHA] 2000, McCormack et al. 2011).

The structured feedback provided by community partners on the program at the commencement and end of each school term informs program adaptation. Additional feedback is provided when necessary through academic supervisors and executive staff across partner organisations. Students participate in structured mid-placement and end-of-placement program evaluations facilitated by an independent researcher, thus further informing program adaptation and improvement.

Despite extensive internal evaluations, no formal research had been undertaken to explore the partnership initiation and formation, the development and adaptation of the service-learning program, and the impacts of partnership and program participation for community (school principals and senior managers from local facilitating agencies) and campus (allied health students and academics) participants. Furthermore, limited evidence exists on the applicability of community-campus partnerships and service-
learning innovations in enhancing service accessibility and health student educational outcomes within the rural and remote Australian context. This doctoral research has sought to address these significant gaps in our knowledge and understanding, specifically from community and rural and remote Australian perspectives.

Paper 1, which is now introduced, contextually locates the community-campus partnership and service-learning program. It describes the establishment and adaptation of the partnership and service-learning program between 2009 and 2015. The co-authors are executives from school education, the health sector, and the BHUDRH.


*How this paper fits in the thesis:*

This descriptive paper contextually locates the community-campus partnership and service-learning program at the centre of this study. The paper describes the establishment and adaptation of the partnership and program, the Allied Health in Outback Schools Program (AHOESP), between 2009 and 2015.

*What this paper adds:*

This paper contributes additional knowledge to the national and international literature on how community-campus partnerships are formed in rural and remote contexts, in this instance, a rural and remote Australian context. This new knowledge includes the processes employed by partner organisations in defining their roles and responsibilities within the partnership and in the development, implementation and adaptation of the service-learning program, and how the adoption of a developmental evaluation approach enhanced the contextualisation of service and learning activities. This paper also provides insight into the impact of the partnership and program on the growth of clinical placement capacity within the region, addressing documented concerns about the lack of coordination, supervision and opportunity for allied health student placements in these contexts. Questions of transferability and scalability of the service-learning model are also addressed by student discipline and growth in number of student placement weeks. In addition, this paper provides insights into the perceived mutual benefits accrued by community and campus stakeholders, addressing concerns within the literature associated with the inequitable distribution of power and the privileging of campus outcomes.
Implications:

The approaches and processes described in this paper have implications for the health sector at the policy, practice and education levels. The use of a developmental evaluation approach in health service design and the education of future allied health professionals may challenge: traditional centralised decision making and policy development that can occur at a distance from rural and remote Australian communities; linear and simple logic-based models of service delivery; and professional education informed by traditional curative and hospital-based approaches to health care delivery. The devolution of decision making and consensus reaching across local-level stakeholders may also challenge traditional health constructs associated with centralised control, power, professionalism, decision-making responsibility and health care accountability. The role of community stakeholders in the design of their health services and development of their health workforce has implications for how we transition the rhetoric of community engagement to the practice of community engaged health care. Community-campus partnerships and service-learning models, those that are underpinned by developmental evaluation approaches to service and learning design, may provide alternative strategies for addressing the health inequities experienced by rural and remote Australian communities.
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As a co-author of the above paper, I confirm that the above candidate has made the following contributions to the above paper:

- Conception and design of the research
- Analysis and interpretation of the findings
- Writing the paper and critical appraisal of content

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Improving Health and Education Outcomes for Children in Remote Communities

A cross-sector and developmental evaluation approach

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Early childhood is one of the most influential developmental life stages. Attunements at this stage will have implications for the quality of life children experience as they transition to adulthood (COAG 2009; CoSDH 2007; Maggi et al. 2005). Children residing in remote Australia are exposed to disadvantages that can contribute to developmental delays and resultant poorer education and health outcomes. Remoteness is defined in the Australian context by geographical location through the Australian Standard Geographical Classification — Remoteness Areas (ASGC-RA). Communities in far west NSW are identified as RA3 — outer regional, RA4 — remote, and RA5 — very remote (ABS 2013). In addition, remote locations have been identified as sharing common characteristics that include higher levels of health risk and disease burden, limited access to health services, health workforce shortages and socio-economic disadvantage (McGinn & Humphreys 2009).

A number of these characteristics are evident in far west New South Wales (NSW) communities and have contributed to children with speech and motor skill delays experiencing no to limited access to allied health services for a number of decades. More recently, growing awareness that no single policy, government agency, or program could effectively respond to these complexities or ensure appropriate allied health service access for children in these communities led to the development of a new model and approach to providing essential health services that were aligned to community need.

The Allied Health in Outback Schools Program (AHOPS) commenced in 2009 and was first described in the literature in 2010 as a peer-reviewed conference paper (Jones et al. 2010). At this time, the program was known as the Allied Health Student-Ran Clinic Initiative. The concepts of community first (Carney & Hackett 2008), shared governance (Jackson et al. 2008) and student-run clinics (Dalskovitz et al. 2006) were core features. The initiative was underpinned by the establishment of cross-sector partnerships and a shared aspirational aim that sought to improve the developmental outcomes of children in the region and so enhance
their later life opportunities. Initial partner organisations included the Far West Local Health District (FWLHD) of the NSW Ministry of Health and the Far West Network (FWN) of the NSW Department of Education and Communities (NSW DEC), state-funded entities with direct health service and school education roles within the public sector, the Broken Hill Aboriginal Education Consultative Group (BHAE CG), and the Broken Hill University Department of Rural Health (BHUDR). The University of Sydney, a federally funded department with carriage of health professional education and coordination of pre-registration clinical fieldwork experiences in far west NSW. The RHU RDH drew on established relationships at the local level and its organisational relationship with the University of Sydney to actively engage cross-sector representatives from health, school education and higher education sectors, including representatives from the University’s Faculty of Health Sciences who had carriage of allied health pre-registration education. It was identified early that the initiative had the potential to deliver beneficial outcomes for communities and partner organisations. These included improved access to allied health services; enhanced developmental, education and social outcomes for primary school aged children; expanded remote health placement capacity; and education and primary health care practice opportunities for pre-registration allied health students.

Although not explicit in the early stages of program evolution, a developmental evaluation approach was adopted. Local partners with longstanding relationships, experiences and networks within the region were aware of the challenging dynamics and realities associated with developing innovative projects to address complex and protected health service inequalities. And external representatives from the Faculty of Health Sciences were aware of the additional complexities associated with ensuring quality educational and practice experiences for their students within an emerging service-learning pedagogy being developed and delivered in remote Australia.

Over the last five years the model has been the catalyst for partnership consolidation, expansion and diversification, while model adaptation and refinement experiences have provided valuable insights that have informed health and education policy and enabled the model to be responsive to changing community needs, emerging policy and funding reforms.

This article describes the local need that drove model development, key partner organisations and their roles, and the processes associated with the establishment of cross-sector collaborations. Model characteristics, outcomes to date, contributions to expanding value-adding opportunities within the school setting and scalability of the model are also discussed. In addition, the article explores the challenges and implications associated with the development of a new approach to health service delivery, health workforce development, program evaluation and research. The authors propose that a community-
central developmental evaluation approach to service innovation in remote locations is required. Contemporary logic-based policy development and funding allocations, with fixed interventions and predetermined program deliverables and outcomes, are no longer capable of responding to the complexity experienced by remote Australian communities.

THE NEED

International and national literature identifies the need to provide young children with the best possible start in life to ensure they achieve their optimal potential and are able to contribute meaningfully to society (CCMG 2009; Maggi et al. 2005). Timely and appropriate access to services that identify and address developmental delays earlier in life help to prevent later life disadvantage and higher cost burdens of corrective interventions (Guinn et al. 2009).

Young children residing in remote Australian communities are exposed to socioeconomic disadvantage that can contribute to developmental delays and diminished life outcomes (AIHW 2008), including socioeconomic disadvantage (Simon et al. 2013), poorer health (AIHW 2008) and lower educational attainment (ABS 2008). For many families, this lived disadvantage is an intergenerational experience (McLachlan, Gibling & Gordon 2013). The amplification of this disadvantage for remote Aboriginal populations is well documented (ABS & AIHW 2008).

Children residing in remote areas are likely to experience limited or no access to pediatric allied health services (AIHW 2013; McAllister et al. 2011). The maldistribution of Australia’s health workforce (HPA 2012; AIHW 2010), as well as health workforce education and service systems that are focused and funded towards curative models of health service provision (ANPHA 2013), are identified barriers to community orientated care. These barriers hinder the development and implementation of primary health-care models of service provision that are aligned with individual community needs, delivered in accessible community settings, and focused on health promotion and disease prevention (DoHA 2010; Douglass et al. 2009; Wakeham et al. 2009).

There is a growing body of international (Sanger et al. 2003) and national evidence (McAllister et al. 2011; Snow & Powell 2012) that associates later life disadvantage with undiagnosed or untreated speech, language and communication delays in early life. Studies conducted by Snow and Powell (2012) identified that over 50 per cent of male juvenile offenders within a community sample had significant deficits on measures of language and narrative skills and that disengagement from education and social systems had commenced in early schooling. The 2006 International Adult Literacy and Life Skills Survey (IALSS) identified that 40 per cent of employed and 60 per cent of unemployed Australians had
poor or very poor English language and literacy. Improvement in these domains was called for to enhance effective participation in education, the labour force and society (OCI 2010).

Children residing in remote New South Wales have been identified as being at greater risk of developmental vulnerability or delay in two or more of the domains of the Australian Early Development Index (AEDI) on entry into the primary school system (NSW DET 2013). Children and their families have experienced difficulty accessing allied health services for a number of decades, not least because of the vast distances they need to travel. For west families with financial capacity travel up to 500 km to larger regional or metropolitan sites to access these services, but this is not normally an option for disadvantaged families. Services, when available through the public health system, can be overwhelmed by extensive waiting lists, whilst recipients of services may experience fragmented and at times duplicated occasions of service. Financial barriers to accessing private allied health professionals exclude a number of socioeconomically disadvantaged families from self-funded service access (AIHA 2013).

Challenges experienced by rural and remote communities in the recruitment and retention of appropriately qualified health professionals are well documented (DohA 2010; HWA 2010). The lack of health professionals in these regions directly impacts the capacity to provide pre-registration clinical placement experiences, which limits exposure to rural and remote practice and further exacerbates workforce shortages.

In 2008, a delegation of primary school principals approached the Broken Hill University Department of Rural Health (BHUDRH). The University of Sydney, seeking support to address the intergenerational educational and social impacts experienced by pupils in their schools who were unable to access speech pathology services. The cross-cutting nature of this issue and its implications for health service provision, school education, pre-registration allied health student education and community agencies was drawn on by the BHUDRH to bring a diverse range of stakeholders together for initial discussions to identify viable solutions to improving access to paediatric allied health services.

PARTNERSHIP ESTABLISHMENT

Representatives from the FWLHD, including senior management and allied health clinicians, FWN NSW DET primary school principals and learning support staff, BHUDRH senior management and academics, and representatives from the BHACCG met in early 2009. They explored historical approaches to service delivery and contributing factors to their lack of success in addressing service requirements to ensure past mistakes were not repeated. New alternatives to service provision were also explored. The development of an allied health service-learning model that aligned educational and clinical practice experiences for final-year students with unmet service needs within the region was viewed
as the most viable option for consideration. Access to expertise in the area of pre-registration allied health education and clinical fieldwork was drawn on from representatives of the Faculty of Health Sciences, The University of Sydney. These key stakeholders became the foundational partners for model development and implementation.

Site visits to Broken Hill were undertaken in early 2009 by faculty representatives who engaged in cross-sector meetings with local partners to progress the development of the model. Once the foundational structure of the model had been decided upon, ongoing involvement from the Faculty was through teleconference. Local partners continued to meet routinely over the coming months to further consolidate the model and identify organisational roles and responsibilities prior to a pilot phase in September 2009.

**Partner Roles**

The FWLHD committed to provide clinical supervision; FWN NSW DECS principals committed to the provision of a key school contact person, classroom engagement and pupil withdrawal for therapy when required. The BHUDHD committed to placement and program coordination, development of onsite pre-placement education and provision of student accommodation. The BHACC committed to informing regional Aboriginal organisations of activity and findings from the initiative. The University of Sydney Faculty of Health Sciences committed to the provision of student participants to ensure appropriate student numbers and discipline mix.

No external funding was sourced during the initial development and pilot stages of the initiative. Partner organisations self-funded their own contributions by drawing on existing human resources and infrastructure.

**Partnership Development**

The partners were aware of the challenges associated with addressing allied health service access and workforce shortages. Evidence of successful approaches to addressing allied health service inequity within remote locations was identified as a gap within the existing literature.

Model development therefore involved an extensive review and sharing of literature by the BHUDHD in the areas of community-campus partnerships (CCPH 2013), service and transformative learning educational pedagogies (Dirks 1998; Moskowitz et al. 2005), and complex systems theory (Mitchell & Newmann 2002). This review informed our approach to partnership establishment and sustainability – power distribution, cross-sector complexities, need for flexibility, sharing of resources, time investment with education – community-centred, supported authentic learning and teamwork opportunities; location of service delivery – community settings in preference to hospitals; and evaluation framework – developmental in preference to formal
and summative. Interpretation and adaptation of the literature to the local context, resources and aims of the model formed the foundation for model implementation.

The adoption of a developmental evaluation framework in preference to traditional formative and summative approaches to model evaluation was considered to be a key contributor to model responsiveness, acceptability and sustainability. Developmental evaluation is suited to social innovation, where there are high levels of uncertainty associated with the actions that are being implemented. This approach supports the development of innovative ideas and visionary interventions, providing a period of exploration and adaptation of emerging models prior to more traditional evaluation approaches being introduced (Futton 2013).

A cross-sector working group was established to work on model design and delivery. Senior leaders from across the partner organisations provided strategic endorsement and support for the initiative. Feedback on model progression was routinely provided by the working group through quarterly written reports to the senior leaders to ensure they were fully informed of developments and had the capacity to respond to identified opportunities and challenges.

THE MODEL: DEVELOPMENT AND EVOLUTION 2009-2014

The adopted approach saw cohorts of final-year speech pathology and occupational therapy students from The University of Sydney undertaking their clinical placement experiences in primary school settings in far west NSW across three school terms. Prior to their placement, participating students took part in a discipline-specific, five-day comprehensive preparation for practice program on site in Broken Hill. This was in recognition of the potential challenges students could confront in transitioning from a traditional hospital experience to a remote community-centred primary health care practice, with an expectation that they would have a leadership role in therapy development and delivery.

The students, under the supervision of qualified discipline-specific clinicians, provided screening, assessment and therapy for children identified with mild to moderate needs. Children identified with complex developmental delays and emotional and social needs were referred to hospital clinics for more intensive assessment. Supervision in the initial stages of model development was supported by academics and clinicians employed through The University of Sydney and the JWHRD. For more detail on these initial processes, see Jones et al. 2010.

The model currently sees up to six speech pathology and four occupational therapy students undertaking service-learning placements for periods of six to eight weeks across four school terms, three communities and 12 primary school campuses. A total of 24 speech pathology and 16 occupational therapy students are placed annually through the program. Students now participate in an interdisciplinary five-day preparation program prior to
placement. Program content is adapted when necessary based on parent, school, allied health student, clinician and academic feedback to address emerging needs.

Guides have been developed to structure student and supervisor activities within each term. Screening of kindergarten children occurs in Term 2 instead of Term 1, enabling teachers to implement literacy and phonological activities prior to screening, minimizing false positive findings. Student cohorts develop therapy plans and individualized handover documents that identify successful pupil–therapist engagement strategies and assessment outcomes, inform the activities of the next cohort of students, and guide teacher and parented involvement in class- and home-based therapy, which embeds continuity of therapeutic engagement. Student cohorts change across the four school terms, with continuity of therapy delivery and partnership engagement being maintained through the stability of academic staff.

An evolving focus on interprofessional learning and practice between disciplines further aligns the model to contemporary best practice (Thistlethwaite & Morax 2010). Students participate as an interdisciplinary group in elements of screening, assessment, therapy, clinical education sessions and placement debriefs. Therapy delivery is refocusing to reflect “responsiveness to intervention” (RTI) processes through a multi-tiered approach to service delivery, to address the range of needs experienced by children. Therapy delivery includes individual, small group and whole-of-class sessions. Whole-of-class sessions support universal prevention approaches (Fairbanks et al. 2007) and enhance skills transference between teaching staff and allied health students (ASHA 2000; McCormack et al. 2011). Table 1 provides an exemplar overview of allied health student activity undertaken during a typical week of their placement in Term 3.

Supervision approaches now incorporate discipline-specific and multidisciplinary academic and student peer supervision (Kuipers et al. 2013). Supervisors provide an additional layer of supervision for classroom activities. Weekly clinical case discussions support the development of critical thinking in students, providing an opportunity to discuss therapeutic approaches and alternative methods of therapy delivery (Fiarie & Fairman 2005). Weekly pastoral care sessions support students in adapting to and understanding practice approaches, their placement communities and socioeconomic contexts.

A recent development for this model has been enhanced service delivery integration with FWLHD allied health clinicians. Clinicians are now referring school-aged children directly into the program and modelling speech, language, communication and motor skills therapy required by these children to the allied health students, further enhancing continuity of therapy. Additionally, health service clinicians are extending their role by retaining case management for children who are jointly engaged with their
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Table 1: Overview of Weekly Student Activity, School Term 3

Service and the model. Clinicians meet with academics and allied health students at the beginning and end of each school term to discuss therapy requirements and outcomes.

The ongoing alignment of the model to federal and state policy, funding opportunities and changing community needs has contributed significantly to the capacity of the community to address what was considered an intractable inequity in access to services. Senior cross-sector leaders continue to work collaboratively on strategic aspects of the model through promotion and lobbying at the state and federal levels and identification of relevant policy and funding opportunities. As the model has matured and partners have developed clarity of understanding associated with their roles and responsibilities, the activities of the cross-sector working group have been integrated into daily practices. The aspirational aim of the model has not altered; however, program partners have learned that the path that leads to these outcomes can be unclear and divergent, requiring flexibility in responses and long-term commitments to achieve shared outcomes and sustainability (Hummans & Acutt, 2003).

**Model Characteristics**

1. **Adaptation**

As the model matures, the conceptualisation and re-conceptualisation of the service and educational elements has resulted in the trialing of various approaches to service delivery and allied health student education. Adaptations have been driven by new learnings informed by parents, schools, clinicians, academics and participating allied health students through informal and formal evaluations. How allied health services and broader health and social service access and delivery are
interpreted has become increasingly complex and interconnected across health, education and social domains (McLachlan, Gillillan & Gordon 2013).

2. Developmental evaluation
Traditional linear, logic-based models (Rocke & Nunn 2009) for addressing complex problems (assessing issues in isolation with a limited set of possible options) have been replaced by developmental evaluation, which acknowledges unpredictable and unplanned phenomena, momentum shifts that can include periods of slow or rapid change, and tipping points associated with policy and funding opportunities and challenges (Prout 2011). This approach has enabled the model to adapt to emergent, complex and at times ill-defined issues across remote health, health workforce, and education policy and funding domains.

3. Credibility and consistency
Remote and Indigenous populations tend to have a healthy level of cynicism towards new programs and their longevity. Our model is concerned about each perception of consistency and credibility. However, parents continue to support their child’s engagement with student-led services, while teacher engagement within the classroom and with the program continues to strengthen each term that students and academics are present within the school system. Engagement with clinicians employed through the hospital system is consolidating, with a growing sense of service integration, coordination and collaboration. In addition, other universities are seeking access to the model for their students based on student learning, practice outcomes and attainment of workplace skills.

4. Commitment
Commitment to the ‘long haul’ by key stakeholders in the initial stages of model inception was informed by past experiences of short-term funded, externally driven programs that were unsustainable (Chevere, Baum & Bowen 2013). A verbal agreement across partners to a minimum seven-year program commitment has enabled partners to respond to a number of crucial factors, including expanding partnerships, funding and policy changes, and value-adding opportunities that may not have emerged within a short-term, prescribed framework.

5. Flexibility
Each school engaged in the program has its own unique approach to service integration, activity, policy interpretation, parental engagement and leadership. School leaders and teaching staff change within school settings, parental engagement across schools can be variable, school priorities and aspirations can and do change, and clinic access may fluctuate. Having capacity to respond quickly to these factors is critical to avoiding poorly aligned approaches and model vulnerability.

6. Trust
The literature and experiences of partners confirm that meaningful partnerships are underpinned by trust (Vangems & Huchum
Trust is not created from top–down directives and cannot be enforced by formal contracts; rather, it develops gradually as working relationships evolve (Nylund et al. 1997). Cross-sector partners need mutual understanding of the individual and shared interests of the partner organisations, as well as faith that the partners will remain in the relationship despite obstacles or challenges that inevitably arise (Enos & Morton 2003). With trust comes a greater capacity for open and honest discussions on how best to progress model evolution and responsiveness ( Vaughan & Huxham 2003).

7. Cross-sector collaboration
Establishing partnerships across health, school education and higher education sectors is complex. Transitioning the theory of partnerships to the practical application of partnering requires time and resource commitments; individual partners also need to invest time in building their own capacity to work across sectors (BP03 2002). The approach of starting small, achieving and sharing successes and then expanding activity has proven critical as the model has evolved.

Model Outcomes

1. Improved service access
In 2013, academic and allied health students screened 233 kindergarten children (85 per cent of total enrolments in the region), focusing on children with teacher-identified need in the communities of Broken Hill, Menindee and Wilcannia. In total, 12 schools across the region were engaged with the model. Service access results included:
—71 per cent (n=181) of children screened were identified as requiring support with mild to moderate delays
—44 per cent of pupils received individual or group therapy sessions
—31 per cent of pupils received individual therapy
—47 class-based therapy sessions were delivered.

When requested, academics and allied health students were actively engaged in pre-school settings with children with identified needs. Individual pupils with intense needs can receive up to 20 occasions of allied health service annually. Key areas of identified need for children residing in the region were speech delays, storytelling, pre-literacy, and fine motor skill delays. In 2013, 20 pupils with complex/severe needs were referred to allied health clinicians employed by the FWHHD.

Ten pupils from more remote communities were also referred to FWHHD clinicians, and a further ten pupils were referred to hearing services for additional assessment. Additional challenges exist for more remote families who are required to travel up to 200 km to Broken Hill to access services. Alternative approaches to very remote service delivery are currently under development.

Service acceptability of the model in far west NSW is reflected in the number of regional primary schools engaged in the program (100 per cent) and parental consent rates for participation (95 per cent and higher) nationally. Additional research is planned.
to explore the impact on developmental attainment for service recipients. It is envisaged that this critical component of the program will be reported on in more detail in subsequent articles.

2. Increased clinical placement capacity

Figure 1 depicts the growth in clinical placement capacity for speech pathology and occupational therapy in the four year period from 2009 to 2014. Between 2009 and 2008, there were no speech pathology placements, though small numbers of occupational therapy students had access to traditional hospital based placements. The decline in student capacity in 2013, as shown in Figure 1, reflects a stage of model restructure. The opportunity for further growth in pre-school and social service settings is limited by supervisory capacity and on-site student accommodation availability.

Model Expansion

1. Participating universities

Allied health students from four regional and metropolitan universities are now engaged in the model. This expansion has contributed to:

—cross university professional networking, team building and collaboration through a shared experience (Thistlethwaite & Monan 2010)
—normalisation of a collegiate approach within the pre-registration education experience
—commitment to guaranteed student numbers and mix of disciplines across all school terms.

University engagement, student participation and academic collaboration in the program are facilitated locally through the BHUDH to ensure clarity of communication, coordination and integration of activities across university partners.

2. Discipline engagement

Social work and dietetics students have been integrated into the model in response to social and additional health needs identified
by school leaders. Social work students are exploring strategies to engage parents and school communities in education, health and social programs. Dietetic students are working with the schools to explore locally responsive approaches to addressing physical inactivity and poor diet. The parental engagement strategies being identified by the social work students are being drawn on by the speech pathology, occupational therapy and dietetic students to inform their approach to program development, delivery and parental involvement.

3. Staffing and supervision
The RHUHDH and FWLHD jointly employ academics to enable integrated and consolidated approaches to student supervision, education, program development and service delivery. This approach mitigates supervision and student coordination demands for remote health service clinicians who experience high demands for service delivery and enables greater numbers of students to be engaged in service learning activities.

Value Adding Initiatives
1. Federal Government Health and Hospital Fund
In 2009, the Australian Government committed $5 billion to the Health and Hospital Fund (HHF) to invest in major health infrastructure programs. Round 4, 2011, targeted projects aimed at improving access to essential health services for rural and remote Australians (NHMRC 2010). A lack of appropriate infrastructure within primary school settings was identified as a barrier to expanding and integrating health, education and social service activity. New infrastructure that supports integrated service delivery through cross-sector collaborations and co-location of staff and activity was identified as a key requirement in supporting the transition of additional services to primary health care approaches in the school setting (NHMRC 2010).

The RHUHDH, as lead agency, and partners lodged a submission to establish multipurpose health and wellbeing infrastructure, ‘School Health Hub’, directly on six public and one Catholic school education sites in Broken Hill. In 2012, partners were informed that their application for $4.7 million had been successful. Complex cross-sector funding contracts are in the final stages of completion.

2. Health Workforce Development Funding
In late 2009 and 2010, the RHUHDH applied for funding through the federal government and Health Workforce Australia’s HWA 2010 clinical training fund (CTT) to support the growth of clinical placement capacity in far west NSW for allied health disciplines to expand student engagement within the model. Federal and HWA funding of $350,000 supported the joint appointment of allied health academics. These appointments have been critical in ensuring that the model addresses higher education professional accreditation requirements.
3. NSW Department of Education and Communities Rural and Remote Education Strategy

In 2013, the NSW Department of Education and Communities released the Rural and Remote Education Strategy - A Blueprint for Action (NSW DEC, 2013). The Strategy highlighted that disadvantage experienced by rural and remote pupils begins in early childhood. A key area of the Strategy is the establishment of strong relationships between NSW DEC schools, their communities and other agencies. The Strategy referenced the issue of limited or no access to allied health services and the difficulties experienced in linking pupils and families to these professionals as an area for strategic investment (NSW DEC, 2013).

The Strategy supports the establishment of a statewide network of Specialist Centres to provide assistance to pupils and families through a single, coordinated local point of contact. These centres will bring together local education, health and social services for two key purposes: (1) to support schools in managing complex cases where students are at risk of disengaging from education as a result of learning, health and wellbeing concerns; and (2) to engage in collective impact approaches to address education, social and health determinants that contribute to disadvantage and poorer life outcomes. Broken Hill was identified as a pilot site for the establishment of a Specialist Centre in 2014, acknowledging the existing cross-sector partnership, Health and Hospital Fund infrastructure and collective action that is already occurring (NSW DEC, 2013).

4. NSW Ministry of Health Integrated Care Strategy 2014-2017

The NSW Ministry of Health Integrated Care Strategy (NSW MoH 2014) focuses on providing seamless and effective care that is responsive to the needs of individuals and families. The Strategy aims to develop a system of care and support that provides the right care, in the right place, at the right time. A commitment of $120 million over four years has been made to develop locally led models of integrated care across the state (NSW MoH, 2014).

Partners are working collaboratively with The University of Sydney, Faculty of Nursing and Midwifery (Sydney Nursing School) to develop a submission that will build on existing integrated activity in the school sector. The submission will seek to enhance health promotion activity, improve access to early identification and intervention services, and provide coordinated support for children and families experiencing complex physical and mental health conditions through the establishment of new graduate transition to practice initiative that will see primary health care nursing positions co-located within the School Health Hubs.

Scalability of the Model

The RHEUH is engaged with academic departments in Geraldton, Western Australia, and Katherine, Northern Territory, on the adaptation and implementation of the model. These communities are drawing on the Broken Hill experience, expertise and networks to develop similar approaches to address areas of unmet health
need. There is an expectation that the models developed will be adapted to respond to local communities.

Additional interest in the model is being expressed by academics working in other Australian University Departments of Rural Health. Academics have visited Broken Hill to gain a greater depth of understanding of how the model was developed, partnership establishment, model structure, and impact on service recipients and participating allied health students.

**CHALLENGES AND IMPLICATIONS**

1. **Policy and funding**

   There is currently no established range of systematic population health directed programs and funding for the prevention, early detection and intervention for speech and communication deficits (Wylie et al. 2013). Only 1.7 per cent of Australia’s total health care budget of approximately $140 billion is allocated to preventative health programs (ANPHA 2013). There is a growing need to redress this imbalance and lack of continuity across prevention and curative treatment models. The National Health and Medical Research Council (NHMRC) identified the need for a service and funding focus on population groups that have the greatest potential for improved health outcomes, such as children living in poor socioeconomic conditions and Aboriginal populations (NHMRC 2006). The National Public Health Partnership (NPHP) identified that an investment in children from socioeconomically disadvantaged families was likely to have an enormous positive effect on improving the quality of life of children, as well as resulting in far-reaching positive outcomes for the Australian economy (NPHP 2008). However, the inverse care law continues to apply to these populations, where those with greatest need have the least access to services to address their needs (Wyatt 2002).

   The recent focus on the prevalence of speech, language and communication delays and speech pathology services in Australia in the 2014 Senate Inquiry (Parliament of Australia 2013) highlighted the complex challenges associated with service accessibility. Without identified funding to restructure service inequity, Australian children, especially those from rural, remote and Indigenous backgrounds, are likely to be subjected to the ongoing later life disadvantage identified within the literature (NPHP 2008).

2. **Parental engagement**

   There are substantial gaps in knowledge of how best to engage with remote and Aboriginal parents to define developmental need and provide health services that are culturally responsive. The role of parents in engaging with therapy planning and delivery influences how successful strategies to address developmental delays will be (Roberts & Kaiser 2011). Parental consent for their child’s participation in the model is high within the region; however, engaging directly with parents through individual or open school meetings can prove difficult. The literature identifies a range of
factors that can influence the level of parental engagement, and additional investment is needed in this area to identify acceptable and appropriate approaches (Higgins & Merley 2016).

3. Service learning as a valid educational pedagogy

Much of the service-learning activity in Australia to date has been heavily informed by international literature and experiences (Jacoby 2010; Moskovitz et al. 2006). Whilst service-learning remains an emerging educational pedagogy for health science students within the Australian context, there has been a growth of service-learning activity over the last five years (Chambers & Lovery 2012). If Australia is to adopt service-learning as a meaningful approach to pre-registration education for future health professionals, then theory development and practice implementation that account for Australia’s unique geography and vast population spread, as well as our health and education systems, needs to be at the core of this movement. Robust research that explores the impact of service learning for service recipients, communities, participating students and higher education institutions is urgently required to identify the efficacy of Australian responsive models.

4. Health workforce development

Recent changes within Australia’s health workforce development portfolios, the rationalisation of federal government agencies in 2014 and the integration of HWA into the federal Department of Health have created a level of uncertainty in relation to current and future funding opportunities (CoA 2014). The development and expansion of our model was substantially supported by innovation funds accessed through HWA to appoint clinicians/academic staff. Sustainability of the model and sister programs that have been developed may be challenged without secure funding sources.

Access to allied health services for rural and remote populations is dependent on the availability and accessibility of suitably-qualified health professionals within these regions (AIHPA 2013). Health workforce evidence identifies that students who experience a rewarding and valuable clinical placement in these locations are more likely to consider returning to rural and remote practice post-graduation (Kurzene/Rmploy 2013).

Students engaged in the model are exposed to primary health care approaches to service delivery and Indigenous and remote health care, broadening their scope of practice and capacity to respond appropriately in these environments. Allied health students contribute to improving the educational, health and social outcomes of children who, due to their socioeconomic status and geographical location, are at greater risk of developmental delays and service access inequity.

5. Higher education

The challenge for higher education institutions is to develop and deliver coursework and clinical fieldwork experiences for health students that align to contemporary remote Australian community...
health needs and expectations. Rebalancing the educational disparity between curative and primary health care practice and associated workforce development is essential. The inclusion of primary health care practice in contemporary approaches to speech pathology and occupational therapy education and service delivery is being supported by leading national and international experts. These experts are challenging traditional curative approaches to service delivery, calling for a continuum of care that is responsive to the needs of at-risk and under-served populations (Wiley et al. 2015).

Higher education institutions in the United States have been challenged by community sectors to locate themselves alongside community-focused agencies to contribute meaningfully to resolving complex social, educational and health disparities (Jacoby 2010). There is a clear message in the US that the university sector has a social responsibility mandate. How or if this is interpreted and translated into practice within the Australian context in the current policy and funding environment will impact on the relevance of higher education institutions across the broader Australian population and remote subpopulations.

6. Cross-sector collaborations
The growing collaborative approach across sectors in NSW is being influenced by education and health policy. The NSW DEC Specialist Network Centre initiative and the NSW Moll Integrated Care Strategy provide remote NSW communities with a platform to construct new approaches to working across sectors to address local areas of need. Government agencies promoting these changes have to ensure that remote communities are afforded the flexibility to interpret these policy changes to best align with local needs. These agencies need to work collaboratively with remote regions to ensure that allocated funding from across a range of health, education and social sectors is spent within these regions to enhance service accessibility. Community engagement and leadership in decision making on how best to utilise allocated funds is essential in aligning services to need and will increase clarity and transparency of resource allocation and expenditure.

EVALUATION AND RESEARCH FRAMEWORK
Developmental evaluation has supported the process of innovation within and across partner organisations. Developmental evaluation informs us that innovations are often in a state of continuous development and adaptation, unfolding in changing and unpredictable environments (Patton 2011). Developmental evaluation assists with clarity on where and why an initiative started, which folks in the road have been taken, what helped inform those decisions and what has been learned along the way. This form of evaluation is an ongoing process, enabling continuous improvement and adaptation.

Developmental evaluation can create challenges for inflexible systems and traditional funding streams. The lack of
definitive answers in the initial stages of program development. Higher levels of uncertainty, and long-term processes that may not provide immediate benefits or may have poorly defined start and end points can be difficult for government agencies to comprehend (Fattan 2011). In contrast, AHORP partners have been able to develop and consolidate activity based on a deeper understanding of the issues and provide strong rationales for why certain approaches or activities have been selected and why other options have been discounted.

Decisions are informed by a number of sources and evaluation processes, including parents, teaching staff, school principals, participating allied health students, the academic partner and clinic feedback. The RRHRRH, as an academic department, works closely with key stakeholders to ensure evaluations are conducted. Evaluation processes for allied health students include mid and end of placement focus groups. Meetings are held with school principals and key teaching and support staff prior to placements commencing each term. These meetings enable school staff to highlight successes, identify concerns and suggest improvements. Parent meetings are scheduled across the school terms to encourage information sharing and to seek parent feedback on the program. External academics provide independent feedback on student experiences and clinical and professional learning outcomes, enhancing the academic robustness of the program.

A comprehensive research framework has been developed to explore program impact on service recipients and the impact on developmental outcomes, families, community partners, participating allied health students and their academic institutions. Funding is currently being sought to progress this research.

The model is the focus of a qualitative PhD study that is exploring the impact of program participation for community leaders - school principals and pre-school managers, senior managers and academics from PWN NSW DEC; the RRHRRH and The University of Sydney, and participating allied health students. Findings from this research will be published in subsequent articles and will assist in refining the broader research agenda.

CONCLUSION

No single policy, government agency or program can effectively respond to the complexities experienced by remote populations or ensure appropriate allied health service access for children in these communities. New models, policy development approaches and funding streams are required to ensure services align with community needs and expectations. As policy and funding reforms across Australian government agencies refocus on improving their responsiveness to local needs and priorities, meaningful community engagement and leadership will have to become a critical component of service planning, implementation and evaluation. Balancing tensions between government requirements and community expectations will prove challenging but is
essential if we are to ensure flexible, responsive and fit-for-purpose services for remote populations.

Developmental evaluation highlights that social change innovation occurs when there are alterations in practice, policies, programs, resource flows and structures at the organisational level (Gamble 2008). The model has influenced allied health education, practice and service access within far west NSW, has been a catalyst for the extension of service-learning activities within the school setting, and has influenced the flow of resources through federal and state health and education systems. The complexity of establishing and sustaining cross-sector partnerships and time and resource contributions of partners to promote model success and sustainability cannot be underestimated. Continually re-conceptualising the issues, solutions, opportunities and partnership approaches has been critical. Committing to the ‘long haul’ has its challenges but they are far outweighed by the benefits accrued by communities and partner organisations.

Much of the theory and evidence presented in this article will resonate with proponents of remote health, primary health care, community-engaged practice and service-learning. What this article has endeavoured to do is to provide a deeper insight into one remote Australian community’s experience in redressing allied health service access inequities through the establishment and consolidation of meaningful cross-sector partnerships over the last half-decade.

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1.13 Chapter Summary

In this chapter, I have established the context of the study (and consequently, of the thesis) in far west NSW, Australia, and have provided information on the health and well-being of rural and remote Australian populations and, specifically, children residing in this region. I have described Australia's allied health workforce; the shortages experienced in rural and remote locations; current barriers to the provision of pre-registration placement experiences in rural and remote Australian locations; and strategies employed to overcome these challenges and address rural and remote health workforce shortages. I have highlighted the need to engage rural and remote communities in their health care agendas and the current lack of this engagement. An overview of UDRHs and their role in rural and remote health service design and workforce development has been provided, specifically in relation to the changing approaches adopted by the BHUDRH to enhance health student learning, host site outcomes, service accessibility, acceptability and sustainability. Systems perspectives have been described, community-campus partnerships and service-learning literature explored, and criticisms within this literature identified. I have then introduced the A+OBSP prior to positioning Paper 1 in this thesis. In Chapter 2, greater detail is provided on the methodology and methods used in this pragmatic qualitative study.
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CHAPTER 2

METHODOLOGY AND METHODS

2.1 Introduction

In undertaking this doctoral study, I aimed to gain a greater understanding of: why and how the community-campus partnership was formed; the associated service-learning program developed and adapted; who initiated and participated in the partnership and program and for what purposes; and what the impacts of this participation were for community participants (school principals and senior managers from local facilitating agencies) and campus participants (allied health students and academics). To be specific, I used a qualitative and pragmatic study design, a purposive approach for the selection of participants, focus groups and individual semi-structured interviews as data collection methods; and a data analysis strategy of constant comparative analysis (CCA) to achieve the three primary research goals and answer the four questions posed by this study.

In this chapter, I discuss the overall study design: a qualitative and pragmatic approach; the purposive selection of participants and of multiple data collection methods, namely, focus groups and individual semi-structured interviews; and the data analysis strategy of a constant comparative analysis (CCA) method.

2.2 Study Design

This section summarises: the overall design of the study; the preliminary activities undertaken; development of study goals and questions; selection of a qualitative and pragmatic approach to the study; identification of participants and data collection methods; data analysis strategy; approach to data interpretation; the need for a return to the literature to enable a more comprehensive, complex and nuanced understanding of study findings across community and campus groups; and the establishment of the trustworthiness of the study. Figure 2.1 provides a visual representation of this design.
Figure 2.1: Study design

Data Collection Methods and Selection of Participants
- Focus Groups: School Principals, Allied Health Students
- Individual Semi-Structured Interviews: Senior Managers from Local Facilitating Agencies, Academics
  Ethics Approval and Data Collection

Data Analysis Strategy
Constant Comparative Analysis at the Single, Subgroup and Group Levels

Study Publications and Conceptual Framework Construction
1 descriptive paper (published), 5 papers associated with study findings (4 published and 1 in review) and a conceptual framework chapter

Finalisation of the Thesis
2.3 Preliminary Activities

Prior to the commencement of this study, the following preliminary activities were undertaken.

2.3.1 Literature review

To justify, initiate and inform this doctoral study, the following literature was revisited and reviewed (an extensive literature review was conducted early in the partnership formation to inform the partnership approach and the development of the service-learning program):

- Rural and remote Australian health status, specifically the health status of rural and remote children;
- Rural and remote Australian health workforce policy and practices, specifically the allied health workforce;
- Community engagement in health service design and health workforce development;
- Health partnerships, including community-campus partnerships; and
- Service-learning as an educational pedagogy, specifically for the health sciences in rural and remote and inter-professional contexts.

This literature review identified significant gaps in the evidence associated with: community engaged health care; the establishment, implementation and sustainability of community-campus partnerships; community perspectives of these partnerships and their impacts; the validity of service-learning as an educational pedagogy for Australian health science students and as a strategy to provide substantive outcomes for communities. These findings supported the need for this study, specifically from a rural and remote Australian perspective, and contributed to the development of study goals and questions. Based on the study findings, additional literature was then reviewed, with this described in Chapter 3, in four peer-reviewed and published
papers (Papers 2, 3, 4 and 5), and in Chapter 4 which includes Paper 6 (currently ‘in review’).

2.3.2 Reflection on prior internal partnership and program evaluations

The documented program evaluations in the three years from 2011–2013 were reflected upon to support the identification of key areas of inquiry and to further inform the development of study goals and questions. This reflective process identified the need for additional exploration of the following aspects of the partnership and program:

- Why and how was the partnership formed?
- Who initiated the partnership and for what purposes?
- Why was a service-learning model developed, and how and why was this model adapted?
- What were the impacts of participation in the partnership and program for community and campus participants and what factors influenced these impacts?
- Did this participation impact on the civic and higher education sectors in which participants were located?

In addition to these questions, I identified that previous evaluations had focused on exploring the discrete experiences of participants in isolation to the more complex, comprehensive and potentially interconnected experiences from across a range of participants: school principals, senior managers from local facilitating agencies, allied health students and academics. The need to explore these potential connections and interactions was perceived as being significant in order for me to gain a comprehensive, complex and more nuanced understanding of the partnership and program.

2.3.3 Researcher’s experiential knowledge of the partnership and program

My extensive experiential knowledge of the partnership and program, and my previous role in facilitating partnership and program evaluations, further contributed to the
design of this study. This association and the potential for researcher bias informed the development of strategies to address these concerns. The strategies employed in the identification of study participants, distribution of invitations to participate in the study, and data collection and interpretation were developed to ensure this potential bias did not unjustly influence the study and its findings. These strategies are discussed in detail in Section 2.14 of this chapter.

2.4 Development of Study Goals and Questions

Based on this preliminary activity the following three research goals were developed:

1) To describe and understand the formation of the community-campus partnership from the perspectives of community and campus participants;

2) To describe and understand the development and adaptation of the service-learning program from the perspectives of community and campus participants;

3) To develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants.

The research strategy for this doctoral study needed to support the collection of comprehensive data from a range of community and campus participants who were considered to be information rich and capable of providing deep insight into the community-campus partnership and associated service-learning program. This included the collection of data that would sufficiently address the goals of this study and answer the following four key questions posed:

1) What factors contributed to the initiation, formation and participation of community and campus partners in the community-campus partnership and associated service-learning program?

2) What were the impacts of participation in the partnership and program for community and campus participants and for the civic and higher education sectors in which they were located?
3) How did community and campus participants interact with each other to fulfil the shared purposes of enhancing allied health service accessibility and allied health student educational outcomes?

4) How did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants?

By answering these questions, I aimed to gain a greater understanding of the community-campus partnership and associated service-learning program and the civic and higher education impacts of this participation, an understanding that was equally informed by community and campus perspectives and experiences and responsive to the rural and remote Australian context in which the study was located.

2.5 Adopting a Qualitative Study

The chosen research methodology must enable the goals and questions of a study to be addressed. For this study, a qualitative approach to inquiry was adopted (Patton 2002, Creswell 2007). The decision to adopt qualitative inquiry was influenced by:

- My paradigm/world view – a systems perspective of health (WHO 2009, Sallis et al. 2008, Plesk and Greenhalgh 2001);
- The need to contextualise the study – a rural and remote Australian context;
- The existence of a breadth of quantitative data that describe the health and health workforce challenges confronting rural and remote Australia – a deficit model (Moore and Charvat 2007);
- The lack of evidence focusing on the development and implementation of health partnerships and solutions to address rural and remote Australian health service and workforce challenges – with the partnership and solution to be equally informed by community perspectives, experiences and voices.

How these four influences informed the adoption of a qualitative approach for this study is now described in greater detail.
2.5.1 Systems perspective of health

As health care becomes increasingly complex, health researchers and practitioners are adopting systems perspectives to gain a deeper understanding and appreciation of the relationships that exist within and external to the health sector. It is increasingly being recognised that these relationships can directly influence health service accessibility and acceptability (WHO 2009, Sallis et al. 2008, Plsek and Greenhalgh 2001). The WHO (2009) stated that understanding the characteristics of systems is crucial to seeing how systems work. These systems characteristics are described in Table 2.1.
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-organising</td>
<td>Within systems, no individual agent or element can determine the nature of the system. Dynamic interactions among a system’s agents and interactions with other systems contribute to how a system is organised and functions.</td>
</tr>
<tr>
<td>Frequently changing</td>
<td>Frequent change within systems is considered a crucial factor in the sustainability of a system. Systems are adaptive and have the capacity to create their own behaviour. Systems can react differently to the exact same inputs in unpredictable ways. Systems can evolve through their interactions with other parts of a system and their external environment.</td>
</tr>
<tr>
<td>Tightly connected</td>
<td>Interventions in one part of a system may have direct effects on other parts within this system. These impacts can be positive or negative and may not become apparent in the immediate future, necessitating the evaluation of impacts over extended periods of time.</td>
</tr>
<tr>
<td>Driven by feedback</td>
<td>Feedback loops provide a system with information that enables the system to moderate its behaviour as parts of the system react and ‘back-react’ to each other.</td>
</tr>
<tr>
<td>Non-linear</td>
<td>Interventions at the level of systems can be non-linear and unpredictable. The effects of these interventions can be disproportionate and located at a distance from the initial actions and interventions.</td>
</tr>
<tr>
<td>History reliant</td>
<td>Time delays may exist between the implementation of an intervention and the effects of this intervention. Evaluation of these effects may be required over extensive time frames to mitigate incorrect assumptions and conclusions.</td>
</tr>
<tr>
<td>Counter-intuitive</td>
<td>Interventions that may be considered simple and effective in one context may not work within other contexts.</td>
</tr>
<tr>
<td>Resistant to alteration</td>
<td>The characteristics of systems, i.e. their complexity, multiple agents and interactions, may generate resistance to change. This resistance may be influenced by the competing policies, practices and funding priorities of individuals within these systems.</td>
</tr>
</tbody>
</table>

Compiled and adapted from World Health Organization (2009); Sallis et al. (2008); and Pisek and Greenhalgh (2001)
Systems perspectives can 'enhance human dignity by moving beyond explanations that hold individuals responsible for, and even blame them for, harmful behaviors' (Sallis et al. 2006, p. 482). Sallis et al. (2008) state that from a systems perspective:

Individual level and many levels of external influence are integrated in a single framework, making it clear that causation of behavior is widely distributed, not lodged in one or another source (p. 482).

In organising and sustaining efforts that seek to improve population health outcomes, systems thinking is considered essential due to its acknowledgement of the impact of social, economic and political domains on the health of individuals and communities. These perspectives take into consideration the complexity of public health problems; the growing frustrations with individualised, linear and mechanistic approaches to health care (Plsek and Greenhalgh 2001); and the interconnectedness of social and health inequity (McLaren and Hawe 2004).

Quantitative inquiry does not provide an approach that enables a deeper understanding of the complexity and completeness of a phenomenon. Quantitative inquiry is 'conducted in the analytical tradition of, 'let's take it apart and see how it works'" (Patton 2002, p. 59). As this study was concerned with understanding the complex, multiple and interconnected facets of the partnership and program, I needed to avoid an approach that:

(1) oversimplifies the complexities of real-world programs and participants’ experiences, (2) misses major factors of importance that are not easily quantified, and (3) fails to portray a sense of the program and its impacts as a whole (Patton 2002, p. 59).

This study was concerned with understanding the rural and remote context and the interactions that occurred between community and campus participants as a 'complex system that is greater than the sum of its parts' (Patton 2002, p. 59). This study sought to gather data from a range of informants on multiple aspects of the phenomenon under investigation. Through this approach, a more comprehensive, complex and nuanced understanding could be gained of the dynamic actions and interactions within and between community and campus participants engaged in the partnership and
program. Through the collection of data from participants who could attribute their own meanings to the phenomenon, thus providing a ‘constellation’ of participant perspectives, I sought to describe and understand the history, interconnections and relationships through a comparison of single, subgroup and group data sets, and then across community and campus groups.

This study did not seek to oversimplify the complexities associated with the community-campus partnership and the service-learning program through positivist and reductionist approaches. This study sought to provide a greater understanding of the whole phenomenon in preference to taking a narrow, selective and linear approach to interpreting discrete partnership or program components.

2.5.2 Contextualising the study: a rural and remote Australian context

Qualitative inquiry is concerned with the context in which a phenomenon is situated, acknowledging that context is critical to understanding the actions and interactions of individuals, subgroups and groups (Patton 2002). In qualitative inquiry:

Context becomes the framework, the reference point, the map, the ecological sphere; it is used to place people and action in time and space and as a resource for understanding what they say and do (Lawrence-Lightfoot and Davis 1997, p. 41).

This research was concerned with describing and understanding the rural and remote Australian context in which the community-campus partnership and associated service-learning program were located. Acquiring this depth of understanding of rural and remote Australian health service design and workforce development, as perceived by community and campus participants, was considered critical in contextualising this study. McLaren and Hawe (2004) stated that there is an:

Independent effect of place of residence on health, with the consequent search for explanation that requires analysis of context. An ecological perspective encompasses context in the broadest sense of the word, to include physical, social, cultural and historical aspects of context as well as attributes and behaviours of persons within (these contexts) (p. 6).
Furthermore, the perspective that a researcher brings to qualitative inquiry 'is part of the context for the findings' (Patton 2002, p 64), in my instance, a systems perspective of health care. In contrast, quantitative research seeks to generate context-free findings that are concerned with predictions and generalisations. Yilmaz (2013) stated that:

Unlike quantitative studies which are concerned with outcomes, generalisation, prediction, and cause-effect relationships through deductive reasoning, qualitative studies are concerned with process, context, interpretation, meaning or understanding through inductive reasoning (p. 313).

Of central importance to this study was gaining an understanding of the influence of this rural and remote context on partnership formation, on the development and adaptation of the service-learning program, and how this context contributed to the impacts experienced by community and campus participants.

2.5.3 Existing quantitative data describing rural and remote health and health workforce challenges: a deficit model

The long-term focus on quantifying the disadvantages and inequities experienced by rural and remote communities, their poorer health outcomes and workforce shortages is increasingly being called into question and identified as contributing to a ‘deficit’ perspectives of these communities (Hyett et al. 2014, Bourke et al. 2010, Morgan and Ziglio 2007, Moore and Charvat 2007). Deficit-driven perspectives can influence health policy and practice, as well as funding allocations and health care accessibility, acceptability and sustainability (Bourke et al. 2010). This deficit-orientated approach to interpreting rural and remote Australian communities is believed to contribute to a lack of focus on the exploration of innovative and localised solutions that seek to address health inequities and disadvantages. Limited resources in these locations can also impact on the capacity of local communities to self-report innovative approaches to health service design and workforce development.

Within the population health arena, the need to refocus from an approach that seeks to continually describe the deficits of communities through de-personalised statistics, to approaches that explore and describe community assets and how these assets are
activated to enhance community health outcomes, is increasingly recognised. As indicated by Morgan and Ziglio (2007):

Whilst there is a wealth of data documenting the amount and type of inequities that exist in populations, there is little empirical evidence about the effectiveness of strategies for reducing them. Moreover the evidence that does exist tends to be of a higher general order, describing the types of actions that are required but stopping short of how these actions might work for different population groups in different contexts (p. 17).

While deficit models identify areas of need and priority, they fail to identify positive capabilities, such as the individual and collective community assets that can be drawn on in problem identification, the activation of solutions and the development of protective health behaviours that enhance population health outcomes. At the individual level, these assets can include social competence, resilience skills, positive values, self-esteem and a sense of purpose. At a community level these assets can include supportive networks, community solidarity and community cohesion (Morgan and Ziglio 2007).

Rural and remote communities can be ‘incubators’ of health service innovation with the ‘predisposition’ to not wait passively for funding and policies to address unmet health needs. Rural and remote communities can instead take direct action to lead the development of strategies that address health sector failures by drawing on the assets available to them (Bourke et al. 2010). An asset-based approach needs to be integrated into health research to enable the exploration of questions associated with ‘what creates health, rather than its traditional focus on generating evidence about the causes and distribution of disease and early death’ (Morgan and Ziglio 2007, p 19). In identifying and determining ‘what creates health’, the necessary questions are concerned with what the key assets are for good health; the links between these assets and how they work together to achieve better health outcomes; and how these assets can be activated to reduce health disadvantage and inequity (Morgan and Ziglio 2007).
Quantitative inquiry is not designed to explore complex phenomena and their associated nuances, further reinforcing my rejection of a quantitative approach for this inquiry. Qualitative research is better positioned to address questions that seek to understand the ‘who’, ‘how’, ‘why’ and ‘what’ aspects of a phenomenon under investigation (Patton 2002). This research study sought to understand ‘why’ and ‘how’ the community-campus partnership was formed and the service-learning program was developed and adapted; ‘who’ initiated the partnership and participated in the partnership and program from across community and campus sectors; and ‘what’ the impacts of this participation were for community and campus participants. Answers to questions such as these are increasingly being sought to address significant gaps within the community engagement, community-campus partnership and service-learning literature and to inform approaches to health service design and workforce development (Aragon and Garcia 2015, Woulfe et al. 2010, Morgan and Ziglio 2007).

2.5.4 Lack of qualitative description of community engaged and informed rural and remote health and health workforce solutions

The increasing focus is on how best to engage and work collaboratively with communities in the identification, implementation and evaluation of strategies that seek to prevent disease; to identify and intervene early to improve the health outcomes of rural and remote populations (Morgan and Ziglio 2007); and to inform health professional practices in these contexts (HWA 2013a). This focus necessitates the meaningful engagement of communities in their health care agendas to ensure strategies are ‘fit for context’, health services are accessible, acceptable and sustainable (Aragon and Garcia 2015, Woulfe et al. 2010), and care is provided by rurally responsive health professionals (HWA 2013a).

Despite this knowledge, several barriers exist in the engagement of communities in the identification of their health issues and the development of sustainable solutions. The previously described deficit perspectives of rural and remote communities can be held by external policy and decision makers and reinforced by deficit models that consistently describe disadvantage and inequity. These perspectives can act to
marginalise community perspectives, experiences and voices in their health care agendas. Morgan and Ziglio (2007) stated that:

Learning how to ask what communities have to offer begins a process of building and developing local capabilities for creating health. It brings knowledge, skills, and capacities out into the open, where they can work together to everyone’s benefit. As the web of assets grows, so does the potential for the community to work with professionals as co-producers of health which can also contribute to a sense of belonging and more cohesive communities (p. 20).

The community engagement (Sarram-Faroushani et al. 2012, Johnson 2015, Hyett et al. 2014), community-campus partnership and service-learning literature (Butin 2010, Cruz and Giles 2000) is heavily criticised for a lack of focus on who initiates these partnerships and programs and for a lack of description of the impact of participation from the perspectives of community participants. Additional research has been called for that addresses this lack of community perspective in the literature (Hyett et al. 2014, Cruz and Giles 2000).

This study was concerned with describing partnership and program experiences from the perspectives of community and campus participants. Thick description through direct quotes from participants was used to shed insight into participants’ feelings, thoughts, experiences and frames of reference, acknowledging the uniqueness of these experiences for community and campus participants. This study sought to ensure a voice for community participants to address significant gaps in the literature.

2.5.5 Role of the researcher in qualitative inquiry

In qualitative research, the researcher is considered to be an instrument through their influence on study design; development of questions; selection of research methodologies, methods and participants; data analysis; and interpretation of findings (Merriam and Tisdell 2015). Qualitative studies need to include a level of information about the researcher that describes the researcher’s experiences, perspectives and world views (see introductory section), prior knowledge of the phenomenon and personal connections to study participants and the phenomenon under investigation.
The following additional information is provided on my association with the community-campus partnership and service-learning program under investigation and my connections to partnership and program study participants. As the Director of Primary Health Care with the Broken Hill UDRH, a position I have held for over 10 years, I was the initial contact for primary school principals when they raised concerns about the detrimental impact of the lack of allied health service accessibility on the developmental and life outcomes of children enrolled in their schools. A few principals had engaged with me, prior to the formation of the partnership, in my capacity as the parent of children enrolled in their schools. I contributed significantly to the facilitation and formation of the community-campus partnership and the development of the service-learning program, drawing on my academic networks within the University of Sydney, Faculty of Health Sciences. I continue to be strategically engaged in both the partnership and program. I routinely come into contact with allied health students participating in the service-learning program in my capacity as an educator, contributing to education sessions for allied health student orientation and induction to the partnership and program, and facilitation of student civic reflection sessions. I have a strong collegiate relationship with both senior managers from the local facilitating agencies who participated in this study. I am the direct line manager of the rural academic participant and work strategically with the metropolitan academic participant on the development of rural and remote placement opportunities for allied health students. In light of these relationships, the design of my approach to this study needed to manage potential conflicts of interest and bias in data collection and analysis. The strategies and processes that I have employed to avoid bias in data collection, data analysis and the interpretation of findings are described later in this chapter.

2.6 Taking a Pragmatic Approach to the Study

Despite the increasing selection of theoretically and technically sophisticated qualitative methods (Sandelowski 2000) and analytical strategies (Smith et al. 2011), high levels of contention continue on how best to justify qualitative research methodologies and methods (Patton 2002). As our understanding of qualitative inquiry evolves and its application across health and social sciences extends, methods of
undertaking qualitative research should stand alone without being reliant on the need for an allegiance to a discrete philosophical stance or methodology (Patton 2002). However, concerns associated with ensuring the epistemological credibility of qualitative research have resulted in researchers purposefully aligning their research to ‘acceptable’ qualitative methodologies such as phenomenology, grounded theory, ethnography or narrative inquiry in an endeavour to ensure academic ‘credibility’. Sandelowski (2000) stated that:

A confusing state of affairs exists whereby studies are called narrative, even though they may include nothing more than minimally structured, open-ended interviews; phenomenological, even though they may include nothing more than reports of the “subjective” experiences of participants; or, ethnographic, even though they may include nothing more than participants in different ethnic groups (p. 334).

In seeking to avoid this ‘confusing state of affairs’ within this study, I undertook an initial exploration and interrogation of ‘accepted’ qualitative methodologies to determine the appropriateness of their application and their capacity to address my study goals and questions. Table 2.2 provides an overview of the main characteristics associated with the qualitative methodologies of phenomenology, grounded theory, ethnography and narrative inquiry, as well as my rationale for their rejection.
<table>
<thead>
<tr>
<th>Qualitative Strategies of Inquiry</th>
<th>Characteristics</th>
<th>Rationale for rejection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phenomenological Approach</strong></td>
<td>Explores lived experience of a phenomenon and focuses on understanding how human beings make sense of an experience and transform this experience into consciousness to create shared meaning (Patton 2002). Requires in-depth interviews with participants who have directly experienced the phenomenon of interest, necessitating a ‘lived experience’ as opposed to an indirect experience (van Manen 1990). Focus is on acquiring a deeper understanding through multiple interviews with participants and prolonged immersion (Creswell 2007). Focus is on identifying the ‘essence’ of the shared experience. Seeks quotes and statements that are emblematic in meaning (Padgett 2008).</td>
<td>Participants in the study were purposively selected based on their potential diversity of experiences with the community-campus partnership and associated service-learning program. Study participants were engaged in different aspects of the experience (i.e. differing roles within the partnership and program). Individual, subgroup and group experiences were considered important in this study to illuminate a greater understanding and diversity of experience of the phenomenon. Multiple interviews with participants and prolonged immersion were not pragmatically feasible given the context of the study and lack of ongoing access to study participants (i.e. allied health students).</td>
</tr>
<tr>
<td><strong>Grounded Theory</strong></td>
<td>Focus is on generating theory. Connects induction and deduction through the constant comparative analysis method across research sites and data sets. Involves theoretical sampling and testing of emergent concepts through additional fieldwork (Patton 2002). Assumes commonalities exist in how individuals experience similar circumstances, view and make sense of their social world (Glaser and Strauss 1967). Depends on methods that take the researcher into the real world so the results and findings are grounded in the empirical world providing</td>
<td>Although this research draws on the analytical strategy of constant comparative analysis, this strategy can be employed ‘beyond’ grounded theory (Fram 2013) and without the aim of producing a theoretical understanding of the phenomenon under investigation (Chow 1998, Fram 2013). The generation of new theory was not an explicit aim of this study as several theories are available to inform our understanding of community-campus partnerships and service-learning pedagogies. This study acknowledged the potential for greater diversity in how participants perceived their experiences of the phenomenon. The research goals were to represent a deep and holistic understanding of the phenomenon. This study did</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
<td>Notes</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Ethnography</td>
<td>Centrally locates the notion of culture and cultural relativism. Assumes that any human group of people interacting together for a period of time will evolve a shared culture (Patton 2002). Explores tacit rules and norms of a distinct culture or subculture. Relies on direct, intense and ongoing observation for data collection. Requires the commitment of substantial time and effort (Padgett 2008).</td>
<td>This study was not focused on one cultural group or subgroup. Participants in the study were not drawn from a group of people who were interacting with each other over extended periods of time (i.e. the school manager and allied health students did not routinely interact with each other; the rural academic did not routinely interact with the school manager). The study did not seek to explore tacit rules or norms associated with the phenomenon under investigation. Data collection was not focused on direct, intense or ongoing observation.</td>
</tr>
<tr>
<td>Narrative Inquiry</td>
<td>Emphasis is on the power of spoken words (Mishler 1986). Focus is on how something is said as well as what is said. Interviews are designed to elicit story telling (Riessman 2008). Seeks to explore social meaning reflected in talk and text (Gee 1991). Examines sequencing, turn taking and interruption to explore social roles and identities (Farnell and Graham 2000). Focus is on words, rhythm and gestures. Requires researcher’s immersion in linguistic structures and meaning.</td>
<td>The study was not concerned with sociolinguistic exploration of the data. Study questions were not designed to elicit story telling but were developed to gain a deeper understanding of pre-determined areas that were of interest to the researcher, with these areas informed by previous evaluations of the partnership and program and the research goals and questions.</td>
</tr>
</tbody>
</table>
Following this interrogation it became evident that these accepted qualitative methodologies were poorly suited to addressing the study goals and questions. Based on the rationale provided in Table 2.2 and my desire to avoid ‘forcing’ this study to fit within an incompatible qualitative methodology, a pragmatic qualitative approach to study design was adopted (Morgan 2014, Hall 2013, Smith et al. 2011, Sandelowski 2000).

Pragmatic research is guided by the adoption of research approaches and the selection of data collection methods that best enable the goals and questions of the study to be addressed. In the case of pragmatic qualitative research, these justifications may challenge traditionalist interpretations and ‘require considerable alterations in our thinking’ (Morgan 2014, p. 1051). As this study did not seek to view the world in terms of absolutes nor was it committed to one philosophy or understanding of reality, the methods drawn on and their use were those considered best suited to obtaining, analysing and interpreting the data. This pragmatic qualitative study was intentionally designed to explore and gain a deeper level of understanding of community and campus participants’ experiences, interconnections and relationships. The study goals informed the purposive selection of community participants (school principals and senior managers from local facilitating agencies) and campus participants (allied health students and academics). The study adopted the ‘accepted’ qualitative data collection methods of focus groups (Lambert and Loiselle 2008, Hollander 2004, Patton 2002) and individual semi-structured interviews (Harrell & Bradley 2009, Lambert and Loiselle 2008, Patton 2002), and the analytical strategy of constant comparative analysis (CCA) of the data ‘beyond’ a grounded theory approach (Miles et al. 2014, Fram 2013, O’Connor et al. 2008).

2.7 Ethics Approvals

Low risk ethics approval was granted for this study through the University of Sydney Human Research Ethics Committee (approval number 2014/176); NSW Department of Education and Communities (NSW DEC) (SERAP approval number 20141117); the NSW Catholic Education Office, and La Trobe University, with written approvals based on the University of Sydney approval (see Appendix 4).
2.8 Data Collection Methods

As mentioned, focus groups and individual semi-structured interviews were selected as the data collection methods. Although both methods are independent approaches to qualitative data collection, they can be combined to generate complementary, contrasting and unique views of a phenomenon (Lambert and Loiselle 2008). The three rationales for combining focus group and individual semi-structured interviews in qualitative research designs are as follows: 1) pragmatic responsiveness; 2) parallel use of data for the purposes of comparison; and 3) the researcher’s desire for data completeness (Lambert and Loiselle 2008). These three rationales influenced the selection and combination of focus groups and individual semi-structured interviews for this study.

2.8.1 Pragmatic responsiveness

In the situation where study participants may be allocated to focus groups but are unable to participate, the opportunity exists for them to participate in individual semi-structured interviews, a strategy that avoids the loss of their experiences and perspectives to the study. This rationale is relevant where participants may have to respond to unforeseen workplace demands, as was reflected in this study where one school principal allocated to a focus group was unable to participate and consented to participate in an individual interview instead. Time constraints and access to participants can also influence the pragmatically responsive use of focus groups and individual interviews, as was the case in accessing allied health students undertaking their placement in the program.

2.8.2 Parallel use of data

The data from focus groups and individual interviews can be combined for parallel use and comparative purposes when exploring a phenomenon of interest. Each method can be used with different groups of informants with the data collection from one method not directly influencing the implementation of the other data collection method (Loiselle et al. 2007). In this study, focus groups were utilised as a data collection method with school principals and allied health students, reflecting the group nature of the experiences of these participants, and individual semi-structured interviews were
utilised as a data collection method for senior managers from local facilitating agencies and allied health academics, reflecting the differing roles and organisations that these participants represented within the partnership and program. Through this approach, data triangulation between the subgroups, community and campus groups, and across these groups had the potential to provide deep insight into the shared patterns, differences of experience, and unique insights associated with the phenomenon, thus contributing to the credibility of study findings (Loiselle et al. 2007).

2.8.3 Data completeness

My desire for data completeness influenced the combination of focus groups and individual semi-structured interview methods. As stated by Lambert and Loiselle (2008):

> When seeking data completeness, it is assumed that each method reveals different parts of the phenomenon of interest (complementary views) and contributes to a more comprehensive understanding (expanding the breadth and/or depth of the findings) (p. 230).

A key goal of this study was the desire for data completeness as the study sought to extend the concept of completeness beyond discrete subgroup experiences to an understanding of experiences within and across community and campus groups.

2.8.4 Combination of qualitative data collection methods and participant allocation to methods

Although increasing attention is being placed on the combination of qualitative data collection methods, few authors explicitly address the implications of combining these methods. It is imperative that researchers provide justification for their selection of research methods and their rationale for the allocation of study participants to these methods (Lambert and Loiselle 2008). Therefore, the rationale and justification for the selection and allocation of participants to focus groups or individual semi-structured interviews are now provided.
2.8.5 Selection of focus groups

The exploration of various phenomena draws on the use of focus groups, collecting interactive data generated through participant discussions (Lambert and Loiselle 2008). In a focus group, small numbers of participants are able to comment on each other’s experiences, increasing the depth of inquiry and potentially illuminating aspects of the phenomenon that may be less accessible through alternative methods of data collection (Patton 2002). Data collected through focus groups are the product of context-dependent group interactions (Holander 2004).

Focus groups typically involve bringing together people of similar backgrounds and experiences to participate in a group interview about significant issues that affect them. Different focus groups can be conducted as part of a series to elicit a variety of experiences and perspectives associated with a phenomenon, thus enhancing confidence in any patterns that may emerge (Patton 2002).

Focus groups need to be carefully planned to ensure that participants’ perspectives on the phenomenon under investigation are acquired in a permissive and non-threatening environment. Focus groups need to be focused on narrow topics, stay on topic and be time-sensitive. Several benefits and limitations are associated with focus groups. The benefits include: an enhanced quality of data as data are acquired through participant interactions with checks and balances between participants possibly mitigating false or extreme views; an enhanced ability to quickly assess the consistent and shared views of participants as well as their contrasting views of the phenomenon; and pragmatic responsiveness with the method’s cost and time effectiveness supporting the collection of data from several participants at the same time. The limitations associated with focus groups include: a restriction on the number of questions that can be asked; the withdrawal of participants from their natural settings; limitations on the depth of individual responses; and the risk of suppression of minority views (Patton 2002). The rationale for the allocation of school principals and allied health students to focus groups is provided in Section 2.9.2.
2.8.6 Selection of individual semi-structured interviews

Individual interviews are a widely utilised data collection method in qualitative research (Sandelowski 2000, Lambert and Loiselle 2008). Individual participants are selected to collect ‘detailed accounts of participants’ thoughts, attitudes, beliefs and knowledge pertaining to a given phenomenon’ (Lambert and Loiselle 2008, p. 229). Although Lambert and Loiselle (2008) stated that individual interviews can be considered to be a ‘generic’ data collection method, individual interviews can take forms that include unstructured, structured or semi-structured approaches.

In unstructured interviews, the researcher has minimal control over participant responses and the conversation may go in a number of directions that are influenced by the participant. Collecting data through unstructured interviews can result in rich and nuanced data; however, this approach can be highly time intensive and reliant on extensive engagement between the researcher and study participant (Harrell and Bradley 2009). Structured interviews are highly controlled where questions are fixed and asked in a specific order. These interviews resemble written surveys in which there is no flexibility for deviation. This form of interview is drawn on when data are being collected from large samples and where findings are to be generalised to larger populations (Harrell and Bradley 2009).

Individual semi-structured interviews are a purposeful conversation between the researcher and participant where the researcher focuses on the participant’s ‘perception of self, life and experience’ (Minichiello et al. 1990, p. 61) with this expressed in the participant’s own words. These interviews enable the researcher to gain access to an individual participant’s world in order to understand their interpretations and motivations (Minichiello et al. 1990). In semi-structured interviews, a schedule of questions is developed that identifies the topics to be explored. The interviewer has a level of discretion on the order in which questions can be asked but the questions are standardised to elicit information on the phenomenon under investigation. Prompts and probes can be developed to ensure the interviewer covers the correct material. Semi-structured interviews are utilised ‘when the researcher wants to delve deeply into a topic, and to understand thoroughly the answers
provided’ (Harrell and Bradley 2009, p. 27). The rationale for the allocation of senior managers and academics to individual interviews is provided in Section 2.9.3.

2.9 Selection of Study Participants

Community and campus participants who were considered to be information rich in regard to the partnership and program were purposively selected. Ulin (2005) stated that:

Qualitative research emphasizes depth more than breadth, insight rather than generalization, illuminating the meaning of human behaviour. The challenge for the qualitative researcher, therefore, is to select participants who will be able to provide the most meaningful information on the topic (p. 54).

Community (school principals and senior managers from local facilitating agencies) and campus (allied health students and academics) participants were selected for their capacity to provide an in-depth description of their particular experiences and perceptions and to capture central themes that may cut across these participant groups. This approach to participant selection is of interest as:

Any common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared dimensions of a setting or phenomenon (Patton 2002, p. 235).

This study was concerned with exploring the perceptions and experiences of subgroups as well as the diversity of community and campus perspectives and experiences. As indicated by Patton (2002):

When selecting small samples that provide great diversity, data collection and analysis can yield two types of findings: (1) high-quality, detailed descriptions of each case, which are useful for documenting uniqueness, and (2) important shared patterns that cut across cases and derive their significance from having emerged out of heterogeneity, both are considered important findings in qualitative inquiry (p. 235).
This study aimed to achieve both these outcomes and sought to understand individual community and campus experiences and perceptions of the partnership and program as well as comparing these experiences and perceptions across community and campus groups.

2.9.1 Recruitment of study participants

All potential study participants were sent an introductory email to the study through student, university or work email accounts by an independent administration officer (see Appendix 6). The recipients were: school principals (n=12) representing all schools from the three regional communities engaged in the community-campus partnership and service-learning program; senior managers from local facilitating agencies (the BHUDRH [n=1] and school education [n=1]); and campus participants (allied health students: occupational therapy [n=4] and speech pathology [n=6], representing one inter-professional student cohort in 2014) and allied health academics (a rurally-located academic [n=1] with direct supervision responsibility of students and a metropolitan academic [n=1] with a strategic program role). Participant information sheets and consent forms were attached to these emails. All signed consent forms were returned to the same administration officer. The following community participants consented to participate in the study: principals (n=7) who represented seven schools and two of the three communities engaged in the study and both senior managers (n=2). The following campus participants also consented to participate in the study: all allied health students (n=10) and both academics (n=2).

2.9.2 Allocation of participants to focus groups

Principals were purposively allocated to one of two focus groups: Focus Group 1 (FG1) (n=4) and Focus Group 2 (FG2) (n=3). One principal allocated to FG2 was unable to participate due to unplanned work commitments and consented to participate in an individual semi-structured interview. Due to the depth of principals’ experiences and perceptions of the partnership and program and the importance of exploring community perspectives in detail, small participant numbers within the focus groups were considered appropriate Hollander (2004). The allied health students, comprising occupational therapy (OT) (n=4) and speech pathology (SP) (n=6), were
purposely allocated to one of two inter-professional focus groups: Focus Group 1 (FG1) OT=2 and SP=3 and Focus Group 2 (FG2) OT=2 and SP=3, reflecting the inter-professional design of the service-learning program.

Hollander (2004) identified four types of social contexts associated with focus groups that influence participant allocation and interactions. These contexts are: 1) associational context where there are common characteristics that bring the participants together; 2) status context that relates to the local or societal status of participants; 3) conversational context reflecting the type and flow of focus group discussions; and 4) relational context that is the degree of prior acquaintance across participants.

The rationale and justifications for the allocation of these participants to focus groups are provided in Table 2.3.
<table>
<thead>
<tr>
<th>Focus Groups</th>
<th>Rationale</th>
<th>Justifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School</strong></td>
<td><strong>Principals</strong></td>
<td><strong>Associational context</strong> Shared characteristics – strategic and operational stakeholders in the partnership and program and leaders of schools hosting the allied health students.</td>
</tr>
<tr>
<td></td>
<td><strong>Status context</strong></td>
<td>Shared professional role and status within the region.</td>
</tr>
<tr>
<td></td>
<td><strong>Conversational context</strong></td>
<td>Capacity to engage as peers in the type and flow of the discussion.</td>
</tr>
<tr>
<td></td>
<td><strong>Relational context</strong></td>
<td>All members of a broader school education and collegiate body within the region.</td>
</tr>
<tr>
<td></td>
<td><strong>Pragmatic responsiveness</strong></td>
<td>Need to account for the differing time frames of principals’ engagement in the partnership and program (i.e. a long-, medium- or short-term history of engagement). Enabled principals to be purposively allocated to these groups to ensure this distribution and the capacity for historical and current knowledge sharing. Provided principals with a second opportunity to participate in an individual semi-structured interview if they were unable to attend the scheduled focus group due to unforeseen circumstances.</td>
</tr>
<tr>
<td><strong>Allied Health Students</strong></td>
<td><strong>Associational context</strong></td>
<td>Shared characteristics – all were allied health students undertaking their placement in the region and the associated service-learning program.</td>
</tr>
<tr>
<td></td>
<td><strong>Status context</strong></td>
<td>Shared level of student status within the group to promote conversation. Desire to avoid the separation of students due to potential perceptions of power differentials between the independent qualitative researcher and students.</td>
</tr>
<tr>
<td></td>
<td><strong>Conversational context</strong></td>
<td>Capacity to engage as peers in the type and flow of the discussion.</td>
</tr>
<tr>
<td></td>
<td><strong>Relational context</strong></td>
<td>All participants in the inter-professional service-learning program undertaking a shared placement in one school term in 2014.</td>
</tr>
<tr>
<td></td>
<td><strong>Pragmatic responsiveness</strong></td>
<td>Need to account for the time frame of student engagement in the region, 6-8 weeks. Enabled the inter-professional allocation of students, reflecting the program design. Enabled the timetabling of student release from the program to participate in the study.</td>
</tr>
</tbody>
</table>
All focus groups ran for approximately 60 minutes, were digitally recorded with consent and were conducted on site at the BHUDRH, a location familiar to the school principals engaged in the partnership and program and to students undertaking their placement in the program. All focus groups were facilitated by the same independent qualitative researcher, a study design strategy to minimise potential bias in data collection associated with my connection to the partnership and program. An independent research assistant participated in these groups to document the interactions between focus group participants as well as the participant turn-taking in discussions to support the transcription of voice recordings (Creswell 2007).

**2.9.3 Allocation of participants to individual semi-structured interviews**

The senior managers from local facilitating agencies (n=2) and both allied health academics (n=2) were allocated to individual semi-structured interviews. This enabled the richness of detail arising from their longstanding involvement in the partnership and program to be captured. The senior managers and metropolitan academic were foundational participants in the partnership while the rural academic had four years of involvement. This method was considered to be the best way of acquiring deep and rich information from ‘expert’ informants. The participation of a school principal in an individual semi-structured interview also prevented their experiences from being lost from this study due to their unplanned availability to participate in scheduled focus groups. The rationale and justifications for these allocations are provided in Table 2.4.
Table 2.4: Individual semi-structured interviews: rationale and justifications for participant allocations

<table>
<thead>
<tr>
<th>Individual Semi-Structured Interviews</th>
<th>Rationale</th>
<th>Justifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Managers Local Facilitating Agencies</td>
<td>Capacity to contextualise the partnership and program in significant detail from a longstanding community perspective.</td>
<td>Longevity of senior managers' engagement in the partnership and program (from inception for both) that could contribute to their provision of detailed accounts of the partnership formation, program development and evolution.</td>
</tr>
<tr>
<td>Provision of detailed accounts.</td>
<td>Participants' thoughts, attitudes, beliefs and knowledge pertaining to the partnership and program, from a community perspective, were of critical importance in this study to address significant gaps in knowledge on civic impacts and outcomes of participation.</td>
<td></td>
</tr>
<tr>
<td>Need to acquire specific information on the partnership and program to enable comparison across data sets.</td>
<td>Focus on participant roles in the partnership and program, catalysts and conditions for participation, and impact and outcomes of this participation (i.e. from rural and remote community members' perspectives). Able to pursue in more depth particular areas that emerged from the interview.</td>
<td></td>
</tr>
<tr>
<td>Pragmatic responsiveness.</td>
<td>Access to study participants due to the 'busy-ness' of their schedules. Differing partnership and program roles of senior managers. Differing levels of management seniority.</td>
<td></td>
</tr>
<tr>
<td>Allied Health Academics</td>
<td>Capacity to contextualise the partnership and program in significant detail from a longstanding academic perspective.</td>
<td>Longevity of academics' engagement in the partnership and program (from inception for the metropolitan academic and for four years for the rural academic) that could contribute to their provision of detailed accounts of the partnership formation, program development and evolution.</td>
</tr>
<tr>
<td>Provision of detailed accounts.</td>
<td>Participants' thoughts, attitudes, beliefs and knowledge pertaining to the partnership and program, from a campus perspective, were of critical importance in this study, addressing questions of applicability of the service-learning pedagogy within this rural and remote Australian context.</td>
<td></td>
</tr>
<tr>
<td>Need to acquire specific information on the partnership and program to enable comparison across data sets.</td>
<td>Focus on participant roles in the partnership and program, catalysts and conditions for participation, and impact and outcomes of this participation (i.e. from campus members' perspectives). Able to pursue in more depth particular areas that emerged from the interview.</td>
<td></td>
</tr>
<tr>
<td>Pragmatic responsiveness.</td>
<td>Differing roles of academics engaged in the partnership and program (i.e. the metropolitan academic had a strategic role and the rural academic had a direct supervision role). Differing levels of academic status and seniority. Geographical separation of academics.</td>
<td></td>
</tr>
</tbody>
</table>
All individual semi-structured interviews were conducted by the same independent qualitative researcher who conducted the focus groups. Interviews ran for approximately 50 minutes, were conducted on site at the BHUDRH for both senior managers and the rural allied health academic, and via telephone for the metropolitan allied health academic due to their geographical location.

2.10 Schedules of Questions

To enable the comparison of all data a generic set of open-ended questions (Cohen and Manion 1989) was developed for all participants to enable the study goals to be met and the study questions to be addressed. These generic questions were ordered as follows for the flow of questioning and focused on:

1. Factors that influenced partnership/program participation.
2. Perception of what the partnership/program aimed to achieve.
3. Impact of participation in the partnership/program.
4. How participants would describe the partnership/program to others.
5. Recommendations for partnership/program improvement.
6. Perceptions on future partnership/program directions.

In addition to the generic questions, several nuanced questions were asked specific to each subgroup, reflecting their differing roles within the partnership and program. For example, allied health students were asked how this placement experience compared with previous placement experiences. This provided a means to obtain greater detail to support the comparison of the service-learning experience to students’ previous clinical placement experiences, thus informing answers to the study questions associated with the impacts of participation in the partnership and program for campus participants. Examples of the schedules of questions are provided in Appendix 5.
2.11 Data Management and Preparation for Analysis

The data collection resulted in the accumulation of nine voice recordings, from the four focus groups and five individual semi-structured interviews. Handwritten documents identifying interactions and turn taking for each focus group were also provided by the research assistant. I transcribed all voice recordings verbatim and although a time-consuming process, this approach to data transcription was considered critical in enabling me to establish and maintain a closeness to the data, balancing my self-exclusion from data collection to mitigate potential influence on participants’ responses. In addition, verbatim transcription enabled me to capture the exact words of study participants (Davidson 2009). During the transcription stage, notes taken by the research assistant during the focus group sessions were drawn on to ensure I accurately identified participants, their interactions and responses within the voice recordings and transcription process.

Participants were de-identified by school, community, position and discipline. Individual interview participants were informed of the additional challenges in guaranteeing their confidentiality due to the location and small participant numbers. These participants were provided with copies of their transcripts to determine if their own words needed to be modified (Carlson 2010): no modifications were requested. Table 2.5 provides a reference list of participants and their allocated unique identifiers.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Health Students</td>
<td>FG1 Student 1=FG1:S1; FG2 Student 2=FG2:S2, etc.</td>
</tr>
<tr>
<td>Principals</td>
<td>FG1 Principal 1=FG1:P1; FG2 Principal 2=FG2:P2, etc. Principal who participated in the individual interview=P1</td>
</tr>
<tr>
<td>Allied Health Academics</td>
<td>Rural Academic=RA Metropolitan Academic=MA</td>
</tr>
<tr>
<td>Senior Managers from Local Facilitating Agencies</td>
<td>University Manager (BHUDRH)=UM School Manager=SM</td>
</tr>
</tbody>
</table>
2.12 Overall Strategy for Processing Qualitative Data

As a qualitative researcher I gave primacy to the data collected, rejecting pre-existing or pre-defined variables or hypotheses. I worked from the data through a process of induction to identify codes, categories, patterns and themes. Codes are 'a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based data' (Saldana 2000, p. 3). A code represents and captures the primary content and essence of the data, and a number of codes can be used repeatedly, reflecting repetitive patterns of action and consistency of human behaviour. One of the primary goals of qualitative data analysis is to identify repetitive consistencies. Saldana (2009) stated that coding is:

An exploratory problem-solving technique without specific formulas to follow.
Coding is only the initial step toward an even more rigorous and evocative analysis and interpretation. Coding is not just labelling, it is linking (p. 8).

Grbich (2007) stated that when codes are applied and reapplied to qualitative data, the researcher is codifying, segregating, grouping, regrouping and re-linking to consolidate meaning and explanation. Coding enables researchers to organise and group coded data into categories based on shared characteristics. The process of creating codes can be pre-determined, deductive or emergent, evolving from the data (Stuckey 2016). An emergent process of creating codes was used in this study.

In this study, coding was undertaken on hard-copy printouts of transcripts to provide a greater sense of control and ownership of the data (Saldana 2000). This approach enabled analytic memo writing on transcripts that documented my reflections on the coding process, code choices, processes of inquiry and emergent categories, patterns, themes and concepts. By memo writing about the specific codes that I applied and how they clustered and interrelated, more concise codes were identified. The coding process was undertaken collaboratively, involving both supervisors and myself. A selection of community and campus transcripts were independently coded by all researchers with these codes then being compared and discussed to obtain a group consensus on the identification and allocation of codes. Weston et al. (2001) stated that 'a research team builds codes and coding builds a team through the
creation of shared interpretation and understanding of the phenomenon being studied' (p. 382). I then independently coded the remaining transcripts, seeking additional guidance and consensus from my co-researchers when required to clarify codes and categories.

In the process of collaborative coding, we sought to achieve a high level of agreement in the identification or interpretation of codes through simple group consensus. An outcome of coding, categorisation and analytic reflection is the development of themes. DeSantis and Ugarriza (2000) described a theme as:

An abstract entity that brings meaning and identity to a recurrent (patterned) experience and its variant manifestations. As such, a theme captures and unifies the nature or basis of the experience into a meaningful whole (p. 362).

For the purposes of this study, an inductive and content-sensitive approach to data analysis and coding was employed. This involved the development of emergent and descriptive codes, codes that enabled the labelling and allocation of data to topics (Saldana 2009) within single data sets, that is, to individual focus group and interview data sets. These codes were then compared within subgroup data sets, that is, principals, senior managers, allied health students and academic subgroups, by all researchers and categorised to enable the development of themes through a process of constant comparative analysis (CCA).

2.13. Constant Comparative Analysis Method Employed in this Study

Qualitative inquiry can involve the production of volumes of rich and deep data from various sources and ‘while not seeking to reduce data to statistical evidence, qualitative data nevertheless requires systematic analysis’ (Hewitt-Taylor 2001, p. 39). A dominant principle of analysis in qualitative research is that of data comparison (Glaser and Strauss 1967, Boeije 2002, Patton 2002, Fram 2013). One such approach is the strategy of constant comparative analysis (CCA). Despite CCA being considered synonymous with the methodology of grounded theory (Glaser and Strauss 1967), this data analysis method can be employed beyond this traditional allegiance (Fram 2013, O’Connor et al. 2008).
The aim of a CCA method is to force the researcher to remain close to their data in order to avoid subjective interpretations (Glaser and Strauss 1967, Rennie 2000). By revisiting the data, conceptualising and constantly comparing the data, a high level of sensitivity is achieved that can stimulate thoughts about incidents, data concepts, categories and their properties (Glaser 1978, Strauss and Corbin 1998). Srivastava and Hopwood (2009) stated that:

The basic rule for the constant comparative method is that in the process of coding an incident for a category, it should be compared with previous incidents in the same group as well as different groups that may have been coded in the same category (p. 157).

O’Connor et al. (2008) informed us that:

It must be clear that constant comparison, the data analysis method, does not in and of itself constitute a grounded theory design. Constant comparison assures that all data are systematically compared to all other data in the data set. This assures that all data produced will be analyzed rather than potentially disregarded on thematic grounds (p. 41).

However, Fram (2013) identified a significant void in the literature when it describes the use of a CCA method ‘beyond’ grounded theory. This void has potentially contributed to researchers who employ a CCA method forming an allegiance with grounded theory despite a lack of methodological adherence to grounded theory approaches to study design, implementation, data collection and interpretation and use of findings.

Glaser and Holton (2007) cautioned that:

The mixing of qualitative data analysis and grounded theory methodologies has the effect of downgrading and eroding the grounded theory goal of conceptual theory, with the result being “a default remodelling of classic grounded theory into just another qualitative data analysis method with all its descriptive baggage” (p. 48).
Despite this caution, it has been argued that ‘the adaptability of the constant comparative analysis method needs to occur to foster innovation in qualitative research’, with Fram (2013) then continuing by stating that there has been:

A call to action to qualitative researchers to further investigate the use of the constant comparative analysis method outside of grounded theory as a part of the tradition of innovation in qualitative research (p. 200).

2.13.1 Process of applying a constant comparative analysis method in qualitative inquiry

Limited guidance is available on the adaptation and application of the CCA method, even within a grounded theory framework (Boeije 2002). Boeije (2002) stated that ‘the literature does not make clear how one should “go about” constant comparison, nor does it address such issues as whether different types of comparison can be distinguished’ (p. 393). In addressing this lack of clarity and direction, Boeije (2002) described five procedural steps associated with her approach to CCA within her study: 1) comparison within a single interview; 2) comparison between interviews within the same group; 3) comparison of interviews from different groups; 4) comparison in pairs at the level of the couple; and 5) comparing couples (married partners). In this process, Boeije (2002) took pragmatic steps to break down CCA to ensure the method’s applicability in answering her research questions. The adaptation of the CCA method in this study has been informed by this approach. I have also taken a pragmatic approach to breaking down the CCA method to ensure its applicability in undertaking comparison within single transcripts; comparison within subgroup transcripts; comparison within group transcripts; and comparison across community and campus group transcripts to explore and identify similarities, differences and potentially unique insights at each of these levels. This pragmatic approach has been employed to ensure my research goals and questions could be answered. This resulted in the identification of four stages of data comparison: Stage 1): Comparison within single transcripts; Stage 2): Comparison within subgroup transcripts; Stage 3) Comparison within group transcripts; and Stage 4) Comparison across group transcripts, as shown in Table 2.6.
<table>
<thead>
<tr>
<th>Stage 1: Comparison within Single Transcripts</th>
<th>Stage 2: Comparison within Subgroup Transcripts</th>
<th>Stage 3: Comparison within Group Transcripts</th>
<th>Stage 4: Comparison across Group Transcripts</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Principals – Focus Group 1</td>
<td>School Principals</td>
<td>Community Participants</td>
<td>Community and Campus</td>
</tr>
<tr>
<td>School Principals – Focus Group 2</td>
<td></td>
<td>• School Principals</td>
<td></td>
</tr>
<tr>
<td>School Principal – Interview</td>
<td></td>
<td>• Senior Managers</td>
<td></td>
</tr>
<tr>
<td>Senior Manager (BHUDRH) – Interview</td>
<td>Senior Managers from Local Facilitating Agencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Manager School Education – Interview</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allied Health Students – Focus Group 1</td>
<td>Allied Health Students</td>
<td>Campus Participants</td>
<td></td>
</tr>
<tr>
<td>Allied Health Students – Focus Group 2</td>
<td></td>
<td>• Allied Health Students</td>
<td></td>
</tr>
<tr>
<td>Rural Academic Rural – Interview</td>
<td>Allied Health Academics</td>
<td>• Allied Health Academics</td>
<td></td>
</tr>
<tr>
<td>Metropolitan Academic – Interview</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
These four stages of comparison are next described in greater detail. In each stage, a description is provided of the comparison process, the aim of the comparison, my reflexivity and the results obtained.

2.13.2 Stage 1: Comparison within single transcripts

a) Description of comparison process

In this initial stage of data comparison, I closely followed the process employed by Boeije (2002). I conducted an initial exploration within each single transcript that included a sentence-by-sentence or paragraph-by-paragraph process of coding. This ensured that every sentence and/or paragraph, where relevant, within individual transcripts was studied to interpret what had been said by study participants. Each sentence or paragraph was then labelled with an initial code. Different sections of the transcript were then compared for similarities, differences and potentially unique insights. For example, within the single transcript for Focus Group 2 with the allied health students, ‘service’ was an identified initial code. Within this code, student descriptions of classroom-based services were captured. These descriptions included the acquisition of new knowledge and skills through student participation in class-based service delivery, as well as a contrasting perspective that class-based service was ‘not really therapy’. A unique insight was also provided in this focus group through the linking of classroom-based service delivery with a student’s sense of professional responsibility (another code) for the children who were the recipients of their services.

In this instance, where one fragment of the transcript was given the code of ‘service’, the researcher studied the rest of the transcript for other fragments where this same code could be applied. Where more than one reference was made to ‘service’, these references were compared in order to identify if the same information was being repeated (allied health student knowledge and skills acquisition) or contrasted (not a service); or if a unique insight was provided (linking of service to a sense of professional responsibility for the service recipient). These ‘service’ references were then further explored to determine the context in which the comments had been made and what dimensions were highlighted by the participants.
b) Aim of comparison

The aim of this comparison within the single transcripts was to develop codes and categories. In this open coding process, it was possible to identify similarities, differences and unique insights. Boeije (2002) stated that this initial stage of data comparison ‘represents an attempt to interpret the parts of the interview in the context of the entire story as it has been told to us by the interviewee’ (p. 395). My aim was to interpret the parts, the single transcripts, in the context of a more complex and comprehensive understanding of the partnership and program.

c) Researcher reflexivity

This initial stage of data comparison captured my reflexivity through memo writing and self-questioning on how codes were emerging from the data and how descriptive codes were applied to enable the labelling of categories. Similarities or differences in coding, and unique insights were then identified within the single transcripts.

d) Results

This initial comparative analysis within single transcripts generated the following outputs:

- A summary of all single transcripts;
- A list of provisional codes and categories which contributed to the process of contextualisation;
- The identification of similarities, differences and unique insights;
- Researcher documentation (memos) that described the analysis process;
- Research group consensus on the coding process.

2.13.3 Stage 2: Comparison within subgroup transcripts

a) Description of comparison process

Following Stage 1 of data analysis, I brought subgroup transcripts together to enable a comparison within subgroups; that is, both allied health student focus group transcripts
were compared with each other, both school principal focus groups and the individual principal interview transcripts were compared with each other, both senior manager interview transcripts were compared with each other, and both academic interview transcripts were compared with each other. This enabled the comparison of transcripts, codes and categories within specific participant subgroups, based on the premise that they were similar with regard to their experience of the phenomenon, positions held and status of participants. In Stage 2, similar codes and categories within the subgroup transcripts were compared to support the identification of patterns and the development of higher-order themes and subthemes of relevance to these subgroups. Using the same example as earlier, through the comparison of the allied health student focus groups transcripts, codes and categories, the following themes emerged in relation to ‘service’: challenges students confronted in transitioning to a service-learning experience; acquisition of work-readiness attributes including inter-professional attributes through direct service delivery experiences; and enhanced perceptions of enhanced future employability through service exposure.

b) Aim of comparison

The first aim of Stage 2 was to conceptualise the phenomenon as it was perceived and experienced by subgroups that comprised school principals, allied health students, senior managers and academics. The second aim was to identify and describe the similarities and differences within these subgroups to enable the development of subgroup themes and subthemes. Unique insights specific to these subgroups were not lost from this process with a hard-copy document created to record these insights for further exploration. For the purposes of this pragmatic study, similarities, differences and unique insights were all considered significant and essential in ensuring a comprehensive understanding that could expand the breadth and depth of findings.

c) Researcher reflexivity

My reflexivity was evidenced in this stage of comparison through my questioning of how findings within each single transcript were compared as a subgroup to illuminate and inform the development of subgroup themes and subthemes, and how this
comparison could remain sensitive to contrasting and unique insights provided by these subgroups. For example, allied health students described how their previous placement experiences had not sufficiently prepared them for their participation in the service-learning program, while this insight was not described by other participants.

d) Results

This comparison stage resulted in:

- An extension in the number of identified codes and categories for subgroups;
- The development of subgroup themes and subthemes;
- A summary of subgroup transcripts;
- Researcher documentation that further described the analysis process, including the identification of and sensitivity towards the unique insights associated with each subgroup.

2.13.4 Stage 3: Comparison within same group (community group and campus group) transcripts

a) Description of comparison process

The triangulation of data is considered to be of central importance in qualitative analysis (Lincoln and Guba 1985; Patton 2002). Triangulation is a means of improving the rigour of data analysis by assessing the integrity of inferences drawn from more than one vantage point (Lincoln and Guba 1985). In Stage 3 of data analysis, subgroup data were compared within the community or campus groups. For example, allied health student data were compared with allied health academic data, representing the campus group, and school principal data were compared with senior manager data, representing the community group.

b) Aim of comparison

In this stage of comparison I sought to gain a comprehensive, complex and more nuanced understanding of the perspectives and experiences of distinct community and campus groups and the interconnections and relationships that existed within
these groups. The aim of Stage 3 was to contribute greater depth and breadth to the findings and to enrich the information provided by each subgroup. This comparison enabled the validation of similar experiences and perceptions, highlighted the differences in experiences and provided unique insights that, when combined, contributed a deep insight into the relationships and interconnections within the distinct community and campus groups. Continuing with the allied health student example, the comparison of student findings with those of the academics illuminated:

- Similarities (shared perceptions of student knowledge and skills acquisition through their participation in the service-learning program);
- Differences in perceptions of future employability based on the service-learning experience (the metropolitan academic was unsure if the experience contributed to enhanced employability outcomes for the students, whereas allied health students and the rural academic described their knowledge of previous student participants’ employment outcomes as influencing their perceptions of enhanced future employability); and
- Unique insights (the rural academic’s insight of their perceived collegiate relationship with the students they supervised in the delivery of allied health services to rural and remote children).

c) Researcher reflexivity

Reflexivity in Stage 3 was evidenced in my questioning of how the comparison of subgroup findings and the development of themes and subthemes remained sensitive to the unique insights provided from the perspectives of each group; what influenced significant similarities and differences; what nuances existed within the group findings; and what implications the findings had for the community and campus groups.

d) Results

This stage provided a comprehensive insight into the perspectives and experiences of the distinct community and campus groups. These group insights were critical in addressing the following two study goals: to describe and understand the formation of the community-campus partnership and the development and adaptation of the
service-learning program from the perspectives of community and campus participants.

Results acquired through Stage 3 of data comparison contributed to answering the following study questions: 1) what factors contributed to the initiation, formation and participation of community and campus partners in the community-campus partnership and associated service-learning program; 2) what were the impacts of participation in the partnership and program for community and campus participants and for the civic and higher education sectors in which they were located; and 4) in what ways did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants. These results also contributed to the development of the following papers that have been published in national and international peer-reviewed journals:

Jones, D., McAllister, L & Lyle, D 2016, Challenging Remote Community Deficit Perspectives: An Australian insight into the role of these communities in the design of their health services and the development of their health workforce, *International Journal of Practice-Based Learning in Health and Social Care*, vol. 4, no. 2, pp. 19-34.


2.13.5 Stage 4: Comparison across community and campus group transcripts

a) Description of comparison process

Although data triangulation is considered important in qualitative analysis, debate is growing as to whether triangulation alone has the capacity to account for a deeper inquiry that appreciates uniqueness and an understanding of the simultaneously revelatory and concealing effects of different ways of seeing the world' (Sandelowski 1995). Furthermore, Sandelowski (1995) stated that:

The concept of triangulation ought to be reserved for designating a technique for confirmation employed within paradigms in which convergent and consensual validity are valued and in which it is deemed appropriate to use information from one source to corroborate another (p. 573).

This critique on the limitations of triangulation has given rise to calls to adopt ‘crystallisation’ as a means of producing knowledge about a particular phenomenon through the generation of deeper and more complex interpretations (Richardson 2000, Ellingson 2008). As stated by Ellingson (2008), the crystallisation provides another way of achieving depth through the compilation of many details, their organisation, analysis and interpretation. Furthermore, Ellingson (2009) stated that crystallisation manifests itself in qualitative studies that:

Offer deep, thickly described, complexly rendered interpretations of meanings about a phenomenon; include a significant degree of reflexive consideration of the researcher’s self and roles in the process of research design, data collection, and representation; eschew positivist claims to objectivity and a singular, discoverable truth in favor of embracing knowledge as situated, partial, constructed, multiple, embodied, and enmeshed in power relations (p. 10).

In Stage 4, the final stage of comparison, the ‘situated, partial, constructed, multiple, embodied, and enmeshed’ insights offered across the community and campus groups were explored to provide a deeper and more complex interpretation of the partnership and program.
b) Aim of comparison

In this stage, I aimed to achieve crystallisation of the findings as a means of producing knowledge and thick description informed by the comparison across community and campus group findings. The intention was to provide a more comprehensive, complex and nuanced understanding of the partnership and program as perceived by multiple study participants.

c) Researcher reflexivity

My reflexivity in this final stage of data comparison was guided by the following questions that I asked of myself as a researcher:

- How was the partnership and program perceived across community and campus groups?
- What were the relationships and interconnections across the community and campus groups?
- Could these findings be of relevance and transferable to other rural and remote Australian contexts?
- How could the similarities, differences and unique insights provided through the comparison across the community and campus groups inform the conceptualisation of the phenomenon so a more complete story could be told?

d) Results

Stage 4 of comparative data analysis was critical in addressing the research goal of developing a greater understanding of the impacts of participation in the partnership and program for community and campus participants, and in answering the study question:

1. How did community and campus participants interact with each other to fulfil the shared purposes of enhancing allied health service accessibility and allied health student educational outcomes?
Results acquired through this final stage of data comparison contributed to the development of the conceptual framework described in Chapter 4 as well as to the following paper located in the same chapter:


2.14 Accounting for the researcher’s experience, knowledge and connections to the phenomenon and study participants

Qualitative research, an approach that acknowledges the researcher’s subjectivity, necessitates that the ‘biases, motivations, interests or perspectives of the inquirer are identified and made explicit throughout the study’ (Lincoln and Guba 1985, p. 290). Researcher bias can be evidenced in:

- Design of a study.
- Approach to data collection.
- Selection of subjects that may not all be equally credible.
- Previous influence on participants that affects the outcome of the study.
- Lack of background information.
- Study group may not be representative of the larger population.
- Analysis of observations that can be biased.
- Group dynamics that are influenced by the presence of the researcher.
- Lack of trust building between the researcher and study participants that fails to support full and honest self-representation.

Qualitative researchers must attempt to minimise their effects on the study during the course of the study. In addressing the potential bias that could exist through my association with the phenomenon under investigation, that is, my professional, academic, collegiate and management connections to study participants, the following
strategies and processes were employed in the study design, data collection, data analysis and the interpretation of findings:

- An independent administration officer was responsible for the circulation of recruitment invitations to potential study participants and the collection of signed consent forms (see Appendix 7);

- Participant information sheets explicitly stated that participation in this study was voluntary and neither non-participation nor withdrawal from the study would detrimentally impact on potential participants' placement experience, employment or relationship with the BHUDRH (see Appendix 8);

- An independent qualitative researcher facilitated all of the data collection;

- Alternative staff members at the BHUDRH delivered education and reflection sessions with potential allied health student participants, limiting my direct contact with these potential participants;

- Multiple coders were used to establish the reliability of coding and theme identification;

- Thick description was used as accurately and completely as possible to describe and explain the phenomenon and participant experiences and perceptions of this phenomenon;

- Ongoing self-examination was undertaken throughout the course of this study to ensure colleagues, staff and students did not feel 'pressed' to participate in the study and that study findings, as accurately as possible, reflected participant experiences and perceptions;

- Exploration of extensive and diverse literature sets was guided by the study findings and their interpretation;

- A constant process of working back and forth between the data and my own perspectives and understanding was used to make sense of the evidence;
• Guidance and clarity were sought from my doctoral supervisors, my co-researchers, on strategies and processes employed in participant selection, data collection, data analysis and interpretation, and the production of papers for peer review.

2.15 Trustworthiness in Qualitative Inquiry

In quantitative studies, the credibility of research data is supported by objective measures of reliability and validity through the use of standardised instruments and statistical analysis. In contrast, qualitative studies are interpretive in nature and researchers are more interested in questioning and understanding the meaning of the studied phenomenon. Several strategies and criteria can be used to enhance the trustworthiness of qualitative findings, namely: 1) credibility, 2) transferability, 3) dependability and 4) confirmability (Lincoln and Guba 1985, Creswell 2009). The trustworthiness of the qualitative data in this research was established through various processes to ensure the study’s credibility, transferability, dependability and confirmability. These four strategies and the processes employed are now described.

2.15.1 Credibility

Credibility is one of the most important factors in establishing the trustworthiness of qualitative studies and relates to the value and believability of study findings (Lincoln and Guba 1985). Credibility addresses the issue of the fit between respondents’ views and how the researcher represents these views; that is, does the explanation fit the description (Denzin and Lincoln 2005, Janesick 2000) and is the description credible (Tobin and Begley 2004). Shenton (2004) proposed that the following provisions could be made to promote confidence that researchers have accurately recorded the phenomenon under investigation:

• Adoption of well-established research methods that have been successfully utilised in comparable studies;
• Early familiarisation with the culture of participants;
• Justifiable sampling processes;
• Triangulation;
• Structures to support honest participant responses;
• Iterative questioning;
• Frequent debriefing between the researcher and supervisors;
• Opportunities for peer scrutiny;
• Reflective commentary;
• Background, qualifications and experiences of the researcher;
• Member checking;
• Thick description.

In Table 2.7, Shenton’s (2004) provisions are listed and descriptions are provided for how these provisions were addressed in this study.
Table 2.7: Shenton’s provisions for qualitative credibility and the study’s response

<table>
<thead>
<tr>
<th>Shenton’s Provisions</th>
<th>Study Description</th>
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<tr>
<td>1. Adoption of well-established research methods that have been successfully utilised in comparable studies.</td>
<td>This study has drawn on accepted qualitative (Patton 2002, Creswell 2009) and pragmatic approaches (Sandelowski 2000, Smith et al. 2011) in its design. This study has used the ‘acceptable’ and well-established qualitative research methods of focus groups and individual semi-structured interviews as data collection methods that can be combined (Lambert and Loiselle 2008, Adami 2005) and the data analysis method of constant comparative analysis (CCA) (beyond a grounded theory framework) as described by Fram (2013) and Boeije (2002).</td>
</tr>
<tr>
<td>2. Early familiarisation with the culture of participants.</td>
<td>The researcher had extensive experiential knowledge of the partnership and program and the context in which the partnership and program were located (see introductory section). To avoid potential bias, an independent researcher collected all study data.</td>
</tr>
<tr>
<td>3. Justifiable sampling processes.</td>
<td>The identification of potential study participants was informed, purposeful and guided by the researcher and two research supervisors, and sought to ensure equal representation of community and campus participants who could provide deep insight into the partnership and program.</td>
</tr>
<tr>
<td>4. Triangulation.</td>
<td>Use of multiple data collection methods: focus groups and individual semi-structured interviews. Use of multiple informants: school principals, senior managers from local facilitating agencies, allied health students and allied health academics. Use of multiple coders, the researcher and two supervisors (one with extensive qualitative knowledge and allied health research skills and the other with extensive research knowledge applicable to rural and remote primary health care research).</td>
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<tr>
<td>5. Structures to support honest participant responses.</td>
<td>The location of the data collection was carefully considered to ensure that the venue was familiar to study participants and an alternative telephone interview was arranged for the metropolitan academic to account for their geographical location. An independent qualitative researcher undertook all data collection to ensure that participant responses were not influenced by study researcher bias.</td>
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<td>6. Iterative questioning.</td>
<td>Multiple rounds of revisiting the data at the single, subgroup and group levels.</td>
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<td>7.</td>
<td>Frequent debriefing between the researcher and supervisors. The researcher and supervisors routinely met to discuss the data collection methods, data analysis and interpretation to achieve a consensus on the codes, categories, themes and subthemes that emerged from the data.</td>
</tr>
<tr>
<td>8.</td>
<td>Opportunities for peer scrutiny. All papers associated with this study have been published or submitted for publication in national and international peer-reviewed journals. A conceptual framework is presented in Chapter 4 for additional peer scrutiny.</td>
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<tr>
<td>9.</td>
<td>Reflective commentary. The researcher has provided detailed descriptions of their reflexivity during the data analysis stages.</td>
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<tr>
<td>10.</td>
<td>Background, qualifications and experiences of the researcher. The researcher had previous qualitative research experience in rural and remote health workforce development. The researcher had several previous peer-reviewed publications. The researcher had extensively facilitated partnership evaluations and program reflection sessions.</td>
</tr>
<tr>
<td>11.</td>
<td>Member checks. Member checks of the individual semi-structured interviews were undertaken by senior managers and academics. Peer scrutiny on processes associated with this study was conducted by two PhD research supervisors with expert knowledge in allied health education and rural and remote primary health care.</td>
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<tr>
<td>12.</td>
<td>Thick description. The researcher has endeavoured to provide thick description throughout this thesis. Direct quotes from participants have been used in all publications of study findings and in the conceptual framework chapter.</td>
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</table>
2.15.2 Transferability

Transferability relates to whether or not specific findings from a study can be transferred to similar contexts or situations (Tobin and Begley 2004). It can be demonstrated through the use of thick description (Patton 2002); that is, the use of direct quotations from participants to document and describe their feelings, experiences and thoughts about an event and its meaning to them at a personal level. Readers can then make informed decisions in relation to the transferability of findings to their own specific contexts and situations (Lincoln and Guba 1985). Transferability is achieved in the current study through the researcher providing sufficient information about themselves, that is, stating the position of the researcher in the study (see introductory section and Section 2.5.4); the research context (see Chapter 1); and the use of thick description in the papers presented in this thesis to ensure the authenticity of the descriptions of participants’ experiences and the potential transferability of study findings to other situations. The construction of the conceptual framework presented in Chapter 4 also supports the potential process of transferability of key concepts and associated components for informing health sector engagement with rural and remote communities based on the synthesis of study findings.

2.15.3 Dependability

Dependability refers to the transparency of data collection, analysis and interpretation that occurred in order to reach the identified conclusions (Merriam 1998). It relates to the provision of logical, traceable and clearly documented processes associated with undertaking qualitative research. Dependability is demonstrated through audit trails that enable others to examine the researchers’ documentation of data, methods used, decisions made and findings delivered (Seale 1999). Central to the audit trail is reflexivity, the researcher’s approach to maintaining a self-critical account of the research process, including their internal and external dialogue (Tobin and Begley 2004).

The following processes were employed in this study to support the transparency of data collection, analysis and interpretation. Data collection was undertaken by an independent qualitative researcher who was not directly engaged in the partnership or
program. Data analysis stages were undertaken using a constant comparative analysis (CCA) approach and informed by previous studies that had adopted this approach (Fram 2013, Boelje 2002). In addition, a clear and transparent record was maintained of the hand coding process and the stages of data comparison. The interpretation of data was critically appraised and verified by my co-researchers, an expert qualitative researcher with a depth of experience in allied health professional education and an expert researcher in the area of rural and remote primary health care, with these expert researchers being my doctoral supervisors. The trustworthiness of the analysis was further enhanced by using several checking processes: recording and verbatim transcription of focus group and individual interview data; checking of transcripts against the recordings to ensure accurate transcription; and member checking of individual interview transcripts (Creswell 2007).

My reflexivity is evidenced in the positioning of myself within the study, the provision of information on my connections to the phenomenon and study participants, and the ongoing reflexivity applied during all stages of data comparison and interpretation (see Section 2.13).

2.15.4 Confirmability

Confirmability refers to the objectivity of the researcher in conducting the research and interpreting the findings. It relates to data interpretation and study findings and seeks to ensure that these critical processes and outcomes are not 'figments of the inquirers' imagination, but are clearly derived from the data' (Tobin and Begley 2004, p. 392). However, Gasson (2004) identified that research is never objective and that in qualitative studies, '[f]indings should represent, as far as is (humanly) possible, the situation being researched rather than the beliefs, pet theories, or biases of the researcher' (p. 93): researcher reflexivity is critical in mitigating these concerns.

Morrow (2005) stated that the integrity of qualitative findings resides within the data and that the researcher must tie together the data, stages of analysis and the findings so readers can confirm the 'adequacy' of these findings. Lincoln and Guba (1985) specified that the establishment of an audit trail, a record that enables others to track the process that has led to the interpretation of findings, is a key approach to ensuring
confirmability. Ulin et al. (2005) identified six categories of information that contribute to a good audit trail. These six categories and how they have been addressed in the current study are as follows:

1. Maintenance of raw data – Voice recordings and copies of un-coded transcripts have been maintained throughout this study;

2. Data reduction and analysis products – A list of codes has been maintained on hard-copy transcripts and documents;

3. Data reconstruction and synthesis products – Peer-reviewed publications describing key themes and their relationships;

4. Process notes – Maintenance of methodological notes, memo writing, researcher reflexivity and questioning, and maintenance of audit notes;

5. Materials relating to intentions and dispositions – Study protocol approved by two formal ethics committees, maintenance of personal notes relating to the study, motives for undertaking the study and expectations of the study (described in detail in the introductory section and the current chapter);

6. Instrument development information – Interview and focus group schedules of questions developed for the study, both generic and nuanced; in addition, an ethical approach to data collection was employed.

2.16 Chapter Summary

As qualitative inquiry is an iterative process, findings from this study have informed the further exploration of a breadth of literature in an endeavour to describe, interpret and portray these findings as accurately as possible. This process has resulted in the production of five papers on study findings that are presented in Chapter 3 and Chapter 4 of this thesis that have been published or are in review.

A conceptual framework chapter, Chapter 4, has also been produced that integrates community and campus perspectives, including those perspectives that offered unique insights into the phenomenon. This conceptual framework chapter has been informed
by study findings and the further exploration of existing theories and principles within the literature. The framework seeks to inform how health and higher education sectors engage with rural and remote Australian communities in the design of their health services and the development of their health workforce. Chapter 3 now presents the study findings, with this followed by Chapter 4 which focuses on the conceptual framework.
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CHAPTER 3

FINDINGS

3.1 Introduction

In this chapter, four papers are presented that describe the diversity of community and campus findings acquired through Stage 3 of data comparison, within community and campus groups. These papers have been published in national and international peer-reviewed journals. Table 3.1 provides a concise overview of each paper including: the status of the paper, focus of the paper and the paper's key findings. Each paper is then introduced. This introduction describes: how the publication is located within this thesis; what the publication adds to the literature; and implications of these findings. The papers, in journal format, are then presented.
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<th>Status</th>
<th>Participant Group</th>
<th>Focus</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Published 2016.</td>
<td>Community. School principals and senior managers from local facilitating agencies.</td>
<td>This paper explores the conditions and catalysts that influenced community participation in the partnership and program. Impacts of this participation, as perceived by community participants, are also described.</td>
<td>Conditions that contribute to rural and remote health inequities and disadvantages, i.e. geographical isolation, lower socio-economic status of populations, health service inaccessibility and workforce shortages were identified as influencing community participation. The catalysts of community perceptions of health sector failures to respond to their identified health needs and existing internal relationships and external networks were identified as participation catalysts. Community participants described the direct impacts of their participation as: their role in initiating the partnership, the importance of their involvement in program design and delivery, program adaptability to community feedback, partnership commitment, service and relationship consistency, acceptability of the service, and investment in health workforce development. These findings challenge both deficit perceptions of community and academic privilege within health partnerships.</td>
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<td>Status</td>
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<tr>
<td>Published</td>
<td>Campus: Allied health students and academics.</td>
<td>This paper explores campus perspectives of the conditions and catalysts that influenced student and academic participation in the partnership and program. Civic impacts of participation are described.</td>
<td>Campus participants described the following as conditions that influenced their participation: a desire for rural and remote exposure, an academic interest in service equity and indirect experiences of inequity. University-led allocations of students to the program and student self-selection for the program were identified as catalysts for student participation. Civic impacts on campus participants included: the acquisition of local community knowledge and experiences of inequity, deep insight into community connectedness and relationships, the importance of professional credibility, and continuity of engagement and service. Professional satisfaction, faculty pride, and enhanced service and learning outcomes were described. Based on these findings, I proposed a new concept, that of ‘being community literate’, as necessary in ensuring responsive rural and remote health care.</td>
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<tr>
<th>Status</th>
<th>Participant Group</th>
<th>Focus</th>
<th>Findings</th>
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<tr>
<td>Published</td>
<td>Campus: Allied health students and academics</td>
<td>This paper explores campus perceptions on the clinical and professional impacts of participation in the service-learning program on student acquisition of work-readiness attributes and perceptions of future employability.</td>
<td>Students described a lack of preparedness for participation in a service-learning program and the capacity to undertake semi-autonomous practice. Students described their previous placement experiences as being in the ‘shadows’ or ‘shadowing’ others. Through their participation in the service-learning program, students reported enhanced insights into the diverse relationships associated with the program and its provision of services. Enhanced work-readiness attributes were described, such as planning and organisation, clinical reasoning, self-confidence and teamwork. Campus participants also described perceptions of enhanced prospects for the future employability of participating students due to their perceptions of these enhanced work-readiness attributes and their knowledge of previous student participant employment outcomes.</td>
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<tr>
<td>Status</td>
<td>Participant Group</td>
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</tr>
<tr>
<td>Published.</td>
<td>Campus: Allied health students and academics.</td>
<td>This paper explores campus perceptions on the impact of participation in the service-learning program on the inter-professional knowledge, skills and practices of participating allied health students.</td>
<td>Participating students described that they had no previous inter-professional practice exposure or no or limited exposure to health care delivery that enhanced their understanding of inter-professional teamwork practices. Participants described the multi-modality supervision models employed in the program and the expectations of inter-professional teamwork as enhancing their knowledge, skills and capacity for inter-professional practice. The program structure was identified as supporting inter-professional service provision across the school year through the establishment of an inter-professional student ‘team continuum’ model. Direct episodes of inter-professional service provision and translation and utilisation of inter-professional skills into practice were described.</td>
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</table>
3.2 Introduction to Paper 2: ‘Challenging Remote Community Deficit Perspectives: An Australian insight into the role of these communities in the design of their health services and the development of their health workforce’

Jones, D, McAllister, L and Lyle, D 2016, Challenging Remote Community Deficit Perspectives: An Australian insight into the role of these communities in the design of their health services and the development of their health workforce, *International Journal of Practice-based Learning in Health and Social Care*, vol. 4, no. 2, pp. 19-34.

*How this paper is located in the thesis:*

The community-campus partnership and service-learning literature is criticised for the lack of evidence describing who initiates these partnerships and for what purposes, the community impacts of partnership and program participation and, more specifically, evidence that is informed by community perspectives and experiences. The lack of evidence on partnership initiation and community-informed impacts raises concerns that are associated with community choice to participate in these partnerships; the inequitable distribution of power between community and campus partners; and the privileging of campus objectives and outcomes of these partnerships and service-learning programs.

This paper addresses the question of who initiated the community-campus partnership and explores the conditions and catalysts that influenced community participation as well as the perceived civic benefits of participation in the partnership and service-learning program from the perspective of community partners, school principals and senior managers from local facilitating agencies. This paper addresses my first two research goals: 1) to describe and understand the formation of the community-campus partnership; and 2) to describe and understand the development and adaptation of the service-learning program (with both [1] and [2] from the perspectives of community participants), and my research questions of: 1) what factors contributed to the initiation, formation and participation of community and campus partners in the community-campus partnership and associated service-learning program; and 2) what were the impacts of participation in the partnership and program for community and
campus participants and the civic and higher education sectors in which they were located (with both [1] and [2] from the perspectives of community participants).

**What this paper adds to the literature:**
This paper addresses significant gaps in the international and national community-campus partnership and service-learning literature and evidence, more specifically from community and rural and remote Australian perspectives. The importance of conditions and catalysts that act to promote community engagement in health partnerships and service design; community feedback in informing the adaptation of the service and learning components of the program; perceptions of enhanced service accessibility and acceptability of the location of service (school sites); service and relationship consistency; and community investments and commitments to the development of a potential rural and remote allied health workforce were identified as the civic impacts of community participation.

**Implications of findings:**
Proponents of community-campus partnerships identify the need for the health sector to reform traditional approaches to health service design and workforce development to ensure services and health care delivery are informed by community experiences and perspectives. The findings presented in this paper provide valuable insights into the conditions and catalysts that influence community participation in health partnerships and the capacity of rural and remote Australian communities to initiate these partnerships to address their protracted health inequities and health workforce shortages. This paper informs us that rural and remote community members have a choice of who they will engage with in their health agendas and who can provide feedback that directly informs and reforms how health services are designed and delivered. These findings challenge perceptions of rural and remote community disempowerment and academic privilege within community-campus partnerships and service-learning programs. The "litmus test" for the health sector may be whether they have the capacity to effectively interpret and respond to community voices, needs and expectations, and whether they have the ability to commit to long-term and sustainable services and relationships. Collective needs can be addressed and
services sustained through the meaningful engagement of rural and remote
community members in the design of their health services and the development of
their health workforce.
3.2.1 Faculty of Health Sciences – Author Contribution Statement

Faculty of Health Sciences
Author Contribution Statement

Candidate Name: Debra. Maria. Jones

Degree Title: Doctor of Philosophy

Paper: Jones, D, McAllister, L and Lyle, D, 2016, ‘Challenging Remote Community Deficit Perspectives: An Australian Insight into the Role of These Communities in the Design of Their Health Services and the Development of Their Health Workforce’, International Journal of Practice-based Learning in Health and Social Care, vol 4, no. 2, pp. 19-34

As a co-author of the above paper, I confirm that the above candidate has made the following contributions to the above paper:

- Conception and design of the research
- Analysis and interpretation of the findings
- Writing the paper and critical appraisal of content

Professor Lindy McAllister:

Signed:  
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Challenging Remote Community Deficit
Perspectives: An Australian Insight into the Role
of These Communities in the Design of Their
Health Services and the Development of Their
Health Workforce

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Abstract
This article reports on findings from a qualitative study that explored the formation of a
community-campus partnership, development and delivery of an allied health practice-based
service-learning program, and impacts of partnership and program participation for community
and campus participants. The partnership sought to address a prolonged lack of access to
allied health services for children residing in remote Australia. The program aligned
occupational therapy and speech pathology student placements to the provision of allied health
services to these children. Community participants – school principals and senior managers
from local facilitating agencies, and campus participants – allied health students and academics
were allocated to focus groups, school principals (n = 7) and allied health students (n = 10), and
individual semi-structured interviews, senior managers (n = 2) and academics (n = 2). A
constant comparative analysis method was used to analyse data. This article describes
community perspectives of partnership initiatives, catalysts for participation, and participation
impacts. The role of community partners in initiating the partnership was described and
conditions associated with remote contexts and health sector failures were identified catalysts.
Service and training adaptation, partnership commitment and service consistency, service
acceptability and accessibility, and community investment in remote health workforce
development were identified impacts. This article addresses significant gaps in the national and
international practice-based service-learning literature, specifically from community and remote
perspectives. Study limitations are discussed and implications for how community-campus
partnerships are formed and service-learning programs are sustained in remote contexts are
explored.

Keywords: allied health; community-campus partnerships; practice-based service-
learning; qualitative; remote Australia

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Introduction

Globally, remote communities confront challenges in accessing health services and workforce sustainability (Gleeson 2009, World Health Organization (WHO) 2011). Whilst acknowledging this global significance, this qualitative article focuses on the health inequities confronting children residing in remote New South Wales (NSW), Australia. These children are geographically isolated, can be exposed to socio-economic disadvantages that restrict access to health services, and experience poorer educational outcomes due to limited pre-school engagement and primary school attendance, acknowledged precursors that contribute to developmental vulnerability and delay (Australian Institute of Health and Welfare (AIHW) 2009, Council of Australian Governments (COAG) 2008, Standing Council on Health (SCH) 2013).

These children are also less likely to have access to allied health services to prevent, identify or address these delays due to protracted health workforce shortages across allied health disciplines (Health Workforce Australia (HWAA) 2013, Jones et al. 2014, Spence and Harris 2014). A failure to intervene early can have detrimental impacts on the later life outcomes of these children. The HWAA (2013: 51) stated that ‘[c]hildren who enter school not yet ready for school-based learning have lower levels of academic achievement, and are at an increased risk of teenage parenthood, mental health problems, committing criminal activity and poorer employment outcomes’, as reflected in this region.

Internationally, school-based health services can be provided through agreements between health and school authorities (Bryce et al. 2007), with this approach reflected in some Australian states (Queensland Government Department of Education and Training 2009, Victoria State Government (Education and Training) 2015). However, there is limited policy and practice within NSW that reflects similar approaches to health care delivery. Significant investments are made in the early years of development, 0-5 years, yet, children residing in remote NSW can enter into school education experiencing developmental delays (NSW Department of Education (DEECD) 2019). The protracted nature of remote allied health workforce shortages, service inequities, unaddressed childhood delays, and limited evidence for effective solutions to address these challenges continues. Alternative approaches to health service design and workforce development are required. This necessitates strategies that ensure community perspectives and experiences inform the identification of health needs, implementation of localised solutions, and the provision of educational opportunities that support the development of responsive health professionals. This pragmatic-qualitative study has sought to explore the experiences of one remote Australian region in the development of a localised solution to address protracted allied health service inequities through the formation of a community-campus partnership and development of an associated service-learning program.

Community-campus partnerships and service-learning

Community-campus partnerships and practice-based service-learning strategies have been implemented internationally to address health inequities experienced by such underserved populations (Klabenfany and Westra 2008, Jacoby 2003, Sessa, Grabowski, and Szabadi 2003). Community benefits associated with partnership participation include enhanced access to academic expertise, human, and social capital located within universities (Jacoby 2003). Hallmarks of effective partnerships include a focus on community assets, the development of cross-cutting strategies, mitigation of practices that privilege institutional partners, and sustainable engagement (Kesterman et al. 2003). However, Cruz and Giles (2008) identified policies, institutional, structural, professional and power barriers in the identification of community informed benefits. Furthermore, Glover and Silka (2013) raised concerns about a lack of exploration into who initiates these partnerships, for what purposes partnerships are created, a potential lack of community choice in participation, inequitable distribution of power between partners, and academically driven partnership objectives. Additional research has been called for to explore community perspectives and experiences of partnership initiation and participation (Bulun 2010, Cruz and Giles 2008, Glover and Silka 2013).
Community-campus partnerships underpin the development of service-learning strategies (Gunty and Holbrook 2009). A service-learning approach to experiential learning links theoretical knowledge acquired within curricula to knowledge application in ‘real world’ settings (Crashman and Setzer 2009). Service-learning goals go beyond addressing the needs of individual students by focusing on civic engagement as a conduit to learning attainment. This engagement enables students to participate in learning that can include ill-defined problems that occur within community. Service-learning is intrinsically linked to community engagement and contribution to student learning, reciprocity and mutual benefit (Jarvis 2008). However, there is little evidence that service learning provides substantive and long-term solutions to communities (Burin 2010; Cruz and Giles 2006; Silver and Silk 2019).

Community-campus partnerships and service-learning are emerging strategies across Australian health and higher education sectors (Jones et al. 2015, Mason 2013, Hambrooke 2013) and there is limited research that describes who initiates these partnerships, how service-learning programs are sustained, and the impacts of partnership and program participation, specifically from remote community perspectives. This article explores the initiation of a remote Australian community-campus partnership, catalysts that contributed to partnership participation and service-learning program development, and participation impacts from the perspectives of community partners. The partnership sought to address the protracted lack of access to allied health services for children residing in far west NSW, and the program aligned allied health students’ (occupational therapy (OT) and speech pathology (SP)) placement experiences with the provision of services to address these unmet needs. This article responds to the lack of evidence informed by community perspectives on who initiated the partnership, impacts of participation, service-learning program sustainability and contribution to substantive solutions, addressing significant knowledge gaps and contributing new insights to international and emerging Australian community-campus partnership and service-learning literature.

The remote Australian context

The community-campus partnership and service-learning program described in this article were established in 2009 and were informed by existing community-campus partnership and service-learning evidence (Olmos and Hather 2009, Jacoby 2003, Jones, McAlister, and Lisle 2013). This evidence was then adapted to ensure service responsiveness to community contexts and the learning requirements of Australian allied health students (Olmos and Silk 2013, 40) identify the importance of “attending to the specificity of place in crafting sustainable partnerships”. In our case, this involved a number of onsite meetings between community partners and an external university partner. The partnership is governed by health – a local health district of the NSW Ministry of Health, far west NSW school education – NSWR Department of Education, a University Department of Rural Health (the Broken Hill UDRH), and an external university faculty, the University of Sydney Faculty of Health Sciences. Partners collaboratively developed an allied health service-learning program. The program aligned senior OT and SP students’ learning to the provision of allied health services to school-aged children. Services are now provided across three regional communities and twelve school campuses. Six SP and four OT students undertake an inter-professional service-learning (Clark et al. 2013) placement for periods of six to eight weeks across the four school terms. This created a student ‘team continuum’ (Jones, McAlister, and Lisle 2013) to enhance service continuity. Approximately 150 regional children accessed these services annually.

Ethics approval

Low risk ethics approval was granted through The University of Sydney Human Research Ethics Committee (approval number 2014/278), NSW Department of Education and Communities (NSW DEC) (SERAP approval number 20141117), Catholic Education Office, and La Trobe University (written approval).
Research goals and questions

This study had two primary goals: 1) to document and describe the formation of the community-campus partnership, the development and adaptation of the service-learning program from the perspectives of community and campus participants, and 2) to develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants. As this study was concerned with comparing community and campus perspectives a set of generic questions were asked of all participants:

- What influenced your participation in the partnership program?
- What do you think the partnership program hopes to achieve?
- What impact did your participation in the partnership program have on you?
- How would you describe the partnership program to your peers?

Methodology

This pragmatic qualitative study (Gardners, 2000; Smith, Bunker, and Cleaver, 2011) did not seek to view the world in terms of absolutes and was not committed to one philosophy of understanding. The methods drawn on were those considered best suited to obtaining, analysing and interpreting the data (Morgan, 2014). This study was intentionally designed to explore and gain a deeper level of understanding of community and campus participants’ experiences and relationships.

Participants

Potential community participants:

- School principals (n = 12), representing all school campuses engaged in the program;
- Senior managers from local facilitating agencies, school education and the UDHR (n = 2).

Potential campus participants:

- Allied health students (n = 16) undertaking their placement in the program in one school term in 2014;
- Allied health academics (n = 2), one with direct student supervision responsibility and one with a strategic program role at the external university.

Seven school principals, both senior managers, all allied health students, and both academics consented to participate in the study.

Data collection and analysis

Focus groups (FGs) were used with school principals and allied health students, and individual semi-structured interviews with senior managers and allied health academics. Both methods were used to support the pragmatic responsiveness of the study – enabling participants allocated to focus groups to participate in individual interviews to avoid their experiences being lost to the study, as was the case with one school principal; the parallel use of data to enable data comparison – an approach to data triangulation that has the potential to provide deep insight into shared patterns and differences of experience (Gubrium et al., 2007); and our desire for data completeness (Lambert and Losch, 2006-2007) stated that:

When seeking data completeness, it is assumed that each method reveals different parts of the phenomenon of interest (complimentary views) and contributes to a
more comprehensive understanding (expanding the breadth and/or depth of the findings).

FGIs and individual interviews were digitally recorded and transcribed manually (Coyote and Gupta 2019). Participants were de-identified by school, community, position and discipline. Individual interview participants were informed of challenges in guaranteeing their confidentiality, and were provided with transcript copies to determine if there was a need to modify their own words (Coyote 2019); no modifications were requested.

Data was analysed using a constant comparative analysis method (Binnie 2002, From 2013). Four stages of analysis were conducted: (1) comparison within single transcripts, (2) comparison within group transcripts (principal, senior manager, allied health student and academic groups), (3) comparison within community and campus group transcripts (principals and senior managers; allied health students and academics), and (4) comparison across community and campus transcripts. Three researchers independently reviewed a selection of campus transcripts, coded and categorised data, and identified emerging themes. All of the researchers reviewed and re-analysed results in order to refine descriptions of themes (Coyote 2017). The remaining transcripts were then analysed by Debra Jones (author).

Results and discussion

This article presents the community findings associated with partnership initiation, catalysts for participation, and participation impacts, identified through Stage 3 of data analyses. Other findings, such as campus and student impacts of participation have been presented elsewhere (Jones, McAlester and Lye 2015a; Jones, McAlester and Lye 2015b; Jones, McAlester and Lye in Press).

Initiating the partnership

The University Manager (UDRM), a self-identified intergenerational community member, provided insight into the circumstances that contributed to partnership initiation:

We were going into our high schools providing tutorial support. The principals informed us that high school may not be the best place to start, that we needed to step back and look at how we could address the needs of younger children who couldn’t access allied health services. The principals highlighted developmental issues as the main cause for children disengaging from education.

A long-term principal described their perspective of partnership formation and initial program discussions:

We had a long-term frustration across the schools around the inability of health sectors to provide services for children with delays. This partnership was pretty much let’s try it and see what happens. We didn’t know particularly where it would end but we made a start. (FD: Principal 1)

Another long-term principal described their perception of who initiated the partnership:

I’d describe the partnership as something that came about from a locally identified need. As a group of principals we saw that there was a need and we all came up with a model that might work for us. (P:1)

The School Manager provided their insight into partnership initiation:

It evolved from conversations between the principals and the UDRM. The potential partnership was discussed at a meeting and everyone was unanimous about

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participating, what other choice did we have? But it turned out to be a real local-solutions approach.

The question of who initiates community-campus partnerships is one of importance but rarely identified in the literature. Oliver and Sika (2019: 49) stated that a “failure to devote attention to the question of who starts the partnership ignores important relational dynamics that may actually undermine the stated goals of mutuality, equality and reciprocity.” Much of the community-campus partnership literature is focused on university engagement with underserved communities, and the question of who initiates the partnership is of importance specifically when this literature is heavily criticized for biasing the needs of institutional partners over those of communities (Bluth 2010; Cuc, and Sikes 2009; Epple, Guarnieri, and Malloy 1988). It stated that these partnerships can be high risk endeavors where communities can be viewed as “pockets of need, laboratories for experimentation, or passive recipients of expertise.” Furthermore, remote Australian communities can be viewed from an existing deficit perspective. Bound et al. (2010: 205) stated “[that] despite the very best of intentions, the persistence of identifying ‘remote community’ problems contributes to outsider understanding rural and remote health as inherently problematic. Undoubtedly, the prevailing deficit approach has been used successfully by many stakeholders in their political quest to gain more resources.” The findings from this study answer the “why” question posed by Oliver and Sika (2019) and challenge deficit perspectives of remote communities with community partners describing their leading role in partnership initiation and solutions identification.

Catalysts for community participation

The remote context

Features associated with remote contexts were identified as influencing community participation. The impact of geographical isolation, lower socio-economic status, protracted allied health workforce shortages, and resultant service inaccessibility were described:

My friends had to travel three hours to get allied health services. Whilst they had the financial and transport means to do that a lot of families in this community don’t. The children who are in most need of these services can’t afford to access services. (FG1: Principal 3)

For a lot of parents in this community they didn’t have an understanding of what allied health professionals could actually offer. Community knowledge of what they could contribute to support children was something they had no concept of. These professionals weren’t visible or accessible in our community. (FG2: Principal 2)

The University Manager provided insight into their direct experience of allied health service inequity:

I was a parent that had to travel to get any sort of allied health support. My child desperately needed a program like this and I lived that lack of access to services for years and years. We lived this ourselves as children, allied health services weren’t available to us when we were growing up.

The Australian (2012: 18) stated that “[i]n the combined impact of fewer resources, poorer access to services, limited availability of key health professionals, poorer health status, lower socioeconomic status, distance and travel mean that rural and remote communities and the health challenges they face are significantly different from those confronted by metropolitan Australians.” We propose that these features can also contribute to ethical dilemmas. An increasing emphasis is being placed on enhancing community health literacy as a means of reducing health disparities and increasing service equity. The Australian National Statement on Health Literacy (Australian Commission on Safety and Quality in Health Care 2014-67) proposes that local health sectors should “[p]rovide education programs for consumers
aimed at developing health knowledge and skills, to enhance the, ‘motivation and capacity of a person to access, understand and apply information to make effective decisions about health and health care.’ Whilst seeking to improve community health literacy limited attention is paid to the implications of enhancing community knowledge of health services in the continuing absence of the health professionals required to address remote health needs. These potential ethical dilemmas need to be taken into consideration, necessitating remote representation in policy and practice development.

**Health sector failures**

Perceptions of health sector failures to respond to community identified needs, appear to have been a significant catalyst for partnership participation:

We have a number of different health services in this community, many different services to be honest. But there was just a glaring gap with allied health services. While schools were identifying developmental issues with children and making referrals the services were just not following these up. (FG1: Principal 3)

Community members are loath to get on a waiting list. It’s another barrier to them seeking support. Children get referred to services and the momentum gets lost because of the waiting times. Appointments get missed and the child ultimately suffers. It’s not that the parents don’t want to take up services but the delays, transport, and socio-economic status make it more problematic. (FG2: Principal 2)

The Australian Charter of Healthcare Rights (Australian Commission on Safety and Quality in Health Care, 2009) stated that access to healthcare is a fundamental right for every Australian. However, children residing in remote communities are at greater risk of experiencing developmental delays (NSW DEC, 2013) and are less likely to have access to allied health services to address these delays (WA DEC, 2013, NSW DEC, 2013, Gipson et al., 2011; Gibson et al., 2011) and stated that “[t]here are examples of health systems that fail to apply their expertise to address the social determinants of health; institutionalize health care arrangements that create financial and geographic barriers to access for disadvantaged groups.” (Gibson et al., 2011; Gibson et al., 2011) identify health sector failures as catalysts in partnership formation. Although not an acknowledged catalyst for partnership formation (Brown, Crosby, and Stone, 2009), we propose that direct and indirect experiences of service inequities can act to influence the formation of remote health partnerships. Furthermore, Brown, Crosby, and Stone (2009) 46 stated that “[w]e can live with the problem, engage in symbolic action that does little to address the problem, or mobilize collective action to fashion a cross-sector-solution”, in this instance the development of an allied health service-learning program.

**Community impacts of participation**

**Adaptation of service and learning components**

Processes employed to support program adaptation and continuous improvement were described:

We’re always having discussions about how we can make the program better. It’s not just ‘here a program is’ and leave it alone. It’s a constant evaluation. (FG1: Principal 4)

The academics have been around a while now and we’ve got that constant feedback. We’re doing things now that we weren’t in the beginning. Because of that feedback there is a smooth transition between student cohorts and how they are prepared for program participation. The lessons learnt from the previous cohorts quickly impact on the next cohort. (FG1: Principal 3)
A principal compared this aspect of adaptation with other service approaches:

> Other agencies come in, deliver what they want and it meets their needs. Why would you want to work with them? We have adapted and expanded on this model to best meet the needs of our children and the results speak for themselves. (Principal 1)

Despite principal receptiveness to adaptation, the School Manager voiced concerns with a lack of program uniformity across school campuses:

> We’ve been delivering the program for a while now. We should have fine-tuned it to a point where every school is working consistently.

The engagement of communities in knowledge production to inform service-learning activities is an important feature of sustainable community-campus partnerships and service-learning initiatives (Duijts 2010; Sandy and Holland 2009). However, this co-production is dependent on health and university sector receptiveness to community input (Garcia 2004). In achieving knowledge co-production, there is a need to transition relationships between health, universities and communities from ones that are transactional “designed to complete a task with no greater plan or promise” to transformational relationships, those that are receptive to “[d]eeper and more sustained commitments” (Coops and Morton 2011: 24). Duijts et al. (2008: 42) informed us that community-led adaptation can “[p]rofoundly disturb many fundamental constructs that have long informed professional identity, defined and differentiated expert knowledge from lay knowledge and shaped the roles and rules that typically govern the ways in which health professionals and health consumers interact.” Whilst we acknowledge a desire for standardisation, study findings suggest that service acceptability and sustainability was enhanced by program adaptation that was informed by community experiences and feedback.

**Partnership commitment and service consistency**

The importance of community commitment to the partnership was evidenced when there was a failure by the university to meet their commitments in the early stages of program implementation:

> After the first student cohort, the university was unable to provide us with a second cohort of students. We were devastated about making promises that we couldn’t keep. We learnt a lot from that experience, from working through this with the principals and university. I think this experience contributed to the success of the program. (University Manager)

Programs are sustainable as long as there is that shared commitment. You’re going to hit some hurdles along the way and you’ve got to work through them. Our principals definitely wanted this program to succeed and they weren’t going to throw the towel in because we hit some hurdles. (School Manager)

A principal compared their experiences of other health relationships and service inconsistency, with the program:

> Other health services and staff are always changing. This service is extremely consistent and we’ve always needed that consistency, that opportunity to build those relationships. (FG1 Principal 3)

The School Manager expressed their concerns about future relationship consistency and implications for program sustainability:

> My greatest fear is that we have key drivers who champion the program. I worry that if these drivers leave that the program would become vulnerable. We have to identify our future leaders and build their capacity to ensure this program is secure.
Transferring the theory of partnerships to the practical application of partnering can be challenging. Health and higher education sectors need to consider their capacity to commit to long-term service consistency and partnerships prior to implementing services and engagement strategies. King and Morton (2003) stated that, for partnerships to be successful, partners need to remain in relationships despite obstacles and challenges that inevitably arise. However, remote locations can experience high levels of relationship and service inconsistencies influenced by political, policy and funding decisions and high turnover of professional staff. Previous experiences of relationship and service inconsistencies may have significantly contributed to a community focus on the importance of these features. Community-campus partnership and service-learning literature describes the need to invest in sustainable relationships (Candy and Holland 2006), yet less emphasis is placed on the importance of service consistency, a characteristic that may be of significance in sustaining partnerships and programs in remote contexts.

**Service acceptability and accessibility**

School principals reflected on their perception of service accessibility and program acceptability:

> Our parental consent rate for the program is 100%. Parents know about the program. Parents who have been reluctant to go out of town for allied health services are on board with what the school is trying to achieve. They are more inclined to take our phone calls because they know we are supporting their children. (FG1: Principal 3)

The acceptability of service location, school campuses, and location impact on enhanced service accessibility were described:

> Even if allied health services from the other agencies were to come to this community I don’t think some of our parents would access those services if they were based at the health service. This program takes that burden off parents. It’s embedded into everything that we do in our school. Because of the way the program operates the students are in our classroom environment and all of the children get the benefit of this program. (FG1: Principal 2)

The University Manager described the importance of local leadership in ensuring program acceptability:

> It’s not about external agencies being the guiding light. This initiative was grown locally, local people have ownership of it, are connected and invested in ensuring it succeeds. The power and knowledge exists within the community. External agencies that have the most success are ones that sit alongside rather than on top of communities. (University Manager)

The Australian National Health and Hospitals Reform Commission (NHRC) (2009:122) identified that “consumers should not only be the focus of the health system, they should be at the centre of decision-making in health.” Health Workforce Australia (HWA) (2013) stated that a commensurate effort in remote health workforce development and reform was required. A failure to reform has the potential to result in a worsening divide in access to health services; a failure to impact on the quality of life of remote Australians; consumer avoidance or rejection of care; and higher cost burdens to health care systems, individuals and communities. Findings from this study provide important insights into the capacity of remote communities to contribute to the design of acceptable health services and workforce development strategies that can enhance service accessibility and sustainability.
**Community investment in health workforce development**

Participants described their role in supporting the development and educational outcomes of participating allied health students. The potential impact of this investment on remote practice post-graduation was identified:

> Hopefully some of these students will come back as permanent health staff because they’ve had such a positive learning experience with us. They’re made to feel like a part of the school community. I would hope that some of them will say, ‘That’s actually a really good option for me when I graduate’. That would be wonderful for our community. (FG1: Principal 3)

Even though the students may not be from this community, if we can get these students interested in coming to rural communities to practice then school education are doing our bit. (School Manager)

The University Manager discussed how the program was designed to better align to community expectations:

> The program has been designed with community, for community, and to support students in internships themselves into the community. It helps them understand what it’s like to live and work in a rural location, to show that rural practice is not isolating, that you can have a thriving professional career here.

The provision of remote practice experiences is a key strategy in addressing health workforce shortages. However, *Bozza and Harris (2015)* described barriers to the provision of these experiences for allied health students, including an undersupply of allied health placements, lack of adequate supervision, student isolation from peers and learning resources, and lack of placement coordination. Prior to the establishment of this partnership and program, no pediatric OP student placements had occurred in the region in the preceding 15 years with minimal OT student placements. Following the inception of the program, 70 OT and 170 SP students have now been provided with a remote practice experience. Study findings suggest that student learning outcomes may be equivalent to, if not greater than, those achieved in metropolitan and traditional hospital settings. *Jones, McAlister, and Lyle 2015a, Jones, McAlister, and Lyle 2015b.* Community partners have played a critical role in expanding placement capacity, providing onsite education and supervision, and the coordination of student placements through the UDRH. We acknowledge that not all remote locations have access to the academic, educational and infrastructure resources associated with UDRH, and this may have direct implications for the transferability of these partnerships and programs. However, UDRH footprints are expanding and this may provide greater opportunities for other remote communities to engage in health service design and workforce development.

The findings from this study highlight the capacity of remote communities to inform how their health services are designed and a potential future remote health workforce developed. These findings challenge 'deficit' perspectives that can influence the development of remote health policies and practices and marginalise community perspectives and experiences. Health and higher education sectors need to have a greater level of responsibility to locally developed and led health innovations, and student education that may challenge traditional supervision and training models. These findings have international and national significance for other remote communities that may be seeking alternative approaches to their engagement in their health care agendas.

**Limitations**

Exploring the service impact for children and their families was beyond the scope of this study and additional research is required. Impact of participation on allied health student preference
for remote practice post-graduation was beyond the scope of this study. As this study explores the experiences of one remote Australian region, findings should be generalized with caution. However, the partnership and program described in this study have been adapted for implementation in other remote contexts, and evaluations of these affiliated programs are currently being conducted.

Conclusion

Through the effective engagement of communities in the design of their health services and the development of their health workforce, collective needs can be addressed. The findings presented in this article provide valuable insights into the capacity of remote Australian communities to initiate health partnerships that seek to address their protracted health inequalities and health workforce shortages. The “triumphs” for health and higher education sectors may be whether they have the capacity to respond to remote community voices, and the ability to commit to long-term and sustainable services and relationships that address community-identified needs and expectations. These findings address significant knowledge gaps in the international and national community-campus partnership and service-learning literature. We propose that community perspectives on partnership initiation and ongoing engagement contributed to substantive and long-term solutions being afforded to children residing in this remote region. Based on study findings, remote communities can lead health partnerships and support the development of programs that may provide viable and sustainable alternatives to addressing their health inequities and workforce shortages.

Acknowledgments

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References


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3.3 Introduction to Paper 3: ‘Community-Based Service-Learning: A rural Australian perspective on student and academic outcomes of participation’


**How this paper is located in the thesis:**

Despite the longevity over several decades of community-campus partnerships and service-learning pedagogies at the international level, these approaches to health partnerships and pre-registration health student education are only just emerging across the Australian health sector. As a result, Australian community-campus partnerships and service-learning programs are heavily informed by international literature and evidence. This paper contributes to the emerging Australian community-campus partnership and service-learning literature through the exploration of campus (allied health academics and students) perspectives of the conditions and catalysts that influenced their participation in the partnership and program and the civic impacts of this participation.

This paper addresses my first two research goals: 1) to describe and understand the formation of the community-campus partnership; and 2) to describe and understand the development and adaptation of the service-learning program (with both [1] and [2] from the perspectives of campus participants), and my research questions of: 1) what factors contributed to the initiation, formation and participation of campus partners in the community-campus partnership and associated service-learning program; 2) what were the impacts of participation in the partnership and program for community and campus participants and the civic and higher education sector in which they were located; and 3) how did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants (with [1], [2] and [3] from the perspectives of campus participants).

**What this paper adds to the literature:**

This paper describes student and academic desire for rural and remote exposure; academic interest in service equity for rural and remote populations; and the role of
universities in the allocation of students to the program (university-led allocation and student self-selection for placements) as conditions and catalysts for their participation. Civic impacts of participation included the acquisition of a depth of understanding of community knowledge and connectedness; the importance of academic and professional credibility within this context; consistency of relationships and service; professional satisfaction and faculty pride; and enhanced service and learning outcomes as participation impacts. Based on study findings, the authors argue for the need to ensure the development of ‘community literate’ health students, academics and practising professionals in the creation of rural-ready and responsive health professionals. This community literate approach needs to inform how the Australian health sector engages with rural and remote communities in the design of their health services and the development of future health professionals.

Implications of findings:

The Australian health sector is well placed to draw on the extensive service-learning literature and evidence that have been generated internationally. However, if the Australian health sector is to seriously consider health partnerships with rural and remote communities and the adoption of service-learning as a valid educational pedagogy, it is imperative that service-learning is contextualised to these locations to ensure the relevance and responsiveness of service and learning components to the diversity of rural and remote Australian contexts and community needs. We need to focus on providing robust evidence for the validity of this pedagogy and avoid the replication of international approaches that can marginalise community perspectives within the partnership and service-learning discourse. In these early stages of community-campus partnership and service-learning evolution, we need to ensure that the voices of community partners are at the forefront of the movement and that their choices inform and reform service and learning activity.
3.3.1 Faculty of Health Sciences – Author Contribution Statement

Faculty of Health Sciences
Author Contribution Statement

Candidate Name: Debra. Maria. Jones

Degree Title: Doctor of Philosophy


As a co-author of the above paper, I confirm that the above candidate has made the following contributions to the above paper:

- Conception and design of the research
- Analysis and interpretation of the findings
- Writing the paper and critical appraisal of content

Professor Lindy McAllister

Signed __________________________ Date 12/12/2016

Professor David Lyle

Signed __________________________ Date 12/12/2016
Community-Based Service-Learning: A Rural Australian Perspective on Student and Academic Outcomes of Participation

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University of Sydney

This article reports on a community-based service-learning program that aligned occupational therapy and speech pathology student learning with service provision in order to address the unmet developmental needs of children residing in rural New South Wales, Australia. The article describes academic outcomes for participating allied health students and academics. A pragmatic qualitative research study was undertaken and a data collected through focus groups with students and individual interviews with academics. Data were analyzed using a constant comparative analysis method. Broad codes were developed and then collapsed into two themes: catalysts for program participation and civic impact of participation.

Based on the study findings, the authors argue for the need to ensure the development of community-literate health students, academics, and practicing professionals if colleges and universities are to create a rural-ready and responsive health workforce. This community-literate approach must inform how Australian higher education institutions engage with rural communities in community-based service-learning initiatives.

Keywords: community-literate, health workforce development, occupational therapy, rural Australia, service-learning, speech pathology, university departments of rural health

Service-learning in pre-registration education is gaining momentum across Australian higher education (Burbeck, 2012; Caspersz, Olana & Sarah, 2012; Coffey & Lavory, 2015; Hammersley, 2012; Langworth, 2007). In rural and remote (referred to as rural throughout this paper) Australia, community-based service-learning models, including community-based interprofessional service-learning models, are being developed by University Departments of Rural Health as an additional approach to hospital-based education for health students (Jones et al., 2015; Mason, 2013). A number of factors have led to the emergence of rural community-based service-learning including: increased demand for traditional and non-traditional placements to meet the educational requirements of greater numbers of health students responding to national health workforce shortages (Health Workforce Australia [HWA], 2013b, Jones et al., 2015; Mason, 2013); the exploration of alternative models that promote positive learning experiences in regional community-based primary healthcare settings (HWA, 2013a) to promote student interest to practice in rural settings post-graduation (Deaville & Grant, 2011; O’Brien, Phillips, & Hubbard, 2010); and the need for better alignment between health education and contemporary rural healthcare practices and community expectations (HWA, 2013a). Standing Council on Health (SCoH), 2013). Community-based service-learning models are underpinned by mutually beneficial and reciprocal outcomes for student learning and community service recipients (Tyler & Gries, 1999; Jacoby, 1996).

Defining and Describing Service-Learning

Service-learning has been an acknowledged pedagogy in the United States for a number of decades (Beatty, 2010) and has been described as “a philosophy of service and learning that occurs in experiences...
reflection, and civic engagement within collaborative relationships involving community partners” (Pfeick, 2011, p. 1). Service-learning provides opportunities for community agencies and education institutions to work collaboratively on initiatives that draw on and contribute to student development of discipline knowledge and technical skills (Lok, 1997; Ziegowski, 1995) through the provision of student services that align with community-identified health needs (Elyer & Giles, 1999; Jacoby, 2003; Sessa, Grabowski, & Shaishdar, 2012).

A diversity of service-learning definitions have been proposed within the literature (e.g., see Cipolle, 2010; Jacoby, 1996). Bringle and Hatcher (2009) defined service-learning as:

A course-based, credit bearing educational experience in which student’s (a) participate in an organized service activity that meets identified community needs and (b) reflect on the service activity in such a way as to gain further understanding of the course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. (p. 38)

Recently, the definition of service-learning has been expanded to include approaches that align service-learning with interprofessional education aims. Clark et al. (2015) stated that “service-learning aims to recognize and respond to societal needs” and that “interprofessional education aims to form teams to meet those needs” (p. 2). For the purposes of this study, the authors adopted Bringle and Hatcher’s (2009) service-learning definition with the addition of interprofessional learning and practice aims, learning that enhances student knowledge and understanding of teamwork to enable discipline-specific and interprofessional practice that draws on student technical skills in team service provision.

A number of beneficial student outcomes have been associated with community-based service-learning initiatives. These benefits include heightened awareness of civic and social responsibility (Kendrick, 1990), increased student desire to be civically engaged (Jacobson et al., 2011), enhanced academic and critical thinking (Austin & Sax, 1998; Elyer & Giles, 1999), development of self-esteem and personal efficacy (Austin & Sax, 1998), and enhanced understanding of community issues (Breen, Heaton, & Wall, 2007). According to the literature, service-learning is intrinsically linked to engagement with communities and their contribution to student learning outcomes (Bringle & Hatcher, 1996; Jacoby, 1996).

Service-Learning and the Australian Context

As an emerging approach to student education in Australia, service-learning initiatives are heavily informed by literature, experience, and evidence from the United States. This creates a number of complications when considering the lack of clarity and a universally accepted definition of service-learning and its objectives (Butia, 2010), limited service-learning experience and evidence to inform higher education strategic and educational frameworks (Birbeck, 2012), and differing educational, historical, and cultural environments (Langworthy, 2007). This article aims to inform Australian higher education’s understanding of, and approaches to, community-based service-learning.

University Departments of Rural Health

A number of university departments of rural health—key stakeholders in rural health workforce development and education (Maun, 2013)—have invested in community-based service-learning models. These models seek to align pre-registration health education for students with service provision that addresses community-identified health needs within their footprint (Jones et al., 2015; Maun, 2013). Selected models have been adopted within rural Australian contexts and have moved students beyond the patient bedside into collaborative work with community agencies. Although university departments of rural health have extended their engagement in service-learning innovation, the strategic success of this program is routinely measured by impacts on student intent to practice in rural settings and whether students take up rural practice post-graduation. Less emphasis has been placed on the learning outcomes
that may be achieved through student engagement with rural communities, student contributions to enhanced service accessibility, and the resultant health outcomes of communities.

The Service-Learning Program

The program at the center of this study, Allied Health in Outback Schools, was initiated in 2009 in response to concerns raised by community leaders, namely primary school principals, about the detrimental educational, health, and social outcomes for children experiencing developmental delays who were unable to access allied health services. Rural Australian communities can experience difficulty in the recruitment and retention of allied health professionals, which has direct implications for service accessibility (Opers & Harris, 2015). Therefore, a cross-sector partnership was established between local health and school education sectors, and the Broken Hill University Department of Rural Heal, a rural department of the University of Sydney. Representatives from the university’s Faculty of Health Sciences, with responsibility for allied health education, contributed to the development of a community-based and interprofessional service-learning program. Partners identified early potential program benefits, including improved service accessibility, enhanced child developmental outcomes, growth in rural placement capacity (HWA, 2013b), enhanced student learning outcomes, and student exposure to primary healthcare practices (HWA, 2013a).

Serial cohorts of final-year occupational therapy and speech pathology students from four Australian universities now participate in the program across the four school terms. Students provide screening, assessment, therapy, and referral services, drawing on the work of previous student cohorts to inform service delivery. This approach creates a “team continuum” (Jones et al., 2015a) that increases the continuity of student service delivery. Supervision approaches include discipline and interprofessional supervision, student peer supervision, and school teacher supervision. Learning and service occur onsite at the university department of rural health and at 12 school campuses across three regional communities. Approximately 150 preschool and primary school children access this service annually. Students participate in an intensive five-day orientation to the placement program prior to entering school settings, as well as weekly clinical and professional reflection sessions. Mid- and end-of-placement focus group evaluations are conducted by an independent facilitator to guide student reflection and identification of potential areas of program improvement. (For more information about the program and its evolution, see Jones et al., 2015).

Despite the perceived multidimensional benefits of community-based service-learning (Kudel, 2013; Casper et al., 2012; Ouz & Giles, 2006; Hannes, 2012; Steinberg, Bringle, & Williams, 2010) limited evidence exists within the Australian literature about the impact and outcomes of participation for higher education students and faculty. Although a number of internal evaluations of the Allied Health in Outback Schools program have been undertaken, no formal studies have explored the impact of participation on allied health students, occupational therapy and speech pathology, and academics engaged in this program or other service-learning programs being delivered within the Australian context, specifically rural Australian contexts.

The Study

This qualitative study used a pragmatic approach (Sandefors, 2000; Smith, Belcker & Chester, 2011). Pragmatic research is driven by the phenomenon under investigation and guided by the adoption of research approaches and methods that best enable the aims of the study to be addressed (Morgan, 2014).

Since this study did not seek to view the world in terms of absolutes and was not committed to a single philosophy or understanding of reality, the methods utilized were those considered best suited to obtaining, analyzing and interpreting the data. The aim of this study was to better understand the impacts and outcomes of participation in the community-campus partnership and service-learning program, which was informed by community and campus participants. Through this study, we hoped to contribute a rural perspective to the growing
service-learning discourse in Australian higher education. This article focuses on academy outcomes for participating occupational therapy and speech pathology students and allied health academics, with a specific focus on factors that influenced stakeholder participation and on the impact of this participation.

Low-risk ethics approval was granted by the University of Sydney’s Human Research Ethics Committee, the NSW Department of Education and Communities (NSW DEC), the Catholic Education Office, and La Trobe University.

Participants

Participants selected for this study included occupational therapy (n = 4) and speech pathology (n = 6) students, who represented one student cohort undertaking their placement in one school term in 2014, and allied health academics—one in a rural setting who had over three years of responsibility for the direct education and supervision of students engaged in the service-learning program, and one in metropolitan setting who had contributed to the development of the program and had a continuing strategic partnership and programmatic role. Students and academics were sent introductory emails through their university email accounts by an independent university administration officer. The email contained participant information sheets, consent forms, and additional details from the lead investigator about the study. Signed consent forms were returned to the administration officer. All students (n = 10), from two different universities, and both academics (n = 2) consented to participate in the study. All data were collected in the latter half of 2014.

Design

Focus groups and individual semi-structured interviews were conducted to support the pragmatic responsiveness of the study, the parallel use of data to enable data comparison, and the researchers’ desire for data completeness (Lambert & Loselie, 2008).

Focus groups

Occupational therapy and speech pathology students were purposefully allocated to one of two interprofessional focus groups (FGs) reflecting program design (two occupational therapy students and three speech pathology students in each group). The FGs were selected to elicit the shared experience of student participants. Each FG ran for approximately 60 minutes, was facilitated by an independent qualitative researcher (Crewell, 2007), and was conducted onsite at the Broken Hill University Department of Rural Health. The facilitator used a prepared schedule of questions that had been developed from previous student cohort mid- and end-of-placement FG evaluations and from the research aims. Specifically, questions focused on:

- factors that influenced program participation;
- perception of what the placement entailed;
- comparison of the placement with previous placement experiences;
- impact of participation in the program;
- perceptions of program aims;
- how participants would describe the program to others;
- recommendations for program improvement; and
- perceptions of future program direction.

Semi-structured individual interviews

Academics participated in individual, semi-structured interviews. The rural academic’s interview was conducted face-to-face at the University Department of Rural Health, while the metropolitan academic’s was held via teleconference. Each interview ran for approximately 50 minutes. The same independent qualitative researcher facilitated both interviews using a prepared schedule of questions developed from
previous academic program feedback and the research aims. A level of variation existed between academic questions based on operational and strategic program roles. Semi-structured individual interviews were selected due to these variations, differing levels of seniority, and geographical separation. Academic questions reflected those asked in student FGIs, excluding questions 2 and 3. Follow-up questions were asked during FGIs and individual interviews as needed to promote greater participant feedback. FGIs and individual interviews were digitally recorded, then transcribed manually; the transcripts were then provided to the academics for verification (Lincoln & Guba, 1985). Students were de-identified by discipline and university due to the small sample size and placement location to ensure confidentiality. Students were allocated FG and student numbers (i.e., FG1: Student 1, FG2: Student 2, etc.). Academics were de-identified by discipline to ensure confidentiality based on the small number of participants, and identifiers were allocated (i.e., rural academic and metropolitan academic).

Data Analyses

Data were analyzed using a constant comparative analysis method (Fram, 2015; O’Connor, Nesting, & Thomas, 2009). The authors used a pragmatic approach to adopt this method (Boeije, 2002) in an effort to ensure its applicability to this study. This resulted in four stages of analysis: (1) comparison within single transcripts; (2) comparison within group transcripts (principal, senior manager, allied health student, and academic groups); (3) comparison within community and campus group transcripts (principal and senior managers, allied health students, and academics); and (4) comparison across community and campus transcripts. These researchers independently reviewed a selection of campus transcripts, coded and categorized data, and identified emerging themes. All of the researchers reviewed and re-analyzed results to refine descriptions of themes (Creswell, 2007). The remaining transcripts were then analyzed by the lead investigator.

Results

Two themes—catalysts for program participation and civic impacts of participation—were identified through Stage-3 analysis of campus data (i.e., comparison between allied health student and academic transcripts). Table 1 lists the themes and subthemes that emerged from the analysis.

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In the following sections, the themes and subthemes are described in greater detail using direct quotations from participants. A discussion of findings is provided at the end of each subtheme.
Theme 1: Catalysts for Program Participation

This theme contained four subthemes: university-led allocation of student participation, student self-selection for participation, the pull of rural location, and service equity for rural populations.

Subtheme 1: University-led allocation of student participation

A number of students identified the role of their university in placement allocation. “I didn’t allocate to be here. I had a couple of other places where I suggested I could go” (FG2: Student 2). They also discussed the process associated with informing students of what they perceived to be a “randomly allocated” (FG2: Student 1) placement: “We got an email saying that we were placed here. We just got told. We had to pack our bags and 12 hours later we got here” (FG1: Student 2).

Subtheme discussion. The use of university-led allocation, although perceived as “random” by some students, may reflect the university’s commitment to ensuring sufficient student numbers to meet the service requirements of the program. Universities also need to ensure a breadth of student experiences that address professional registration requirements, including rural experiences. This university-led allocation could hold potential risks for students when their choice and voice have not influenced their placement allocation as well as for host community agencies if students reflect a level of antipathy toward their “random allocation” (National Rural Health Alliance (NRHA), 2004). In relation to student impact of participation in this program, all students identified positive learning outcomes associated with their experience, and no negative feedback was reported by host community agencies about students’ approaches to their placement. However, careful consideration must be given to ensuring that students are fully informed of the rationales for placement allocation to avoid perceptions of “randomness” and the potential for less-than-optimal learning outcomes.

Subtheme 2: Student self-selection for participation

Students who self-selected identified a number of influential factors, including knowledge of previous student experiences and program promotion by university placement coordinators, described as “word of mouth” (FG1: Student 3): program promotion:

- We had heard good things from previous students. They said it was an excellent placement to work on. We all [preferred] this placement first. (FG2: Student 3)
- Our placement coordinator made an emphasis on the advantages of service-learning placements, that it would be beneficial for us to get that experience. (FG1: Student 3)

One participant discussed the role of a previous student in reducing student pre-placement anxieties:

One of the [previous students] sent me an email outlining everything you needed to know [about the program]. It took away the anxiety I previously had quite a challenging placement and [they were] aware of that. They really built me up and said “You’re going to love it, it’ll be fantastic.” (FG1: Student 3)

Another student described his or her perception of program status within his or her home university as an influencing factor for self-selection:

Our university thinks very highly of the program, so they encouraged us to do it. We were given information that it was intensive, it entailed working five days a week and that it was a wonderful experience. We had the choice to put our names down. (FG2: Student 1)

Subtheme discussion. As the study findings suggest, access to rural placements for students with a preference for rural experiences can rely on student, academic, and placement coordinator knowledge of placement availability. Indeed, inadequate knowledge is considered a barrier to student selection of rural
placements (Spiers & Harris, 2015). The findings also suggest that “word of mouth” promotion by previous students and placement coordinators can directly influence student self-selection and act to mitigate potential pre-placement student anxieties. Finally, it appears that positive perceptions of program quality and student learning outcomes associated with service-learning participation contributed to this study to program promotion and student placement selection.

**Subtheme 3: The pull of rural location**
Study participants discussed student self-selection for a specific rural experience as an additional catalyst for their participation in the program. “I chose this placement based on the rural location. I wanted experience with a rural placement” (FG1: Student 3). They also highlighted their perception of a rural placement as being different from previous metropolitan placements. “Rural is something different. I think it added an element of adventure to the whole placement. That made me want to come here” (FG2: Student 4). In addition, students discussed a perceived lack of alternative choice for rural placements:

There weren’t an awful lot of rural placements to pick from so to be completely honest. There were about 50 of us and there were four places here and places in larger regional and metropolitan centers. Our options were limited. Out of those options Broken Hill was my first preference. (FG1: Student 2)

The rural academic indicated that a preference for rural work influenced his or her relocation to the community to take up an academic position:

I’d always been interested in rural work. I was looking for another rural job. I’d passed through this community before. It looks very similar to another rural community I had lived and worked in. Coming back here felt right.

**Subtheme discussion.** The “pull” of rural location appears to have influenced student self-selection for placement and employment preference for the rural academic. Decreased competitiveness in accessing client experiences (HWA, 2012b), diversity of clients, and perceptions of autonomy in practice (Van Hofwegen, Kitcham & Harwood, 2005) have been identified as pull factors for student self-selection for rural placement. Scarcity of rural placement opportunities (Spiers & Harris, 2015) may also contribute to a sense of student competitiveness in accessing these opportunities. There is less evidence available describing the influence of rural location on work preference for existing health professionals and academics as factors that contribute to their engagement. The authors propose that rural located university departments of rural health may contribute to the recruitment and retention of “difficult to access” health professionals within these regions. The establishment of positions that incorporate clinical and academic roles may prove attractive to rural orientated health professionals seeking to extend their careers.

**Subtheme 4: Service equity for rural populations**
The rural academic described how he or she first became engaged in the program and his or her initial program role:

A colleague put a Broken Hill University Department of Rural Health staff member in contact with me. My role when the program first started was faculty sponsor. I had the capacity to make our contribution happen. I had a little discretionary funding to initially support the program.

This academic then went on to describe his or her professional and research interest in rural health:

I have a research interest in rural health and a passion about equity of access to services for people in rural areas. This program was a match made in heaven. I’ve learnt through being
involved in this program and talking with local stakeholders that there’s a process involved. We had a discussion right in the very beginning about no research until we’d won the trust of the community.

The rural academic stressed the importance of equity in service accessibility for rural populations: “I think this position has really enabled me to offer services that best meet the needs of rural individuals as opposed to everyone getting an equal share; it’s more responsive.”

**Subtheme discussion** Individuals residing in rural Australian communities are more likely to experience lower socioeconomic status (Simon et al., 2013), lower levels of educational attainment (NSW DEC, 2013), and poorer health outcomes—all acknowledged precursors to developmental delay (Council of Australian Governments, 2009). Children residing in rural areas are also less likely to have access to pediatric allied health services to address these needs (Allied Health Professionals Australia [AHPA], 2013; NSW DEC, 2013; Spers & Harris, 2015), as was the case in far western New South Wales. The importance of providing health services to these children to ensure the best possible start in life and enhanced late-life outcomes has been described in the Australian and international literature (COAG, 2009; Irwin, Siddiqi & Hertzman, 2007; Simon et al., 2013). The locally identified need to resolve pronounced allied health service inequities has emerged as the primary catalyst for partnership formation and program development. However, addressing complex inequities in resource-limited environments can prove challenging. The Broken Hill University Department of Rural Health drew on its academic networks to facilitate local partner engagement with a large metropolitan university (i.e., the University of Sydney Faculty of Health Sciences) with significant intellectual, social, and human resources to identify and implement solutions. This enabled the linking of the metropolitan-based academic, who possessed a rural interest, with the community partnership.

Providing evidence of the impact of Australian community-based service-learning is critical to the transferability and adaptability of this pedagogy. However, high levels of sensitivity must be employed by researchers when considering research agendas in rural locations. Mutual trust must be established and strategies employed to avoid an academy-dominated research agenda (Budhai, 2013; Cruz & Giles, 2009). Additional challenges arise when student and academic self-selection bias for service-learning or rural engagement influence research findings (Steinberg et al., 2010), and these inclinations need to be controlled in research studies to avoid over-interpretation of results (Astin & Sax, 1998). Student participants in this study self-identified as representing a mix of university-allocated and self-selected participants, potentially enhancing the broader generalizability of study findings, whereas both academics described their preference for, or interest in, rural health.

**Theme 2: Civic Impacts of Program Participation**

This theme contained four subthemes: community knowledge and connectedness, academic credibility and continuity, professional and faculty satisfaction, and service-learning implications.

**Subtheme 1: Community knowledge and connectedness**

Students described the attainment of rural community knowledge from a peer critique perspective—that is, critiquing their peers who were non-program participants but also undertaking a rural placement in the region:

You have some health students who come out here and this is way too remote for them. They don’t need the hassle and change. They are city folk who can’t really adapt. It’s great that they take the opportunity so at least they know what rural practice is like. (FG2: Student 3)

Students described their own sense of community connectedness: “I’ve loved the placement. Going home is going to be really difficult. I don’t want to go home, I’m really quite content here” (FG2: Student 157)
1) This student also commented on his or her observations regarding the connectedness of community members:

"Everyone asks what you're doing here, they know that you're students. They say, "You must be the health students. What are you doing?" We're working in the schools. "Oh, I know so and so." We even get the kids that say, "Oh, do you know this child because they get therapy from you." (FGD: Student 1)

Students also described the relatively quick adoption and use of local community idioms:

"I love the learning from local people's perceptions. Melbourne, Adelaide, and Sydney aren't that far, local people don't know what the big deal is, but just over the hill is so far away. I'm like, "What do you mean?" I started saying that in my third week of placement—over the hill is so far away. (FGD: Student 1)

The metropolitan academic described the impact of knowledge sharing by a community leader on his or her insight into the community's experience with service inequity:

"One of the school principals said to me, "Will we ever see you again? That's what happens with allied health professionals, they come once and then you never see them again." Talking to the principals took it to another level. I came away feeling very determined that I was going to help be part of the solution.

The rural academic provided a description that reflected his or her desire to ensure connectivity with the community:

"I’ve tried to engage with the community as much as possible; otherwise, you would be professionally isolated. I make a really strong point of being approachable in social settings and friendly so community members will approach me.

The metropolitan academic described the unique student benefits associated with gaining deeper knowledge of and experience with rural communities:

"There is the dimension of student learning about rural communities, their challenges, their joys, their benefits and the difference in culture. In our faculty, a small percentage of students are of rural origin. We have a lot of international students who typically never go [rural], ever. For those students this program is an amazing eye-opening experience.

Subtheme discussion. Participants described a number of deep community insights that the authors attribute to the attainment of a sense of belonging within the program and broader community context. Leveti-Jones et al. (2008) argued that a sense of belonging is important to a student's "fitting in" to their placement context. To achieve this perceived belonging, students require adequate time to settle into their host facilities and familiarize themselves with personnel, workplace culture, and practices. Once settled, it has been observed that students often progress from feeling like an outsider to feeling like an accepted team member, enhancing their confidence and engagement in learning activities (Leveti-Jones et al., 2008). The authors propose that this sense of belonging can be extended to include student and academic belonging within rural community contexts. Rural placements and partnerships can challenge metropolitan-oriented students and academics, requiring a period of time to adapt to rural community identities, culture, and practices.

Subtheme 2: Academic credibility and continuity of engagement
Students reflected on the importance of their professional credibility as service providers to rural pupils and families:

I know we’re only students and we’re not professionals. We haven’t been doing this forever and we don’t have all the experience, but for the pupils to be receiving services at all is amazing. I think we provide them with more services than what they would possibly be able to receive otherwise. Their parents can’t take them to a specialist; they’re not going to be able to receive that care here. (FG1 Student 3)

Students also described the continuity of activity between student cohorts: “Each cohort [has] been doing the same thing, so you just have to keep doing it so that the next cohort knows exactly what to do” (FG1 Student 2).

The metropolitan academic described his or her concerns about loss of community credibility when a failure to meet commitments occurred early in program development.

We couldn’t fulfil our obligations to the second cohort of students. I was absolutely mortified. I thought [the] community might have given up on us, but they didn’t. We regrouped and the next year we ran across the whole year with students. I think we won back the faith of the school principals in that year.

Both academics identified the importance of maintaining continuity of engagement with the community and the program through ongoing direct or indirect actions at the strategic and operational levels. The metropolitan academic described his or her current relationship with community initiatives:

I was at a meeting where people from the university were sounding out the other faculties about whether they were interested in engaging with Broken Hill on a wider scale. I spoke about our experiences, how great it had been and what our students were getting out of it. It was a watershed moment for me.

The rural academic identified the importance of continuity of engagement with key stakeholders at the local level:

I try and keep across 12 campuses and the relationships with all of those teachers. That’s what I was doing this morning, getting out, going around saying hello to all the teachers again.

Subtheme Discussion. In the literature, service-learning partnerships have been described as existing along a continuum of risk and benefit—that is, low-risk activity, low benefit; high-risk activity, high benefit (Enos & Morton, 2003). Establishing rural–metropolitan partnerships between academic departments and local agencies can be considered a high-risk endeavor that is impacted by geographical distance, partner priorities, commitment (or lack thereof), stability of engagement, and credibility within the community. Where there are high levels of risk, high levels of trust are required. As Enos and Morton (2003) maintained, “Trust can be understood as a mutual understanding of the interests of the partners, together with some faith that the partners will stay with the relationship despite obstacles or difficulties that will surely arise” (p. 34), as reflected in the early stages of program development. The establishment of trusting relationships requires significant time investments and continuity of engagement. Many rural communities are confronted with externally driven initiatives that have shorter timeframes for deliverables, limited funding, and uncertainty associated with sustainability (Bourke et al., 2010). By contrast, this program, at the time of this study, had been operational for six years, had high levels of continuity of engagement across key stakeholders, and service provision through student “team continuums” (Jones et al. 2015a), which the authors propose are features contributing to the sustainability and success of the program.
Subtheme 3: Professional and faculty satisfaction
Students described a number of professional learning experiences acquired through their program engagement. Many of these experiences related to higher levels of autonomy: “You need to show a lot of initiative and get things done yourself. Make a lot of decisions that normally you would have someone else making them for you” (FG2: Student 2). This student then described the implications of experiencing this level of autonomy: “It really sets us up for working when we graduate” (FG2: Student 2).

The professional satisfaction derived by the academics through program involvement is reflected in the following quote from the metropolitan academic:

I found it incredibly rewarding being involved in the program. I talk with a lot of people about partnerships, and less than half of them ever amount to anything. This program has been a great success story. It achieves at all levels, individual outcomes for children, outcomes for classroom teachers and schools, community and our education objectives.

Likewise, the rural academic provided detailed insight into the impact of program participation on his or her professional development:

The role has just blossomed. It’s an extraordinary job that keeps giving, it’s like a magic pudding. I’ve enjoyed the opportunities to present at conferences, developing skills as a supervisor, to offer supervision in a really innovative model, and impacting... new graduates and their experience. I’m a complete product of my experiences in this program.

The metropolitan academic described his or her perceptions of program impact from the faculty perspective:

Our faculty has a lot of pride in what happens, what we do, what our students do in Broken Hill and that community relationship. I think it’s a great thing for us. Faculties are funny beasts and things that faculties can collectively feel proud about are not all that common.

Subtheme discussion: In their meta-analysis on the impact of service-learning on students, Cella, Durlik, and Dyminski (2011) identified positive impacts across the domains of attitudes toward education and learning, civic engagement, social skills, and academic outcomes. They identified that service-learning can benefit students at various educational levels in a multitude of ways, including enhanced self-esteem, positive attitudes toward education and community involvement, and development of community empathy. Seena et al. (2013) proposed that complex relationships exist within service-learning pedagogies and that these relationships are multiple and bidirectional. Participant insights into relationship complexity associated with the program included community-academic-student, service-learning, academic-community, academic-student, student-pupil, student-community, student-program and student-cohort-program relationships (Jones et al., 2015b).

A lack of evidence of the impact of participation in community-based service-learning for faculties represents an identified gap in the literature (Conway, Astel, & Gerwien, 2009). Findings from this study suggest that individual student, academic, and faculty benefits can result from participation in these programs and from partnerships between a metropolitan university and rural community agencies.

Subtheme 4: Service-learning implications
Students provided the following insights into their service-learning experience:

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• It’s stressful but satisfying. We can see we have provided a service for these pupils and we’re able to achieve our own goals while we’re doing it. (PG2: Student 2)
• I think it’s very overwhelming at the beginning, just to get started in the first two weeks. Now that we’ve gone through four weeks, five weeks, gotten into the routine of it, we can see the progression with the pupils as well as with our own professional development. (PG2: Student 5)

Both academics described the tension associated with balancing student learning and service provision. As the metropolitan academic observed:

While the program is about meeting the needs of the schools and the community, it deals with that fine balance between the student learning needs and community needs. Ethically I think when it comes to individual clients, they always come first, and student learning is second.

The rural academic described his or her perception of the main program aim: “The first aim is the service, because regardless of the fact that we are educators, the first thing is the service and always is the service.”

Subtheme discussion. The service-learning literature has identified the potential impacts of exposure to marginalized populations and service provision responsibility on student learning outcomes (Jacob, 2003). Tensions can arise in ensuring equal weighting of service and learning components, especially in communities that experience high levels of unmet need. Ensuring that students’ learning is not compromised during their engagement in rural Australian community-based service-learning initiatives is vital. Thus, service and learning objectives must be carefully aligned and potential tensions managed to ensure that the rural context of need informs service activities and that these service activities provide students with the opportunity to consolidate their technical and professional skills. Increasingly, healthcare delivery is person-centered (Epstein & Stange, 2010) and community-centered (Fukuzawa, 2013); therefore, supporting students in developing knowledge and skills that enable them to centrally locate service recipients and communities in service provision is essential. Community-based service-learning may provide a conduit to achieving these outcomes.

Limitations

The community-campus partnership and service-learning literature are equally concerned with the impact of partnerships and programs on community partners and direct service recipients—in the case of this study, rural children and their families. Impacts on community partners and service recipients went beyond the scope of this study; however, additional research is being undertaken to examine these outcomes. Since this study explored the experiences of a small number of academic participants engaged in one community-based service-learning program being delivered in one rural Australian location, generalizability of the findings is problematic. However, the program described in this study has been adapted for implementation in other rural Australian contexts, and evaluations of these affiliated programs are currently being conducted.

Discussion

A number of complex and interconnected insights into rural communities were proposed by participants in this study. They described high levels of community insight—or as the authors have termed, “community literacy” insight. Within the Australian healthcare context, consumer health literacy is perceived as essential to ensuring high-quality care, and a range of consumer-directed interventions target individual and community health behaviors (Australian Commission on Safety and Quality in Health Care [ACSONHC], 2014). The authors propose that an additional lens is required if substantial and sustainable improvements in rural health outcomes are to be achieved. The lens of health literacy needs to be
expanded to include a focus on the development of community-literate health students, academics, and professionals. The authors propose the following preliminary definition of community literacy:

having the cognitive and social skills which determine the motivation and ability of health students, academics, and professionals to gain access to, understand, and use community knowledge and information that enables them to be “community intelligent” in the ways they promote and maintain good community engagement practices that reflect and respond to community contexts, needs, priorities and expectations.

Health students, academics, and professionals need to access rural community knowledge to enhance their capacity to effectively engage with communities. The development of community-literate health professionals is just as important as the development of health-literate consumers, and reciprocal investment at the policy, funding, education, and practice levels is required to achieve community-literate health systems and professional outcomes.

Conclusion
Australian higher education institutions are well positioned to draw on the extensive service-learning literature, experiences, and expertise that has been generated in the United States over the past few decades. However, if Australian higher education institutions are to seriously consider adopting service-learning as a valid educational pedagogy, then it is imperative that they contextualize service-learning in ways that ensure relevance and responsiveness of the pedagogy to the diverse range of Australian contexts and population needs. In doing so, they must focus on proving robust evidence for the validity of this pedagogy and also be highly cognizant to avoid replicating the United States experience of marginalizing community perspectives in informing the service-learning discourse. In these early stages of service-learning evolution, Australian higher education institutions must ensure that the voices of community partners and service recipients are at the forefront of the movement and that their choices direct service-learning activity. In short, the academy must ensure a community-literate approach to community-based service-learning.

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References


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3.4 Introduction to Paper 4: ‘Stepping Out of the Shadows: Allied health student and academic perceptions of the impact of a service-learning experience on students’ work-readiness and employability’


**How this paper is located in the thesis:**

This paper explores campus perceptions of student acquisition of work-readiness attributes and the impact of participation in the service-learning program on the future employability of student participants. This paper addresses my second research goal, to describe and understand the development and adaptation of the service-learning program (from the perspectives of campus participants), and my research questions of: what were the impacts of participation in the partnership and program for community and campus participants and for the civic and higher education sector in which they were located, and how did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants (from the perspectives of campus participants).

**What this paper adds to the literature:**

This paper provides insight into student perceptions of their lack of preparedness for participation in a service-learning program and their capacity to undertake semi-autonomous practice. Students described their previous placement experiences as being observational only or highly directed by their clinical supervisors. These approaches to student learning were described by students as them being in the ‘shadows’ or ‘shadowing’. Through their participation in the service-learning program, students reported enhanced insights into the diverse relationships associated with the delivery of the program and its provision of allied health services; improvements in their planning and organisational skills; enhanced clinical reasoning; a greater understanding of inter-professional practice; and improved self-confidence. Academic perceptions of the impact of student participation in the service-learning program supported those described by the students. In addition, campus participants described
perceptions of enhanced prospects for future employability for participating students, although a lack of evidence to substantiate this outcome was raised by the metropolitan academic. Students and the rural academic described their insights into previous student participants' employment outcomes as influencing this perception.

**Implications of findings:**

Universities, health services and health students have a vested interest in the development of work-ready graduates to improve employment prospects, standards of practice and health care outcomes. Based on participant experiences, community-based service-learning, a relatively new educational pedagogy in rural and remote Australian health education, may provide a viable alternative to traditional hospital placements in the provision of rural and remote practice exposure and the development of work-ready attributes for new graduate allied health professionals.
3.4.1 Faculty of Health Sciences – Author Contribution Statement

Candidate Name: Debra, Maria Jones

Degree Title: Doctor of Philosophy


As a co-author of the above paper, I confirm that the above candidate has made the following contributions to the above paper:

- Conception and design of the research
- Analysis and interpretation of the findings
- Writing the paper and critical appraisal of content

Professor Lindy McAllister

Signed: [Signature] Date: 11 May 2016

Professor David Lyle

Signed: [Signature] Date: 12/5/16
Stepping out of the shadows: Allied health student and academic perceptions of the impact of a service-learning experience on student’s work-readiness and employability.

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Abstract

Universities, health services and health students have a vested interest in the development of work-ready graduates to improve employment prospects, standards of practice and healthcare outcomes. Work integrated learning supports the transition of theoretical knowledge into professional practice, thus preparing students for their work following graduation. The positive impact of practice experiences on work-readiness and employability is largely assumed. This paper describes the impact of participation in a rural Australian service-learning program on student and academic perceptions of work-readiness and future employability. Qualitative data was gathered from allied health students who participated in inter-professional focus groups and allied health academics who participated in individual interviews. The findings indicate that students were challenged in transitioning from being observational or highly directed learners, described as [being in the] ‘shadows’ or ‘shadowing’, to semi-autonomous healthcare providers. Participants reported enhanced perceptions of future employability through ‘real work’ experiences and identified broader program implications for universities and students. Based on participant experiences, service-learning, a relatively new educational pedagogy in rural health education in Australia, may provide universities, health services, and students with an alternative to acute hospital placements in the development of work-ready attributes for new graduate allied health practitioners.

Key words: Work integrated learning, work-readiness, inter professional learning, service learning

Introduction

Work integrated learning (WIL) experiences in rural and remote (referred to as rural throughout this paper) locations are a significant health workforce development strategy (HWA, 2013b). Students who are exposed to positive WIL experiences are more likely to consider rural practice post-graduation (HWA, 2013b, Deaville & Grant, 2011). These experiences include clinical, fieldwork and service-learning placements that support student acquisition of workplace attributes aligned to health industry expectations, including autonomous and inter-professional practice (IPP) (Smith, Fems, & Russell, 2014; Nisbet, Lee, Kumar, Thistlethwaite, & Dunston, 2011). Barriers exist nationally and in particular in rural locations, in the provision of WIL experiences. Such barriers include curriculum and...
educational responsiveness to rapidly changing health care environments, staffing reductions within health care settings (Rodger, Webb, Devitt, Gilbert, Wrightson, & McMeeken, 2008), existing rural workforce shortages (HWA, 2013b), high work demands for health professionals and limited placement capacity (Spiers & Harris, 2015; HWA, 2013b). Occurring in tandem with these barriers is the increased demand for placement growth to respond to increased student numbers needed to address national health workforce shortages (HWA, 2013a). These factors have contributed to the emergence of service-learning models that extend placements into community-based settings (McAllister, Paterson, Higgs, & Bithell, 2010) and which can serve dual purposes: expansion of placement capacity and enhanced accessibility to health care through the alignment of student learning to service provision for populations with high unmet health needs (Eyer & Giles, 1999). Despite the growth of WIL opportunities, and specifically service-learning in rural Australia, there is limited evidence of the impact of participation in these models on student learning outcomes, academic institutions and community agencies (Smith et al., 2014; Steinberg, Bringle, & Williams, 2010).

The purpose of this qualitative study was to explore the impact of participation in a rural community-based inter-professional service-learning (CBISL) program for students, academics and community agencies. The program aligned the learning requirements of final year occupational therapy (OT) and speech pathology (SP) students to the provision of services to address the unmet developmental needs of school children residing in far west New South Wales (NSW), Australia.

Context

Rural health workforce development and work integrated learning

Rural communities face complex challenges in the recruitment and retention of health professionals (HWA, 2013b). Health workforce shortages impact on the type and intensity of services available (DoHA, 2010) and allied health professionals are particularly under-represented in rural locations (AHPA, 2013; Spiers & Harris, 2014). The provision of rural experiences for students is a significant strategy in addressing these health workforce shortages (HWA, 2013b). Evidence suggests that where students are exposed to positive experiences they are more likely to consider rural practice in the future (Deaville & Grant, 2011).

WIL includes clinical, fieldwork and service-learning placements that support students in the acquisition of work-readiness attributes for graduate practice, including autonomous and IPP (Smith et al., 2014; Nisbet et al., 2011). Generic attributes include clinical reasoning, adaptability, time management, planning and organisation, self-confidence, independent working and IPP (Jackson, 2010; Smith et al., 2014). IPP attributes are acquired when students work collaboratively in professional teams to accomplish shared goals that improve healthcare outcomes (Freeth, Hammick, Reeves, Koppel, & Barr, 2005). The acquisition of generic and inter professional skills and student capacity to demonstrate these to potential employers is increasingly being linked to enhanced employment outcomes for Australian graduates (Smith et al., 2014).

Despite the benefits of WIL, as mentioned above, barriers exist nationally and rural in the provision of quality WIL experiences (HWA, 2013a). Rodger and colleagues (2008) broadly describe these barriers as a lack of curriculum and education responsiveness to rapidly changing healthcare environments and decreased placement capacity resulting from workforce reductions. In rural locations, workforce shortages, across a range of disciplines, high work demands and limited placement capacity in hospital settings, all impact on student ability to access rural WIL opportunities (Spiers & Harris, 2014; HWA, 2013b). Health Workforce Australia (HWA, 2013b) also identified that rural locations are being confronted with increasing demands to extend placement capacity in response to the growth in health.
student numbers needed to address national health workforce shortages, contributing to the emergence of community-based WIL models (Rodger et al., 2008; McAllister et al., 2010).

Community-based service-learning

In rural locations service-learning is being drawn on by University Departments of Rural Health (UDRH), key stakeholders in Australian rural health workforce development (Mason, 2013), to establish models that transition students from the patient bedside into community settings. Service-learning is concerned with balancing student learning and service recipient outcomes (Furco, 1996) through the alignment of student learning to the provision of services to populations with identified unmet health needs (Eyler & Giles, 1999; Jacoby, 2003) characteristics reflected in rural Australia. Service-learning models expose students to a range of population health needs, diverse community members, alternative service delivery models, complex problems and community partnerships (Jacoby, 2003). Service-learning extends learning through the formation of community-academic-student partnerships (Furco, 1996; Sefer, 1998).

The goals of service-learning partnerships go beyond addressing the learning needs of individual students by focusing on civic engagement as a conduit to achieving learning outcomes. Service-learning engages community partners in student professional, technical and civic development (Cashman & Sefer, 2008). A service-learning approach to experiential learning (Kolb, 1984; Furco, 1996) links theoretical knowledge acquired within curricula to the ‘real-life’ application of knowledge (Titchen & Higgs, 2001; Cashman & Sefer, 2008). This alignment enables students to engage in learning that can include ill-defined problems that occur within ‘real’ community contexts which cannot be replicated in hospital or university settings (Keys, 1994).

A rural community-based inter-professional service-learning program

The Allied Health in Outback Schools Program (AHOBSP) commenced in far west NSW in 2009 and was informed by the principles of service-learning and experiential learning. The program is underpinned by a cross-sector partnership between school education and health service stakeholders, the Broken Hill UDRH (BHURDH) and The University of Sydney Faculty of Health Sciences. Program objectives include addressing unmet allied health needs of children, expansion of regional placement capacity through extension into non-traditional community settings, and exposure of students to alternative population health practices (Wylie, McAllister, Marshall, & Law, 2014), with intent to influence student place of practice post-graduation (Deaville & Grant, 2011).

Serial inter-professional, OT and SP, student cohorts, (i.e., new cohort of final year OT and SP students each school term), undertake placements across the four school terms. Students participate in an intensive five day orientation program and weekly professional reflection sessions facilitated by the BHURDH with services being delivered in pre-schools and primary school settings. Students draw on the work of previous cohorts to inform service activity creating service continuity. Students, with same-discipline, as well as inter-professional supervision, from qualified OTs and SPs, provide screening, assessment and therapy as inter-professional groups for children with mild to moderate developmental delays. Children identified with complex delays are referred to hospital clinicians for further assessment. Supervision is provided through scheduled face-to-face contact throughout the students’ ‘working week’ and via email, SMS and telephone. Approximately 150 pupils access these services annually. Service delivery takes a population health approach (Kindig & Stoddart, 2003) in response to the needs of school children, parents, and teachers and includes individual, small group, and whole of class sessions (Wylie et al., 2014).

In each school term, four OT students and six SP students engage with three regional communities and 12 school campuses. A total of 24 SP and 16 OT students are placed.
annually representing significant growth in regional allied health placement capacity (Jones et al., 2015). Term-specific documentation guides student service planning and delivery. Students develop individualised pupil therapy plans and handover documents identifying successful pupil engagement strategies, assessment and therapy outcomes. Therapy plans then guide parental and teacher involvement in home and ongoing class-based interventions (see Jones et al., 2015 for more information).

Students participate in structured mid and end of placement program evaluations facilitated by an independent researcher, informing program improvement and adaptation. However no formal evaluation had been undertaken on the impact of participation in this program for allied health students, academics, community leaders, facilitating agencies and service recipients. Limited evidence exists, especially within the rural Australian context, on the efficacy of service-learning for these key stakeholders (Steinberg et al., 2010; Frenk et al., 2010; Kramer & Usher, 2011; Smith et al., 2014). As an emerging health education strategy in rural Australia additional research is required that explores these outcomes.

The Study

The research aims of this study were to provide a deep and holistic understanding of the impact and outcomes of participation in the AHO BSP for key stakeholders, ensuring this exploration was informed by multiple stakeholder perspectives (Creswell, 2007). The study was qualitative in design, explored the experiences of community leaders, pre-school and primary school principals, senior managers from local facilitating agencies, one based with the UDRH and one with school education, SP and OT students, and academics engaged in the development and delivery of the program.

Due to the breadth of study findings this paper reports on student and academic outcomes, specifically those associated with perceptions of student work-readiness skills acquisition and future employability. Additional student, academic and community experiences are described in subsequent papers.

Method

Low risk ethical approval was obtained from the University of Sydney Human Research Ethics Committee (approval number 2014/178), NSW Department of Education and Communities (SERAP approval number 20141117), Catholic Education Office and La Trobe University (written approval).

Participants

Academics and OT and SP students were purposefully selected based on their role in program development and delivery. Participants were contacted through work and student university email accounts. An introductory email including information sheets and consent forms was sent by an independent administration officer to one student cohort and two academics. The email provided contact details of the lead investigator for additional study information. Signed consent forms were returned to the administration officer. All data was collected in the latter half of 2014.

The entire student cohort, OT 4 and SP 6, undertaking their placement in one school term in 2014, consented to participate in one of two face-to-face focus groups. Face-to-face focus groups (FGs) were held onsite at the BH/UDRH. Students represented two different universities. Two allied health academics, one rurally located with direct responsibility for student supervision and one metropolitan, with a strategic program role, consented to participate in individual semi-structured interviews, face-to-face for the rural academic and via teleconference for the metropolitan academic.


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Face-to-face focus groups

Student FGs were considered appropriate given the shared experience of the program, time restrictions associated with placement duration and levels of comfort during data collection (Patton, 2002). Students were purposefully allocated to each FG to ensure an even distribution of OT and SP students, reflecting the inter-professional placement (two OT and three SP students in each FG). Both FGs ran for approximately 60 minutes. An independent qualitative researcher facilitated both sessions using a prepared schedule of questions developed from previous cohort evaluations (n=12 sessions) and study aims. Questions focused on:

1. Factors that influenced program participation and student pre-placement understanding of the program.
2. Comparison of the placement to previous placement experiences.
3. Learning impacts associated with program participation.
4. How students would describe the placement to their non-participating peers.
5. Understanding of program aims.
6. Recommendations for program improvement and future directions of the program.

Follow up questions were asked to encourage greater participant feedback. FG sessions were digitally recorded and transcribed manually. Allied health students were de-identified by discipline and university in the transcripts due to small participant numbers and placement location to ensure confidentiality. Participants were allocated FG and student numbers: Focus Group 1 Student 1 – FG1:S1, Focus Group 2 Student 2 – FG2:S2 and so on.

Semi-structured individual interviews

Individual academic interviews were selected due to variations in program roles, differing levels of seniority and geographical separation. Each interview ran for approximately 50 minutes. The same independent qualitative researcher facilitated both interviews using a prepared schedule of questions developed from previous academic feedback and the study aims. Questions focused on:

1. Factors that influenced program participation and participant role in program development and delivery.
2. Impact of participation in the program on participant approach to education delivery, practice and strategy.
3. How the academics would describe the program to external community and university agencies.
4. Understanding of program aims.
5. Suggestions for program improvement and future directions of the program.

Some variation existed between the questions and follow up questions asked of the academics reflecting their operational and strategic program roles. Individual interviews were digitally recorded and transcribed manually before being provided to participants for verification. Academic participants were de-identified by discipline to ensure their confidentiality based on small participant numbers and allocated identifiers, RA for Rural Academic, and MA for Metropolitan Academic.

Data analysis

Data was analysed using an inductive, content-sensitive approach (Patton, 2002). The lead researcher repeatedly listened to digital recordings and read and re-read the transcripts, to become deeply familiar with the audio and texts. Coding was conducted using a process of constant comparative analysis (Miles, Huberman, & Saldana, 2014). Data was manually
coded based on the researchers’ desire to avoid distancing themselves from the data (Creswell, 2007). The process began with identification and coding of words or phrases that captured key meanings. These codes were then grouped and re-grouped into a smaller number of categories. Coding and categorisation was constantly compared within, and across, transcripts to ensure consistency in development, application and refinement of student and academic codes and categories. Categories were collapsed into overarching themes until all codes and categories were accounted for (Patton, 2002). This approach enabled the researchers to explore, in-depth, student and academic perspectives.

Data interpretation was critically appraised and verified by expert qualitative researchers with a depth of experience in allied health and primary health care professional education. The lead and expert researchers independently coded two transcripts using the same process. These codes were then compared, explored, and refined with the identification of key themes and sub-themes. The remaining texts were coded independently by the lead researcher. Trustworthiness of the analysis was enhanced through checking processes: referential adequacy through recording and verbatim transcription of focus group and individual interview data, checking of transcripts against the recordings to ensure accurate transcription and member-checking of individual interview transcripts (Creswell, 2007). In order to ensure interpretation process trustworthiness, a clear and transparent record was maintained of the hand coding process. Rigor was further enhanced by the inclusion of direct participant quotes to illustrate the five identified themes, subthemes and subsections (Creswell, 2007) as outlined in Table 1.

Table 1: Themes, Subthemes and Subsections.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes (numbered) and subsections (dot points)</th>
</tr>
</thead>
</table>
| 1. Challenges in transition to service-learning | 1. Students as supernumerary or inactive in previous learning experiences: Shadows  
2. Student as observer/highly directed learner: Shadowing  
3. Fragmented and specialist exposure to care delivery |
| 2. Context of care                        | 1. Rural context  
2. Community-based population health practice |
| 3. Work-readiness attributes              | 1. Relationships  
• Service-Learning  
• Community  
• Academic Student  
• Student-Program  
2. Learning planning and organisation skills  
3. Clinical reasoning  
• Supervision approach  
• Peer learning  
• Scope of experience  
4. Inter-professional practice  
5. Self confidence |
| 4. Employability                          | 1. Perceptions of previous student employment outcomes  
2. Enhanced skills acquisition  
3. Employer implications |
| 5. Program implications                   | 1. University implications  
• Curriculum development  
• Model transferability  
2. Student implications  
• Impact on care delivery  
• Longer placement durations |

Results and Discussion

Data analysis identified five themes, associated subthemes and a number of subsections. These are each elaborated and followed by a brief discussion.

Theme 1: Challenges in transition to service-learning

Participants identified a number of factors that impacted on student capacity to transition from previous practice experiences to a semi-autonomous service-learning role. Students and the RA used terms such as ‘shadow’, FG1:S2, to describe student preference to be supernumerary or inactive in initial stages of placement, and ‘shadowing’, FG2:S1, to describe previous supervision approaches where students were an observer or highly directed learner. Three subthemes are now described using participant comments, followed by a brief discussion.

Subtheme 1: Students as supernumerary or inactive in previous learning experiences: ‘Shadow’ role.

Student participants described previous practice experiences where they were inactive in the learning environment as having just had observational practicums (FG1:S3). Consequently some students viewed their participation in the service-learning program, particularly when compared with these previous experiences, as being:

...thrown off the deep end. (FG2:S3)
...beneficial for us to be thrown in the deep end and get that experience. (FG1:S3)

However, other students did not see this as a benefit reflecting a preferred supernumerary approach:

I didn’t have that opportunity to shadow [the supervisor] for a short period of time prior to [engaging in service delivery], it caused me a little bit of anxiety. (FG1:S2)

Student perceptions of how academics regarded the benefits of the program included:

Our placement coordinator made an emphasis on the advantages of student-led placements. (FG1:S3)

The tasks that students undertake in their practice experiences are considered crucial for quality learning outcomes (Herrington & Herrington, 2006; Smedley and Morey, 2010) identified students’ preference to be active participants in practice settings and that a lack of participation impeded student confidence, competence and learning outcomes. Student experiences of being inactive in their previous placements and preference for opportunities to remain supernumerary, or to ‘shadow’, in the initial stages of placement, potentially reflect a lack of semi-autonomous practice in previous learning experiences. This may have contributed to student perceptions of ‘being thrown in the deep end’, being influenced by program expectations of higher levels of semi-autonomous student practice.

Subtheme 2: Student as observer or highly directed learner: ‘Shadowing’ role.

A number of students commented that in previous practicums they had passively followed their supervisor. The concept of ‘shadowing’ was described by students as being associated with activities where they were heavily directed by their placement supervisors:

In other placements you just do what you’re told and get on with it (FG1:S3).

We’ve always had supervisors shadowing us, being like do this, do that. (FG2:S1)

One student commented that being an observer only was appropriate for them:

My learning style is to observe something. It’s simpler when you can see it than when you have to work it out for yourself. (FG1:S3)

The RA identified implications of this shadowing approach to supervision on student development of work-readiness attributes:

Those work ready skills are difficult to develop in other placements where there is that shadowing level of supervision.

Exposure of students to discipline role models and professional experts enhances students’ understanding of how ‘real’ practitioners behave in ‘real’ healthcare contexts (Herrington & Herrington, 2006). When students are not actively engaged by supervisors in understanding practice rationales and healthcare approaches they are less likely to be able to model and contextualise ‘real-world’ service provision (Herrington & Herrington, 2006). Students, who are exposed to ‘shadowing’, especially in the final stages of their degree where higher levels of autonomous practice can be a discipline expectation, may struggle to develop practice competence and confidence. Shadowing may also result in students devaluing their contribution to health care delivery and client outcomes.

Subtheme 3: Fragmented and specialist exposure to care delivery

Students described prior experiences of fragmented and specialised exposure to healthcare delivery, challenging their ability to conceptualise holistic client care:

In some of the other placements I’ve had in the past it’s hard to put all of the pieces together because you’re only a small part of [care]. (FG2:S4)

Students described a lack of exposure to a diverse range of therapeutic activity as impacting on their ability to respond to complex and diverse health care needs experienced by pupils in the program:

I’ve had a lot of [specialised therapy] experience but very little [other specialised therapy] experience and this placement has predominately been around [the other specialised therapy]. I’ve been like, What am I doing? Am I doing this right? (FG2:S1)

Students need to be provided with experiences that enable them to understand and apply their knowledge in complex environments, in this instance a rural community-based context, so they are appropriately prepared for the ‘real-world’ of work. Curricula requirements and practice environments need to be responsive to contemporary health care practice and student learning needs, providing opportunities for students to engage with diverse practice opportunities when they present themselves, supporting student capacity to comprehend and engage with complex and inter-connected components of care (Stumberg, 2005).

Theme 2: Context of care

This theme has two subthemes: rural context and community-based population health practice.

Subtheme 1: Rural context.

The rural context was seen as contributing to participant experience, with students commenting on the connections with the community:

Part of the interest in coming here was being in the rural town and experiencing it for yourself. (FG1:S5)

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Everyone in [rural community] knows each other or has a connection at some point. (FG2:S5)

It's not like a major city where you can pass by so many people and no one talks to each other. (FG1:S3)

The RA described the deeper connectivity of the program and student learning experience within the rural context:

We sit and live in this community. We are service providers to our community and we [are] doing that through the education of students. (FG2:S6)

The authors propose that the view of Rodger and colleagues (2011) regarding a welcoming clinical environment as an indicator for quality learning experiences can be extended beyond the clinical setting to include the broader welcoming nature of host communities. Denser connecting mechanisms, within and across rural communities, create different learning environments for students influencing approaches to healthcare provision. In developing rural community-based WIL opportunities academic institutions and health professionals need to be informed about and acknowledge the importance of rural community contributions to student learning outcomes (Rodger, Fitzgerald, Davila, Millar, & Allison, 2011).

Subtheme 2: Community-based population health practice

The five day orientation component of the program was established to support student transition to rural community-based practice. This aspect of the program was appreciated by participants as seen by the following comment:

It's getting orientated to the whole experience. You have a new placement, you're nine hours from home, you're in a new place, you're meeting new people, you're trying to explore the town, you're looking at different schools and you're going to [Outreach communities]. There's a lot on, it's great, it's just a little bit intense for the first week. (FG1:S5)

The validity of the population health approach, class-based therapy, to allied health service delivery was questioned by a student, challenging their perception of 'real' therapeutic approaches and location of therapy delivery:

I think time would be much better spent doing individual sessions rather than trying to manage an entire class. You're setting these [broader] goals. I'm starting to think, 'What should pupils be doing at this age?' That's where I'm pitching this lesson rather than focusing on therapy. It's not really therapy. (FG2:S4)

Student preparation for their WIL experience is a key curriculum dimension (Smith et al., 2014). Program orientation has been extended from two to five days in an endeavour to prepare students for their experience. Orientation includes cultural education, community tours, introduction to key program stakeholders, tours of host schools and clinical education focused on technical skills development required to enhance service delivery and pupil outcomes. A high priority is placed on supporting students in understanding the context of their placement and alternative health care approaches. Understanding contexts of care that impact on community health is essential in the provision of population healthcare. Differing social, educational, cultural and economic status experienced in rural locations creates different 'forms of reference' for communities, influencing how and where care can best be provided, including service delivery in school settings (Kindig & Stoddart, 2003; WHO, 2010).

Service-learning is concerned with broadening student exposure to diverse populations, specifically marginalised and underserved populations (Jacoby, 2003), in this instance through population healthcare delivery (DoH, 2010).

Theme 3: Work-readiness attributes

This theme contains five sub-themes: relationships, planning and organisation skills, clinical reasoning, inter-professional practice, and self-confidence and associated subsections.

Subtheme 1: Relationships

This subtheme contains four subsections associated with relationships.

Subsection 1: Service-learning relationships

The multi-layered program relationships, the connection between service and learning and the importance of time to build positive relationships were all recognised by the students:

There’s a lot of support from the university, our supervisors, the hospital staff [and] community. They understand why we are here and what we are doing. (FG2:S2)

We can see we have provided a service for these pupils. We’re able to achieve our own [learning] goals while we’re doing it. (FG2:S1)

Students come and go. It takes time to build rapport with the [pupil]. (FG2:S1)

Seeing the pupils every day, they all remember your name. It feels really nice. It feels different to other placements in that way. (FG1:S2)

Students also described a sense of responsibility associated with their pupil relationship:

Our responsibility [when we are at ‘work’] is to provide therapy for these pupils. (FG1:S2)

Subsection 2: Community relationships

Students described the friendly nature of the community and displayed insights into the social connectivity of the community:

I find everybody’s so easy to talk with. (FG1:S3)

The community has that really amazing atmosphere. Everyone talks to everyone, everyone knows everyone’s business and everyone’s related. (FG1:S1)

The MA described their relationship with the community:

That visit to community was incredibly important in terms of my thinking. I felt ashamed of my own profession because of what had happened in the community. The level of disillusionment in the principals I found quite distressing. I came away very determined I was going to help be part of the solution.

Subsection 3: Academic-student relationship

The RA perception of their relationship with the students was collegial:

I’m working alongside budding [discipline] so there’s greater capacity between us [to deliver services].

Students discussed the depth of program knowledge of their supervisors and identified the cumulative nature of this knowledge from past student cohorts:

They just know every little bit. We do debrief every week and they have an agenda that has slowly been accumulated from previous placements. They know how we’re feeling, what we’re thinking. (FG2:S1)

Subsection 4: Student-program relationship

Students demonstrated an understanding of the importance of building and sustaining trust between program stakeholders and how this trust could be detrimentally impacted upon by student approaches to relationships:

They’ve [program partners] worked really hard on the program so far. They’ve built that rapport with the teachers to gain that trust. [The community have] obviously had [services] coming in and out, inconsistent. It’s up to how well the future students manage that [relationship] (FG2:S3)

Students identified the ‘student continuum’ approach as a connecting relationship between serial student cohorts and program outcomes:

It’s nice to see that [previous cohorts have] been doing the same thing. You just have to keep doing it so that the next person knows exactly what to do. Here in this continuum of students you really do feel like you’re at least making some change [for the pupil] (FG1:S2).

Positive relationships established on placement significantly improve student learning outcomes (Hartigan-Rogers, Cobbett, Amrault, & Muse-Davis, 2007). However, there are few formally identified efforts that seek to assist students in developing effective relationships (Sichman, Sloyer, & Williams, 2011). Relationship-centered care (RCC) is based on partnerships between individuals, communities and health care practitioners and includes an understanding that relationships occur at multiple levels, between different partners and are critical for effective health care delivery (Sichman et al., 2011). There are increasing calls for allied health professions to engage in population health approaches that are intrinsically linked to complex relationships (Miller & Gallicchio, 2007, Wylie et al., 2014). A lack of practice experiences within community-based organisations that provide exposure to these relationships has been identified as a constraint in the provision of RCC experiences (Sichman et al., 2011). Our data supports the value of investing in the provision of these opportunities at the pre-registration level.

Sub-theme 2: Learning planning and organisation skills

Students identified a lack of previous exposure to decision making, case load management, development and implementation of therapy plans, preparation of documentation, and the preparation of new or utilisation of existing resources, as impacting on their capacity to confidently undertake these tasks within the early stages of program participation:

We always go over time. Nine times out of ten, it’s 7:30, 8, 9 o’clock at night and I’m still preparing [resources] (FG2:S1).

Just working with the resources we do have, it’s been emphasised throughout the placement, ‘You should try and work with what’s available, use what’s in the [class] room’. It has been really useful to try and do that (FG2:S4).

The MA identified the learning impact associated with the program, including time management and resource use:

It’s not only time, they have to manage their learning. They need to know what they don’t know and work with the resources that are available.

Students identified exposure to ‘real’ work experiences as impacting on their planning and organisation skills.
You have your own caseload, you have to make your timetable, make your session plans and think about therapy. (FG1:S3)

Planning and organisation skills include time management, effective use of resources, collecting, analysing and organising information (DISRTE & DEEWR, 2013). Despite the literature identifying the importance of these skills (Smith et al., 2014) our findings suggest that students can be poorly prepared to undertake these tasks when their responsibility for these tasks in professional practice settings has been limited. Accessibility of resources in rural locations is frequently less than that experienced in metropolitan practice and health professionals are required to think innovatively in the identification of, and access to, alternative resources to enable the delivery of therapy.

Sub-theme 3: Clinical reasoning

This subtheme contains three subsections: supervision approach, peer learning and scope of experience.

Subsection 1: Supervision approach

The supervision approach of the program was described as contributing to the development of higher levels of autonomy in professional and technical decision making:

Because there isn’t that constant supervision I was constantly [asking myself] Am I doing this right? Is this okay? Am I pitching it at the right level? Did I use the right feedback? Am I using the right tools? Personally that was quite a challenge doing that on my own [initially] but now it’s okay. (FG2:S1)

Subsection 2: Peer learning

The RA identified the role of peer learning as an additional modality to support the development of clinical reasoning skills.

I talk more formally with the students in debrief. You don’t go to your supervisor first in the workplace, that’s not the first place you go if you need help, you go to your peers.

The impact of peer learning was also discussed by the students:

To be able to manage our own case load and still have the support there to ask [the supervisor] questions, find out if we’re doing the right thing, have the other students as well, to discuss different aspects of therapy. (FG2:S2)

The MA identified peer learning as a workplace skill:

They learn how to work with their peers, maximise their learning. That’s a great workplace skill to have.

Subsection 3: Scope of experience

Students identified program participation as impacting on their clinical reasoning skills, describing skill acquisition in information processing, analysis, decision making and resultant implications for client care:

You have to think about therapy, how and why, the clinical reasoning behind why you are doing that type of therapy. That thought process is going on. Why are you doing what you’re doing and how is it going to help a client? (FG1:S3)

Student capacity to understand holistic approaches to service delivery through exposure to a broad range of therapy approaches and continuity of client care was described:

I think [the program] makes [therapy delivery] make more sense. You have a much more holistic understanding of the whole process. (FG2:54)

Educational institutions may struggle to challenge students in developing clinical reasoning (Sharp et al., 2013; Anum & Roksa, 2011) due to a lack of ‘real’ context (Duming, Artino, Pangaro, van der Vleuten, & Schuwirth, 2011). Health care practice is underpinned by clinical reasoning and a failure of adequate clinical reasoning can have negative impacts on client outcomes of care (Norman, 2005). The development of clinical reasoning skills for allied health students has been identified as being essential in enabling students to gather, analyze and process information to inform logical decision making across health care contexts (McAlister & Rose, 2008). The provision of higher levels of autonomous practice, within a framework of safety, and peer learning for senior students has been identified as contributing to the development of clinical reasoning skills (Smith et al., 2014; Kuipers, Pager, Bell, Hall, & Kendall, 2013). Service-learning is also viewed as inherently promoting clinical reasoning attributes through exposure to direct service provision (Steinke & Fitch, 2014).

Sub-theme 4: Inter-professional practice

Study participants identified the importance of accessing WIL IPP experiences. The RA and students commented as follows:

- Inter-professional practice was [talked about] at university. I hadn’t had a go at [inter-professional practice] at university.
- Inter-professional education, you don’t really get, you never get that. (FG1:52)

The MA identified the importance of IPP experiences for students at their institution:

- A goal of our faculty is to make sure our students have at least one genuinely inter-professional placement. For many of our students this [program] will be the one and only true inter-professional placement they have.

The students provided examples of sharing inter-professional knowledge in approaches to therapy planning and to enhance therapy delivery:

- You know what the other discipline activity is, you speak to them before and after therapy, you talk to them after school and you plan therapy together. (FG1:52)
- Maybe something’s working, you’ve got the same pupil and something’s working during therapy with this pupil in your discipline so you pass it onto the other discipline and say try this out. (FG1:53)

Health industry expectations for new graduates include the acquisition of a breath of knowledge, skills and experiences that will enable them to locate themselves as valuable IPP team members (Nisbet et al., 2011). The benefits of IPP include positive interactions across different professions, enhanced collaboration between professions, development of mutual trust, decreased service duplication, and improved health care safety and client satisfaction (Nisbet et al., 2011). Despite IPP being considered standard practice in Australian health care settings findings from this study support the findings of Howell, Devine and Prostman (2004) that students may receive little or no formal IPP experience during their training. There is a need to embed meaningful IPP experiences within Australian health practice settings to ensure new graduates are prepared for contemporary healthcare practice. Due to the breadth of findings associated with IPP this sub-theme will be explored in greater detail in a subsequent paper.

Sub-theme 5: Self-confidence

Students identified enhanced self-confidence in their skills associated with program participation.

As a clinician coming into our second last placement it’s very beneficial to be at least feeling confident in this area. I’m feeling better. You’ve got more skills. It’s good to be finally feeling like that coming up to graduation. (FG1:35)

Students discussed the impact of semi-autonomous practice as contributing to their trialing and implementation of alternative therapeutic approaches:

The independence, going and doing some therapy, that didn’t work so well, what can I do next time? There’s a lot of professional reflection. (FG1:35)

Practice experiences play a key role in the development of professional self-confidence (Rodger et al., 2008). Supportive learning environments, with appropriate levels of supervision and safety, can enable students to learn from their mistakes contributing to learning opportunities that require them to explore alternative approaches to therapy delivery that enable the alignment of therapy to individual client need (Plack, 2008). Building student confidence to practice independently is a key learning outcome as students near completion of their degree (Newton, Billot, Jolly, & Ockerby, 2009a).

Theme 4: Employability

This theme consists of three subthemes, perceptions of previous student employment outcomes, enhanced skills acquisition and employer impact.

Subtheme 1: Perceptions of previous student employment outcomes

Knowledge of employment outcomes of past student participants who were seen to have gained employment first on graduation were discussed:

The students who had done the placement [previously] were actually the first to get jobs. I think it had a lot to do with the fact that it’s so student-driven. The employers really liked that. Makes us more work ready. (FG2:S1)

Enhancing employability outcomes is considered integral to degree programs (Jackson, 2010). WIL experiences are considered a significant strategy in the development of work-readiness attributes that enhance graduate employability (Jackson, 2010; Smith et al., 2014). Participation in the program was perceived by students as an opportunity to develop work-readiness attributes that would be considered desirable by potential employers. Additional research is required on the employment outcomes of program participants, including industry perceptions of participant characteristics that may influence employer selection, to validate these perceptions.

Subtheme 2: Enhanced skills acquisition

The RA shared their perception of enhanced skills acquisition, thereby facilitating transition into the workplace for students in comparison to non-participating peers:

These students do have skills that other students don’t, a whole lot more. I think [the program] aims to achieve service-giving skills in the new graduates and prepare them in a way they should be prepared.

Students shared this perception stating that their skill level was enhanced by more realistic [work] (FG2:S3), that would:

Really set us up for working, going into the workplace (FG2:S2).

Developing graduates with work-readiness attributes that are considered valuable by employers is a key objective of WIL strategies (Skills Australia, 2010). WIL is viewed as supporting students in the development of skills that have the potential to enhance their employment outcomes (Smith et al., 2014). Health graduates who: possess a range of work-


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readiness skills may experience a smoother transition into the workplace compared with graduates lacking such skills (Walker et al., 2013, p.116).

Subtheme 3: Employer Implications

The RA identified the importance of their role in describing student program experiences to potential employers when acting as a student referee. The employers are not familiar with the program and they say, ‘Oh wow, that’s fantastic’. While many of the students saw enhanced employability as an outcome of their service-learning placement, not all students did. One student questioned whether the experience in a community-based setting would prepare them for a hospital position:

I wonder whether this placement is preparing me for the workplace. Say I go into a hospital next year, has this placement actually equipped me to do that because I have that lack of traditional placement in a hospital. (FG1:S2)

The MA also questioned whether the students who had participated in the program had enhanced employability potential in comparison with non-participating peers:

I don’t think we know whether they’re better prepared. We don’t have a direct comparison with other types of placements. I know the program is incredibly helpful.

There is an increasing call at the national level for the integration of population health and primary health care practice into health care education and service delivery (DoHA, 2010). Frenk et al. (2010) stated that health professional education has not responded effectively to contemporary health care needs resulting in ill-equipped graduates. A mismatch of student competency to population health needs, a narrow technical focus that fails to account for a broader contextual understanding of healthcare, and a focus on hospital orientated health education are factors that impact on student capacity to respond to changing and complex healthcare environments (Frenk et al., 2010). Additional research is required to determine if participation in the program provides participants with skills that are transferable across health care contexts and are of relevance to the health industry.

Theme 6: Program implications

This theme contains two sub-themes: program implications for Universities and program implications for students and associated subsections.

Sub-theme 1: University implications

This subtheme has two subsections: curriculum and model transferability.

Subsection 1: Curriculum development

The MA reported that program participation had influenced faculty investment in rural curriculum content:

In order to prepare the students for that remote experience we need to put rural health in the curriculum so that when they go to the community they’ve got a bit of an idea. That’s made us backtrack to our curriculum and up the rural content.

Subsection 2: Model transferability.

Student participants discussed the potential transferability of the program and implications for their universities:

This program could be fed back to our universities to help them with some of the school placements they try and run because this is far more organised. (FG2:S4)

The MA identified their perceptions of impact on faculty in considering transferability of the model to other contexts:

One of the things the program has done, because that clinical education model has been so successful, is stimulated the thinking of [faculty] staff around using similar models in other places, helping other organisations to use those kinds of models. To develop different models that launch from here [into metropolitan sites].

Wakeman et al. (2009) identified that rural communities are incubators of health service and workforce innovations that better meet the needs of these communities. Denser connections within rural communities increase opportunities to implement change at the population level. The transferability of rural health service and workforce innovation into metropolitan contexts is poorly understood and additional research is required that explores the transferability and impact of rural/developed models in these locations.

Sub-theme 2: Student implications

The students identified four aspects of the program for further consideration: Impact on care delivery, longer placements, intent for rural practice and return to previous placement experiences.

Concerns were raised by students about their contribution to health care outcomes in previous experiences:

In other placements you just go in and go out and you don’t really feel like you’ve made a difference. … Here in this continuum of students you really do feel like you’re at least making some change for the pupil. (FG1:S2)

Length of placement experience was identified by many of the students as a factor that impacted on consolidation of their knowledge and skills:

This week I will just feel as if I’m getting into it, getting the hang of things. … I feel like an additional [placement] month, in terms of the development for the children, would change [pupil outcomes] dramatically within that month. (FG2:S3)

Students had differing views on how the placement might influence their consideration of rural practice post-graduation:

I would consider [working rurally] definitely. After this placement I probably would consider it. (FG1:S2)

For me personally I wouldn’t go rural straight away because of the lack of support first year out. I think I need that support. (FG1:S5)

The difficulty of returning to highly supervised placements was also raised:

I’m thinking it might be difficult to go back to a traditional placement, being supervised all the time and [loosing autonomy]. (FG1:S2)

Experiential learning includes student engagement in tasks that are aligned to healthcare provision, including the direct engagement of students with healthcare recipients. Through this engagement students are provided with a deeper insight into the role of health professionals and their contribution to improved health outcomes (Spers & Harris, 2015). Experiencing a sense of professional satisfaction through direct service provision to clients has been identified as improving student participation and learning outcomes (Suchman et al., 2011). The time required to enable students to gauge their impact on care requires sustained engagement over a period of time (Herrington & Herrington, 2006). Benefits associated with longer duration of student placements have been explored in the health education literature, predominately within medical student education (Forster, Assareh, Watts, & McLachlan, 2013). Opportunities to extend allied health student placements within
rural locations needs to be explored to enable the consolidation of student learning and service recipient outcomes.

Discussion Summary

A high level of connectivity exists across the themes, subthemes and subsections discussed in this paper. Addressing rural health workforce and service accessibility challenges is complex. Of equal complexity is the development and delivery of quality WIL experiences in these locations. Allied health students and academics described a number of broad challenges that can be experienced in the provision of WIL and IPP experiences. Student descriptions of previous placements, ‘shadows’ and ‘shadowing’, raise a number of concerns associated with the active engagement of students in ‘real world’ work of ‘real meaning’ in ‘real world’ contexts. If WIL strategies are to uphold the promise of producing graduates with the capabilities valued by employers’ (Smith et al. 2014, p.14) additional investments are required to ensure these experiences meet WIL and industry objectives.

Study participants identified a number of beneficial learning outcomes acquired through their participation in the program including insight into rural community contexts, complex and interconnected relationships, planning and organisation skills and enhanced self-confidence. Findings suggest that a rural CBISL experience has the potential to impact on student acquisition of work-readiness attributes and the practices of a metropolitan university.

Limitations

The small participant sample size associated with this qualitative study limits generalisability of the results. Findings are representative of one student cohort and a small number of academics. Additional research is required to explore program impact on greater numbers of participating students and academics. Comparative studies are also required that explore learning outcomes between program participants and non-participating peers. Service-learning is inherently concerned with experiences of service recipients and communities and additional research is required on program outcomes for service recipients, pupils and families, school teaching staff, and local clinicians. Findings on community leader and agency perspectives are described in subsequent papers.

Conclusion

Universities and the health industry acknowledge the need to develop highly skilled work-ready health professionals. Levels of industry dissatisfaction with the current levels of work-readiness of Australian graduates have influenced the development of WIL strategies that seek to enhance student acquisition of generic skills. Limited evidence exists on the impact and outcomes of participation in WIL strategies for health students, higher education institutions and the health industry. This paper explored the impact on allied health student and academic participants in a rural CBISL program. The program aligned student learning to direct service provision to address unmet allied health needs of pre-school and primary school children in far west NSW, expanding student placement capacity within the region and exposing students to alternative learning and service provision approaches. Based on the findings of this study, CBISL, a relatively new educational pedagogy in Australian health education, may provide students, universities and the health industry with an additional approach that can contribute to the development of generic work-readiness attributes. The provision of WIL learning experiences that expose students to ‘real work’ in ‘real world’ settings that are of ‘real value’ to ‘real rural communities’ is imperative if we are to ensure a competent future health workforce.

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3.5 Introduction to Paper 5: ‘Interprofessional Academic Service-Learning in Rural Australia: Exploring the impact on allied health student knowledge, skills, and practice: A qualitative study’


How this paper is located in the thesis:

This paper explores campus (allied health students and academics) perceptions of the impact of participation in the service-learning program on the inter-professional knowledge, skills and practices of participating allied health students. This paper addresses my second research goal, to describe and understand the development and adaptation of the service-learning program (from the perspectives of campus participants); and my research questions of: 1) what were the impacts of participation in the partnership and program for community and campus participants and for the civic and higher education sectors in which they were located; and 3) how did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants (from the perspectives of campus participants).

What this paper adds to the literature:

This paper reported on findings indicating that participating allied health students had experienced either no previous inter-professional practice exposure or no previous exposure to health care delivery that enhanced student understanding of inter-professional teamwork practices. Participants described the multi-modality supervision models employed in the program—direct, indirect, peer and inter-professional—as enhancing their knowledge, skills and capacity for teamwork practices. In addition, the structure of the program was identified as supporting inter-professional service provision across the school year through the establishment of a ‘team continuum’ model.
Implications of findings:

If future health professionals are to be developed with the capacity to work collaboratively in the provision of quality health care, it is imperative that we provide pre-registration health students with meaningful inter-professional practice experiences. The capacity to practise as part of an inter-professional team is an industry expectation of new graduate practice. Inter-professional service-learning is emerging within the rural Australian context as one approach to pre-registration education and practice exposure. Based on participant experiences, community-based inter-professional service-learning may provide universities, health services and students with an alternative to traditional hospital-based placements in the development of student inter-professional knowledge, skills and practices.
3.5.1. Faculty of Health Sciences – Author Contribution Statement

Faculty of Health Sciences
Author Contribution Statement

Candidate Name: Debra. Maria Jones

Degree Title: Doctor of Philosophy


As a co-author of the above paper, I confirm that the above candidate has made the following contributions to the above paper:

- Conception and design of the research
- Analysis and interpretation of the findings
- Writing the paper and critical appraisal of content

Professor Lindy McAllister

Signed: ___________________________ Date: 11 May 2016

Professor David Lyle

Signed: ___________________________ Date: /5/14
Interprofessional Academic Service-Learning in Rural Australia: Exploring the impact on allied health student knowledge, skills, and practice.

A qualitative study

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Abstract

In 2009, health, health education, and school education agencies in rural NSW, Australia, partnered with a metropolitan university to develop an interprofessional service-learning program. The program aimed to address unmet allied health needs of regional school children. Speech pathology and occupational therapy student placements were aligned to enable the provision of interprofessional student services. Despite program longevity, no formal research had been undertaken on cross-sector program impacts and outcomes. This pragmatic qualitative study explored the perspectives of multiple-program stakeholders, school principals, and senior managers from facilitating agencies, speech pathology and occupational therapy students and allied health academics. The study aimed to gain a holistic understanding of program impact and outcomes from multi-dimensional perspectives. This paper focuses on student and academic findings associated with interprofessional education and practice. Students participated in interprofessional focus groups. Academics participated in semi-structured individual interviews. Data were analysed using a constant comparative method; broad codes were developed and collapsed into three key themes: previous interprofessional practice exposure, program supervision model, and interprofessional practice impacts. Findings suggest that: 1) students had experienced either no previous interprofessional practice exposure, or exposure that effectively enhanced student understanding of team work practice; 2) student participation in the program enhanced continuity of care through the ‘team continuum’ and capacity to practice interprofessionally. Lessons learnt from this rural program have influenced the practice of a metropolitan university.

Keywords: allied health; interprofessional; occupational therapy; rural; service-learning; school children; speech pathology

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Introduction
Rural and remote (referred to as rural throughout this paper) New South Wales (NSW) children are more likely to experience social, economic, educational and health disadvantage, acknowledged precursors of developmental delay (Simon et al. 2013, NSW Department of Education and Communities 2013, Baum et al. 2006, Australian Institute of Health and Welfare 2009). These children are less likely to have access to a range of allied health services to prevent and address these needs due to persistent health workforce shortages (Spers and Harris 2015, Allied Health Professionals Australia 2013, Health Workforce Australia 2013). For many rural families this disadvantage and service inaccessibility can be intergenerational (McLachlan, Giffith, and Gordon 2013).

In 2009, regional stakeholders, public schools, the health sector and the Broken Hill University Department of Rural Health (BHUHDRH) partnered with The University of Sydney’s Faculty of Health Sciences in the development of an allied health service-learning program. The program, in the first instance, aimed to align speech pathology (SP) student learning experiences to the provision of services for pre-school and primary school children to address unmet speech and language needs. The program rapidly expanded to include occupational therapy (OT) students in 2010, refocusing the program to an interprofessional service-learning (IPSL) model (Jones et al. 2015).

Perceived benefits of the program included enhanced service accessibility and potential impact on child health and resultant later life outcomes, growth in student placement capacity and the provision of interprofessional education (IPE) that directly aligned to interprofessional practice (IPP) opportunities for students.

Defining and describing interprofessional practice
Freeth et al (2005) defined IPP as “two or more professions working together as a team with a common purpose, commitment and mutual respect” (ix-x). IPP is considered essential in responding to complex health needs requiring input from more than one profession (Briones et al. 2011), complexity that is reflected in rural Australian contexts. IPP is important in the provision of safer, effective and sustainable patient-centred care, achieved through enhanced interprofessional communication and collaboration, coordination of services and team work approaches (Kümmer et al. 2015).

Provision of interprofessional education (IPE) defined as occasions when two or more professions learn from, with and about each other to improve collaboration and quality of care (Centre for the Advancement of Interprofessional Education 2003), is an approach to the development of health students for contemporary IPP (Glenton and Bialkowski 2014, Polking and Kiersma 2014). The World Health Organisation (2010, p1) stated that, “Once students understand how to work interprofessionally, they are ready to enter the workplace as a member of the collaborative practice team”.

Pre-registration IPE can include clinical simulation (Baker et al. 2008), interprofessional problem-based scenarios (Boyle et al. 2008) and work integrated learning (WIL) experiences such as interprofessional student training wards (Brewer and Stewart-Wynne 2013). More recently interprofessional service-learning (IPSL) (Clift et al. 2015, Learder et al. 2014) is emerging within the rural Australian context, directly aligning student learning to IPP experiences to address community identified areas of health need (Frakes et al. 2014, Jones et al. 2015).

Interprofessional service-learning
Service-learning is an experiential educational pedagogy, students learn through direct service provision that is specific to their discipline (Eyrle and Olies 1996, Jacoby 2003). Service-learning is distinguished from clinical placements by the equal weighting between student learning and service outcomes. Through structured reflection, students apply their theoretical knowledge in real world settings exploring their professional and civic roles (Seifert 1998).
The provision of services in community-based settings – in this instance, rural pre-school and primary schools – enables students to learn about service continuity, health promotion, communication, collaboration and health issues that affect underserved communities (Seifer 1996). Service-learning aims to recognise and respond to societal needs, and interprofessional education aims to form teams to meet those needs, assisting health students to learning about collaborative IPP in alternative health care settings (Clark et al 2015).

The program

The Allied Health in Outback Schools Program (AHOBS) commenced in 2009, responding to concerns raised by primary school principals on the detrimental impacts for children who were unable to access allied health services. Rural communities are characterised by persistent allied health workforce shortages (Allied Health Professionals Australia 2013; Health Workforce Australia 2013; Spiers and Harris 2015). The BH-LDRH drew on its organisational relationship with The University of Sydney to engage representatives from the Faculty of Health Sciences, providers of allied health pre-registration education, to work collaboratively with local partners in program development.

Serial cohorts of OT and SP students from four universities, now undertake placements across four school terms. Student to supervisor ratios are 4:1 for OT, and 6:1 for SP. Students, as interprofessional teams, under the supervision of discipline and interprofessional qualified clinicians, provide screening, assessment and therapy services for school children with mild to moderate needs across twelve school sites and three regional communities. Children with more complex needs are referred to hospital clinicians. Approximately 150 children access these services annually.

Additional interprofessional program elements include a five day intensive induction in Broken Hill, weekly clinical and professional reflection sessions and mid- and end of placement focus group evaluations. Despite these evaluations, longevity of the program and perceived benefits associated with IPP, no formal evaluation of program outcomes for cross-sector stakeholders had been undertaken. Due to the breadth of findings associated with this study, this paper focuses specifically on OT and SP student and allied health academic findings associated with IPE and IPP.

The study

This qualitative study adopted a pragmatic research design (Sandelowski 2000; Smith, Bekker, and Chester 2011), that is, a design that allowed the study questions to be addressed from multiple and diverse views and interpretations, to explore the perceptions and experiences of OT and SP students and allied health academics – one rural based at the BH-LDRH with direct responsibility for student supervision and one metropolitan based with a strategic program role – who were engaged in the development and delivery of the program. Study questions explored:

1) Factors that influenced participation in the program;
2) Effects of program participation;
3) Recommendations for program improvement;
4) Participant perspectives on the future directions of the program.

In asking these questions we hoped to gain a deeper understanding of program impacts and outcomes to contribute a rural perspective to the Australian service-learning discourse.

A pragmatic qualitative research design was selected based on the multi-sectorial nature of participants, variations in their roles within the program and potential diversity of backgrounds and experiences associated with program participation. The researchers had a desire to avoid over-immersion in the epistemological underpinnings of a chosen method that poorly aligned to the complex and multi-dimensional aims of the study (Sandelowski 2000; Smith, Bekker, and Chester 2011).
Methods

Ethics approval

A low risks ethics approval for this study was obtained from The University of Sydney Human Research Ethics Committee (approval number 2014/178). Written approval was obtained from La Trobe University.

Participants

Participants were purposefully selected (Creswell 2007) based on their roles in program development and delivery. An introductory email was sent by an independent administration officer to potential study participants, OT and SP students undertaking their placement in one school term in 2014 (via student email accounts), and to two allied health academics (via work email accounts). Participant information and consent forms were attached to this email and contact details of the lead investigator provided for additional study information. Signed consents were returned to the administration officer. All data were collected in the latter half of 2014.

Four OT and six SP students – representing all potential participants – consented to participate in one of two interprofessional focus groups (FG) conducted onsite at the BHUDRH. One rural academic with direct supervision of students, and one metropolitan academic with a strategic role in the program, consented to participate in individual semi-structured interviews: face-to-face for the rural academic, and via teleconference for the metropolitan academic.

Face-to-face focus groups

OT and SP students were purposefully allocated to one of two interprofessional FGs reflecting interprofessional program design: two OT and three SP students in each FG. FGs were selected for their ability to generate information on the collective view of the students and to generate a rich understanding of student experiences (Morgan 1998). FGs were facilitated by an independent researcher, running for approximately 60 minutes. A prepared schedule of questions was used to guide discussions. Questions were developed from findings from previous student program evaluations and study aims. Questions focused on factors influencing student engagement in the program, including: student understanding of the program prior to participation, comparison of the program to previous placement experiences, impacts of program participation, how students would describe the program to their non-participating peers, insight into program aims, suggestions for program improvement and thoughts on the future directions of the program.

Additional questions were asked as needed to encourage greater feedback. Sessions were recorded and manually transcribed. To ensure confidentiality, students were de-identified by discipline within the transcripts (due to small participant numbers and the rural location). Students were allocated FG and student numbers. e.g. Focus Group 1 Student 1 – FG1.S1, Focus Group 2 Student 2 – FG 2.S2.

Semi-structured individual interviews

One rural academic and one metropolitan academic consented to participate in semi-structured interviews, two interviews in total, running for approximately 50 minutes. The same researcher facilitated both interviews using a prepared schedule of questions. Questions were informed by study aims and previous academic feedback on the program. A level of variation existed between the questions asked of the rural and metropolitan academics to reflect their operational and strategic roles. Individual interviews were selected as a data collection method due to role variations, differing levels of seniority and geographical divide. Questions focused on factors that influenced program participation, program role, insight into why the program commenced, impact of participation in the program, program aims, how they would describe the program to
external agencies, and suggestions for program improvement and future program directions. These questions reflecting those asked of FG participants.

Follow-up questions were asked as needed to encourage greater participant feedback. Individual interviews were recorded and transcribed manually. Transcripts were provided to participants for verification. Academics were de-identified by discipline to ensure their privacy. Identifiers were allocated as Rural Academic: RA, and Metropolitan Academic: MA.

Data analyses

Data were analysed using an inductive process with the explicit aim of describing and interpreting the range of experiences associated with the phenomena, that is, their participation in the program. (Ritchie and Lewis 2003). The lead researcher read and re-read student and academic transcripts and manually assigned initial descriptive codes using a process of constant comparative analysis within and across student FG and individual academic interview data (Charmaz 2013, Miles, Huberman, and Saldana 2014). Broad codes were developed and collapsed into key themes and subthemes. Two researchers then independently reviewed a selection of transcripts, coded and categorised data, and identified emerging themes. All the researchers then reviewed and re-analysed results to refine descriptions of themes and subthemes (Greweil 2007). The lead researcher then coded and categorised the remaining data.

Findings and discussion

Three key themes relating to IPE and IPP were identified: previous interprofessional practice exposure, program supervision model, and impact on interprofessional practice. See Table 1 for themes and subthemes.

Table 1: Themes and subthemes

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
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<tbody>
<tr>
<td>1) Previous interprofessional practice exposure</td>
<td>1) Types and levels of supervision</td>
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<td></td>
<td>2) Peer roles</td>
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<tr>
<td>2) Program supervision model</td>
<td>1) Integration of interprofessional knowledge into therapy</td>
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<td>2) Service continuity</td>
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<tr>
<td>3) Impact of program participation on interprofessional practice</td>
<td>3) Role of socialisation</td>
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These themes and subthemes are now described in greater detail using direct participant quotes. The discussion on findings will be provided at the end of each subtheme.

Theme 1: Previous interprofessional practice exposure

The RA described their personal pre-registration experience of IPP: “Although I hadn’t done a lot of [interprofessional practice] work it wasn’t because I wasn’t interested. It had really been pushed at university [that] I hadn’t had an opportunity to try [interprofessional practice] at university. This lack of opportunity was also described by students: “You don’t really get, you never get [interprofessional practice] experiences” FG1:52. This student then went on to describe their perception of previous IPP exposure: “You can go on a month [long] hospital placement and liaise with [another discipline] but that doesn’t say you have a relationship with
them’ and another student reflected: ‘You might be able to shadow the [other profession] today, you might watch them, you just walk around with them but you don’t see that connection, that side of a team. We’ve definitely learnt a little more about each other’s profession and how we work together there’ FG2.83.

The MA described the faculty’s goal of providing IPP experiences: ‘A goal of our faculty is to make sure our students have at least one genuinely interprofessional placement. Any new placements we set up now have to be interprofessional and Broken Hill was at the forefront of that [change], however, [for] many of our students the [Broken Hill placement] will be the one and only true interprofessional placement they have, the interprofessional aspect [of the program] is unique’. This ‘uniqueness’ of IPP exposure was discussed by students: ‘This placement is quite different to everyone else’s because we actually get to work with students from another discipline. We do class-based therapy alongside them. We know what their activities are’ FG1.52.

Theme discussion

If we are to develop future professionals who have the capacity to work collaboratively in the provision of quality health care it is imperative that we provide pre-registration health students with meaningful IPP experiences that prepare them effectively for contemporary health care practice (Poole, Laparbera, and Kersma 2015). Authentic learning is recognised as a valued approach by health students, clinicians and academics in the development of skills, knowledge, professional and clinical attributes (Emstzian et al 2009). However health students can feel poorly prepared to participate in complex health settings (Prince et al 2005, Latini-Valianinen, Talvitie, and Luuka 2007). Despite IPP being considered a key competency in health professional development (World Health Organisation 2019) and normal workplace practice, Howell, Devine and Portsmouth (2004) identified that students were likely to have limited IPP experience.

The acquisition of work-readiness attributes such as team work, communication and collaboration are becoming an industry expectation of student and new graduate practice (Smith, Fein, and Russell 2014). Feeh et al (2005) highlighted the importance of IPE and IPP for students in enabling them to respond to health care complexity and population health needs. Bathridge et al (2010) described key competencies for collaborative IPP including: role clarification where learners and professionals understand their role and the role of other professionals; team functioning where learners and professionals understand the principles of team dynamics and group processes for effective IPP, and interprofessional communication where learners and professionals communicate with each other in a collaborative and responsible manner.

Findings from this study validate those of Howell, Devine and Portsmouth (2004). Students and the MA described the ‘unique’ nature of the IPP program experience, highlighting the difficulty for universities in providing quality IPP experiences and resultant impact on student learning outcomes. Such perceptions of their previous experiences, that of ‘shadowing’, difficulty in establishing a professional relationship, and failure to connect their experience to IPP, detrimentally impacted on their ability to gain insight into the role of collaborative teams.

Theme 2: Program Supervision Model

This theme has two subthemes: types and levels of supervision, and peer roles.

Subtheme 1: Types and levels of supervision

Students described the program knowledge held by their interprofessional supervisors:

Everything is so laid out. The [Interprofessional] supervisors just know every little bit they come across. We do a [reflection session] every week and they have an agenda that has slowly been accumulated from previous student [experiences]
Things said at week 5 [of placement], these things happen. They know what to expect FG2-S1.
The RA described their professional development associated with program participation and student supervision:

I’ve had to learn how to manage a classroom [of children] and how to supervise [interprofessional] student groups because the program is integrated and their [practice] overlaps. The supervision model is [different], the students are in the [school classroom] together delivering therapy and there can be potentially four sessions occurring [simultaneously]. I could be observing one session for a student and [if it’s going well] listening and watching what’s happening in other sessions at the same time.

The MA identified the lower level of direct discipline student supervision of the program and student impact: “The supervision, the direct supervision is low in Broken Hill and the students still learn, they still achieve, it all works”; and program impact on faculty confidence to explore alternative supervision approaches. It’s given academics [here] the confidence to try other models instead of that traditional one-on-one supervision”.

Students reflected on the impact of having less direct supervision:

There’s much less supervision and it really sets us up for working [post-graduation]. To be able to manage our own caseloads and still have the [supervisors support] there to ask them questions, find out if we are doing the right thing, to have [our peers as well] to discuss different aspects of [therapy] FG2-S2.

Students also described the support provide by the supervisors: “They are so willing to help. They’re not wearing rose-coloured glasses, they know what’s happening with us” FG2-S4.

Subtheme discussion

WIL literature describes the importance placed on the acquisition of new graduate generic work-readiness attributes. These attributes include clinical reasoning, adaptability, time management, planning and organisation, self-confidence, independent working and team work (Jackson 2010, Smith, Ferns, and Russell 2014). Student capacity to articulate these skills to potential employers is being linked to enhanced employment outcomes for Australian graduates (Smith, Ferns, and Russell 2014). Interprofessional supervision literature proposes that it can be possible for qualified professionals from one health discipline to provide supervision to interprofessional students when the focus is on generic skills development and skills translation into practice (Grace and Morgan 2015). With increasing student placement demands (Health Workforce Australia 2013), alternative approaches to IPP experiences and supervision are being explored.

The supervision model associated with this program draws on discipline specific, interprofessional, direct, indirect, and student peer supervision (Kuijper et al 2013). Teaching staff provide an additional layer of generic supervision for classroom activities. Any model that draws on a range of supervision modalities has to ensure that the learning context is suitable, therapy provided by the students is low risk and within their scope of practice (Grace and Morgan 2015), and that supervisors are appropriately skilled to undertake these roles (Chepko et al 2012). If these elements can be achieved then students can be provided with an opportunity to explore shared practices and generic competencies of relevance across a range of health disciplines enabling them to locate themselves within IPP teams.

Subtheme 2: Peer roles

The RA discussed the integration of peer learning and supervision roles within the program:
The idea of encouraging peer support has permeated all aspects of the program. Peer learning is a way of having more advanced peers offering recommendations for peers who require additional support. Having peers who need support observing their [more advanced] peers and seeing [how] they [practice].

The process of discussing peer roles with students was described: 'To encourage their peer learning I talk more formally with the students in [reflection sessions] that you don't go to your supervisor first in the workplace, that's not the first place you go [if you need support], you go to your peers first, that's what I'm trying to encourage' RA.

An example of the peer learning and supervision roles was provided by a student: 'I was looking at these pupils in [the school classroom] and going, 'I still don't know what I'm supposed to be doing with these pupils', then my [peers] came back and said, 'You can possibly try this, this and this'. Then when I saw the [class-based] session it made more sense' FG1:33.

The MA described implications of the peer learning approach from their perspective: 'I think the students learn how to work with their peers and to maximise their learning through their peers. That's a great workplace skill to have'.

Subtheme discussion

Education strategies identify the need for supervisors to acquire facilitation skills to enhance student IPP experiences, rather than directing students (Barr and Tapp 1995). Facilitated learning enables students to develop greater levels of practice autonomy, enhanced self-directed learning and identification of their role within their peer groups, optimising interprofessional interactions (Kupers et al 2013). Sevenhuyzen et al (2011) state that peer learning can enhance student learning through the addition of peer feedback to educator feedback. Students can discuss decision-making processes, share work-place challenges and contribute to peer social-supports (Secomb 2003). Peer group supervision (PGS) is a contemporary approach to clinical supervision for allied health professionals (Kupers et al 2013). Peers meet as a group, learn together, share professional experiences and reflect on their practice. The authors propose that the interprofessional reflection sessions held weekly in the program reflect the characteristics of PGS (Andersson et al 2008).

Interprofessional and peer supervision, in the context of this program, may serve an additional purpose, enabling multiple student-to-educator ratios (Sevenhuyzen et al 2013). Given the increasing demands for student placements, multiple student-to-educator models may contribute to growth in placement capacity – as was reflected in the far west region of NSW through program establishment (Jones et al 2010) – without compromising student learning, as is evidenced by findings described in this paper.

Theme 3: Impact of program participation on interprofessional practice

This theme contains three subthemes: integration of interprofessional knowledge into therapy; service continuity; and role of interprofessional socialisation.

Subtheme 1: Integration of interprofessional knowledge into therapy

The RA described their interpretation of interprofessional practice, analogous to the role of allied health aides in therapy delivery: 'I talk to my students about being a [specific discipline] but an [other discipline] aide. We have a role outside of our own discipline'.

The students described the program emphasis placed on interprofessional practice:

'There's a big emphasis on working with the [other discipline] and them working with us around coordinating [therapy] timetables if we want to see a [pupil] together. We definitely don't have that much interprofessional [experience] in the other placements FG2:33.'
Students discussed interprofessional knowledge sharing associated with therapy delivery: 

‘Maybe something is working, we have the same [pupil] and something is working for our discipline during therapy so you pass [that knowledge] onto the [other discipline] and say try this approach.’ FG1-S3. Students provided examples of knowledge translation into practice:

‘It could be something as simple as holding [a pupil’s] hand that usually runs as soon as the classroom door opens. I held the [pupil’s] hand and it worked (they didn’t run off). You share the [strategy] with [the other discipline] and they do it. We can now both [manage] the [pupil] and get our [therapy delivered]’ FG1-S4.

Students provided insights into interprofessional knowledge seeking activities: ‘We’re starting to pick up on [aspects of therapy] from [the other discipline]. If you notice a [pupil] having trouble (and it may be relevant to the other discipline) you go and have a chat with them and discuss what the problem could be’ FG1-S4.

Students provided direct examples of interprofessional integration of therapy goals:

‘We found that we can incorporate each other’s therapy goals into just everyday things that the [pupil] do. Say [the pupil’s playing] and we need to [integrate the other disciplines therapy] we can do that. We’re reinforcing the [other disciplines] therapy. There’s that cross-over [of therapy] FG1-S4.

Subtheme discussion

Collaborative client care requires mutual respect and an understanding of the roles and responsibilities of other health professions for effective team work and quality care (World Health Organisation 2010). In rural locations, a lack of accessibility to a range of health professionals has consequences for the extension of roles and scope of practice for health care providers. The Mason Review (Mason 2013) of Australia’s health workforce programs identified the need to challenge traditional professional domains of practice that impede innovation, calling for health professional role redesign to allow practitioners to work to their fullest potential and scope of practice.

Poling, Llabarbera, and Klepzig (2015) state that if health professionals are expected to work collaboratively in the provision of safe and coordinated patient care then their education needs to include preparation on how to work collaboratively including sharing of knowledge and expertise. Zdolowski (1996) argues that service-learning should require students to draw on their discipline-specific knowledge and skills in service provision to enhance their understanding of their professional roles. Interprofessional service-learning extends this to include student acquisition of knowledge of other professionals, their roles and responsibilities to enhance team work practices. In the context of this program further extension has occurred to include integration of other discipline low-risk therapy into practice.

Degrees of variance exist in the IPSL literature on the role and scope of practice for students. In a study conducted by Clark et al. (2015), students engaged in IPSL were not required to draw on their discipline-specific knowledge. Findings identified that whilst students reported learning outcomes associated with attitudes towards interprofessionalism and team work skills, student knowledge of interprofessional teamwork and roles of other professions was less prominent. This is attributed to the early stage of student professional identity and role development, and contrasting with the final year stages of development of student participants in the study program.

In this study, participants identified a lack of previous IPP exposure. By placement week 5, when the FGs were conducted, students were describing interprofessional knowledge sharing, the role and activities of the other discipline and integration of other discipline low risk activities into their own service provision. As IPSL gains momentum within the Australian health education context, there is a growing urgency for us to define this educational pedagogy from an Australian perspective. The authors propose that we ensure that discipline specific.
knowledge and practice is a hallmark of student learning and service provision, contributing to student capacity and competence in becoming effective and valuable contributors to IPP teams.

Subtheme 2: Service continuity

Students identified the impact of the ‘team continuum’ approach to service delivery on their sense of contribution to service outcomes. ‘In other placements you just go in and out and you don’t really feel like you’ve made a difference. Here in this continuum of students you really do feel like you’re at least making some [difference]’ FG1:S2, and: ‘Our supervisors are pushing the idea that we’re part of a continuum and that has really helped our understanding [and] not put so much pressure on ourselves to help so many children’ FG2:S3. Students also described the importance of the continuum: ‘There were a lot of things to learn but its [good to see that previous cohorts] have been doing that same thing. You just have to keep doing it so that the next person knows exactly what to do’ FG1:S2. Students also contrasted the ‘team continuum’ approach of the program with their previous school-based placement experiences:

All the school placements I’ve been on, we were the first [group] to go in and we had to set up the reports and files the way we wanted them. It made it harder [for continuity]. I always wondered how anyone [else] could follow on from that FG1:S2.

Subtheme discussion

As health care increasingly focuses to community-based service provision, service recipients and providers can be confronted with complex systems involving multiple health professionals. Olsen and Blachowicz (2014, 237) state that: ‘patients and carers often describe falling through the ‘cracks’ and feeling ‘lost’ because of poor communication and collaboration between health professionals who are providing treatment’, resulting in lack of service continuity. For rural Australian communities, these risks are exacerbated through persistent health workforce shortages (Health Workforce Australia 2013). In many instances, rural communities can be reliant on fly in fly out (FIFO) and drive in drive out (DIDO) models of care, with services being dependent on organisational rostering and clinician availability. Approaches to care can alter, based on individual clinician preferences, resulting in disjointed service delivery for recipients and existing local team members (Nakemman, Currie, and McElwainey 2012).

A core feature of IPP is the creation of collaborative teams that support continuity of service provision and improved quality of care, Marion, Lorimer and Leander (1996) describe a team as a small number of people who are consistent and committed to a shared purpose, with common performance goals, complementary and overlapping skills. The authors propose that an extension of this definition of a team – and interpretation of IPP teams – is required in relation to study findings, that of an interprofessional ‘service-learning team continuum’ (SLTC). Student cohorts, or teams, change every school term within the program, lacking the consistency and continuity associated with team and IPP team literature. However the program has developed to ensure strong links are established across each individual cohort of students. These interprofessional student teams drawn on and build upon the work of previous teams to inform current activity and future service provision, creating connectivity and continuity of services. This SLTC approach may provide an alternative model that can be considered in other rural locations. Additional research to explore this concept is required.

Subtheme 3: Role of interprofessional socialisation

The MA stated: ‘I think the level of support and acculturation the [students] get is unique. Other [rural] communities don’t have a University Department of Rural Health so when the students go there they don’t have that support. I think the [UDRi] has a set of benefits that [would] be good to define’. A number of UDRIs have accommodation infrastructure and the RA described their role in student allocation to accommodation:
I [help] coordinate student accommodation to make sure our students are divided to encourage them to interact socially. They tend to gravitate to their [own discipline] so I make a very clear point that they've been accommodated across disciplines. Although there are elements of [social interactions] naturally occurring we still have to plan it so it works otherwise they swap rooms which is what has happened previously.

Students described their anxiety on learning that they would not be co-accommodated: ‘Coming out here we’re quite concerned not being in the same room as our [discipline peers] and being all split up’ FG2/S2, however:

It's been completely different [living out of home] and it's fantastic that [all the students] just get in together. We have What's Up and Facebook Groups and everyone goes to different places together, it's really communal. You don't have to [socialise] with your [discipline peers] you can go with someone from [another discipline] who is a student in the same position as you are FG2/S2.

Subtheme discussion

Social learning theory focuses on the relational aspects of learning and formation of communities of practice (Lave and Wenger 1991) however limited research is associated with social processes of learning within IPE and IPP environments (Cai et al. 2010). The provision of shared accommodation and common learning areas for students undertaking placements in rural locations has been identified as having the potential to contribute to the development of interprofessional relationships and teamwork (Jacob et al. 2012).

Study participants identified experiencing levels of anxiety when informed they would not be co-accommodated with their discipline peers however their experience of interprofessional socialisation identified the benefits accrued through student integration. Creating collegiate environments through shared social experiences may have the potential to enhance formation of IPP communities. The authors acknowledge that not all rural communities have access to accommodation infrastructure, and potential cost burdens in self-funding accommodation is a barrier to student uptake of rural placement opportunities. Additional investment in this area is required if we are to expand health student exposure to rural IPP (Spers and Harris 2015).

Limitations

Small participant numbers reflects study design, exploration of a range of stakeholder perspectives, purposive sampling, and the realities of allied health practice and distribution of allied health academics within the rural Australian context. Additional research on program impact and outcomes for larger numbers of student cohorts and academics engaged in the program is required to enhance the generalisability of these findings. IPSL is equally concerned with impact and outcomes for service recipients, and so additional research is required on pupil, family and teacher outcomes. Community partner perspectives on impact and outcomes of participation in the program are described in subsequent papers.

Conclusion

This pragmatic qualitative study sought to contribute to the Australian discourse on IPSL from a rural perspective. Study findings have led the authors to propose an extension to the interpretation of IPP teams to include SLTC as one approach to addressing allied health service accessibility and fragmented service provision in rural locations. Findings contribute to our understanding of interprofessional supervision and the role of student peers in enhancing learning outcomes and placement capacity through multiple student-to-educator ratios whilst not compromising the quality of student learning. The authors acknowledge that client safety is paramount and needs to lead IPSL innovation in health education. The role and contribution of interprofessional SLTC in addressing mild-to-moderate developmental delays experienced by
rural children, needs to be carefully considered. Although this study describes valuable IPP student learning outcomes service-learning is equally concerned with outcomes experienced by service recipients. Additional research is required in this area if we are to meet the intent of service-learning, that of reciprocal benefit and value of service and learning activity.

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References


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3.6 Chapter Summary

In this chapter, I have presented four published papers associated with the study findings. These papers have explored the conditions and catalysts that influenced the initiation of the community-campus partnership and associated service-learning program from community and campus perspectives; civic and higher education impacts of this participation for community and campus participants; campus perspectives on the impact of participation on student acquisition of work-readiness attributes and future employability; and campus perspectives on the impact of participation on student acquisition of inter-professional knowledge, skills and practice. These findings contribute significant new knowledge to the community-campus partnership and service-learning literature, specifically from community and rural and remote Australian perspectives.

In addition, a conceptual framework has been developed that seeks to inform how health and higher education sectors can best engage with rural and remote communities in the design of their health services and development of their health workforce. This conceptual framework chapter has been informed by Stage 4 data comparison and analysis across community and campus data. Furthermore, the exploration of complexity, social and organisational theories and community engagement, health partnership, population health and health literacy principles have informed the framework development. I now present this conceptual framework in Chapter 4 which also contains my final paper, Paper 6, currently in review.
CHAPTER FOUR

A Community Engaged Approach to the Design of Rural and Remote Health Services and Workforce Development: A Conceptual Framework to Inform Health and Higher Education Sector Approaches to Engagement
4.1 Introduction

In this chapter, I have synthesised the previously presented literature and data arising from this study and undertaken a further exploration of the literature to develop a conceptual framework. I propose that this framework can contribute to informing how the health sector, that is, health service policy makers and providers and higher education institutions which have carriage of the education of our future health professionals (referred to as the health sector throughout this chapter) approach the engagement of rural and remote Australian communities in: 1) the design of their health services; and 2) the development of their health workforce. The framework has been informed by findings identified through Stage 4 of data comparison across the community and campus groups. In this stage, I explored the multiple and enmeshed perspectives and experiences of study participants. In doing so, I have acquired a more comprehensive and complex understanding of the partnership, program and participation impacts. To be specific, I have extended my understanding of:

1. How the partnership and program were perceived across community and campus groups;
2. How the community and campus groups acted and interacted to provide a bigger picture of relationships and impacts;
3. The factors that contributed to community engagement in the partnership and the sustainability of the program;
4. The relevance and potential transferability of these findings to other rural and remote Australian contexts, and;
5. The potential impacts of these findings on how the health sector approaches community engaged rural and remote health care.

In comparing Stage 4 findings I identified shared characteristics and unique insights associated with partnership and program participation. These characteristics and insights then informed the exploration of complexity, social and organisational theories as well as the principles associated with community engagement, population health, primary health care, health partnerships and health literacy. These theories and
principles and the study findings informed the identification of the six key concepts that I propose symbolically frame the partnership and program. These concepts are: 1) community contexts; 2) features of engagement; 3) focusing of engagement; 4) influences on engagement; 5) engagement impacts; and 6) potential outcomes. Each concept is composed of components that describe in greater detail the multiplicity of influences within that concept. A high level of interconnectedness exists within and across these concepts and associated components. A conceptual model—a visual representation of this framework—has been developed to support framework interpretation, adaptation and application. A significant citation has been drawn from the existing literature to introduce each component. Direct quotations from study participants are then included within the component discussions to further illustrate their significance. These concepts, components, significant citations and participant quotes constitute the key features of this framework.

This final stage of data comparison, further exploration of the literature and the subsequent development of this conceptual framework have enabled me to address both the third study goal: to develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants, and the third study question: how did community and campus participants act and interact with each other to fulfil the shared purposes of enhancing allied health service accessibility and allied health student educational outcomes?

In the following sections, I discuss the need for this framework; the importance of context in informing framework development; the desirability for community engaged health care; the challenges to achieving this engagement; my rationale for the selection of a conceptual framework to present framework concepts, components and the synthesis of study findings; the multiple theories drawn on and the rationale for the adoption of a systems interpretation of these theories; and the principles used to further inform this framework. I then introduce the framework, and outline and assemble concepts and their components, thus providing a comprehensive and unified framework. The intent of this framework and the factors that need to be taken into consideration when exploring the potential for framework transferability and adoption in other rural and remote Australian contexts are then discussed. My final
paper. Paper 6, is then introduced, with the final discussion providing a summary of Chapter 4.

4.2 Need for this Framework

Calls are increasing to re-orientate rural and remote health service design and workforce development (HWA 2013, SCoH 2012, Wakeman and Humphreys 2011, DoHA 2008). This re-orientation is necessary if we are to ensure service alignment to community-identified health needs, contextualised care and care that is provided by responsive health professionals (HWA 2013, SCoH 2012, Frenk et al. 2010). Despite several community engagement frameworks that describe principles, structures and processes of engagement (Moore et al. 2016, Johnson 2015, Sarrami-Foroushani et al. 2014), I argue that many of these frameworks are premised on discrete theoretical interpretations of engagement (Arnstein 1969, WHO 2001, O’Mara-Eves et al. 2013) that fail to account for the diversity of rural and remote community contexts, the realities experienced by these communities, the complexities they confront, their expectations of health care and their previous engagement experiences (Hyett et al. 2014). In enabling the re-orientation of health services and professional practices, I propose that a conceptual framework of engagement, one that is informed by rural and remote engagement experiences, can guide health service and workforce policies, funding and practices to enhance service accessibility, acceptability and sustainability, contributing to improved health outcomes for rural and remote Australian communities.

4.3 Importance of Context

In Chapters 1, 2 and 3, I have described the importance of contextualising health services and workforce practices. However, Moore et al. (2016) informed us that, despite growing calls for greater community engagement in the design and delivery of services, ‘there is no consensus as to what this involves, and there appears to be a gap between the rhetoric and the reality of community engagement’ (p. 2). Kenny et al. (2013) stated that the engagement of rural and remote communities in health partnerships is considered central in ensuring the acceptable, appropriate and
effective responses required to begin to tackle entrenched inequities experienced by these communities. The study findings that reflected community expectations of service responsiveness to health needs and context, and campus responses to these expectations, have informed the development of this framework.

Furthermore, the study’s community-campus partnership and service-learning program have evolved since the initial discussions held in 2008. The service-learning program is now considered an extension of allied health service provision within the region, being the main provider of occupational therapy and speech pathology services to children with identified mild to moderate developmental delays. Due to the longevity of this program and the consistency of allied health service provision, this service is now perceived by community agencies as being a part of the greater whole of regional allied health service delivery. Extensive work has been undertaken in the integration of this program into the allied health service models employed by local health services. Due to the role and location of this program within the regional approach to addressing the allied health needs of far west NSW children, I propose that the concepts and components described in this conceptual framework have broader significance and resonate beyond the community agencies and partner university, the entities that constitute the community-campus partnership. This evidence-based framework can be more widely used by rural and remote health services to inform their approach to community engagement in health service design and workforce development. The term ‘health sector’ is therefore used to capture this proposition and the potential transferability and utility of the conceptual framework presented in this chapter.

4.4 Desirability of Community Engagement

Community engaged health care is perceived to improve the health outcomes of populations and the acceptability, accessibility and sustainability of services (Moore et al. 2016, CDC 2011). The CDC (2011) stated that:

If health is socially determined, then health issues are best addressed by engaging community partners who can bring their own perspectives and understandings of community life and health issues to a project. Approaches to health improvement
must take into account the concerns of communities and be able to benefit diverse populations (p. 4).

Engaged communities are perceived as being able to contribute to: the identification of causal linkages to poor health, such as service gaps and social needs; health policy development; responsive practices; and the identification of potential ethical dilemmas in health care delivery, those that may not be immediately obvious to geographically and contextually distanced state and federal health departments and higher education institutions (CDC 2011, Moore et al. 2016), that is, the health sector. The meaningful engagement of communities is critical in addressing this geographical and contextual divide. Moore et al. (2016) informed us that when the health sector acquires a deeper understanding of community contexts, it is better informed to meet community needs. As rural and remote health care becomes increasingly more complex, social needs more pressing, and health resources scarcer, community engaged approaches to health care are gaining greater attention; however, despite the desirability of community engagement, several engagement challenges exist.

4.5 Challenges to Engagement of Communities in their Health Care Agendas

Challenges to the engagement of communities in their health care agendas have been described in Chapters 1 and 3 and can be summarised as the lack of: consensus on how best to define community engagement; evidence that identifies and describes successful and sustainable engagement strategies; empirical evidence on engagement impacts and outcomes, specifically those informed by community experiences; and complex engagement strategies that are capable of responding to diverse community contexts and changing environments (Johnson 2015, Aragon and Garcia 2015, Sarrami-Foroushani et al. 2014).

Enabling rural and remote voices to be heard, and the effective interpretation of these voices, requires political, health sector, professional and power barriers to be overcome (WHO 2008, SCoH 2012, HWA 2013, Cruz and Giles 2000). Politically, Australia lacks a national strategy for the implementation of community engaged health care (Sarrami-Foroushani 2014). The lack of policy has been described as contributing to a parallel lack of political and organisational accountability for
community engagement outcomes (Hyett et al. 2014). The engagement of communities requires a high level of sector receptiveness to community feedback. However, most health care strategies are not characterised by two-way communication between the health sector and communities (Noyes et al. 2013), with the knowledge and expertise of community members discounted while preference is given to the professional knowledge of service providers and academics (Noyes et al. 2013, Ansari et al. 2002).

Empowered communities are considered to have greater capacity to challenge policies and practices that fail to address their needs (Gregson and Court 2010) and to inform ‘how’, ‘where’, ‘when’ and ‘by whom’ services can best be provided (HWA 2013). However, rural and remote community experiences of health care can be marginalised with the identification of issues and solutions being centrally located and controlled within the health sector (Hyett et al. 2014, Kilpatrick 2009). Professionally, health providers have to be receptive to engaging with community members, foregoing traditional approaches that focus on ‘doing to’ communities rather than ‘doing with’ communities (Dunston et al. 2009, Jacoby et al. 2003).

In addition, the community engagement literature focuses on the need to develop the knowledge, skills and capacity of communities so they can effectively engage in their health care agendas (Sarrami-Foroughani 2012, ACSQHC 2014). Yet, less attention is paid to how best to develop the knowledge, skills and capacity of the health sector to enable them to engage effectively with communities in addressing community-identified health needs and priorities through community engaged health partnerships.

Current approaches to the education of health professionals are also criticised for failing to respond to the changing health needs of communities, the poor alignment of practice to community expectations and the lack of knowledge and skills preparation that supports health professionals’ capacity to contextualise care (HWA 2013, Frenk et al. 2010). Frenk et al. (2010) stated that:

In almost all countries, the education of health professionals has failed to overcome dysfunctional and inequitable health systems because of curricula rigidities,
professional silos, static pedagogy (i.e., the science of teaching), (and) insufficient adaptation to local contexts (p. 4).

A conceptual framework, one that is informed by rural and remote evidence, may provide an alternative, more comprehensive and nuanced approach to informing health sector approaches to community engagement. The conceptual framework presented in this chapter has been informed by findings from this study. Study participants were defined by their geographical proximity (communities in far west NSW and academic engagement within this region); special interest (the provision of allied health services to children experiencing developmental delays and the development of health professionals with a greater capacity to practice rurally); and similar situation (direct and indirect experiences of health inequity and disadvantage). This conceptual framework integrates theories, principles and study findings (see Figure 4.1), addressing the identified rhetoric and reality gap associated with community engagement and contextualised health care.
4.6 Why a Conceptual Framework?

Theoretical and conceptual frameworks are used to guide research approaches, communicate findings and present information. To understand why one framework may be considered more appropriate than another, it is necessary to understand the characteristics and intent that differentiate these frameworks. Parachoo (2006) stated that the term ‘theoretical framework’ should be employed when the study being undertaken, or the information being presented, is informed by one discrete theoretical lens. Theoretical frameworks are considered to be scientific hypothesis testing approaches that draw on a body of facts that can be repeatedly confirmed to establish reliable accounts (Imenda 2014). These frameworks are described as being linear in approach and characterised by specificity, including a narrow focus on the problem or solution that is central to a study or core focus of discussion (Iliott et al. 2013). A theoretical framework is a research tool that is used to gain information about a problem or solution that is then used to support prediction and explain behaviours.

In contrast, conceptual frameworks are described as symbolic statements that describe a phenomenon or set of phenomena (Fain 2004). Conceptual frameworks
are considered more ‘fit for purpose’ in environments that cannot be easily controlled and where there is a lack of empirical evidence to guide exploration. Erickson (2010) informed us that ‘scholarly inquiry into the phenomena of service-learning and community engagement is in its infancy and is just beginning to move beyond its early stages to more advanced levels of inquiry’ (p. 2).

Conceptual frameworks have greater acceptability and relevance in representing ways of thinking about a problem and solutions that involve higher levels of complexity (Bordage 2009). In these complex situations, more than one theory and several concepts may be required to provide a depth of meaning. Imenda (2014) stated that:

The process of arriving at a conceptual framework is akin to an inductive process whereby small individual pieces (in this case, concepts) are joined together to tell a bigger map of possible relationships (p. 169).

Conceptual frameworks can draw on existing theories, models and evidence in their development, interpretation, conceptualisation and articulation of well-grounded solutions (Bordage 2009). They allow scholars to build on one another’s work and are dynamic and adaptable to alterations as required (Bordage 2009). This enables framework responsiveness to the ‘messy complexity’ that is experienced in real-world contexts (Ilott et al. 2013).

The selection of a conceptual framework has enabled me to comprehensively examine the ‘messy complexity’ associated with rural and remote community engaged health care. Conceptual frameworks are adaptable to diverse contexts, avoiding a ‘one-size-fits-all’ interpretation (HWA 2013, Humphreys and Wakeman 2009), and enhancing potential framework transferability to a range of rural and remote locations, a diversity that is often expressed but less frequently accounted for in the community engagement literature, and to the design of health services and the development of health professionals.

I make explicit the need for framework adaptation, in partnership with communities, to ensure framework concepts and components resonate at the local community level. This can be achieved through the establishment of a community representative body to guide framework adaptation, implementation and evaluation. This process may
result in the need for a further exploration of the literature and the identification of relevant and meaningful theories, theoretical propositions and principles of engagement, by researchers and/or community agencies, which can then be presented for further community consideration.

4.7 Taking a Systems Perspective

Despite the complexity of rural and remote health care and the presence of interconnected precursors that contribute to inequity and disadvantage, the health sector can focus on addressing the individual building blocks of health in isolation to each other rather than as a part of a more complex, connected and dynamic whole (WHO 2011). The WHO (2008) stated that:

The responses of many health systems so far have been generally considered inadequate and naïve. Inadequate, insofar as they not only fail to anticipate, but also to respond appropriately – too often with too little, too late, or too much in the wrong place. Naïve insofar as a system’s failure requires a system’s solution – not a temporary remedy (p. 7).

Systems thinking aims to provide a more comprehensive understanding of a system and the actions and interactions of individuals and groups, ‘agents’, within systems, how these agents interact and connect with each other and their external environments, and the changes that result from these interactions. However, the WHO (2011) stated that:

Few have tried to implement these concepts beyond single issues to the health system itself, or described how to move from theory to practice – perhaps due to the seemingly overwhelming complexity of any given health system (p. 39).

This conceptual framework aims to describe how participants, the agents, within the community and campus ‘systems’ acted and interacted with each other to enhance health care accessibility and the education outcomes of future allied health professionals. This framework provides insight into the outcomes that can be achieved through these actions and interactions. Framework concepts and components focus not on the individual community and campus ‘building blocks’ in isolation but, in
contrast, this framework is concerned with the dynamic wholeness of the partnership and program. Systems perspectives are increasingly being employed to interpret the internal and external relationships that influence health care accessibility and acceptability, specifically when there is a need to interpret complex cross-sectorial problems and their solutions, as was reflected in this study.

4.8 Theories used in Framework Construction

To understand how to transition the concept of systems thinking to the reality of systems-informed solutions to address health inequity and disadvantage in rural and remote Australia, I have drawn on several existing theories. I propose that these theories can inform health sector approaches to the engagement of rural and remote communities in their health care agendas. I have drawn on complexity, social and organisational theories to describe and reflect the real-world complexity of rural and remote contexts and the partnership and program; the social structures, networks and relationships that existed within and across community and campus groups; and the organisational structures and processes that contributed to partnership formation, program development, implementation, adaptation and sustainability. Specifically, I have focused on complex adaptive systems, social systems and organisational systems theories in the construction of this framework and the interpretation of the study findings.

4.8.1 Complexity theory – complex adaptive systems

Durie et al. (2012) stated that complexity theory offers the potential for:

- comparing such phenomena as networks, sustainability and resilience in biological systems with similar phenomena in social systems, and thereby opens the possibility of transferable co-learning about the causes of such phenomena (p. 3).

Complexity theory rejects a mechanised interpretation of a phenomenon, one that assumes linear causality between events and effects (Mason 2007). Complex systems can be deterministic and evolve through phases of instability where systems that operate on the ‘edge of chaos’ exhibit creativity at the level of the whole system (Price 2004). An essential feature of complexity theory is the concept of complex adaptive
systems. I propose that characteristics associated with complex adaptive systems facilitated the partnership formation, development and adaptation of the program, and partnership and program sustainability. The characteristics associated with complex adaptive social systems are listed in Table 4.1.
<table>
<thead>
<tr>
<th>Features</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free movement of agents within a system.</td>
<td>Agents can interact with each other and their external environment.</td>
</tr>
<tr>
<td>Diversity of agents represented.</td>
<td>Interactions that contribute to novel responses.</td>
</tr>
<tr>
<td>Resilience and tipping points.</td>
<td>Systems can either resist change and maintain their status quo or experience disturbances that create a different state.</td>
</tr>
<tr>
<td>Emergent behaviour.</td>
<td>The development of unpredictable patterns within a system that cannot be adequately described by interpreting the actions of agents within a system in isolation. Emergence results when a number of agents form more complex and interrelated patterns of behaviour as a collective.</td>
</tr>
<tr>
<td>Self-organisation.</td>
<td>Interactions between agents highlight the role of relationships in driving change and innovation.</td>
</tr>
<tr>
<td>Sensitivity to initial conditions.</td>
<td>A small difference in initial conditions can be multiplied to create larger than expected impacts.</td>
</tr>
<tr>
<td>Co-evolution.</td>
<td>Systems evolve together. Alterations in one system can impact and cause changes in other interconnected systems.</td>
</tr>
<tr>
<td>Path dependence and lock-ins.</td>
<td>Some ideas can be ‘locked in’ because they are accepted by the right people at the right time.</td>
</tr>
<tr>
<td>Synergy.</td>
<td>All parts in the system create a greater whole, one that is more than the sum of its discrete parts.</td>
</tr>
<tr>
<td>Feedback loops.</td>
<td>New information acquired, internally or externally, influences the system to resist or embrace change.</td>
</tr>
</tbody>
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Adapted from Neely (2015); Durie et al. (2012); WHO (2011); Pisek and Greenhalgh (2001)
Complex adaptive systems, those that are socially constructed, are considered to be open to their environment with the capacity to co-evolve and co-adapt to environmental changes. The interactions between agents within complex adaptive systems tend to be non-linear, exhibiting emergent behaviours and a capacity for self-organisation (Plsek and Greenhalgh 2001). Through this emergence and self-organisation, systems can explore adjacent possibilities (Kauffman 1993) that can inform novel and innovative behaviours, behaviours which I propose were evidenced in the study findings as being influenced by the context in which the partnership was formed and the actions and interactions of community and campus participants. These complex adaptive systems characteristics, how they were reflected in the study findings and their influence on the development of this framework are described in greater detail in Concept 1: Community contexts.

4.8.2 Social theory – social systems theory

Communities are social constructs and social systems theory is concerned with understanding social behaviours, structures, networks and relationships that are present within societies. The study findings identified the importance of social systems theory characteristics and the contribution of these characteristics to the inequities and disadvantages experienced by rural and remote populations, characteristics that I propose acted as conditions and catalysts for the formation of the study community-campus partnership. The community engagement, population health, primary health care and health partnership literature focuses on exploring and understanding the impact of social influences as they relate to health inequities and disadvantages, a social determinants of health perspective (AIHW 2011, CDC 2011, Marmot 2005). The CDC (2011) stated that:

A history of exploitation in rural communities may be manifested in a number of ways. In many such communities structural inequity is evident in residents’ geographic isolation, great distances from commercial centers, lack of access to services and poverty (p. 113).
Social systems theory explores how power is distributed within society and the impact of empowerment and disempowerment on social life (Willis and Elmer 2007). The population health literature describes how a lack of insight into the unique social contexts of communities, limited health systems networks and relationships with the communities that are the intended recipients of their health services, and centralised control of health decision making can contribute to the poorer health outcomes experienced by disadvantaged communities (Aragon and Garcia 2015, Woulfe et al. 2010). Dominant criticisms of health partnerships, including community-campus partnerships and associated service-learning pedagogies, focus on the inequitable distribution of power between the community and health sector through the privileging of health sector perspectives and objectives (Petri 2015, Butin 2010, Creighton 2006, Bringle and Hatcher 2002). Bringle and Hatcher (2002) cautioned that ‘history has contained too many instances of institutions of higher education treating communities as “pockets of needs, laboratories for experimentation, or passive recipients of expertise”’ (p. 503). However, the findings associated with this study challenge the existing perceptions of power distribution and privilege within this literature. I argue that the social constructs evidenced in the study findings were key facilitators that underpinned this community engaged health partnership. The influence of these social systems findings on the construction of this framework are described in Concept 1: Community contexts and Concept 2: Features of engagement.

4.8.3 Organisation theory – organisational systems theory

Organisation theory is focused on understanding and explaining the factors that influence the structure, behaviour and performance of organisations (Dressler 1992). The term ‘organisation’ refers to social systems that gather individuals together for a specific purpose (Sanders 2010), in this instance partnership formation and program development and delivery. Sanders (2010) stated that, ‘organisation theory is not a single ubiquitous theory, but a kaleidoscope of different theories, perspectives, or schools of thought that each focus on organisations from different perspectives’ (p. 3).
Historically, organisation theory focused on the bureaucracy of organisations and was characterised by explicit definitions of work to be undertaken within an organisation; the allocation of tasks based on position; task alignment to hierarchical structures; and an impersonalised approach to performance and accountability. The centralisation of authority and control within rigid and hierarchical bureaucracies was perceived to facilitate superiority in organisational performance. However, Wren and Bedeian (2009) described how inherent rigidity can limit organisational creativity, flexibility and responsiveness. Alternative theories of organisations have since been developed. These alternative theories include those that focus on health organisations and how these organisations interact internally and externally with their environment to ‘produce more than the sum of their parts’ (Kernick 2004). A systems-orientated health organisation is characterised by the identification of shared organisational goals, an ability to develop alternative strategies to achieve these goals and a capacity to initiate, review and refine organisational strategies when required, attributes that resonate with complex adaptive systems characteristics. Atun (2012) stated:

Health systems play a critically important role in improving health. Well-functioning health systems enable achievement of good health with efficient use of available resources. Effective health systems also enable responsiveness to legitimate expectations of citizens (p. iv4).

In addition, organisational systems thinking is described as: being informed by exploratory and experimental processes where new ideas can emerge from anywhere; acknowledging that local structures, processes and patterns are important; having holistic perspectives; having equal recognition that qualitative measurements of impacts are relevant; supporting teams that can be informal and spontaneous; acknowledging that ambiguity holds creative potential; and being focused on groups and the creation of favourable conditions for mutual learning (Atun 2012).

For the purposes of this conceptual framework, I have drawn on a systems perspective of organisation theory to account for the cross-cutting nature of the organisations engaged in the partnership and program: school education, health, a UDRH and an external higher education institution. Several organisational systems
characteristics were described by community and campus participants and were employed in partnership formation, program development and adaptation, with these features described in greater detail in Concept 2, Features of engagement.

4.9 Framework Principles

In addition to these theories, I have drawn on the principles of community engagement, population health, primary health care, health partnerships (specifically community-campus partnerships) and health literacy. These principles, their characteristics and the rationale for their inclusion in the framework construction are now described.

4.9.1 Community engagement principles

A breadth of literature exists that describes key principles, processes and structures associated with community engagement (Moore et al. 2016, Johnson 2015, Sarrami-Foroushani et al. 2014). Moore et al. (2016, p. 14) proposed eight principles that they believed synthesised community engagement approaches. These principles comprised:

- Commencing engagement by focusing on the needs and priorities of communities in preference to those that may be dictated by external agencies;
- Enabling local autonomy and leadership;
- Building the capacity of communities to address their own needs;
- Embedding flexibility within service systems to enable them to respond to local needs;
- Establishing trusting and respectful partnerships that are balanced between consumers and service providers;
- Working with communities in preference to doing ‘things for them or to them’;
- Sharing of information to enable communities to make informed decisions; and,
• Providing communities with service choices and options.

In addition, community engagement is described as occurring along a continuum. These continuums can range from low-level engagement, that is, consultation, through to high-level engagement, the empowerment of communities (Arnstein 1969). Russell et al. (2008) described three levels of engagement and associated characteristics that can occur across an engagement continuum:

The levels of engagement, which move from consultative to cooperative to collaborative, reflect the realities of program partnerships. The five characteristics of engagement are community involvement in assessment; access to information; inclusion in decision making; local capacity to advocate to institutions and governing structures; and accountability of institutions to the public (p. 6).

Community engagement has also been described as a continuum that ranges from transactional through transitional and then to transformational engagement (Bowen et al. 2010). Transactional engagement is characterised by one-way communication that originates from the health sector, limited community interaction, minimal trust development and sector control of engagement processes (Bowen et al. 2010). The literature suggests that transactional engagement does not contribute to the empowerment of communities, with Heiman (1990) describing transactional engagement as being tantamount to a public relations manoeuvre which could be considered insincere in supporting community engagement.

Transitional engagement is characterised by a move from one-way to two-way communication, repeated community interactions, an emergence of trusting relationships, transparency of activity and community involvement (Bowen et al. 2010). However, two-way dialogue on its own does not ensure a depth of information exchange that allows the health sector to receive community feedback that then informs the adaptation of health strategies and practices (Bowen et al. 2010).

Transformational engagement is characterised by two-way communication, frequent interactions, trust based on personal relationships between the health sector and communities, co-produced learning, and shared control and decision making (Bowen
et al. 2010). Although transformational engagement is considered to have the highest probability of success, this level of engagement is the most difficult to achieve and the least researched (Adamson 2010, Chia 2011).

Three levels of organisational structures for engagement are also described: micro, meso and macro (Barasa et al. 2015, Travaglia and Robertson 2013). At the micro level, consumer to clinician engagement is the focus. At the meso level, communities are engaged in health service planning, design, delivery, governance and evaluation of the effectiveness of services. At the macro level, consumers engage with the health sector on councils, ethics committees and review panels. The conceptual framework presented in this chapter is concerned with transformational community engagement at the meso level of engagement.

Despite the breadth of these community engagement principles, continua and structures, limited evidence is available that describes how the adoption of community engagement principles and concepts impacts on the health outcomes of communities. Based on the existing community engagement literature and evidence, and the previous engagement experiences of community participants, I propose that these existing community engagement frameworks:

- Can be solely constructed based on theoretical propositions;
- Do not specifically focus on the engagement of rural and remote Australian communities in their health care agendas;
- Can marginalise or omit community-informed perspectives, experiences and expectations of engagement;
- Fail to account for the unique challenges, opportunities and diversity that exists across community contexts, and;
- Lack evidence that describes the impacts and outcomes of engagement, and specifically evidence informed by community perspectives and experiences.
This lack of focus, the omission of community perspectives, the linearity of engagement approaches and limited evidence of engagement impacts and outcomes can contribute to an incomplete, fragmented and ‘one-size-fits-all’ interpretation of community engagement. Furthermore, Cyril et al. (2015) identified that:

Health interventions tend to be modeled on community engaged approaches that have worked among non-disadvantaged populations for disadvantaged groups, often resulting in failure to achieve the desired outcomes (p. 2).

In contrast, this study framework has been informed by rural and remote community experiences of engagement as well as campus participant engagement perspectives. These participants described their direct and indirect experiences of health inequities and disadvantages, their previous limited and less than optimal experiences of engagement in their health care agendas, and the alternative processes employed in the partnership and program to achieve desired outcomes, that is, the engagement of communities in improving the health and later-life outcomes of rural and remote Australian children and the educational outcomes of future allied health professionals.

4.9.2 Population health principles

Kindig and Stoddart (2003) defined population health as:

An approach [that] focuses on interrelated conditions and factors that influence the health of populations over the life course, identifies systematic variations in their patterns of occurrence, and applies the resulting knowledge to develop and implement policies and actions to improve the health and well-being of these populations (p. 380).

Proponents of population health acknowledge the need for policy and practice strategies that reflect the diverse needs of populations (Hartley 2004, Woulfe et al. 2010, Lin et al. 2014). Lin et al. (2014) identified two key principles that reflect a population health approach: 1) a recognition of the need to change the social and economic structures that influence population health; and 2) the need to involve community members in framing what needs to be changed and the processes
required to achieve this change. This focus on the role of communities in their health care agendas is sensitive to the need to take action on the social determinants of health through primary health care approaches to health care delivery and practice (WHO 2008).

4.9.3 Primary health care principles

Primary health care focuses on addressing the social determinants of health that contribute to poorer health outcomes. Primary health care approaches include health promotion, disease prevention, and early identification and intervention strategies (WHO 2008). Primary health care practice acknowledges the need to meaningfully engage communities to improve their health outcomes. This engagement includes the integration of community perspectives and experiences in framing and prioritising health issues, the identification of factors that create or sustain poor health and community participation in activities that seek to address their inequities and disadvantages (Lin et al. 2014). However, Lin et al. (2014) identified that:

While active participation is seen as desirable, the ‘politics of participation’ must be recognized: who decides who participates, how they participate, and what control they have over decisions and actions? This thinking underpinned the greater emphasis on a different form of education: education for raising consciousness of oppression, to stimulate community mobilization for social change and on the importance of empowerment (p. 326).

Primary health care proponents have identified challenges in the effective engagement of communities in their health care agendas (Ansari et al. 2002, WHO 2008, Wouffe et al. 2010, Aragon and Garcia 2015), and specifically challenges associated with systems integration and the establishment of sustainable community engaged health partnerships. Ansari et al. (2002) stated that the prevention of poor health and the promotion of good health ‘cannot be realized through the services delivered by the health sector alone’, especially when this sector can ‘down rate’ the assets, skills and expertise held within communities (p. 151). Moreover, Lin et al.
(2014) informed us that the involvement of communities in primary health care initiatives is required to ensure:

- Community voices, experiences, expertise and priorities are heard;
- Transparent and accountable health planning;
- Sustainability of initiatives through community ownership of these initiatives and their outcomes;
- Realistic and appropriate plans and actions that respond to community contexts, and;
- Enhanced understanding of communities to ensure beneficial health strategies.

The community-campus partnership and service-learning program at the centre of this study sought to identify and intervene early in addressing the developmental delays experienced by children residing in far west NSW communities, with these delays acknowledged as precursors to later-life socio-economic disadvantage and poorer health outcomes (Australian Government 2009, AIHW 2009, Engle and Black 2008, Maggi et al. 2005). The approach taken was informed by community participants, their past experiences of health care and their health care expectations. The critical role of communities in identifying and shaping their health care informed the inclusion of primary health care principles in the construction of this framework. These principles and their association with the study findings are described in greater detail in Concept 3: Focusing engagement.

4.9.4 Health partnerships – community-campus partnerships

Ansari et al. (2002) defined partnerships as ‘a group of organizations and individuals who share some interests and are working toward one or more common goals while maintaining their own agendas’ (p. 157). Health partnerships with communities are formed to address complex health issues (Bryson et al. 2006, Sessa et al. 2013). Bryson et al. (2006) identified the increasing prominence of health partnerships and proposed that environmental conditions, health sector failings, and the existence of
social networks and relationships can act as conditions contributing to partnership formation.

Leiderman et al. (2002) stated that, as public resources become increasingly scarce and social needs increasingly more complex, community agencies are seeking out health partnerships with higher education institutions to address these issues, community-campus partnerships (Jacoby et al. 2003, Sandy and Holland 2006). These partnerships underpin the development of service-learning initiatives (Sandy and Holland 2006). Community-campus partnerships are predominantly focused on the engagement of underserved or marginalised populations (Jacoby et al. 2003, Butin 2010, Glover and Silka 2013) and espouse the principals of reciprocity and mutual benefit (Janke and Clayton 2012, Butin 2010). The 'Principles for a Good Community Campus Partnership' (Community Campus Partnerships for Health 2013) state that these partnerships:

- Are formed to serve a specific purpose and may take on new goals over time;
- Have agreed missions, values, goals, measurable outcomes and accountability for the partnership;
- Are built on relationships between partners and characterised by mutual trust, respect, genuineness and commitment;
- Build upon identified strengths and assets, but also work to address needs and increase capacity of all partners;
- Are capable of balancing power among partners and enable resources to be shared;
- Have clear and open communication where partners strive to understand each other’s needs and self-interests;
- Are informed by processes established with the input and agreement of all partners;
• Respond to feedback between stakeholders, with the goal of continuously improving the partnership and its outcomes, and;

• Focus on sharing partnership accomplishments.

In addition, Leiderman et al. (2002) described the following hallmarks that reflect successful community-campus partnerships: the development of cross-cutting strategies, the mitigation of practices that privilege institutional partners, and sustainable engagement. However, the community-campus partnership literature is heavily criticised for a lack of focus on community perspectives and experiences of participation, and specifically evidence informed by community partners. In response to these criticisms, recent studies of community-campus partnerships have focused on prioritising community partner experiences and perceptions of participation (Miron and Moely 2006, Sandy and Holland 2006, Creighton 2006, Petri 2015).

Despite the community benefits attributed to community-campus partnerships and service-learning initiatives, Creighton (2006) provided an alternative insight into community experiences and the usefulness of service-learning. Creighton (2006) found that community partners can experience a:

   Serious lack of organization in service-learning programs. Although some faculty and service-learning coordinators had begun to establish relationships with the participants, the prevailing experiences was that too often students initiated contact with the community partner and were not well prepared by their faculty for the work they were expected to do (p. 128).

In addition, Creighton (2006) identified community perspectives of the cost burden and significant time investments placed upon them; perceptions that service-learning programs were more concerned with student learning than with their effect on the community; community agency frustration about time wasting in working with academic researchers with limited benefit for the services provided; and community feelings of being disrespected by higher education partners who were considered to have elitist attitudes (Creighton 2006). In contrast, significant findings from this study identified mutually beneficial and reciprocal outcomes from the perspectives of
community partners which I propose were underpinned by the acquisition of a deep understanding of the community context by campus participants. This included insights into the importance of community partner knowledge, skills, capacity and commitment to addressing their own health disadvantages and inequities.

In exploring the literature, I identified a prevailing focus on the need to improve and develop community knowledge, skills, capacity and motivation as a means to enhance the capacity of communities to participate in their health agendas (ACSQHC 2014, WHO 2013). In endeavouring to gain a greater understanding of the identified divide between the study findings, the community as experts in the identification of their health needs and equal partners in solutions identification and implementation, and the literature, I explored in detail the emerging and growing body of literature associated with health literacy (ACSQHC 2014, WHO 2013) to provide a contrasting and new lens for community engagement, a lens that seeks to improve the ‘community literate’ approaches of the health sector to community engaged health care.

4.9.5 Health literacy principles

The WHO (2013) stated that:

Health literacy is linked to literacy and entails people’s knowledge, motivation and competences to access, understand, appraise and apply health information in order to make judgements and take decisions in everyday life concerning health care, disease prevention and health promotion to maintain or improve quality of life during the life course (p. 4).

The ACSQHC (2014) informed us that health literacy ‘is about how people understand information about health and health care, and how they apply that information to their lives, use it to make decisions and act on it’ (p. 2). The ACSQHC (2014) then divided health literacy into two components: 1) individual health literacy and 2) the health literacy environment, stating that individual health literacy is concerned with:
[The skills, knowledge, motivation and capacity of a person to access, understand, appraise and apply information to make effective decisions about health and health care and take appropriate action (p. 2).

However, the ABS (2008) identified that 60% of adult Australians had low levels of individual health literacy. As a result, the perception is that these individuals may experience difficulties in ‘effectively exercising their choice or voice’ in health care decision-making processes.

The health literacy environment is defined by the ACSQHC (2014) as:

The infrastructure, policies, processes, materials, people and relationships that make up the health system and have an impact on the way in which people access, understand, appraise and apply health-related information and services (p. 2).

In enhancing the health literacy of Australians, the ACSQHC (2014) focused on three types of actions: 1) embedding health literacy into systems; 2) ensuring effective communication; and 3) integrating health literacy into education. The ACSQHC (2014) then identified the following 10 features that facilitate the embedding of health literacy into systems:

1. Organisational leadership that makes health literacy integral to the mission, structure and operations of the health care organisation;
2. An organisation that integrates health literacy into planning, evaluation, patient safety and quality improvement;
3. Preparation of the workforce to be health literate;
4. Inclusion of populations served by the health care organisation in the design, implementation and evaluation of health information and services;
5. Population needs are met through a range of health literacy skills;
6. Interpersonal communication that employs health literacy strategies;
7. Easy access to health information;
8. Health information that is easy to understand and act on;

9. That health literacy is addressed in high-risk situations, and;

10. Health organisations that clearly communicate health plans and payment requirements.

To ensure effective communication, the ACSQHC (2014) identified the need for clear, focused and usable information and effective interpersonal communication. To achieve enhanced health literacy, the ACSQHC (2014) identified that the general literacy and education levels of consumers need to be understood as interrelated concepts, stating that:

A person's formal and informal education shapes their general literacy, which in turn contributes to their knowledge and skills in understanding health information and systems, and shapes their capacity for making decisions and taking action for their own health and health care (p. 53).

Based on the contextual realities that confront rural and remote Australian communities, several ethical dilemmas are created by the statements made within the Australian National Statement on Health Literacy. I have drawn heavily on sections of this statement within this framework to illustrate my proposition for the need for an equal investment in ‘community literate’ health service and practice outcomes. These ethical dilemmas and community literate propositions are further discussed within Concept 2: Features of engagement and Concept 4: Influences of engagement.

4.10 Introducing the Framework

The six key concepts within this conceptual framework can inform how the health sector engages with rural and remote communities in the design of their health services and the development of their health workforce. These concepts are: 1) community contexts; 2) features of engagement; 3) focusing engagement; 4) influences on engagement; 5) engagement impacts; and 6) potential outcomes. Each concept is composed of several components that describe in greater detail the
multiplicity of influences located within that concept. A significant citation is provided at
the introduction of each new component to illustrate existing literature of relevance to
the components. Direct quotations from participants have also been included in each
component discussion to reflect how these components reflect participant
experiences. A visual representation of the framework—a conceptual model (Green
2014)—is included to enhance framework interpretation and utility. A figure
representing each new concept is provided when the concept is introduced to
enhance interpretation and illustrate the layering of these concepts and components. I
now outline and assemble the framework concepts and components to provide a
comprehensive and unified conceptual framework.

4.11 Concept 1: Community Contexts

The need to contextualise health care to address the health needs, priorities and
expectations of rural and remote communities is critical in addressing significant and
protracted health inequities and disadvantages. Humphreys and Wakeman (2009)
described the importance of responding to diverse rural and remote Australian
contexts with the development of models of care that:

Must vary in order to take account of the specific geographical, social, economic
and cultural contexts that differentiate the many rural and remote communities
scattered across more than 7½ million square kilometres and which are home to
more than 7 million Australians (p. 3).

The need to contextualise health care, and my interpretation of the capacity of
engaged communities to exert influence within and across framework concepts and
components, has informed the location of this first concept, community contexts, as
the outer layer of this framework. Within this concept, I have located two components
that I propose need to inform health sector approaches to the engagement of rural
and remote communities in their health care agendas. These two components are: 1)
communities as complex adaptive systems and 2) communities as sites experiencing
conditions that can act to influence community preparedness for participation in health partnerships, in other words, conditions for collaboration.

![Figure 4.2: Community contexts](image)

### 4.11.1 Component 1: Communities as complex adaptive systems

**Significant Citation 1: Communities as Complex Adaptive Systems**

Much development and humanitarian thinking and practice is still trapped in a paradigm of predictable, linear causality and maintained by mindsets that seek accountability through top-down command and control. In the meantime and in parallel, complexity science has explored and articulated a contrasting world of understanding, helping to explain complex dynamic phenomena in a widely diverse range of settings using insights and concepts like non-linearity, edge of chaos, self-organization, emergence and coevolution (Chambers 2008, p. vii).

Based on the study findings, the resultant exploration of complexity theory and the correlation between these findings and the characteristics of complex adaptive systems (e.g. characteristics such as edge of chaos, emergent behaviour, self-organisation, non-linearity and feedback loops), I propose that rural and remote communities are socially constructed complex adaptive systems. These communities can persistently live on the 'edge of health care chaos' (Chambers 2008). This chaos is influenced by a number of conditions routinely associated with rural and remote
community contexts (these conditions are described in detail in Component 2, Conditions for collaboration).

Rural and remote contexts necessitate emergent behaviours that enable communities to respond effectively to their inequities and constantly changing health care environments. Through the presence of emergent behaviours, agents within communities can have a heightened capacity to informally interact with each other to explore the creation of health partnerships that seek to develop services capable of addressing their own health needs (Pisik and Greenhalgh 2001).

The receptiveness of rural and remote community members to emergent behaviours was evidenced in the early stages of partnership formation and program development. The emergent behaviours of communities may appear to be unordered to those sectors that are distanced geographically and contextually from the activities of informal partnerships. A lack of formal processes, in the presence of a shared desire for specific outcomes, in this instance, enhanced allied health accessibility for children and educational outcomes for service-learning students can challenge a health sector driven by formal and prescriptive processes and practices.

**Community Participant Quote**  **Emergent Behaviour**

In the early stages of program development it was pretty much let’s try it and see what happens. We didn’t know particularly where it would end but we made a start.

School Principal

The characteristic of emergence is closely aligned to self-organisation. Complex adaptive systems can re-organise their structures and functions to enhance their effectiveness and capacity to respond to changing environmental demands.

**Community Participant Quote**  **Self-organisation**

The partnership came about from a need that we identified locally. As a partnership we saw that there was a need and we came up with a model that might work for us.

School Principal
These study findings, and the findings of other rural and remote Australian researchers, identify the capacity of rural and remote communities for self-organisation in response to their unmet health needs (Bourke et al. 2010). Bourke et al. (2010) stated that:

Rural and remote communities tend not to wait passively for policies and funding to improve health and health services, but often take grassroots action themselves to promote health service provision (p. 207).

In emergent and self-organising systems, no individual agent determines the nature of that system (WHO 2011): the organisation of a system arises as a result of the dynamic actions among the system’s agents and interactions with other systems. I propose that the processes associated with partnership formation were exemplars of community-based emergence and self-organisation. Several initial internal interactions occurred between community agents located within school education and the BHUDRH, establishing the foundational membership of the health partnership. This partnership was then extended, through the existing BHUDRH health and academic networks, to include agents from the local health services and an external higher education system. I argue that the interactions between these internal and external agents resulted in the formation of a whole that was greater and more complex than the sum of its individual parts—the community-campus partnership.

Furthermore, this partnership was influenced by feedback loops that informed and influenced the behaviour of agents as they acted and interacted with each other (WHO 2011, Kernick 2004). Kernick (2004) stated that there are ‘iterative feedback loops in network interactions. The effects of an agent’s actions are fed back to the agent and this in turn affects the way the agent behaves in the future’ (p. 27). Feedback can be positive and self-reinforcing, increasing the rate of change of an activity in a certain direction (Paina and Peters 2011). The study findings identified self-reinforcing approaches to feedback within the partnership and program.
Community Participant Quote                Positive Feedback
We're always having conversations; it's not just here the program is. We always talk about how we can do it better, what's working. It's that constant evaluation, it's not just run a program and leave it be. School Principal

Feedback loops can also be negative, acting to influence, moderate and balance behaviours and activity when required (Paina and Peters 2011). The study findings identified negative feedback loops that originated from community partners which I propose acted to balance the approaches of campus participants towards the partnership, specifically the feedback provided by community participants, school principals, in the early stages of partnership formation.

Campus Participant Quote                Negative Feedback
One of the school principals said to me. ‘Will we ever see you again?’ That’s what happens with allied health professionals, they come once and then you never see them again. Talking to the principals took it to another level. I came away determined that I was going to help to be part of the solution. Metropolitan Academic

Noyes et al. (2013) stated that:

The effects of an intervention may be attenuated when it interacts with a complex system in which multiple processes within a system are occurring simultaneously, for example, feedback loops. We need more evidence to show that processes like feedback loops actually matter (i.e. do they operate and, if so, what do we know and do about them?) (p. 1268).

However, most strategies that seek to improve the health outcomes of populations are not characterised by feedback loops (Noyes et al. 2013). Within this study, a key finding was the importance of feedback loops in informing partnership formation, program design and adaptation.

Within complex adaptive systems, solutions to complex issues may have unexpected impacts that can significantly alter the behaviour of agents and the function of the systems in which they are located. While solutions may have the capacity to
dramatically increase service accessibility, a significant risk is apparent that services not strengthened in parallel could be overwhelmed (WHO 2011).

Community Participant Quote
We had no idea that so many of our children needed help. We quickly found ourselves being the main provider of allied health services. University Manager

Sensitivity to Initial Conditions
In this instance, the BHUDRH underwent significant changes in structure, role and staffing profiles as a result of its participation in the partnership, program development and implementation, enabling the department to respond to community demand for allied health services. This included the appointment of allied health academics to coordinate and supervise student-led allied health services and infrastructure expansion to accommodate a significant increase in allied health student placement activity.

The presence of complex adaptive systems characteristics can underpin community capacity to engage in health partnerships. However, these same characteristics have the potential to create tensions between communities and the health sector as the latter could employ traditional bureaucratic processes, centralise control and decision making, and implement change driven by health sector priorities (Pisek and Greenthalgh 2001).

These traditional approaches can close the health sector to community feedback, feedback that can enhance sector responsiveness to community needs and capacity to engage in local health partnerships and solutions-focused approaches to address these needs (Kernick 2004). Where rigid and bureaucratic organisational approaches are employed, rural and remote communities can display high levels of creativity in rejecting care that is perceived to be poorly aligned to their needs or dictated to them.

In engaging with rural and remote communities, the health sector should be prepared to accept emergent and self-organising behaviours. In the presence of multiple feedback loops, actions and interactions that shape the purpose of relationships can develop without centralised control. The decisions and actions that then emerge are
not the responsibility of any discrete sector but are shared across the health sector and the community (Kernick 2004). These processes enable greater levels of flexibility and adaptability within health partnerships to address current, future, planned and unplanned events. However, the health sector has to be prepared to address inevitable challenges that will arise when engaging with communities that display complex adaptive systems characteristics. In engaging, the health sector needs to relinquish positions of power and control (Aragon and Garcia 2015) and prepare for potential failures. Aragon and Garcia (2015) stated that:

The nature of complexity and the requirement for change, when put together, yield the imperative to expect and prepare for failures. Every failure is an opportunity to learn and improve and not necessarily a flaw in people or performance (p. 26).

4.11.2 Component 2: Conditions for collaboration

Significant Citation 2: Conditions for collaboration
To say that cross-sector collaborations are complex entities that defy easy generalization is an understatement. Studies of interorganizational collaboration have proliferated, producing rich material for those who seek to understand the relationships among the initial conditions, processes, structures, governance, contingencies and constraints, outcomes, and accountabilities of collaborations. Yet few, if any, research studies have gathered data on all of these in a way that could easily guide research or help policy makers in government, business, nonprofits, the media, or communities understand when cross-sector collaborations make sense, let alone how to design and implement them (Bryson et al. 2006, p. 52).

Although high levels of diversity exist across rural and remote Australian contexts, these communities can experience similar conditions that may influence their preparedness for engagement in health partnerships (Humphreys and Wakeman 2011, Bryson et al. 2006). These conditions can include geographical isolation, resource constraints, socio-economic disadvantage, poorer health outcomes and health workforce shortages (Spiers and Harris 2015, HWA 2013, SCoH 2012).
While some families had financial and transport means to get to allied health services, the children that needed them the most didn’t. School Principal

Rural and remote communities can be sites of health sector failures where sector activity in isolation can fail to address the complex precursors that contribute to the poorer health outcomes and protracted health workforce shortages experienced in these regions (HWA 2013, SCoH 2012). In rural and remote contexts, failings in one sector can have direct and significant ramifications for other interconnected sectors. In this instance, the perceived impact of health sector failings to deliver allied health services and the impacts on the capacity for children to engage educationally and socially within the school environment.

I’ve been here a long time and before my time principals across the region were frustrated about the inability of the health sector to deliver services to children with developmental issues. School Principal

Rural and remote communities can have extensive and longstanding internal relationships and external networks (Bourke et al. 2010) that enable them to gauge the trustworthiness of potential partners (Bryson et al. 2006). The more these potential partners have interacted positively, the greater the ‘linking mechanisms’ that facilitate the formation of health partnerships (Jones et al. 1997). In addition, previous negative interactions and experiences can influence community avoidance of potential partnerships or result in superficial levels of community participation.

I knew UDRH staff, my partner knew them through the health service. They were parents of children in my school. I felt comfortable with them leading the service idea and nothing has ever change around that. School Principal

Despite the benefits associated with community engaged health partnerships, they can be considered high risk endeavours. Proponents of community-campus partnerships identify the need for health sectors to reform their ‘traditional outreach
paradigm that seeks to provide services to the community on behalf of the community’, stating that ‘what is needed instead is an engagement model that looks for opportunities to partner with communities to meet collective needs’ (Jacoby et al. 2003, p. 6), an approach that may not be routinely reflected within rural and remote Australian contexts.

Community Participant Quote    High Risk Endeavours
With other agencies they come in, deliver what they want and it meets their needs.
Why would you want to work with them? School Principal

The simultaneous and multiple disadvantages and inequities experienced by rural and remote communities (Walby 2007), positive internal community relationships and external networks can act as conditions and catalysts for the formation of health partnerships. However, I acknowledge that conditions and catalysts for collaboration may only reflect a potential state of community readiness to collaborate. I propose that to transition from this potential state of readiness to a state of active community engagement, the components described in Concept 2: Features of engagement need to be addressed.

4.12 Concept 2: Features of Engagement

Concept 2: Features of engagement contains six components that I propose are critical in activating and sustaining rural and remote community engaged health partnerships. The following six components can contribute to our understanding of community engagement and health partnership principles: 1) prioritising community needs and services; 2) acquisition of a sense of place and people; 3) localised innovation and adaptation; 4) intangibles; 5) consistency; and 6) shared knowledge.

In acknowledging rural and remote community diversity, I propose that these components need to be informed by community partners and, if necessary, adapted to ensure framework responsiveness at the local community level. These six components are now described in greater detail.
4.12.1 Component 1: Prioritising community needs and services

Significant Citation 3: Prioritising community needs and services
The necessary reorientation of health systems has to be based on sound scientific evidence and on rational management of uncertainty, but it should also integrate what people expect of health and health care for themselves, their families and their society (World Health Organization 2008, p. vi).

Hyett et al. (2014) suggested that one way of tackling rural and remote health disparities is to ‘engage rural communities in redesigning health services, so they better address local needs’ (p. 2). The National Rural Health Alliance (NRHA) (2000) stated that:

Participation by individuals, communities and special groups in determining their health priorities should be pursued as a basis for successful programs and services to maintain and improve their health (p. 7).
However, defining the health needs of communities can be complex with responses to the identification of these needs being influenced by political, policy and funding priorities that can be determined by government sectors in isolation to rural and remote communities.

**Campus Participant Quote  Community Need**
The health services aren't delivering the services that the community need. They have limited capacity to deliver services; they are doing the best they can with the resources that they have but it's not enough. Rural Academic

Asadi-Lari et al. (2004) proposed that needs-driven health care has transitioned through the following four major stages: a sociological approach; a rational planning approach based on deprivation and epidemiology; a need-targeted approach to the allocation of resources; and a focus on collaborative action, where health needs are collectively identified by a range of stakeholders.

Rosenbaum (2013) suggested that health efforts and investments are most successful when they are underpinned by collective action, action that results in significant impacts on social problems. Through the identification of community needs, it is argued that health sectors will have greater capacity to plan and deliver effective care to those with greatest needs; apply the principles of equity; ensure resources are efficiently targeted to obtain the maximum health benefits; and collaborate with communities to determine priority of needs (WHO 2008). However, limited evidence exists that the identification of community needs actually contributes to the reallocation of health sector resources or alterations in the practices of health services. The North West Joint Improvement Partnership (2010) stated that:

Population needs assessment typically attracts little attention and faces skepticism from operational managers. If needs assessment threatens the status quo, its findings risk rejection, particularly by those who have an interest in preserving existing arrangements (p. 31).

Cain et al. (2016) identified that community members want the health sector to be ‘present’ through true engagement in the identification of their health needs.
Communities expect the health sector to invest time to ‘deeply listen’ to their health experiences and proposed health care solutions (p. 5). Communities can have expectations that these conversations will commence before problems arise, be inclusive, expand beyond conventional medicine and be driven by the communities themselves. However, as health care resources become more scarce, cost containment can be a primary focus of policy makers and influence how need is defined and addressed. This can result in a gap between the identified health needs of communities and the services that are provided to them. Cain et al. (2016) informed us that it is:

Easy to be seduced by definitions of ‘need’ which lead to a situation where limited resources appear sufficient. While some genuine needs will be met, others, perhaps of greater value if met, will be denied (p. 4).

A ‘disconnect’ can then be created between the services provided, their responsiveness to community needs and community perceptions of service value. While some health sectors may build their reputations on principles of quality, cooperation, compassion and innovation, and not necessarily cost (Rivers and Glover 2008), many health sectors define service value in terms of financial sustainability (Porter 2010), whereas proponents of health partnerships define value in terms of reciprocity and mutual benefit (Janke 2008, Jacoby 2015). These proponents argue that health services need to be developed in partnership with communities and meet the needs of communities. Jacoby (2015) stated that within community-campus partnerships, reciprocity implies ‘that service-learning should be designed with the community to meet needs identified by community’ (p. 4). Janke (2008) described mutual benefit as a win-win relationship between community and health sectors, a construct of shared value.

**Community Participant Quote**

To me the program is a win-win all around. The feedback from the students when I ask, ‘How does this placement differ to your previous placements?’ is consistently, ‘I’m not somebody’s shadow; I’ve got to do the job’. Parents who have been
reluctant to go out of town for services are on board with the program. School Principal

However, Petri (2015 p.96) informed us that the service-learning movement ‘has placed most of its academic energy on making its case based on evidence of student outcomes to institutionalize service-learning’. As a result, the voices of community partners can be marginalised in the development of policies, structures and the services to be provided (Petri 2015, Butin 2010).

In health care environments that experience resource limitations, such as rural and remote contexts, community perspectives of need and service value need to be carefully considered. These perspectives, and the potential ethical divides that can be created between the health sector with limited resources and communities with high unmet health needs, need to inform health policy and funding reforms (Nelson et al. 2007).

<table>
<thead>
<tr>
<th>Community Participant Quote</th>
<th>Services of Social Value</th>
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<tr>
<td>If this program isn’t still running in five years’ time, and improving as it goes, it would be a travesty in terms of the community, it would be. But I know it’s dependent on funding. School Principal</td>
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In parallel with increasing calls for locally developed health services to address protracted health inequities, there is a need to ensure that locally developed service innovations, those that are considered to have a high level of social value, are protected (Elshaug et al. 2009). As stated by Asadi-Lari et al. (2004):

> The comprehensiveness of ‘health’ deserves a definition of health needs which over-rides political considerations, or providers’ limitations, and embraces current political strategy to conceptualise and meet health need in the widest sense (p. 4).

### 4.12.2 Component 2: Sense of place and people

**Significant Citation 4: Sense of Place and People**

Health is all about people. Beyond the glittering surface of modern technology, the core space of every health system is occupied by the unique encounter between
one set of people who need services and another who have been entrusted to deliver them (Frenk et al. 2010, p. 3).

Kilpatrick (2009) informed us that:

Understanding a rural place is a prerequisite for effective health development. Understanding: (i) facilitates alignment between health programs and community expectations, customs, values and norms, (ii) assists in identifying and incorporating relevant community assets, including social capital, skills and local organizational contexts, and (iii) provides information about health needs and priorities (p. 9).

Two significant features are associated with the acquisition of a sense of place. The first is acquiring a sense of belonging to community, a belonging that is verified by community members. The second is respecting the association between people’s identity and their sense of community. Hagerty et al. (1992) defined a sense of belonging as ‘the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment’ (p. 173). The need to belong can influence human pursuits and requires frequent interactions with others in a context of mutual concern for each other’s welfare (Baumeister and Leary 1995).

Community Participant Quote   Sense of Belonging to Community

The community credibility’s there because I’m a local, my parents were locals as well. If you took me out of this community I may not be as successful in my role because I won’t have the relationships that I have developed here and the local knowledge. School Manager

A lack of experience of mutual concern between communities and the health sector can influence community perspectives of health sector belonging within their context. A sense of belonging is characterised by membership, influence, integration and fulfillment of needs, and shared emotional connection. An additional characteristic has also been proposed, the relationship between individual self-image and community membership, a sense of community (Obst et al. 2002).
A sense of community is considered to be a powerful force that can influence levels of personal investment in, and understanding of, local contexts, characteristics that can further facilitate the establishment of health partnerships (McMillan and Chavis 1986). This can include a deep personal understanding of rural and remote inequities accrued through direct individual and intergenerational experiences of inequities that can contribute to humanising the health inequities experienced.

Community Participant Quote  Intergenerational Experience of Inequity
I was a perfect example of what a lack of allied health services meant. My child desperately needed a program like this and I lived that inequity. I had to travel to get professional support. We lived it ourselves; as children we didn’t have access to those services either. University Manager

Kilpatrick (2009) cautioned that:

Community engagement processes can become ‘governmentalised’ when rural health professionals, who set local engagement agendas, tend to adopt an instrumental approach to engagement, wanting consumers to engage around their own agenda without considering the nature of the community (p. 42).

Acquisition of a sense of belonging, and respect for rural and remote people’s sense of community, can prove challenging for the health sector. These communities can experience a frequent turnover in health leadership and professional staff. Furthermore, higher education institutions, key stakeholders in health workforce education and service-learning innovation, can be geographically and contextually distanced from these communities (Petri 2015, HWA 2013, Spiers and Harris 2015, Jacoby et al. 2003). In addressing these challenges to the acquisition of a sense of rural and remote place and people, and the establishment of a sense of belonging in these contexts, it is imperative that the health sector develops structures and processes that support the consistency of community interactions and the acceptability of engagement approaches. As stated by Baumeister and Leary (1995):

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Interactions with a constantly changing sequence of partners will be less satisfactory than repeated interactions with the same person(s), and relatedness without frequent contact will also be unsatisfactory (p. 497).

4.12.3 Component 3: Localised innovation and adaptation

Significant Citation 5: Localised innovation and adaptation
Much of the most important innovation of the next few decades is set to follow patterns of social innovation rather than innovation patterns developed in sectors. Yet despite these trends, the process of social innovation remains understudied. While processes of commercial innovation have been the subject of considerable academic research, the parallel field of social innovation has received little attention and rarely goes beyond anecdotes and vague generalizations (Mulgan 2006, p. 146).

As the complexity of health care increases, calls are increasing for greater levels of innovation in the development and delivery of services that enhance service accessibility, acceptability and sustainability. Australian health and health workforce policies (HWA 2013, SCoH 2012) identify the need for innovative solutions to address the complex health and health workforce challenges that confront rural and remote communities and the following detrimental impacts of a failure to do so (HWA 2013): a worsening divide between metropolitan and rural and remote health service accessibility; a failure to have an impact on the life expectancy and quality of life for rural and remote Australians; consumer avoidance or rejection of care; service fragmentation; continuing health workforce shortages; and the development of health professionals who are poorly prepared for rural practice.

Social innovations, those that have the capacity to transform the lives of individuals and communities, are being implemented to resolve complex health inequities (Barraket et al. 2015, HWA 2013, Phillips et al. 2008).

Campus Participant Quote Socially Disruptive Innovation
I know we’re only students and we don’t have all the experience, but for the children to be receiving services at all is amazing. We provide these children with more
services than what they would otherwise receive. Their parents can’t take them to a specialist; they’re not going to receive that care here. Allied Health Student

Phillis et al. (2008) described social innovation as:

A novel solution to a social problem that is more effective, efficient, sustainable, or (socially) just than existing solutions and for which value created accrues primarily to society as a whole than [to] private individuals (p. 38).

Social innovations resonate with the principles of population health and primary health care (described in greater detail in Concept 3 of this framework), that is, the provision of care that enhances accessibility to services for greater numbers of people with greater needs, and the provision of services that are considered to create value for society and populations as a whole (WHO 2008). However, an additional ‘dose of disruptive innovation’ (Christensen et al. 2006, p. 2) may be required to address protracted rural and remote health inequities. The literature informs us that rural and remote communities are already engaged in social innovations that seek to provide health services that most of the population may need more of the time, in ways that are simpler and that enhance service accessibility (Wakeman and Humphreys 2011, Bourke et al. 2010).

Bourke et al. (2010) stated that health innovations led by rural and remote communities are more likely to address the needs of greater numbers of community members than those that are externally developed and driven. The capacity to contextualise rural and remote health care can influence community receptiveness and the acceptability of health innovations (Greenhalgh et al. 2004). The values, beliefs, historical experiences and current needs of communities can influence the adoption or rejection of services (Berwick 2003). Where there is a lack of compatibility, poor alignment of innovation to context, and a failure of the health sector to address community beliefs, values and changing needs, it is unlikely that health services and practices will be considered acceptable, relevant or sustainable.

Complex health innovations can be associated with stringent guidelines that require replication in preference to adaptation. However, health initiatives ‘are more robust to
Modification than their inventors think, and local adaptation, which often involves simplification, is nearly a universal property of successful dissemination" (Benwick 2003, p. 1971). Australian health policies and services can be prescriptive in nature, seeking to ensure 'evidence-based' care that requires replication across all health contexts. The lack of opportunity provided to rural and remote communities to lead the development of health service and workforce innovations, to trial innovative health care approaches prior to their introduction or to observe innovations in action prior to their local implementation can undermine community capacity to gauge the relevance of initiatives, contributing to community cynicism towards new and externally-led innovations.

**Campus Participant Quote**  
Service Compatibility

We sat with the community and white-boarded what a potential service model could be and that’s when we got the service-learning idea. Then we did a trial placement very quickly which went well but we knew the supervision model could be better and that’s now been addressed. Metropolitan Academic

The health sector needs to be sensitive to community experiences of service fragmentation and unsustainable service approaches, and the impact these experiences can have on community receptiveness to new concepts (Kilpatrick 2009). Miles et al. (2010) stated that:

New concepts are often defeated by the "perfect storm of territoriality, budget constraint, and cynicism". The reasons for territoriality and cynicism are understandable: people already struggling to keep overburdened systems afloat may have seen promising solutions come and go many times without any notable, lasting change (p. 16).

Furthermore, the imperative and need for the health sector to engage with communities in health innovations can be undermined by the community engagement literature that consistently identifies the lack of community knowledge, skills and capacity as barriers to their effective engagement in health care design and decision making (Sarrami-Foroushani et al. 2012). In addition, rural and remote health
leadership literature can focus on the need to ‘develop’ rural leaders with the perception that ‘the quest for effective leadership in rural areas is arguably the greatest challenge facing rural communities’ (Avant et al. 2013, p. 53). I concur with Bourke et al. (2010) that these perspectives can perpetuate a ‘deficit’ interpretation of rural and remote communities and undermine their capacity and opportunities to lead health partnerships and service innovation.

**Community Participant Quote**

*Community Leadership*

It’s not about the external sector being the guiding light. This program was grown locally, local people have ownership of it, are connected and invested in ensuring it succeeds. What’s important for external systems to understand is that the power and knowledge exists within the community. It’s not about what can be done to the community. The external systems that have the most success in partnering with communities are ones that sit alongside rather than on top of communities.

University Manager

I propose that the study partnership and program can be considered exemplars of socially disruptive innovations in action through the provision of student-led services to address entrenched unmet rural and remote allied health needs. I also argue that leaders are embedded in these communities and can display transformational leadership characteristics: the capacity to articulate and develop a shared vision of community goals and priorities; having high expectations for the services they receive; and culture-centred approaches that model services on community values, strengths, participation and collaboration (Marks and Printy 2003).

**4.12.4 Component 4: Intangibles**

**Significant Citation 6: Intangibles**

Health systems are inherently relational and so many of the most critical challenges for health systems are relationship and behaviour problems. Yet the disciplinary perspectives that underlie traditional health policy analysis offer only limited and partial insights into human behaviour and relationships. The health sector, therefore, has much to learn from the wider literature on behaviour and the factors that influence it. A central feature of recent debates, particularly, but not only, in
relation to social capital, is trust and its role in facilitating collective action, that is, cooperation among people to achieve common goals. The particular significance of trust is that it offers an alternative approach to the economic individualism that has driven public policy analysis in recent decades (Gilson 2003, p. 1453).

The intangible assets of trust and reputation are intrinsically linked and mutually reinforcing. Reputation is considered an intangible resource that influences the success or failure of community engaged health partnerships (Enos and Morton 2003). It is a valuable commodity that can take time to establish and requires continuous improvement to sustain (Hall 1992). Reputation can be fragile where negative actions have greater ramifications than positive actions. Once lost, reputation can take considerable time and effort to rebuild (MacDuffie 2011).

Campus Participant Quote  Reputation

We couldn’t fulfill our obligations to the second student cohort. I was mortified. I thought community might have given up on the university but they didn’t. We regrouped and the next year we ran across the whole year with students. I think we won back the faith of the school principals in that year. Metropolitan Academic

Reputation is intrinsically linked to trust, with trust described as a social phenomenon that occurs at interpersonal, inter-organisational and systems levels (Lane and Bachmann 1998). Furthermore, trust is provided voluntarily and cannot be imposed through top-down directives (Nyen et al. 1997). Enos and Morton (2003) stated that, in the context of community-campus partnerships, trust can be understood as a mutual understanding of the interests of the partners and that trust cannot be ‘signed-off on’ in a contract; it emerges gradually as a working relationship develops’ (p. 34).

While the community-campus partnership literature (Sandy and Holland 2006, Enos and Morton 2003) acknowledges the importance of investing in the creation of trusting relationships, less evidence is available describing the role of trust as it relates to health sector relationships with communities. The WHO (2001) stated that a lack of focus on trust can contribute to weak responses by the health sector to community needs.
The rapid turnover of health sector leaders and professionals, and the lack of visibility of campus activity in rural and remote communities, can result in relationships of high trust being constantly replaced with relationships of low trust (Gilson 2003), or relationships of limited or no trust being present. Frenk et al. (2010) informed us that trusting relationships need to be guided by ethical commitment and social accountability. For health partnerships to be successful, partners need to remain in relationships despite the obstacles or challenges that inevitably arise (Enos and Morton 2003).

**Community Participant Quote** Partnership Commitment
You hit some hurdles and you’ve got to work through them. There are always going to be hurdles but that commitment is there to work through them. Our principals definitely want the program to be a success and they won’t throw the towel in because we hit hurdles. School Manager

By remaining in these relationships, health partners have a greater capacity to develop consistent trusting relationships that enable open and honest feedback to enable service adaptation, ensuring service alignment to current and future community needs.

**Community Participant Quote** Relationship Consistency
The academics have been around a fair while now and we’ve got that constant feedback, emailing back and forth. School Principal

### 4.12.5 Component 5: Consistency

**Significant Citation 7: Consistency**

In six years of working across 60 countries in search of the perfect health system, I have been fascinated by the fact that every country wants to deliver safe, consistently good, financially sustainable health care, but no one has been able to do it. At the heart of this problem is a paradox: transformation in health care can only be achieved by continuity and consistency (Britnell 2015, p. 1).

Transitioning the theory of community engaged health partnerships to the practical application of partnering can be challenging. Health sectors need to consider their
capacity to commit to long-term relationships prior to implementing community engagement strategies. In addition, rural and remote communities can be sites of 'messy complexity' bringing additional challenges for relationship and service consistency, which also needs to be taken into consideration and accounted for in the early and ongoing stages of health partnership formation and consolidation.

Rural and remote communities can experience high levels of relationship and service inconsistencies influenced by external political, policy and funding decisions; internal resource limitations; and high turnover of strategic and professional staff. Previous experiences of relationship and service inconsistencies may significantly influence the community focus on the importance of these features, as was reflected in the study findings.

**Community Participant Quote**  
Service Consistency

Other services come in, they do their work and then the next time it's a different service or provider with a different approach. This service is extremely consistent and we've always needed that consistency, that opportunity to build relationships and services. It just flows. School Principal

Community-campus partnership and service-learning literature describe the need to invest in sustainable relationships (Sandy and Holland 2006). However, less emphasis can be placed on the importance of relationship and service consistency, characteristics that may be of importance in sustaining health partnerships and service programs in rural and remote contexts.

Health service consistency can be reflected in two distinct yet interconnected approaches: continuity and continua of care. Continuity of care has two core elements: the experience of care for service recipients with service providers, and care that occurs across a time frame, that is, longitudinal continuity. The three types of continuity are informational, relational and management (Reid et al. 2002). Informational continuity is the utilisation of information from previous care to ensure appropriateness of current and future care. Relational continuity is the ongoing relationship between service recipients and service providers, contributing to recipient
loyalty to the provider and the provider’s sense of responsibility towards the health outcomes of service recipients. Management continuity relates to the provision of timely and coordinated services that are well planned across disciplines and sectors (Reid et al. 2002).

A continuum of care describes the provision of services from basic to complex care (Quinn et al. 1999). The provision of a continuum of care is dependent on health sector integration to enable the delivery of the ‘right care, in the right place, at the right time’ (NSW MoH 2014): I also propose that this care needs to be provided by the right health professionals who have received the right exposure and preparation for rural practice. The provision of continuity and continua of care can create formidable challenges in rural and remote contexts that experience high levels of health leadership and professional turnover, and a frequent refocusing of health sector structures, policy and practices (Humphreys and Wakerman 2009).

**Campus Participant Quote  Service-Learning Consistency**

It’s nice to see that previous student cohorts have been doing the same thing. You just have to keep doing it so that the next cohort knows exactly what to do. Here in this continuum of students you really do feel like you're at least making some change for the pupil. Allied Health Student

I propose that locally developed health innovations have the capacity to enhance the continuity and consistency of care management, relationships, information and services through responsive approaches to relationship and service consistency and the creation of continua of care. Strategies employed in the study program to address these areas included: the appointment of academics with responsibility for program coordination, integration, communication, health student supervision and education; the establishment of comprehensive health care plans that built upon the work of previous student cohorts to ensure service provision to children reflected current and future care requirements; and a continuum of care for children through the establishment of bi-directional referral pathways between the program and existing allied health professionals within the local health service for children experiencing complex delays. When consistent relationships and services are established, greater
capacity is available to operationalise partnership and program structures and practices, further contributing to service acceptability and sustainability (Moody and White 2001).

**Community Participant Quote**

There are enough people now who have experienced enough success to ensure this program doesn’t get lost. This program is a part of how we now do business.

School Principal

**4.12.6 Component 6: Shared knowledge**

**Significant Citation 8: Shared knowledge**

Local knowledge and understanding of context are critical in designing and implementing services for health outcomes, but local and larger concerns are often in conflict, especially with respect to place. Rural health is delivered in the context of national and state policies. Resources from various external ‘silos’ arrive in rural communities, usually with strings attached (Kilpatrick 2009, p. 42).

Various knowledge processes have been described in the literature and include knowledge sharing, knowledge creation, knowledge exchange and knowledge transfer (Oborn et al. 2010). In enabling health innovation, multi-directional knowledge sharing is needed so knowledge located in community and the health sector can become easily accessible. Oborn et al. (2010) stated that:

Knowledge is learned within a social context; individuals who are not familiar with, or members of, a given social context are likely to ascribe a different meaning or understanding to a specified knowledge set (p. 1).

Historically, knowledge has been perceived to be the domain of institutions, professionals and researchers (Johnson 2005). Johnson (2005) stated that knowledge transfer is ‘the one-way flow of knowledge from researchers to potential users including policy makers, clinicians, and clients’ (p. 11). The translation of knowledge into practice then requires the exchange, synthesis and application of research and evidence between researchers and practice settings (Graham et al. 2006).
In many instances, knowledge generation that seeks to address rural and remote health inequities can occur at a distance from these communities. External institutional, professional or researcher-identified problems and solutions to the unmet needs of these communities can then fail to address community needs, and lack transferability and sustainability when implemented in these locations (Johnson 2005). Gibbons (2003) stated that many of the complex community issues that universities are being called on to resolve have a ‘provenance’ which is often far removed from the world occupied by academics.

Community Participant Quote

Knowledge Sharing – Allied Health Student to School

I’m finding one of the flow-on effects is the skills that the classroom teachers are acquiring. Because the service is consistent, the teachers are picking up allied health skills. School Principal

As community engaged health partnerships gain momentum (Bryson et al. 2006, Kania and Kramer 2011), alternative approaches to knowledge generation and sharing are emerging. Kania and Kramer (2011) informed us that:

Under conditions of complexity, predetermined solutions can neither be reliably ascertained nor implemented. Changes in individual and organizational behavior that create an ongoing progression of alignment, discovery, learning, and emergence (are required). Leaders of successful initiatives have embraced a new way of seeing, learning, and doing that marries emergent solutions with intentional outcomes (p. 2).

In health partnerships, continuous feedback loops, characteristics previously described in the complex adaptive systems component, influence the identification of new and shared solutions to issues across sectors and communities. I propose that the study findings reflected evidence of knowledge sharing and transfer. Teaching staff were provided with opportunities to acquire new allied health knowledge and translate this knowledge into practice through their engagement in class-based services. Allied health students were also afforded with the opportunity to acquire
additional knowledge of the challenges and confronted by school education and strategies employed to address these challenges.

**Community Participant Quote**

*Knowledge Sharing – School to Allied Health Student*

The students are certainly learning from teachers and our approach. So while they’re doing their placement they’re also learning and seeing things from a school education point of view which is quite a different view to what they’d normally deal with in a hospital setting. School Principal

However, the translation of new evidence-informed knowledge into practice is considered a significant challenge in health care delivery (Rycroft-Malone 2008). I propose that local innovations can generate new knowledge and promote knowledge sharing and transfer.

**4.13 Concept 3: Focusing Engagement**

This concept has three components: population health, primary health care and integrated care. To ensure the responsiveness of the framework, I propose that these components can be adapted to reflect areas, such as chronic disease management, stage of life approaches, curriculum content or community-identified needs and priorities. In this framework, these components reflect study findings and desirable approaches to rural and remote Australian health care delivery.
4.13.1 Component 1: Population health focus

**Significant Citation 9: Population Health Focus**

In the quest to improve health and combat disease, public health has focused on gathering evidence about ‘what works’ from a deficit point of view. That is, there is a tendency to focus on identifying problems and needs of populations that require professional resources and high levels of dependence on hospital and welfare services (Morgan and Ziglio 2007, p. 18).

Population health is a comprehensive approach to addressing the health needs of entire populations, or subgroups within these populations, through strategies that focus on the prevention of poor health by alleviating conditions that contribute to poorer health outcomes (Miles et al. 2010). These conditions can be located within social, educational, health and economic sectors, be influenced by geographical contexts, federal and state policies and programs, and their funding structures. This conceptual framework emphasises the need to inform health sector approaches to community engagement to address protracted health inequities and conditions that
contribute to the poorer health outcomes of these populations, specifically children residing in rural and remote communities.

**Community Participant Quote**

The Life Outcomes of Children

This program is about making sure that our children are given every opportunity to learn effectively and to become a part of our community. It's about ensuring children get an opportunity to be the best they can be. University Manager

Miles et al. (2010) stated that population health approaches:

- Shape environments in ways that enhance and support good health and by engaging partners from many sectors in a comprehensive and coordinated way.
- This approach also recognizes that the entire process needs to be informed by science and communities and adapted to the unique needs of particular populations (p. 12).

Population health approaches enable communities to collectively identify their health needs and priorities and to express solidarity in the identification, implementation and adaptation of solutions that are relevant and sustainable. These solutions may require long-term commitment and resourcing to achieve improved health outcomes.

Despite strong arguments for population health approaches, increasing fiscal concerns can take priority in informing approaches to health care delivery (Willcox 2014). The Australian Government’s investments in public health strategies, those targeted at improving the health of populations, constitute only a small percentage of the nation’s total recurrent health expenditure (AIHW 2011), with this area of expenditure declining since the mid-2000s. In parallel, the nation has experienced a rise in health care expenditure to account for the services required to treat preventable, chronic and lifestyle-related conditions.

The study partnership and service-learning program were established with the shared aims of addressing the developmental delays experienced by rural and remote children through the provision of student-led services, contributing to the potential enhancement of the current and later-life educational, health and social outcomes of
these children while exposing future health professionals to the constructs of population health practice. If health and education are intrinsically linked (AIHW 2009, Engle and Black 2006), then we need to ensure that rural and remote children are provided with every opportunity to engage in their education and that future health professionals are equipped with the knowledge and skills to practise in alternative population health contexts. Gebbie et al. (2003) stated that investments are required to strengthen the population health literacy of undergraduate health students, in order to provide them with a ‘recognition and basic understanding of how health is shaped by the social and physical environment’ (p. 144). Through this exposure, education directed at improving this level of health literacy may also serve as a conduit to introduce students to possible careers in practice settings that have a population health focus.

Within a population health approach, where possible, precursors to developmental delays are addressed; where delays exist they are identified early and supportive services are implemented by competent health professionals as a matter of urgency. Only by addressing these precursors and delays earlier, and providing health students with exposure to population health practices to ensure the future responsiveness of health professionals, can we hope to limit the potential of a lifetime of disadvantage and potential poverty for these children and meaningfully impact on the longstanding inequities and disadvantages that frame the health of rural and remote populations.

**Community Participant Quote**  **Early Identification and Intervention**

First and foremost the program is about identifying the needs of the children early; that’s one of our clear aims. If we can actually assess and screen early and identify any support that children require then that’s the first aim. Without the program we wouldn’t be identifying issues children have until they are much older which is far too late. School Manager

This framework aims to inform engagement and health professional education approaches and, by doing so, to contribute to the attainment of optimal life outcomes for children, their families and communities through enhanced service accessibility, acceptability and responsiveness.
4.13.2 Component 2: Primary health care focus

Significant Citation 10: Primary Health Care Focus

The importance of primary health care within health systems in improving the recognition of health needs and inequity in meeting these needs has recently been given impetus by major reports by the World Health Organization and WHO regional offices. These documents make it clear that what is needed is person- and population-focused comprehensive primary care services, not the disease-oriented selective primary care of the past several decades. Thus, person-centeredness and, by extension, “population-centeredness” are critical features of health systems and services (Starfield 2009, p. 57).

The principles of primary health care include: universal access to care; coverage on the basis of need; a commitment to health equity that is orientated towards social justice; community engagement in defining and implementing health care agendas; and service integration (WHO 2008). Primary health care targets services to populations that experience higher levels of disadvantage through models of care that promote community engagement, enhancing community self-determination and health outcomes (WHO 2008).

Despite the long-term prominence of primary health care (WHO 2008), the following challenges exist in the provision of primary health care services in rural and remote Australia: fragmented responsibility for care across government and local jurisdictions; resource limitations; health workforce shortages; systems failures to address prevention and early intervention; lack of integrated health infrastructure; poor community engagement in health care design; and health sector failures to connect to local resources (Humphreys and Wakeman 2009).

In addressing these challenges, systemic changes have been called for that support the development of regional models of care that include: enhanced accessibility to appropriate primary health care services; a refocusing of health sectors to include health promotion and early identification and intervention strategies; the establishment
of multi-disciplinary teams that provide continuity of care; and the provision of adequate infrastructure to support care integration (HWA 2013).

**Campus Participant Quote  Curative Care Focus**

I think time would be much better spent doing individual sessions rather than trying to manage an entire class of children. You’re setting these broader goals. I’m starting to think, ‘What should pupils be doing at this age? That’s where I’m pitching this lesson rather than focusing on therapy; it’s not really therapy.’ Allied Health Student

In improving health outcomes, services need to be provided by suitably qualified health professionals in locations that enhance service accessibility. However, our future health professionals may experience limited to no experience within primary health care practice models and alternative care locations prior to graduation (Spiers and Harris 2015, Frenk et al. 2010). This includes the provision of services that extend beyond individual episodes of care at the patient’s bedside. Providing pre-registration health students with exposure to primary health care practice is critical in developing appropriately qualified health professionals for current and future health care practice. A failure to provide this exposure can result in health students devaluing community expectations of care and alternative models of health care delivery, as is evidenced in the campus participant quote located in this component. An additional hallmark of effective primary health care is its ability to build strong partnerships and integrate care across multiple sectors.

**4.13.3 Component 3: Integrated care focus**

**Significant Citation 11: Integrated Care Focus**

Few studies of good quality, large and with rigorous study design have been carried out to investigate strategies that promote service integration. All describe the service supply side, and none examine or measure aspects of the demand side. Studies must also assess the client’s view, as this will influence uptake of integration strategies and their effectiveness on community health (Briggs and Garner 2007, p. 1).
The NSW Ministry of Health (MoH) (2015, online) defines integrated care as:

The provision of seamless, effective and efficient care that responds to all of a person’s health needs (developed) in partnership with the individual, their carers and family. Integrated care requires health systems responsiveness to the needs of individuals, resulting in the provision of ‘the right care, at the right place at the right time’.

While acknowledging the intent of integrated care strategies in improving health sector and service integration, I caution against integrated care strategies informed only by the health sector in isolation to communities. The current lack of sector integration and inability of the sector to respond to rural and remote community needs were highlighted in this study.

**Community Participant Quote**

We have many different health services in this community. But there was just a glaring gap with any allied health service delivery. So while we were identifying issues with children and referrals were being made, there was just nothing to continue on with. Even if the service would come to community if it was based at the health service, I still think some parents wouldn’t access it. School Principal

**Service Fragmentation**

The provision of health infrastructure that enables sector integration and co-location of services closer to community needs is a consideration in the provision of integrated care (Ginsburg 2008, WHO 2008). Key stakeholders engaged in this community-campus partnership and service-learning program have been successful in attracting $4.7 million in federal funding to establish integrated health infrastructure, the School Health Hubs, on seven of the primary schools engaged in the program. This infrastructure will provide additional opportunities to further promote service integration across government and non-government sectors, with the provision of these services occurring directly on school sites to enhance service accessibility, acceptability and integration. More recently, additional funding has been accessed through the health sector to enable the appointment of school-based primary health care nurses to promote the further integration of health service provision to children, young adults and their families.
4.14 Concept 4: Influences on Engagement

This concept has three components: community literate health systems, community literate health workforce and community literate higher education institutions. These components were developed based on: the complex insights provided by study participants; the breadth of literature that describes the need to ‘develop’ the knowledge, skills and capabilities of communities for engagement; and my desire to balance the burden of responsibility for the health outcomes of rural and remote communities. The study findings, community development literature and my desire as the researcher for an additional lens to inform community engagement approaches influenced my exploration of the health literacy literature, specifically the Australian National Statement on Health Literacy (ACSQHC 2014). This has resulted in my proposal that a ‘community literate’ lens is needed alongside health literacy agendas to enhance service alignment to community needs and health care practice to community expectations. I now propose an overarching and refined definition of being ‘community literate’:

Being ‘community literate’ is reflected in the way in which health professionals, health and higher education sectors draw on professional, clinical, research and social expertise to better understand, interpret and integrate community knowledge, skills and experiences into the design of health services and the development of health professionals with the aim to contextualise health care. Commitments and investments in this approach to health care will promote ‘community intelligent’ health care delivery through appropriate community engagement practices that are responsive to unique community contexts, and the needs, priorities and expectations of those residing in these contexts.
4.14.1 Component 1: Community literate health systems

Significant Citation 12: Community Literate Health Systems
A broad consensus has emerged on what health care organizations need to do to meet the differing health care needs of diverse populations. The following domains were almost universally regarded as important for creating responsive organizations: organizational commitment, collecting and analyzing data to provide empirical evidence on inequities and needs, development of a competent and diverse workforce, ensuring access for all users, ensuring responsiveness in care provision, fostering patient and community participation, and actively promoting the ideal of responsiveness (Seeleman et al. 2015, p. 1).

The importance of health literacy in improving the safety and quality of care, reducing health disparities and increasing service equity for individuals is outlined in the Australian National Statement on Health Literacy (ACSQHC 2014). This statement sends a powerful message on the role of local health systems in improving the health
literacy of consumers to enhance service accessibility and equity. The statement proposes that local health systems should ‘provide education programs for consumers aimed at developing health knowledge and skills’ to enhance the ‘motivation and capacity of a person to access, understand and apply information to make effective decisions about health and health care’ (ACSQHC 2014). The statement suggests that these outcomes can be supported by the ‘design and delivery of policies, pathways and processes that reduce the complexity involved in navigating the health system including across sector settings’ (ACSQHC 2014). I now reframe these statements to reflect a parallel ‘community literate’ perspective:

Local health systems should provide educational and community engagement opportunities for all health staff targeted at developing their understanding of the context in which they are providing care. Staff should be afforded with opportunities to develop knowledge, skills and expertise that can enhance their capacity to engage respectfully and responsively with communities to access, understand and apply community knowledge, information and skills to support the provision of acceptable health care. This includes the acquisition of knowledge of individuals, groups, sub-groups, private, government and non-government systems that are engaged in health care delivery; and the histories, networks and relationships that exist within and between these systems that can influence community perceptions of their service acceptability. These activities can be supported through the design and delivery of policies, pathways and processes that reduce the complexity involved for staff in navigating communities, especially communities that can display complex adaptive systems characteristics. This could include staff induction processes and the provision of opportunities for the continuing development of ‘community literate’ knowledge and skills. This will necessitate the inclusion of community perspectives in informing how health staff can best acquire this knowledge and expertise.

Based on the study findings and the propositions made within the statement, I highlight the significant ethical risks associated with improving community health literacy when the services required to address their needs are not accessible in rural and remote contexts. Furthermore, in this instance, limited community exposure to
allied health professionals and the services they provide were attributed to the lack of community presence of these professionals. This, in turn, can create an environment where the demand for these services may be limited, resulting in a false understanding of community health needs.

**Community Participant Quote**

For a lot of parents in this community, knowledge of what allied health professionals can actually offer is lacking. The community didn’t have a concept of what these services were. School Principal

4.14.2 **Component 2: Community literate health workforce**

**Significant Citation 13: Community Literate Health Workforce**

Professional education has not kept pace with (current) challenges, largely because of fragmented outdated, and static curricula that produce ill-equipped graduates. The problems are systemic: mismatch of competencies to patient and population needs; poor teamwork; (...) narrow technical focus without broader contextual understanding; episodic encounters rather than continuous care; predominant hospital orientation at the expense of primary care; (...) and weak leadership to improve health-system performance (Frenk et al. 2010, p. 1923).

The statement (ACSQHC 2014) suggests that health professionals should ‘assume that most people will have difficulty understanding and applying complex health information and concepts’ and they should ‘use a range of interpersonal communication strategies to confirm information has been delivered and received effectively’ by consumers of health services. I now reframe these statements.

Health professionals need to be alert to the fact that a diverse range of health professionals and associated services may not be represented across rural and remote Australian contexts. Acknowledgement is needed that this lack of visibility of professionals and exposure to the services they provide can impact on community knowledge of, and demand for, these services. Health professionals should use a range of communication strategies and knowledge acquisition processes to acquire insight into the health care inequities experienced by communities, community-identified health needs and priorities. Health staff need to be provided with
opportunities to use this information to inform and reform local health policies, service provision and practices.

It is essential to expose health students and professionals to the challenges of rural and remote health care and the longer-term implications of a failure to address these challenges. However, students and professionals need to be supported in the acquisition of community literate knowledge, skills and practices.

Community Participant Quote: Developing Community Literate Health Students

We didn’t realize how quickly our health students were going to learn that passion for rural health care and understand what happens when a child comes to school and they haven’t had any breakfast; they’re flat out talking; what is going to happen to this child when they get into high school? University Manager

4.14.3 Component 3: Community literate higher education institutions

significant citation 14: Community Literate Higher Education Institutions

Existing discussions on community engagement downplay the complexity of community, abstracting and dissolving important divisions and power structures in the process. Community-campus partnerships are characterized by inequities of power that impede collaboration and introduce conflicts. Although much has been written on the benefits of community engagement, there has been less discussion of the potential challenges and dilemmas of these efforts. Partnerships lacking meaningful input from community-based stakeholders create ownership tensions and skewed priorities. Such problems arise when university special initiatives determine the priorities of partnership (Dempsey 2010, p. 360).

The statement suggests that government organisations, regulators and bodies that advise on health policy should ‘explore opportunities for including implementation of strategies to address health literacy as a core requirement of health care service design and delivery’ and ‘the development of partnerships to facilitate the exchange of information about health literacy research and programs between research and practice communities’ (ACSQHC 2014). I now reframe these statements.
Government organisations, regulators and bodies that advise on health policy should explore opportunities to engage with a diverse range of rural and remote communities in the development, implementation and evaluation of strategies to promote ‘community literate’ health systems and professional approaches as a core requirement of health service design and workforce development. This includes the exchange of information about ‘community literate’ services, practices and research initiatives across communities, practice settings, health and higher education sectors.

Higher education institutions, key stakeholders in health professional education and health research, are ideally situated to advise on health policy that ensures the alignment of health services and professional practice to rural and remote community needs and expectations. However, as previously identified, these systems can be distanced geographically and contextually from rural and remote communities and have conflicting or poorly aligned world views to those held by rural and remote populations. Higher education institutions will need to make significant investments in the establishment and sustainability of community engaged relationships if they are going to contribute to health research, education and practices that meet current and future community expectations of health care.

**Campus Participant Quote**  
Community Literate Academic
That visit to the community was incredibly important in terms of my thinking, but also on a personal level. I came away determined I was going to be a part of the solution. Metropolitan Academic

**4.15 Concept 5: Engagement Impacts**

This concept describes the key components of policy, funding and practice impacts. These components are considered critical in influencing sector changes and the potential adoption, translation, resourcing and sustainability of this framework within rural and remote Australian contexts.
4.15.1 Component 1: Policy impacts

Significant Citation 15: Policy Impacts
Although community involvement is held by many to be an essential ingredient in the successful delivery of policy objectives, (we found) few studies from the field of area-based initiatives that set out to test this assumption in any systematic way and none that succeeded in doing so (Burton et al. 2006, p. 296).

The National Rural Health Alliance (NRHA) (2013) proposed that a coherent national policy framework for rural and remote health care was required as a matter of urgency. However, the literature informs us that policies developed at the national and state levels may be poorly suited for implementation across diverse rural and remote contexts. New insights into how best to approach policy development targeted at addressing complex health inequities are being explored. In addressing a policy and intervention need for standardisation, the standardisation needs to be considered from
a new perspective. This perspective would allow communities to determine how best to interpret health policies; provide high levels of flexibility in how health strategies are then developed, implemented and adapted; and create evaluation frameworks that are responsive to this level of complexity, allowing for a standardisation by policy intent and flexibility of policy function at the local level. Hawe (2015) stated that:

Studies of transfer, adaptation, and scale-up investigators using a complexity lens have confirmed that programs are rarely duplicated intact. Instead, what is essentially transferred are core principles and “powerful ideas” (p. 313).

Through the adoption and adaptation of this framework, the health sector will be better positioned to reform their approaches to health policy development and service provision by drawing on a ‘community literate’ lens. This will enable the health sector to engage with communities in the design and interpretation of health policies; the implementation of flexible health strategies; their adaptation; and the evaluation of a new perspective on the standardisation of health policy and programs at the local level.

**Community Participant Quote**

In a small community like this, we’re in a great position to bring [local] stakeholders to the table to discuss issues. They come because they’re connected. If you’ve got the right players around the table with a mutual understanding of what the community needs and you trust each other, you can make changes. School Manager

**Community Capacity to Influence Change**

4.15.2 Component 2: Practice impacts

**Significant Citation 16: Practice Impacts**

Traditionally, the education of the various categories of professionals has been conducted in silos, each group developing its own set of competencies within a culture of ownership of a specific area of work. In today’s health environment, teamwork is increasingly the model for care delivery, where boundaries need to be expanded and inter-professional education considered as a step towards that collaborative practice model of care (WHO 2013, p. 23).
The Australian Charter of Health Care Rights (ACSQHC 2008) stated that access to health care is a fundamental right for every Australian; however, rural and remote communities continue to confront challenges in accessing comprehensive health care services, can be the recipients of care poorly aligned to community need, and can be distanced from health care agendas (Humphreys and Wakeman 2009). In addressing these challenges, the health sector needs to develop practices that enable meaningful community engagement in health partnerships to redress health disadvantages and inequities. I propose that this framework can provide this sector with the opportunity to establish an understanding of current community engagement practices, areas for improvement and the focus for community engaged evaluations to ensure the community perspectives of their engagement experiences directly contribute to informing and reforming health care practice.

**Campus Participant Quote  Allied Health Student Practice**

To be able to impact on allied health student learning and their practice as new graduates, that's pretty exciting. Helping them develop those work ready skills that are difficult to develop in other placements where there are higher levels of supervision. Participating students have the opportunity to run inter-professional therapy, not just talk about it. Rural Academic

**4.15.3 Component 3: Funding impacts**

**Significant Citation 17: Funding Impact**

In looking at emerging (health care) models, it is important that funding remains flexible to ensure the needs and circumstances of different localities are accommodated. This means a more effective and flexible use of existing funding as a priority for all stakeholders (SCoH2013, p. 18).

With increasing fiscal concerns being associated with health care delivery and sustainability, a refocusing of the nation's approach to health care policy and funding is required (Willcox 2014). Australian Government investments in population health strategies have decreased as investments in the management of chronic disease care have increased (AIHW 2011). For this framework to have an impact, health sectors will need to acknowledge population health and primary health care practices as key
strategies in mitigating poorer health outcomes and make human resources investments in framework adaptation, implementation and evaluation. While acknowledging the financial constraints that can confront these sectors, I argue that a failure to seek alternative and impactful strategies for the engagement of rural and remote communities to address their health inequities and disadvantages, has the potential to result in higher cost burdens to individuals, communities and health sectors. A fundamental aim of any health system is to prevent poor health so people can remain as healthy as possible for as long as possible. This can only be achieved by tackling unfavourable social determinants of health, such as health service inequity and disadvantage, if we are to reduce poor health and achieve large population health gains (AIHW 2016). I propose that investments made in translating this framework into practice will be significantly less than those required to address the protracted poorer health outcomes experienced by rural and remote populations.

**Campus Participant Quote: Funding Health Innovations**

We’ve got to sort out the funding; that’s the single biggest barrier. I don’t know how we’re going to sort that out, but we’ll try every direction we can in partnership to make that work. Metropolitan Academic

### 4.16 Concept 6: Potential Outcomes

This concept explores the components of health service alignment to community needs; health professional practice alignment to community contexts, improved service accessibility and acceptability; and the resultant enhanced health outcomes for rural and remote Australian communities. These components constitute the ultimate aims associated with this conceptual framework. Due to the depth and breadth of the findings and the literature discussed in this chapter, I have endeavoured to provide a concise discussion on the components associated with Concept 6: Potential outcomes.
4.16.1 Component 1: Health care alignment to community needs

Significant Citation 18: Health care alignment to community needs
(The National Strategic Framework for Rural and Remote Health) aims to identify the systemic issues that most require attention to improve health outcomes for rural and remote Australians, such as access; appropriate models of care; a sustainable workforce; the development of collaborative partnerships; and, governance approaches, ensuring that differences between health services and communities are respected and without impeding local planning (SCoH2012, p. iii).

Despite the intent of the National Strategic Framework for Rural and Remote Health (SCoH 2012) and previous health and health workforce policy statements and investments, rural and remote Australians continue to experience health care inequities and extensive delays in service access. The lack of policy and strategic continuity undermines the establishment of nationally coordinated approaches to effective community engagement in health care (Sarrami-Foroushani et al. 2012). I propose that community engagement in locally developed health service and
workforce innovations has the capacity to deliver services that are acceptable, accessible and sustainable within rural and remote Australian locations.

Community Participant Quote The imperative for Aligning Service to Need
People in this community are loathe to go on a waiting list; it's just another barrier to them seeking support. They get referred to the public health system and the momentum gets lost because of the waiting list. The appointments get missed and the pupil ultimately suffers. It's not that parents don't want to take up the service [but] transport and socio-economic status make it problematic. School Principal

4.16.2 Component 2: Health workforce alignment to community contexts

Significant Citation 19: Health workforce alignment to community contexts
Education and training programs must match the needs of rural and remote communities as well as the complexity and challenges of living and working in them (HWA2013, p. 20).

Developing a health workforce that has the capacity to comprehend the total care needs of rural and remote populations is critical. I propose that this conceptual framework can assist health sectors in the provision of professional education that promotes ‘community literate’ practices and enhances professional capacity to work effectively and responsively across a range of health care contexts, including rural and remote locations.

Campus Participant Quote A Rural Ready Health Workforce
There is the dimension of learning about rural communities, their challenges, their joys, their benefits and the difference in culture. Very few of our health students have a rural background and typically never go rural, ever. For those students, this program is an amazing eye-opening experience. Metropolitan Academic
4.16.3 Component 3: Improved population health outcomes

Significant Citation 20: Improved population health outcomes
Because improvement in population health requires the attention and actions of multiple actors (legislators, managers, providers, and individuals), the field of population health needs to pay careful attention to the knowledge transfer and academic-practice partnerships that are required for positive change to occur (Kindig and Stoddart 2003, p. 380).

The health sector should ultimately be concerned with improving the health outcomes of rural and remote communities through the provision of integrated health care that aligns to community needs, ensuring that services are provided by ‘community literate’ health professionals. I propose that rural and remote communities are equally concerned with achieving these outcomes and that this framework can inform the health sector and communities in the attainment of these shared goals.

Community Participant Quote  

This program is about making sure that our children are given every opportunity to learn effectively and to become a part of our community. It’s about ensuring children get an opportunity to be the best they can be. University Manager

4.17 Intent of this Framework

This framework focuses on informing the health sector approach towards the engagement of rural and remote Australian communities in the design of their health services and the development of their health workforce and takes into consideration the perspectives and experiences of community members; integrates the evidence acquired through this study; draws on and connects existing theories and principles; and, importantly, accounts for the potential need for framework adaptation to ensure framework responsiveness and alignment to diverse rural and remote Australian contexts. Specifically, this framework calls for higher levels of health sector investment in:
1) The development of meaningful engagement strategies that ensure rural and remote community perspectives and experiences of health care inform the design of their health services and the development of their health workforce;

2) Responsibility and accountability for the strategies and processes employed in the establishment, implementation, evaluation and sustainability of community engaged health care agendas and health partnerships;

3) Health service and workforce development evaluations and research that includes community representatives, community perspectives and experiences, and the translation of this evidence into practices that inform and reform health sector approaches to service and workforce design, delivery and evaluation.

4.18 Considerations Prior to Adopting this Framework

Several factors need to be taken into consideration prior to the adoption, adaptation and implementation of this framework. I caution against protracted debates that are focused on defining the terms ‘community’ and ‘community engagement’ (Johnson 2015, Sarrami-Foroushani et al. 2014). These debates can limit opportunities for engagement and forward momentum. Instead, I recommend that those seeking to adopt this framework provide a clear description of who introduced the framework for consideration and for what purposes, who has been engaged in framework discussions, how these discussions have influenced framework adaptation, what the intent of this adaptation is and how the impact of this framework will be evaluated.

Understanding the interconnectedness within and across framework concepts and components is important in informing how this framework is interpreted and used. I have made explicit the potential need to adapt these concepts and components, in collaboration with communities, to ensure framework relevance and responsiveness. Localised engagement can act to mitigate a ‘one-size-fits-all’ approach, an approach that is routinely criticised within the rural and remote health literature for its failings (Humphreys and Wakeman 2009).
Prior to considering the applicability of this framework, the health sector, that is, health services and higher education institutions, needs to reflect on its capacity to commit to long-term relationships and investments in framework adaptation, implementation and evaluation. A failure to reflect, and the lack of authority or capacity to commit to long-term investments, could further exacerbate community scepticism and cynicism. I propose that the health sector consider the following questions prior to initiating activity associated with this framework:

- What community engaged activity is the health sector already undertaking?
- Did the health sector or community initiate these activities?
- Why was this engagement initiated?
- Who has been engaged?
- What are the impacts and outcomes of this engagement?
- Who has informed an understanding of these impacts and outcomes?
- Does the health sector have the capacity to commit to the adaptation of this framework and long-term relationships with communities to ensure sector responsiveness and relevance to the communities in which it is engaged or seeks to engage?

I now introduce the final paper of this thesis, Paper 6, which discusses the features that promote transformational and sustainable rural and remote health partnerships and services. The chapter is concluded with a final discussion.
4.19 Introduction to Paper 6: 'Community Engaged Health Care: Features that promote transformational and sustainable rural and remote health partnerships and services'

Jones, D, McAllister, L, Dyson, R and Lyle, D In Review. Community Engaged Health Care: Features that promote transformational and sustainable rural and remote health partnerships and services, Australian Journal of Rural Health.

How this paper is located in the thesis:

This final paper in the thesis has been informed by findings from Stage 4 of data comparison, namely, the comparison across community and campus groups. This paper specifically focuses on describing the components associated with Concept 2: Features of Engagement of the conceptual framework presented in the current chapter. The features described in this paper have resulted from a further refinement of the study findings and may inform additional adaptation of the features currently presented within the conceptual framework. This paper addresses my third research goal which was to develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants, and my third research question of: how did community and campus participants interact with each other to fulfil the shared purposes of enhancing allied health service accessibility and allied health student educational outcomes?

What this paper adds to the literature:

Rural and remote communities experience protracted allied health workforce shortages and service inequities. It is acknowledged that these communities need to be engaged in the design of their health services and the development of their health workforce to ensure service alignment to needs, and service accessibility, acceptability and sustainability. However, limited empirical evidence exists that describes how best to engage with communities and the impacts and outcomes of this engagement, and specifically evidence informed by rural and remote community perspectives. This paper describes six key features that can contribute to transformational and sustained community engagement, at the meso level of
engagement, in rural and remote Australian contexts. These features can inform health and higher education sector community engagement approaches.

Implications of findings:

If we are to improve the life outcomes of rural and remote Australian populations, in this instance, children residing in these regions, we need to ensure that community experiences of service inequities and locally-identified solutions to addressing these inequities inform the design, delivery and evaluation of health services and the development of responsive health professionals. I propose that rural and remote communities have the capacity, knowledge and expertise to collaborate in the development of acceptable and sustainable health service and workforce innovations. The challenge is: can the health sector re-orientate their approach to community engagement to ensure the six features described in this paper are embedded within their engagement practices?
4.19.1 Faculty of Health Sciences – Author Contribution Statement

Candidate Name: Debra Marie Jones

Degree Title: Doctor of Philosophy

Paper: Jones, D., McAllister, L., Dyson, R and Lyne, D In Review, Community Engaged Health Care: Features that promote transformational and sustainable rural and remote health partnerships and services, Australian Journal of Rural Health

As a co-author of the above paper, I confirm that the above candidate has made the following contributions to the above paper:

- Conception and design of the research
- Analysis and interpretation of the findings
- Writing the paper and critical appraisal of content

Professor Lindy McAllister

Signed: [Signature]
Date: 21/11/16

Robert Dyson

Signed: [Signature]
Date: 12/12/16

Professor David Lyne

Signed: [Signature]
Date: 13/12/16
Jones, D, McAllister, L, Dyson, R and Lyle, D In Review, Community Engaged Health Care: Features that promote transformational and sustainable rural and remote health partnerships and services, Australian Journal of Rural Health

Objective: To describe features that promote transformational and sustainable community engaged health partnerships and services in rural and remote Australian locations.

Design: A pragmatic qualitative study was undertaken. Focus groups and individual semi-structured interviews were used. Data was analysed using 4 stages of comparison within and across participant transcripts.

Setting: Far west NSW, Australia. The health partnership, initiated by primary school principals in 2008, aimed to address allied health service inequities experienced by regional children. A service-learning program was developed, aligning allied health student placements to student-led services for these children. The program has been operational since 2009.

Participants: Community participants - school principals (n=7) and senior managers from local facilitating agencies (both intergenerational community members) (n=2), and campus participants - allied health students (n=10) and academics (one rurally located with student supervision responsibility and one metropolitan located with a strategic partnership role) (n=2), consented to participate in this study.

Measures: All data were collected by an independent researcher. 4 stages of data comparison were undertaken. A thematic analysis was conducted and six key features identified through Stage 4 comparison, across community and campus groups, reflecting transformational community engagement were identified.

Results: These six features are: 1) identifying and responding to community need, 2) providing services of value, 3) community leadership and innovation, 4) reputation and trust, 5) consistency, and 6) knowledge sharing and program adaptation.

Conclusion: We propose that these features contributed to the transformational engagement of community and university participants. These features can inform health sector approaches to community engagement, enhancing rural and remote service accessibility, acceptability, and sustainability outcomes.

Key words: Allied health, community engagement, features of engagement, health partnerships, rural and remote, transformational.
What is already known on this subject:

- Rural and remote communities experience protracted allied health shortages and service inequities.
- There is an imperative to engage communities in the identification of their health needs and priorities, service design, implementation and evaluation and development of their health workforce.
- Limited empirical evidence exists that describes how best to engage and the outcomes of this engagement, specifically evidence informed by sustained rural and remote community engaged health partnerships.

What this paper adds:

- A description of six key features that contributed to sustained community and campus engagement in a rural and remote health partnership and service program.
- Features that can inform health sectors seeking to transform their approaches to community engaged health care.
- Empirical evidence on approaches to best engage and outcomes of engagement, specifically from a rural and remote Australian perspective.

Introduction

The connection between the educational attainment of children and enhanced later life social, economic and health outcomes is acknowledged yet rural and remote Australian children can enter school experiencing developmental vulnerabilities that detrimentally impact on their educational and social engagement. In 2012, 32% of far west NSW children were identified as being developmentally vulnerable on one or more of the Australian Early Development Index domains on school entry. These same children are less likely to have access to allied health services required to identify and intervene early in addressing these vulnerabilities.

In addressing these complex health inequities there have been increasing calls for the transformational engagement of communities in their health care agendas, engagement that is characterised by two-way communication, frequent interactions, trusting relationships, and shared control and decision making at the meso level of engagement, that is where communities contribute to the identification of their health needs and priorities and the design, implementation and evaluation of their health services, to better align health services to community needs.

Context

In 2008, Broken Hill primary school principals approached the Broken Hill University Department of Rural Health (BHUDRH) to voice their concerns about the paucity of paediatric allied health services and the impact of this on children’s development. In response, the BHUDRH facilitated a local partnership between school education, health sectors and the BHUDRH to explore potential service solutions. This partnership extended to include a metropolitan university with carriage of allied health education. A service-learning model was developed, aligning speech pathology and occupational therapy student placements to student-led services to these children. Children with developmental delays are identified through parent and teacher concerns, and student and academic observation, screening and assessment.
Services are delivered directly on 12 school campuses across 3 regional communities. Approximately 150 children access services targeted at addressing speech, language, communication, fine and gross motor skill delays annually. The program has operated for seven years.

Despite the desirability of transformational community engagement in health care, limited evidence exists on how best to engage communities and the outcomes of this engagement. This paper describes six features that we propose can promote transformational community engaged health partnership at the meso level, enhancing service accessibility, acceptability and sustainability outcomes.

Method

Ethics approval was granted for this study through The University of Sydney Human Research Ethics Committee (2014/178), NSW Department of Education and Communities (2014117), Catholic Education Office and La Trobe University (written approvals). The authors declare their association with the partnership and program. Strategies were employed to avoid researcher bias in data collection and interpretation.

Design

A pragmatic qualitative study was undertaken in 2014 to compare the perspectives and experiences of community and university participants engaged in the partnership and service-learning program. This approach enabled the selection of data collection and analysis methods that would best enable study goals to be met.

Participants and Data Collection

Participants were purposefully selected. Focus groups (FGs) and individual semi-structured interviews were data collection methods (see Table 1). Both methods were used to enable the collection of comprehensive data from diverse participant groups.

<table>
<thead>
<tr>
<th>Table 1. Community and Campus Partner Study Participants</th>
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<tbody>
<tr>
<td>Community Partners</td>
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<tr>
<td>School Principals</td>
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<tr>
<td>Senior Managers-Local agencies*</td>
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<tr>
<td>Campus Partners</td>
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<tr>
<td>Allied Health Students</td>
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<tr>
<td>Allied Health Academics**</td>
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*Senior Managers - University Department of Rural Health (UDRH) – University Manager and school education – School Manager. **Rural Academic with supervision responsibility and Metropolitan Academic strategic partner. FGs=Focus Groups, Principal interview (P:1)
All data were collected by an independent qualitative researcher. All participants were asked common questions to support comparison: what influenced their participation, what the aims of the partnership/program were, and participation impacts. All FGs and interviews were digitally recorded with consent and transcribed verbatim.

**Data Analysis**

Data were analysed using four stages of constant comparison: (1) comparison within single transcripts, (2) comparison within subgroup transcripts, (3) comparison within community and campus group transcripts, and (4) comparison across community and campus groups. Three researchers independently reviewed a selection of campus transcripts, coded and categorised data and identified emerging themes. All of the researchers then reviewed and re-analysed results to refine theme descriptions. Remaining transcripts were analysed by DJ and further refined by all researchers.

**Results**

Six features, identified through Stage 4 comparison, reflecting transformational engagement at the meso level were identified. Direct participant quotes are used to support feature identification.

**Feature 1: Identifying and Responding to Community Need**
Community participants overwhelmingly described protracted allied health service inequities for children. A school principal stated, ‘I’ve been here a long time and before that principals were frustrated about the inability of health to provide allied health services to children with developmental delays’. The University Manager provided insight into their direct experience of unmet allied health need, ‘My child desperately needed a program like this, I lived that inequity. We lived it ourselves, as children we didn’t have those services either’. Following an initial visit to regional schools the Metropolitan Academic identified their response to being exposed to children requiring allied health services, ‘I felt ashamed of my profession. There were lots of children who should’ve had access to services who hadn’t’.

The role of community participants in initiating the partnership to respond to these unmet needs was described by the School Manager, ‘At one of our principal’s meetings the possibility of having a relationship with the BHUDRH in developing allied health services was discussed. That’s where the partnership idea started’. The University Manager described how feedback from the school principals informed the response of the BHUDRH, ‘Our principals informed us that we needed to step back into primary schools if we wanted to improve the lives of our children’. The Metropolitan Academic described their response to engaging with the community, ‘I’ve learnt through being involved in this partnership that there is a process of engagement. We went to the community, we worked with them to develop the model, and no research until you earn the trust of community’.

**Feature 2: Services of Value**
Community and campus participants described service value in terms of mutually beneficial outcomes. A school principal stated, ‘The program is a win-win. Student feedback is
consistently, 'I'm not somebody's shadow; I've got to do the job.' Our parental consent rate for the program is 100%.' The Metropolitan Academic credited a number of mutual benefits to the program, 'The program achieves on many levels, outcomes for children, teachers, schools, students and community. When the program got to its second year we'd delivered more allied health services to children than had occurred in the previous 10 years.' Allied health students described the value of service provision in achieving their own learning outcomes, 'We can see we have provided services and we're able to achieve our own learning goals while we're doing it'.

Feature 3: Community Leadership and Innovation

The University Manager provided their perspective on program leadership, 'It's not about external agencies being the guiding light. This program was grown locally; local people have ownership of it, are connected and invested in ensuring it succeeds. The power and knowledge exists within this community.' A principal compared their lack of leadership in previous service initiatives to the program, 'With other agencies they come in, deliver what they want and it meets their needs. Why would you want to work with them?' This principal then described their role in adapting this service model and its impact, 'We have adopted and expanded on this program to best meet the needs of our children and the results speak for themselves'. The Metropolitan Academic stated, 'This education model has been so successful and stimulated the thinking of faculty around developing similar models in other locations. It's given faculty confidence to explore alternative education approaches'.

Feature 4: Reputation and Trust

The Metropolitan Academic described the impact of a university failure to provide students early in program development, 'We couldn't fulfil our obligations to the second student placement. I was mortified. I thought community might have given up on us but they didn't. The next year we ran students across the whole year. I think we won back the trust of the schools that year'. The School Manager reflected on the inevitability of encountering challenges and the importance of trusting relationships, 'There are always going to be hurdles but that commitment is there to work through them. If you have the right players at the table and you trust each other you can make changes. Our principals definitely want this program to succeed and they're not going to throw the towel in because we hit some hurdles'.

Feature 5: Consistency

Previous community-health sector relationship and service inconsistencies were compared to the program by principals, 'Health staff and services always change. This service is consistent; we've always needed that consistency, that opportunity to build relationships'. The importance of consistency of relationships with academic supervisors was highlighted by principals, 'The academics flow in and out of our schools, everyone knows them. That familiarity helps with conversations. School staff aren't as reluctant to ask questions if they are unsure about the services'. The Rural Academic described their role in relationship and service consistency, 'I'm always at the schools, seeking feedback on the program and reminding them about the next group of students and services'. Allied health students described how the student cohorts promoted service consistency, 'Here in this continuum of students you feel like you're making

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some difference. You have to keep doing it so that the next cohort knows exactly what they need to do’.

Feature 6: Knowledge Sharing and Program Adaptation
The Metropolitan Academic described the process associated with program development, ‘We worked with the community and white-boarded a potential service model’. School principals described the processes associated with program feedback and adaptation, ‘It’s not. Here the program is and leave it alone’. There are always discussions around how do we make the program better’. The timeliness of implementing adaptations was also described by principals, ‘The lessons learnt from the previous cohort impact very quickly on the next cohort’. The Rural Academic discussed the processes they employed to capture recommendations for program improvement and implementation of changes, ‘I have an open document on my computer. As suggestions are being made I’m documenting them and building them into the next cohorts rotation.’ Knowledge sharing between students and teaching staff was described by principals, ‘One of the flow-on effects is teachers picking up allied health skills so they can contribute to service delivery in the classroom’.

Discussion
Based on study findings we propose that characteristics of transformational community engagement were described by participants. Two-way communication between these groups was facilitated through the presence of multiple feedback loops, enabling community experiences of previous service approaches to inform the design and adaptation of the new services. Community experiences of previous service approaches included services that meet the needs of service providers and services that lacked relationships and service consistency. These largely negative experiences were compared to positive experiences of the new approach, highlighting the significance of a focus on community needs, community input to service design, and maintenance of relationships between partners. Yet, most strategies that seek to improve the health outcomes of communities are not characterised by two-way communication and feedback loops. Noyes et al. stated that ‘we need more evidence to show that processes like feedback loops actually matter’ (p.1268). Two-way communication and feedback loops are essential to align community expectation of, and support for, service delivery.

Study findings also informed us that for feedback loops to be successful frequent interactions between partners is required. In the early stages of program design the Metropolitan Academic frequently interacted with community partners through community visits and the Rural Academic’s role in sustained interactions with school principals was significant. These frequent interactions acted to promote two-way communication and community feedback as evidenced by - enhanced confidence of school staff to ask questions of this academic and the impact of community feedback on program adaptation. Through frequent interactions partners can establish credible reputations and develop trusting relationships. Whilst intangible, these features can influence the success or failure of community health partnerships. In developing and sustaining reputation and trust partners need to remain in relationships despite inevitable challenges they confront, for example when the metropolitan university was unable to meet their program commitments and the community response to this ‘hurdle’ was to ‘not throw the
towel in.' This promotes knowledge sharing between partners and can mitigate potential community cynicism towards new health service innovations.

Rural and remote health service provision is complex, especially where resources can be scarce and communities may have witnessed a number of 'promising solutions come and go many times without any notable, lasting change' (p. 16). In addressing these issues there have been increasing calls to recognise the importance of community knowledge and experiences of health care in contributing to health service redesign, enabling services to better meet the needs of local communities. However, community-engaged health redesign can 'profoundly disturb' the fundamental constructs that inform health policies and practices that differentiate expert and lay knowledge. Within this study community knowledge sharing significantly informed the identification and prioritisation of health needs (allied health needs of children), and service design (collaborative development of the model), implementation (specifically location of services – school sites), and evaluation (ongoing program adaptation), characteristics associated with meso level community engagement.

Aragon and García stated that 'population health requires solutions that are more than evidence-based: solutions must reflect unique local circumstances to be impactful and sustainable. Local stakeholders must be engaged in designing, implementing, and improving health interventions (p. S25), evidenced in this study through community initiative of the partnership, identification of unmet health needs, and program engagement. Findings from this study support the need to re-orientate health sectors from 'delivering services that meet their needs' to service delivery that responds to what people expect of health care for themselves, their families, and communities. If we can achieve this re-orientation then we have greater capacity to establish partnerships and services that are reciprocal and mutually beneficial.

**Limitations**

Health partnerships are concerned with service outcomes however, an exploration of service impacts on school children was beyond the scope of this study. This study explored the experiences of participants engaged in one rural and remote Australian health partnership and service-learning program limiting generalisability of findings. However, the service-learning program has been adapted and implemented in other rural and remote locations and research is currently being undertaken to explore impacts of participation.

**Conclusion**

If we are to improve the life outcomes of children residing in rural and remote Australian communities we need to ensure that community experiences of service inequity and locally identified solutions inform the redesign of health services and the development of health professionals. Communities have the capacity, knowledge, and expertise to collaborate in health partnerships that seek to develop services that enhance accessibility, acceptability and sustainability. The challenge is, can health sectors that are seeking to engage with these communities re-orientate their approaches to engagement to ensure the six features described in this paper are embedded within their community engagement practices. We propose that the six features described in this paper can contribute to informing health sectors on how best to
engage with rural and remote communities to achieve enhanced service accessibility, acceptability and sustainability outcomes.

References


4.20 Discussion

This chapter has offered a conceptual framework to inform health sector engagement with rural and remote communities in the design of their health services and the development of their health workforce. The conceptual framework is centred on informing health sector practices that will warrant community engagement and commitment to initiatives aimed at improving their health outcomes through the development of a ‘community literate’ health sector and professionals. This framework has been informed by research findings acquired through Stage 4 of the study’s data comparison; complexity, social and organisational theories; and the principles of community engagement, population health, primary health care, health partnership (including community-campus partnerships) and health literacy. Six key concepts and their components have been presented. The proposed ‘community literate’ lens has been described and its position of equal importance alongside health literacy has been discussed in enhancing rural and remote community engagement in health agendas.

I acknowledge the complexity and interconnectedness that exist within and across these concepts and their associated components. I argue that a systems perspective is required if we are to gain a greater understanding of the disadvantages and inequities experienced by rural and remote communities and of how they can influence the development of solutions that contribute to acceptable and sustainable health services. I have made explicit the need to adapt this framework to ensure framework responsiveness and acceptability, with this occurring in partnership with local communities. A visual model has been provided that illustrates this framework, providing an additional resource for local adaptation.

I argue that the health sector needs to work collaboratively with rural and remote communities in the adaptation, implementation and evaluation of this framework in order to enhance population health outcomes; to develop and inform acceptable rural and remote health policy, practices and funding processes; to mitigate community avoidance or rejection of health care that is poorly aligned to community need; and to
ensure service provision by ‘community literate’ health professionals. This framework seeks to support the health sector and other rural and remote Australian communities in their endeavours to work collaboratively in achieving meaningful community engagement. The ultimate aim of this framework is to contribute to informing and reforming health sector approaches to rural and remote community engagement to improve the health outcomes of rural and remote Australian communities.
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CHAPTER 5

CONCLUDING DISCUSSION, CONTRIBUTIONS, LIMITATIONS AND FUTURE RESEARCH

5.1 Introduction

The purpose of this chapter is fivefold. Firstly, the knowledge gaps in the community engaged health care, community-campus partnership and service-learning literature are summarised, with these gaps related to their exploration through the study’s goals and questions. Secondly, my interpretation of the study findings through the use of a complex health intervention lens (Lamont et al. 2016, Hawe 2015, Paterson et al. 2009, Craig et al. 2006) is discussed. Thirdly, I describe the contribution of this research to the community engaged health care (O’Mara-Eves et al. 2013, Johnson 2015, Sarrami-Foroushani et al. 2012), community-campus partnership and service-learning (Sessa et al. 2013, Glover and Silka 2013, Butin 2010, Creighton 2006, Cruz and Giles 2000) literature, specifically from a rural and remote Australian perspective. Fourthly, I discuss how the health sector can more effectively engage with rural and remote Australian communities in the design of their health services and the development of their health workforce. Finally, I comment on the study’s limitations and future research directions prior to presenting the conclusion.

Due to the complexity, breadth and depth of this thesis, Figure 5.1 has been developed to support the visual interpretation of: the linkages between the key theories and principles that have informed this study and interpretation of study findings; key features addressed through this research; researcher approach to the synthesis of study findings (and development of the conceptual framework); new insights and advancements offered by this thesis; and how the study questions have been addressed through this study.
Study Questions

1. To describe and understand the formation of the community-campus partnership from the perspectives of community and campus participants;
2. To describe and understand the development and adaptation of the service-learning program from the perspectives of community and campus participants;
3. To develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants.

Theories and Evidence Informed Principles

**Theories**
- Authentic Learning - Service-Learning
- Inter-professional Practice
- Systems Theory
- Complexity Theory - Complex Adaptive Systems
- Organisational Theory
- Social Theory

**Principles**
- Service-Learning
- Community-Campus Partnerships
- Community Engagement
- Population Health/Primary Health Care/Integrated Care
- Health Literacy

Key Features Addressed in the Study

- Who initiates partnerships and for what purposes
- Conditions and catalysts for community and campus participation
- Professional, clinical and civic impacts and outcomes - campus perspectives
- Civic impacts and outcomes - community perspectives
- Concepts and components to guide health sector engagement with rural/remote communities
- Role of community-campus partnerships and service-learning in rural/remote Australia

New Insights and Advancements Offered

- Viability of service-learning as an educational pedagogy and alternative service approach in rural and remote Australian contexts (Papers 2, 3, 4, 5)
- The need for a community literate lens to inform rural and remote health partnerships and service design (Paper 3)
- Community-campus partnerships and service-learning as vehicles for community engaged health service design and workforce development; social innovation, and; complex health interventions in rural and remote Australian contexts (Papers 2, 3, 4, 5 & Paper 6 – In Review)
- Conceptual framework to inform health sector engagement with rural/remote communities in health service design and workforce development (Chapter 4)

Study question 1
A number of conditions and catalysts were identified, described and discussed that contributed to the formation of the community-campus partnership and the participation of community and campus participants in this partnership. These conditions and catalysts have been described in detail in thesis peer reviewed papers 3 and 4.

Study question 2
The development and adaptation of the service-learning program has been described in detail in thesis peer reviewed papers 1, 2 and 3. Paper 1 has been co-authored by a broad cross-section of key community and campus stakeholders. The use of a developmental evaluation approach has been highlighted and the importance of community engagement and leadership in service-learning program design and implementation highlighted in Papers 2 and 3.

Study question 3
Partnership and program participation impacts have been described in thesis peer reviewed papers 1, 2, 3, 4, 5 and 6 (in review). These impacts include enhanced service accessibility and acceptability for community participants, community engaged health service design and workforce development; and enhanced professional, clinical and civic outcomes for participating allied health students and academics.

Figure 5.1: Summary of key thesis theories, features addressed, new insights and answers to study questions
5.2 Summary of Knowledge Gaps in Community Engaged Health Care, Community-Campus Partnership and Service-Learning Literature

In Chapters 1, 3 and 4, I described the knowledge gaps in the national and international community engaged health care, community-campus partnership and service-learning literature (Johnson 2015, Sarrami-Foroushani et al. 2014, Sessa et al. 2013, Glover and Silka 2013, Butin 2010, Creighton 2006, Cruz and Giles 2000). These knowledge gaps can be summarised as: a lack of health sector understanding of how to engage with communities in designing health services and developing the health workforce (Hyett et al. 2014, Bourke et al. 2010, Kilpatrick 2009); a lack of evidence describing who initiates community-campus partnerships and for what purposes (Glover and Silka 2013); limited evidence of community perceptions and experiences of their engagement and participation in community-campus partnerships and service-learning initiatives (Petri 2015, Glover and Silka 2013, Butin 2010); a lack of understanding as to whether community-campus partnerships and service-learning can provide substantive, meaningful and long-term solutions for communities and quality learning outcomes for participating health students (Petri 2015, Glover and Silka 2013, Butin 2010), specifically in rural and remote Australia; and the lack of evidence of the impact and outcomes of this engagement and participation (Johnson 2016, O’Mara-Eves et al. 2013, Petri 2015, Sarrami-Foroushani et al. 2012, Glover and Silka 2013, Butin 2010). This doctoral study addresses these knowledge gaps through the qualitative and pragmatic exploration of community and campus perspectives and experiences of participation in a rural and remote Australian community engaged community-campus partnership and associated service-learning program.

5.3 Research Goals and Questions

This study was guided by three research goals: 1) to describe and understand the formation of the community-campus partnership from the perspectives of community and campus participants; 2) to describe and understand the development and
adaptation of the service-learning program from the perspectives of community and campus participants; and 3) to develop a greater understanding of the impacts of participation in the partnership and program for community and campus participants. In achieving these study goals, four key questions were posed:

1) What factors contributed to the initiation, formation and participation of community and campus partners in the community-campus partnership and associated service-learning program?

2) What were the impacts of participation in the partnership and program for community and campus participants and for the civic and higher education sectors in which they were located?

3) How did community and campus participants interact with each other to fulfill the shared purposes of enhancing allied health service accessibility and allied health student educational outcomes?

4) How did participation in the partnership and program impact on the clinical, professional and civic learning outcomes of allied health student participants?

The first and second study goals and study questions were answered as follows:

1. Paper 1, presented in Chapter 1, which described the processes associated with partnership formation, and the development and evolution of the associated allied health service-learning program. This paper was co-authored by executive staff representing participating community and campus sectors.

2. Four papers, presented in Chapter 3, which were informed by the Stage 3 data comparison, the comparison within community and campus groups. These papers described the key themes that emerged from the data and addressed the following knowledge gaps in the literature: identification of the conditions and catalysts which informed when and how to engage, who initiated the community-campus partnership and for what purposes; how the partnership was formed; the identification of factors that contributed to partnership and
program participation by community and campus participants; community and
campus perspectives and experiences of their participation; and an
understanding of the service-learning program impacts on the provision of
substantive, meaningful and long-term service solutions for communities and
quality clinical, professional and civic learning outcomes for participating allied
health students within this rural and remote Australian context.

3. Description of the impacts of partnership and program participation for community
and campus participants and for the civic and higher education sectors in which
they were located.

The third research goal was addressed in the Stage 4 data comparison, the
comparison across community and campus groups, which informed a further
exploration of the literature, the construction of the conceptual framework and the
production of Paper 6 (the sixth findings paper [currently in review] presented in
Chapter 4). This exploration and the framework construction answered the third
research goal, to develop a greater understanding of the impacts of participation in the
partnership and program for community and campus participants and research
question of, how did participation in the partnership and program impact on the
clinical, professional and civic learning outcomes of allied health student participants.
In addition, this stage of data comparison contributed to addressing the knowledge
gap associated with how best to engage with communities through the synthesis of
the study findings presented in the conceptual framework.

5.4 Interpretation of Impacts and Outcomes of Complex Health Interventions
and Study Findings

Due to the diversity, depth, interconnectedness and complexity of the current study
findings, I have drawn on the work of current scholars who propose that new
approaches are required to interpret the impacts and outcomes of complex health
of which I consider the study partnership and program to be exemplars. I next
describe the characteristics of complex health interventions, approaches taken in
interpreting their impact and outcomes, and how these approaches can guide the interpretation of study findings.

The Medical Research Council (MRC) (2000) stated that complex health interventions are ‘built up from a number of components, which may act both independently and inter-dependently’ (p. 2). Craig et al. (2006) stated that interpreting the impacts and outcomes of complex health interventions can:

Present a number of special problems for evaluators, in addition to the practical and methodological difficulties that any successful evaluation must overcome. Many of the extra problems relate to the difficulty of standardising the design and delivery of the interventions, their sensitivity to features of the local context, the organisational and logistical difficulty of applying experimental methods to service or policy change, and the length and complexity of the causal chains linking intervention with outcome (p. 6).

When exploring complex health interventions through the lens of complexity theory, these interventions can be represented by ‘recursive causality (with reinforcing loops), disproportionate relationships (where at critical levels, a small change can make a big difference—a ‘tipping point’) and emergent outcomes’ (Rogers 2008, p. 29). Shiell et al. (2008), in extending this complexity lens, describe a complex systems approach to interpreting complex health interventions stating that there is a need to:

Consider the wider ramifications of intervening and to be aware of the interaction that occurs between components of the intervention as well as between the intervention and the context in which it is implemented. This includes the operations, structures, and relations that exist in each setting and the implications that contextual effects have for designing and evaluating interventions (p. 1).

The intention of the qualitative and pragmatic approach used in this study was to overcome the practical and methodological difficulties that could be associated with the exploration of complex health interventions. These difficulties can be created through linear cause-and-effect interpretations of findings, where researchers consider an intervention to be autonomous and the determining factor in producing an
outcome. Paterson et al. (2009) stated that this ‘linear cause and effect relationship is not consistent with complex interventions’ (p. 5) that need to account for the interactions between the intervention; the processes associated with the intervention; the context in which the intervention is being delivered; and the time lag that can exist between implementation, impacts and outcomes.

In overcoming the challenges associated with interpreting the impacts and outcomes of complex health interventions, Craig et al. (2006) suggested that researchers should seek to understand and define the ‘active ingredients’ that contribute to the impact and outcomes of these interventions. The MRC (2000) stated that ‘the greater the difficulty in defining precisely what, exactly, are the “active ingredients” of an intervention and how they relate to each other, the greater the likelihood that you are dealing with a complex intervention’ (p. 1).

Based on the study findings, a substantial number of ‘active ingredients’ were found to be located within participant subgroups, within community and campus groups, and across these groups, contributing to partnership formation, program development and adaptation, participation impacts and the resultant longevity and sustainability of the community-campus partnership and associated allied health service-learning program. These ‘active ingredients’ were identified through constant comparison of the high-quality and detailed descriptions provided by subgroup participants, and the identification of important shared perspectives and experiences within the community and campus groups and of those that then cut across these groups. I argue that the diversity, depth, interconnection and complexity of these ‘active ingredients’ were influenced by a number of causal chains. These causal chains have been described in Chapter 3 and can be summarised as: conditions associated with the rural and remote Australian contexts; geographical isolation; lower socio-economic status of populations; health service inequities and workforce shortages; participant perceptions of health sector failings; internal relationships and external networks; mutual commitments to addressing allied health inequities through health workforce development innovation, that is service-learning innovation. The ‘active ingredients’ are synthesised in Chapter 4 and include the concepts of: features of engagement
(prioritising community needs and services, sense of place and people, local innovation and adaptation, intangibles, consistency and shared knowledge); focusing engagement (population health, primary health care and integrated care); and influences on engagement (community literate health systems, community literate health workforce and community literate higher education institutions). When combined, these causal chains and active ingredients constitute a complex health strategy in addressing allied health inequities within this rural and remote Australian context.

Hawe (2015) stated that complex health strategies that seek to improve the health of populations, through inventive and effective solutions, can be influenced by the ‘effect of community-based solidarity’ (p. 309). In my interpretation of the study findings, evidence of community-based solidarity was found in the initial formation of the local health partnership between representatives from school education, the health service and a University Department of Rural Health (UDRH). However, community partners identified the need to activate an external network to assist them in accessing the expertise of a higher education institution, with carriage of allied health student education, in the identification and implementation of solutions to address the unmet allied health needs of regional children. This necessitated the extension of this community-based solidarity to a more complex and comprehensive collective solidarity, inclusive of the higher education institution. This collective solidarity contributed to significant partnership and program processes, impacts and outcomes that could not have been achieved by the community or campus groups in isolation.

In capturing the dynamics associated with complex health strategies, Hawe (2015) suggested that there is a need to include an exploration of the impacts of: simultaneous causal strands where multiple actions can influence the success of strategies; alternative causal strands that enable a conceptualisation of how the strategy may work differently in different contexts; virtuous and vicious circles which describe how initial positive effects can influence strategy reinforcement or magnify negative effects; and feedback loops that can influence the uptake or rejection of health interventions. In comparing the impact of these elements with the study
findings, simultaneous causal strands were evident through the multiple actions within each participant subgroup (i.e. school principals, senior managers, allied health students and academics), through the interactions that occurred within the community and campus groups, and across these groups. These simultaneous causal strands were evidenced in:

- The activation of internal relationships by community participants and external academic networks to enable partnership formation—a community-campus partnership—and solutions identification and implementation—a service-learning solution (see Papers 1 and 2 Chapter 3);

- The direct and indirect exposure of community and campus participants to the impacts of allied health service inequities for regional children—a key catalyst for community preparedness for participation in the partnership and program—and the intention of campus participants to be a part of the solution (see Papers 1 and 2 Chapter 3);

- Promotion of program participation within the university through word of mouth by academics and previous students, and promotion of community investment in supporting quality student learning experiences and potential rural and remote health workforce outcomes (see Papers 1 and 3 Chapter 3);

- The multiplicity and interconnectedness of relationships that underpinned the partnership and service-learning program, that is, student to service, student to child, service to school, student to academic, service to community, student to community, and service to campus (see Papers 1, 2, 3 and 4 Chapter 3); and

- Service and relationship consistency that contributed to the acquisition of trust and credibility, and the resultant perceptions of enhanced service accessibility, acceptability and sustainability (see Papers 1, 2, 3 and 4 Chapter 3).

Through the scaling up of this initiative in other rural and remote Australian communities experiencing similar allied health service inequities and workforce shortages, and by the construction of the conceptual framework presented in
Chapter 4, I have conceptualised how the study findings could be synthesised and adapted to work across rural and remote Australian contexts. This conceptualisation acknowledges the importance of alternative causal strands in the dissemination and uptake of health initiatives through the ability to contextualise health partnerships and service-learning approaches. Paterson et al. (2009) stated that there is a tendency for ‘outcomes to be conceptualized as having some reality of their own, without a particular context and purpose’ (p. 3); however, the study findings highlight the significance of the context and purpose of the partnership and program in achieving service and learning outcomes. Paterson et al. (2009) further informed us that, for complex health interventions:

It is necessary to replace decontextualized, linear cause and effect models with more complex conceptual models that identify the assumptions that underlie the intervention as well as its process and context (p. 5).

In line with Hawe (2015), the study findings were found to indicate evidence of virtuous and vicious circles, as mentioned previously in this section. The features of engagement that contributed to virtuous circles being established and maintained were as described in the conceptual framework and further refined in Paper 6: prioritising community needs and services; acquisition of a sense of place and people; local innovation and adaptation (contributing to services of value); intangibles (trust and reputation); consistency (relationships and services); and shared knowledge. Negative effects, that is, vicious circles, were magnified through participant comparison of the community-campus partnership and service-learning program and ranged through to less positive community experiences of health sector interactions. Study participants’ perceptions described the protracted failure of the health sector to respond to community identified allied health needs and a persistent lack of relationship and service consistency, whereas the presence of these two significant features would contribute to participant preparedness for partnership and program participation.
The presence of positive and negative feedback loops were described across participant groups. Positive feedback loops, those that informed partnership approaches, supported rapid program adaptation and perceptions of program responsiveness and acceptability. On the other hand, negative feedback loops, those that reflected perceptions of health sector failures and community cynicism towards sector commitment to address inequities, highlighted the negative perceptions of the closed nature of the health sector to community-level feedback on their own health needs and to community capacity to contribute to the identification and implementation of solutions to address these needs.

Researchers exploring features of successful complex health interventions have posited that interventions that are loosely defined by the health sector and predominantly driven by local stakeholders may have greater potential for positive health impacts and outcomes (Hawe 2015, Aragon and Garcia 2015, Kindig and Stoddart 2003, WHO 2008). These propositions can conflict with traditional processes driven by centralised issues and intervention identification and implementation. This alternative approach would shift the focus of complex health interventions (prescriptive in nature, formal in their governance, professional in their implementation and statistical in evaluation) to a focus on the processes that contribute to the role of communities in the design and implementation of complex health strategies that are fit for context, with the range of choices made by communities in strategy uptake and determination of how the impacts and outcomes of the intervention are measured. These processes were directly reflected in the study through the collaborative design of the service-learning program, ongoing program adaptation in response to community feedback and the contextualisation of the service. These features contributed to the acceptability and sustainability of the partnership and program and the capacity for program scale-up in other locations, resulting in a standardisation of the program by function, not form. Hawe (2015) stated that the form taken by a complex health strategy:

May vary across sites, but the function that they perform in the local context is always the same. Standardizing by function is the chief means by which a complex
intervention is allowed to adapt to local context without sacrificing fidelity. The role and meaning behind a particular component, rather than its face value, are what matter. Local-level adaptation is important for maximizing effects and encouraging ongoing sustainability (p. 313).

In progressing the scale-up of this local initiative to other rural and remote communities, I concur with Hawe (2015) that:

Studies of transfer, adaptation, and scale-up investigators using [the] complexity lens have confirmed that programs are rarely duplicated intact. Instead, what is essentially transferred are core principles and “powerful ideas” (p. 313).

In interpreting the study findings through the lens of a complex health intervention, the significance of a qualitative and pragmatic approach to this doctoral study has been highlighted. Qualitative research is better positioned to answer complex questions that seek to understand the ‘who’, ‘how’, ‘why’ and ‘what’ aspects of a phenomenon (Patton 2002) with health policy makers, researchers and professionals turning to qualitative approaches to contribute to our knowledge of health and health services, and to how both can be improved (see e.g. Moore et al. 2016, Hawe 2015, O’Cathain et al. 2015, Green and Thorogood 2014). This study was concerned with exploring the complex, multiple and interconnected facets of the partnership and program in order to avoid: an oversimplification of the complexities associated with real-world health interventions within rural and remote Australian contexts; the omission or devaluing of important factors that could not be easily quantified; and the failure to portray a sense of the partnership, program and participation impacts and outcomes as a whole (Patton 2002, p. 59). Hawe (2015) stated that different models of strategy design and evaluation are required that can respond to simple linear strategies or can incorporate complexity, implying that this is important because a simple model applied to a complex situation risks overstating the causal contribution of any given strategy' (p. 312). I believe that this study illustrates Hawe’s recommendation, with this being reflected in the complex causal strands and multiplicity of active ingredients that were required to establish and sustain the partnership and program.
5.5 Contribution of Study to Community Engaged Health Care Literature

Johns (2006) stated that ‘well-constructed qualitative research has great potential to illuminate context effects’ (p. 402). Understanding the context in which this study was located was essential, and significant study findings identified the importance of context on the preparedness of community participants to engage with campus participants in their health care agendas as well as campus participants’ activation to engage. Kenny et al. (2013) stated that the engagement of rural and remote communities in health partnerships is considered central in ensuring acceptable, appropriate and effective responses to begin to tackle entrenched inequities. However, Moore et al. (2016) noted that ‘there is no consensus as to what this involves, and there appears to be a gap between the rhetoric and the reality of community engagement’ (p. 2). However, community engaged health care is considered critical in avoiding a ‘one-size-fits-all’ approach to service provision, an approach that is often criticised for its failings across rural and remote contexts (HWA 2013, Humphreys and Wakeman 2009). The contextualisation of health care is considered to be highly desirable but is less frequently taken into account in the design of rural and remote health services and the development of rural-ready health professionals (Bourke et al. 2010, Frenk et al. 2010, Humphreys and Wakeman 2009). I propose that if Australian health policy, funding and practices were to be invested in health sector accountability for the contextualisation of health care and health workforce practices, we would, by necessity, be required to engage communities in their health care agendas, overcoming the current gap between the rhetoric and reality of community engagement.

In creating health sector capacity to contextualise health care, the acquisition of a deep understanding of context, people and place is paramount. This has informed my proposition for the need for a new lens, a community literate lens, to inform health sector approaches to rural and remote community engagement. I argue that the community literate lens needs to be considered alongside health policy statements, such as the National Statement on Health Literacy (ACSQHC 2014), if we are to have
an impact on the cycles of health inequity experienced by rural and remote communities, and ultimately improve the health outcomes of these communities.

In addition, I concur with Johnson (2015) that effective community engagement can encourage the appropriate and effective use of scarce health care resources. In this study, it was found that the redistribution of resources from across participating agencies was influential in partnership formation, program development and adaptation, and sustainability. The BHUDRH experienced a direct transformation in its role, both through program extension to include community-based service-learning initiatives and the acquisition of the role of primary provider of allied health services for children residing in far west NSW. This required the redistribution of internal department resources to support the appointment of allied health academics with carriage of community engagement, program coordination and student supervision. School principals redistributed their time and school resources in the development and implementation of the service-learning program while teaching staff contributed to the development and establishment of class-based services. The metropolitan academic used resources from within their higher education institution to support their participation in partnership formation and their role in the development of the service-learning program. This redistribution of resources contributed to the extension of the traditional allied service models and approaches that included extending the service location, from health service to school campuses, and the primary service provider, from allied health clinician to allied health student. These findings are consistent with Hawe’s (2015) statement that the capacity for an intervention to redistribute resources is its chief mechanism to address inequity, whether the resources are taxes or new educational opportunities/skills’ (p. 310).

The study findings have provided a deep insight into the processes, structures and contextual understandings required to effectively engage rural and remote communities in their health care agendas and into the impacts and beneficial outcomes that can be accrued through this engagement. The study findings have been synthesised into concepts and components within the conceptual framework presented in Chapter 4. I argue that this framework can inform the health sector on:
how to engage effectively with communities; what features of engagement are considered important by communities; what processes are associated with engagement; and how the potential impacts and outcomes can be achieved through the transformational engagement of communities at the meso level of engagement, where communities contribute equally to the identification of their health needs and the design, implementation and evaluation of their health services.

5.6 Contribution of Study to Community-Campus Partnership Literature

Community-campus partnerships are predominantly formed to address the unmet needs of marginalised and disadvantaged populations and communities (Jacoby 2015, Sessa et al. 2013, Butin 2010, Sandy and Holland 2006, Leiderman et al. 2002) and, for a number of decades, have had extensive use internationally (Beatty 2010). However, partnerships informed by the principles of community-campus partnerships, that include mutual benefit, reciprocity and social equity (Petri 2015, Glover and Silka 2013, Butin 2010, CCPH 2013), are only just emerging within the Australian health sector. The result is that limited evidence is available on the impacts and outcomes of these partnerships in Australia (Coffey and Lavery 2015, Hammersley 2012, Birbeck 2012, Caspersz et al. 2012), and even less evidence is available from a rural and remote Australian perspective.

Despite the diverse benefits associated with community-campus partnerships, the literature cautions that these partnerships can: bias the needs of institutional partners over those of communities (Petri 2015, Glover and Silka 2013, Butin 2010); be established with the intent to meet the institution’s objectives (Petri 2015, Glover and Silka 2013); predominantly focus on the benefits accrued by the institution (Butin 2010); and marginalise community perspectives and experiences of partnership participation (Petri 2015, Butin 2010, Sandy and Holland 2006). Findings from this study provide insight into who initiated the partnership, for what purposes and the impacts and outcomes of participation from the perspectives of community and campus participants.
The questions of who initiates community-campus partnerships, and for what purposes, are of importance but are rarely identified within the literature (Glover and Silka 2013). Glover and Silka (2013) stated that a ‘failure to devote attention to the question of who starts the partnership ignores important relational dynamics that may actually undermine the stated goals of mutuality, equality and reciprocity in relationships between universities and communities’ (p. 39). This study has identified the role of community partners in initiating the local health partnership that then evolved into the community-campus partnership and their sustained investment in the partnership and associated service-learning program. The multiple and interconnected purposes of the partnership were described by community and campus participants, as including: partnership as a means to address the unmet allied health needs of children residing in far west NSW; partnership as an opportunity to expose allied health students to rural and remote practice through their engagement in a service-learning initiative; partnership as a conduit to addressing the clinical placement needs of the higher education institution and growth in student placement capacity for the BHUDRH; and partnership as a potential rural and remote health workforce solution. These purposes, I propose, were all concerned with mutual benefit, reciprocity and social equity.

Community participants described a range of perceived benefits accrued through their participation in the partnership including: involvement in the identification of their health needs and the solutions to addressing these needs; leadership in service design and adaptation; enhanced allied health service accessibility; acceptability of the service model and location of service delivery; consistency of relationships and services; enhanced engagement of parents with the school system, community cohesion; and campus openness and receptiveness to community-level feedback.

Jacoby (2015) stated that, within community-campus partnerships, reciprocity implies ‘that service-learning should be designed with the community to meet needs identified by [the] community’ (p. 4). A significant study finding was that of the role of the community in the design and ongoing adaptation of the service-learning program, a strategy that promoted service responsiveness and acceptability.
In sustaining this partnership, the acquisition and maintenance of intangibles, such as reputation and trust, were considered important and are reflective of features of successful community-campus partnerships already described in the literature (Glover and Silka 2013, Enos and Morton 2003). Enos and Morton (2003) stated that, for partnerships to be successful, partners need to remain in relationships despite the obstacles and challenges that inevitably arise, as was evidenced in the current study. However, rural and remote communities can experience high levels of relationship and service inconsistencies due to their geographical location and challenges in the recruitment and retention of health professionals. Previous experiences of relationship and service inconsistencies may have contributed to the community focus on the importance of consistency, especially in the establishment of reputation and trust.

In addition, concerns have been raised in the community-campus literature about the distribution of power and control within these partnerships (Glover and Silka 2013), specifically power and control weighted towards the institution. However, findings from this study identified community participant perspectives of power and control being located within the community. In interpreting this alternative perspective of power and control associated with community-campus partnerships, I propose that the presence of a rurally-embedded UDRH, the BHUDRH, may have acted to mitigate potential power and control differentials. The BHUDRH has a mandate to be regionally responsive and accountable for its health service and workforce endeavours (Mason 2013). In this instance, the presence of ‘local’ community members, employed by the BHUDRH and known to other community participants, may have contributed to community perceptions of localised power and control in the initial and ongoing partnership activities.

Despite the benefits of community-campus partnerships, as perceived by study participants, transitioning the theory of community-campus partnerships to the practical application of partnering in rural and remote communities can be challenging. The health sector needs to be sensitive to community experiences of service fragmentation and unsustainable service approaches, and the impact these experiences can have on community receptiveness to new concepts (Miles et al.
In addition, rural and remote health leadership literature can focus on the need to ‘develop’ leaders with the perception that ‘the quest for effective leadership in rural areas is arguably the greatest challenge facing rural communities’ (Avant et al. 2013, p. 53). These perspectives can perpetuate a ‘deficit’ interpretation and undermine the capacity and opportunities for rural and remote communities to establish and lead health partnerships and service innovation. Despite these challenges, I propose that community-campus partnerships in rural and remote Australian locations have the potential to influence the redistribution of health resources and realign health services and professional practices to address their health needs and expectations.

5.7 Contribution of Study to Service-Learning Literature

Service-learning, as an educational pedagogy, is concerned with balancing student learning and service recipient outcomes by focusing on civic engagement as a conduit to achieving these outcomes (Jacoby 2015, Petri 2015, Sandy and Holland 2006). Service-learning links the theoretical knowledge acquired within curricula to the ‘real-life’ application of knowledge in learning environments that can include ill-defined problems that occur within ‘real’ community contexts (Cashman and Seifer 2008). As service-learning is an emerging pedagogy in the education of Australian health students, limited evidence is available that describes the clinical, professional and civic outcomes for participating students and whether service-learning can contribute to the provision of substantive, meaningful and long-term service solutions for communities.

Petri (2015) informed us that the service-learning movement ‘has placed most of its academic energy on making its case based on evidence of student outcomes to institutionalize service-learning’ (p. 96). While this is of significance at the international level, as service-learning is an emerging approach to the education of Australia’s future health professionals, it is imperative that we invest in researching student impacts and outcomes of participation in service-learning initiatives that have been contextualised to the Australian setting, in this case, a rural and remote setting.
Findings from this study describe significant learning outcomes for participating students across clinical, professional and civic domains. These outcomes included: enhanced clinical reasoning; a greater capacity to plan and organise health services; an ability to share their clinical knowledge with others; increased receptiveness to inter-professional practice and integration with skills from other disciplines in service provision; deep insight into the impact of relationships on health care delivery; the importance of service consistency for rural and remote populations; and increased levels of clinical and professional self-confidence. Based on the acquisition of these work-readiness attributes (Smith et al. 2014), campus participants perceived that these students would be better positioned to gain employment post-graduation. However, the study findings also highlighted the challenges faced by students in transitioning from traditional placement experiences where they had been observers or highly supervised in health care, ‘shadows’, to a service-learning program with higher expectations for student service provision and semi-autonomous practice.

Despite these significant learning outcomes, several barriers were apparent to the provision of clinical placements, including service-learning placements, within rural and remote Australian locations. These barriers included: an undersupply of placements; inadequate knowledge of existing placement opportunities; a lack of existing allied health professionals to provide adequate student supervision; student isolation from peer support; and a lack of support for placement administration and coordination (Spiers and Harris 2015). The development and adaptation of the service-learning program described in this study were heavily facilitated by the presence of a UDRH and the academic, education and accommodation infrastructure associated with this department. The BHUDRH also provided comprehensive support for placement administration and coordination of participating allied health students, overcoming some of the barriers identified by Spiers and Harris (2015). These factors need to be taken into consideration when considering the development of service-learning innovations in these locations.

In answering the question posed by Butin (2003), as to whether service-learning can contribute to the provision of substantive, meaningful and long-term service solutions
for communities, I close this section with a quote from a community participant (school principal) in this study:

If this program isn’t still running in five years’ time and improving as it goes, it would be a travesty in terms of the community. There are enough people now who have experienced enough success to ensure that this doesn’t get lost. It is part of how we now do business.

5.8 Implications for Health Sector Engagement with Rural and Remote Communities

The extent to which community engaged health care, community-campus partnerships and service-learning programs can facilitate health-related outcomes for communities is a key question for policy makers, researchers, universities, service providers, and for communities (Moore et al. 2016, O’Mara-Eves 2013, Johnson 2015, Paterson et al. 2009), the end-recipients of the services informed by these health care approaches, partnerships and programs. From the study findings, the major implications for the health sector would be sector capacity, firstly, to support and respect the function of community-based solidarity in the identification of their health needs and the solutions to address these needs and sector capacity, secondly, to engage in health partnerships that reflect a more comprehensive and complex collective solidarity in the implementation and evaluation of health interventions.

The concepts of community-based and collective solidarity pose several challenges for health sectors in the design, delivery and evaluation of health services and the education of health professionals. Health sectors can be focused on approaches dominated by centralised decision making and control and on the individualisation of health care through the application of individual behaviour change theory (Glanz and Bishop 2010). I propose that these approaches can undermine the establishment of community-based and collective solidarity. In maintaining these traditional approaches, health strategies can: disregard context; be linear in approach; lack flexibility and responsiveness to adaptation; and be driven by external research, evidence and policy that can be poorly aligned to the needs and expectations of rural
and remote communities. The community-campus partnership and service-learning program at the centre of this study challenge these traditional bureaucracy-centred and individualised approaches to health care. In taking a population health approach to address the unmet needs of rural and remote children and the contextualisation of the service-learning program, this could be considered a promising alternative for health service design and health workforce development within rural and remote Australian contexts.

Increasingly, the Australian health sector is called on to work alongside communities to resolve complex social, educational and health disparities. In responding to these calls, the health sector needs to take into consideration the context, relationships, actions and interactions within and across communities and the health sector; the impact of intangibles such as trust and reputation on service acceptability and uptake; and the potential barriers to change that can be impacted upon by community cynicism and scepticism towards externally-informed health strategies and their sustainability (Noyes et al. 2013). The community-campus partnership and service-learning program at the centre of this study could provide the health sector with deep insight into how best to engage and sustain engagement with rural and remote communities in their health care agendas. For the past eight years, despite political, policy and funding changes, the partnership and program have been sustained in this rural and remote Australian location. I propose that the longevity of this partnership and program has provided community and campus partners with the unique opportunity to adapt, build upon and consolidate their partnership and approach to health care delivery.

5.9 Study Limitations and Future Research

This study focused on exploring a range of community and campus participant perspectives and experiences of the community-campus partnership and associated service-learning program. Evidence was not gathered on the impacts of the partnership and program on direct service recipients (school children and their families, and teaching staff who had direct engagement with allied health students in
the school and classroom setting) or allied health clinicians working within the local health services who were impacted upon by student-led referral processes and reciprocal clinician referrals to the service-learning program. To capture these additional perspectives and experiences was beyond the scope of this doctoral study. Although the current study focused on exploring the perspectives and experiences of a small number of community and campus participants, these small numbers are reflective of population demographics and placement opportunities across rural and remote Australian communities.

Limited guidance is available on how best to evaluate conceptual frameworks (Moody 2005, Wolff and Frank 2005). Moody (2005) stated that conceptual frameworks can routinely be evaluated in ad hoc ways informed by common sense, subjective experience and opinion. As conceptual frameworks are more than descriptions of the ‘real world’, through their intent to ‘construct the world’, there is an imperative to evaluate the impacts associated with their adaptation, transferability and implementation (Moody 2005, p. 2). Moody (2005) proposed six features that could be drawn on to inform the evaluation of conceptual frameworks. These six features comprised: functionality, reliability, usability, maintainability, efficiency and portability. Consequently, a significant body of future research is being planned by the BHUDRH to explore and evaluate the adaptability, transferability and quality of the conceptual framework presented in Chapter 4. Wolff and Frank (2005) stated that:

> Conceptual models are no ends in themselves. Instead they are supposed to serve a purpose. Therefore, the evaluation of the benefit to be expected from deploying conceptual models within change processes has to take into account, the objectives of change processes (p. 4).

Additional research has already been undertaken by researchers from the BHUDRH, including the same independent researcher who collected the data for this study, to explore a broader range of experiences and perspectives of teaching staff in far west NSW and community partners that are engaged in scale-up partnerships and programs in Geraldton, Western Australia, and Katherine, Northern Territory. Data
collected through the additional research will provide an opportunity for the comparison of findings with those of this study, to be reported in future papers.

As the partnership and program have evolved, additional universities and disciplines (i.e. social work, physiotherapy and exercise physiology) are being integrated into the service-learning program. This provides the opportunity to engage these new academics and students in further research that explores university impacts and the impacts on student learning outcomes. Extending beyond this research is the need to explore the medium- and longer-term impacts of student participation in service-learning pedagogies. Campus participant perceptions of the enhanced likelihood of allied health student participants gaining employment on graduation due to their acquisition of work-readiness attributes is an additional area warranting further investigation. Tracking student participant employment outcomes may further examine the academic validity of these emerging Australian approaches to health student education.

A deep understanding of the importance of context was considered a significant feature for the researcher and is a key finding from this study. Therefore, additional research is required that explores the implications of context for other communities and health sectors engaging in emerging community-campus partnerships and service-learning programs, with the potential for other academic and community institutions to further contribute to this body of research. This exploration could contribute to the increasing body of literature that argues for the need to contextualise health care to promote: service alignment to community needs; service accessibility and acceptability; health policy, funding and practice reforms (Aragon and Garcia 2015, HWA 2013, Frenk et al. 2010, Kilpatrick 2009, Humphreys and Wakeman 2009, WHO 2008); and my proposition that contextualised care can be a conduit to community engagement. Furthermore, a deep understanding of context is intrinsically linked to my proposition of being 'community literate'.
5.10 Conclusion

Through this pragmatic qualitative study, I have addressed significant national and international gaps within the community engaged health care, community-campus partnership and service-learning literature, specifically from a rural and remote Australian perspective. The purpose of this study was to explore community and campus perspectives and experiences of participation in a rural and remote Australian community-campus partnership and associated service-learning program. Limited evidence exists that describes community perspectives and experiences of these partnerships and programs, with even less evidence that is informed by rural and remote Australian communities. This study significantly adds to the evidence regarding rural and remote Australian community perspectives about community-campus partnerships and service-learning programs and their acceptability and sustainability within these contexts. In addition, this study has explored campus participant perspectives and experiences in an endeavour to provide a more complete and complex understanding of how the community and campus participants interacted with each other to achieve the shared outcomes of addressing the unmet allied health needs of rural and remote Australian children through the education and training of Australia’s future allied health workforce within a service-learning pedagogy.

The partnership and program considered many of the concerns identified within the literature by community-campus partnership and service-learning proponents and opponents. Community partners, who initiated this partnership, did not describe experiences of disempowerment or perceptions of campus privilege. In contrast, they described a diverse range of direct and indirect mutual benefits accrued through their participation. Compelling findings from this study included:

- The identified importance of the contextualisation of health services;

- The ongoing adaptation of the service-learning program that was informed by community experiences of the program; the site of service delivery; and the commitment of community and campus partners to work collaboratively on
developing solutions to address the health inequities experienced by rural and remote children;

- A mutual investment in the education and training of future allied health professionals; and the importance of complex and interconnected relationships and networks;
- Consistency of relationships and services;
- The acquisition of a sense of rural and remote place and people—being community literate;
- Local innovation;
- Shared knowledge, and;
- The significant importance of intangibles, such as trust and reputation.

The study findings indicate that these features have underpinned the sustainability of the partnership and program within this rural and remote Australian context. The complexity of establishing and sustaining community engaged health partnerships, community-campus partnerships and service-learning programs in rural and remote locations cannot be underestimated, especially when the issues, solutions, opportunities and approaches to the partnership and program need to be continually re-conceptualised. The challenge for the health sector is whether it has the capacity to challenge the traditional approaches that can act to exclude the perspectives, experiences and voices of communities from their health and health workforce agendas. This level of transformational change necessitates significant reforms in how power is distributed, how health care decisions are made, how services are delivered and evaluated, and how our future health workforce is educated. Committing to rural and remote partnerships and service redesign may have its challenges but they are far outweighed by the benefits accrued by communities and the community literate insights acquired by campus participants.
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APPENDICES

Appendix 1 Paper: ‘Value adding through regional coordination of rural placements for all health disciplines: The Broken Hill experience’

Original Article

Value adding through regional coordination of rural placements for all health disciplines: The Broken Hill experience

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Abstract

Objective. To describe the experience of the University of Sydney's Broken Hill Department of Rural Health (BHUDH) delivering a regional program to five western NSW.

Design. Case study.

Settings. The Australian Government's University Departments of Rural Health Program, established in 1997, has been responsible for setting up regionally coordinated rural placement programs for students from all health disciplines in each state and territory.

Results. Over nine years the BHUDH has leveraged both academic and administrative resources to achieve greater efficiency in program delivery, increased support for students during their placement, and enhanced educational opportunities that draw on regional issues. The Broken Hill program accepts students from 22 Australian universities and places more students in the region for longer periods than previously (274 students in 2003 compared with 140 students in 1998).

Conclusions. Regional coordination, linked to investments in rural-based infrastructure and support systems, can provide a sustainable platform from which to provide quality rural placements for students from all health disciplines, while at the same time increasing regional capacity to take students.

KEYWORDS. program development, regional coordination, rural health, student, University Department of Rural Health.

Introduction

Rural placements are a standard component of most medical and health science undergraduate student programs in Australia, with the growing demand for placements in the past 15 years being driven by government policy concerned about the rural health workforce shortages. Both state and federal governments have invested in rural-based support for both undergraduate and vocational education and training since the late 1980s; however, initial issues such as the limited capacity of rural teachers to accommodate the increasing number of students, inadequate regional infrastructure and support systems, and the lack of coordination of student placements were viewed as threats to these efforts. This led to calls for the development of regional programs that would provide a sustainable platform to meet educational objectives, ensure quality student experiences, and contribute to future rural employment.

At that time, the Australian Government's University Departments of Rural Health Program (UDRPH) was well placed to respond through the establishment of regionally coordinated rural placement programs for students of all health disciplines in each state and territory.

This paper describes nine-year experience of the Broken Hill University Department of Rural Health (BHUDH), delivering a regional program in far western New South Wales (NSW) in the context of these and more recent developments.

The region

The BHUDH is located in far western NSW (Fig. 1) and serves as a multidisciplinary academic unit of the University of Sydney. The far west of NSW is sparsely populated and draws its strong Aboriginal heritage.
and the early influences of farming and mining for its contemporary character. Many of the region's settlements are located along the Barwon-Darling River, traditional lands of the Pandora people and part of the larger Murdi Paikuri region. The largest regional centre is Becket Hill, with a resident population of 21,000. The region as a whole has approximately 48,000 residents, 13% of whom are Aboriginals.

The state government manages the major health care facilities in the region. Other key service partners include the Royal Flying Doctor Service, the local Division of General Practice and Aboriginal Community Controlled Health Services. The complexity of the health needs of this region has resulted in the establishment of partnerships between these organisations, including formal memoranda of understanding, service agreements and joint initiatives. These collaborative arrangements have been established over time and are reliant on frequent contact and negotiation, and a foundation of trust and mutual goal statement.

Program development
Bowman Hill has had a long tradition of accepting medical, nursing and allied health students from across Australia. When the RHODH was established in 1997, it took responsibility for organising student placements within the region and building on existing arrangements by establishing a single coordination point for the whole region and all the health organisations—a one-stop shop for student placements. Priority was placed on maintaining access for students from across Australia, not just the University of Sydney, and on the preparation of new placement schedules that enabled students to...
broadens their clinical exposure to different service organisations and community settings within the region. The guiding principles for development of the student program have been to:

- Encourage students to experience the breadth of rural and remote practice found within the region
- Provide students with opportunities to interact with Aboriginal patients and community members, and to participate in Indigenous health care delivery
- Structure clinical placements to contribute to the development of health knowledge and skills while encouraging students to consider the unique features and challenges of rural practice
- Provide a salary not for all students, for any aspect of their placement, from clinical to personal assistance
- Respond to student interests, local health service preferences and community expectations that local students staying away from Broken Hill be able to return home for clinical placements
- Consider both educational and extra-curricular activities in contributing to a positive learning experience for students while on placement
- Facilitate opportunities for students from different disciplines to mix both professionally and socially during their placements

Integrating these principles into its operation and broadening the academic and administrative resources of the BHUHS has contributed to greater efficiency in program delivery, increased support for students during their placements, and enhanced educational opportunities for students.

Efficient delivery of program

Substantial improvements in program design have resulted in the placement numbers increasing from an average 6.5 students on placement each week in 1998, to 17.5 students each week in 2005 (Table 1). This was achieved by working closely with service partners and systematically determining the current capacity of the current clinical placement sites and identifying additional placement opportunities, either in health facilities already taking students or in new locations such as the NSW Ambulance Service or in outpatient centers.

The introduction of composite placement schedules (converting students through more than one clinical setting during their placement) enabled students to gain a variety of different experiences while providing greater flexibility for the BHUHS to manage the increasing demand for placements. Another strategy to improve program efficiency was to target specific discipline groups for development, especially in allied health (including pharmacy and dentistry), in which placement numbers increased from 11 in 1999 to 38 in 2005.

These developments occurred in consultation with faculty universities. For example, in 2002 the BHUHS established formal links with two pharmacy schools from NSW and began placing their students in Broken Hill as part of the Rural and Remote Pharmacy Workforce Development Program. This program has subsequently been extended to include student groups from universities in South Australia and Victoria.

Considerable effort has been directed towards streamlining administrative procedures and maintaining important links with service partners, the clinical superintendents and the provider universities (faculties), to ensure the accessibility and sustainability of the program as it evolves. Students are accepted into the program through two pathways, either as part of a university-initiated block placement negotiated directly with the provider universities, or on an individual basis through university-initiated placements. A program bias towards block placements reduces processing time and also creates an opportunity to tailor placements to meet the faculty's specific educational requirements.

### Table 1: Student numbers in the Broken Hill University Department of Rural Health Student Placement program, 1998-2005

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical students</td>
<td>108</td>
<td>111</td>
<td>65</td>
<td>52</td>
<td>87</td>
<td>92</td>
<td>106</td>
<td>90</td>
</tr>
<tr>
<td>Nursing students</td>
<td>39</td>
<td>58</td>
<td>132</td>
<td>122</td>
<td>109</td>
<td>136</td>
<td>102</td>
<td>96</td>
</tr>
<tr>
<td>Allied health</td>
<td>0</td>
<td>11</td>
<td>32</td>
<td>37</td>
<td>39</td>
<td>95</td>
<td>83</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>200</td>
<td>209</td>
<td>241</td>
<td>255</td>
<td>305</td>
<td>305</td>
<td>305</td>
</tr>
<tr>
<td>Student weeks</td>
<td>139</td>
<td>466</td>
<td>478</td>
<td>374</td>
<td>466</td>
<td>374</td>
<td>374</td>
<td>374</td>
</tr>
<tr>
<td>Average number of students per week</td>
<td>0.5</td>
<td>2.9</td>
<td>3.2</td>
<td>1.4</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>

(Number of student weeks divided by 32.)
Greater support for students on placement

Over time improvements have been made to the student registration process. The department's website (www.dhhs.med.monash.edu.au) now includes application forms and information about placement opportunities, facilities and services provided for students during their placement, a list of frequently asked questions and answers, and staff contacts. Thus students from across Australia can plan for their placement, complete and submit the required documentation all via the internet. Contact by email and telephone prior to arrival ensures that the students are adequately prepared, and allows for any unresolved issues the student might have to be raised and addressed.

Infrastructure has been progressively developed in the region to support students. The RHUFLHUH offers student accommodation, maintains educational facilities such as a local library collection, electronic resources to suppress the physical collection and provides student access to teleconferencing, printing and an experienced health librarian. Students have 24-hour access to computers and the internet in Broken Hill and just recently in some of the remote communities as well. Students attend an orientation program on arrival, and a special briefing is arranged for students going to remote communities, so they are informed about working in a cross-cultural environment if they are unable to attend the regular cross-cultural workshop. Students are also advised about bush survival skills such as driving on unsealed roads, and safe travelling in harsh environments. The RHUFLHUH runs precursor courses for local clinicians in order to maintain the quality of student supervision and support during clinical placements.

As well as ensuring a rewarding learning experience, the department also makes sure that students have the opportunity to enjoy social and extra-curricular activities to encourage a broad insight into rural and remote living. For example, in Broken Hill students can enjoy an early morning mountain bike ride out into the desert, led by local staff, while students on placement in a remote community might spend time with local staff off-duty, participating in activities such as camping, fishing or mustering sheep on stations. On a regular basis, students and clinical staff are encouraged to meet at the RHUFLH at a regularly scheduled meeting to promote the building of support networks.

Improved educational opportunities

It has taken time for the RHUFLHUH to develop and support new educational opportunities for students. Initially, the department's main contribution to the student program was administrative, organising student placements, and supporting students during their stay. The locally developed educational contribution was delivered through the orientation program and cross-cultural workshop.

The long lead times in building an academic team and the complexity of organizing placements for students from different disciplines and multiple universities restricted early efforts to broaden the educational contribution to the student program. However, in 2003 the RHUFLHUH was approached to establish a local campus of the University of Sydney's School of Rural Health. Local educators were recruited to deliver approximately 30 hours of structured teaching each week to stage 1 medical students from the School of Rural Health in addition to ward-based teaching and lectures assisted by teleconferencing. This involvement has subsequently expanded in 2005 to include stages 2 and 3 as well as community rotation, with local academics modifying elements of the rotation to focus on rural health practice and primary health care, and by placing students with the Royal Flying Doctor Service.

With a strong academic team now in place, new units of study are being developed in collaboration with partner universities, the first of which will offer elective placements for students in remote health practice, primary health care and Indigenous health that will incorporate structured teaching and inter-professional learning that is locally developed and delivered.

Discussion

Over time, the RHUFLHUH has increased both academic and administrative resources to achieve greater efficiency in program delivery, and now accepts students from 22 Australian universities and places more students in the region, for longer periods than previously. This is an important achievement given the recent announcements by the Australian Government to increase the number of Higher Education Contribution Scheme (HECS)-funded university places in rural and remote areas, with a view to placing students in zones that will put greater pressure on existing placements.

Substantial progress has also been made in improving the quality of placements through greater support for students and building local capacity, and involvement of, RHUFLHUH staff and local clinicians in the delivery of structured teaching. Having established direct links with multiple faculties from partner universities, the academic team at Broken Hill is now working with those universities to develop core units of study in remote health that enhance the rural education offered through those universities. These approaches add to the already significant developments in rural health curriculum and programs occurring in Australia.44545

The Australian Government's continued investment in the University Department of Rural Health Program has been critical to the success of this regional program.
Acknowledgements

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References


Appendix 2 Paper: ‘Investing in the future of rural and remote allied health and kids’

Investing in the future of rural and remote allied health and kids

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Debra James is Director, Primary Health Care, Broken Hill University Department of Rural Health, University of Sydney. She has a Master of Indigenous Health, a Grad Dip Aged Care Services Management, and a B Health Science (Nutrition). Deb has worked in rural and remote health service delivery for over 20 years. A registered nurse by background, Deb is a strong advocate for multidisciplinary practice in rural and remote settings and addressing the unmet health needs confronted by rural and remote populations. Deb has a keen interest in the areas of primary health care, Indigenous health and health workforce development. These areas of interest have resulted in the development of a comprehensive health career pipeline for rural and remote residents aspiring to health careers and urban-based students with an interest in rural and remote practice. The delivery of structured education and development of tailored programs has provided placements that reflect the principles of primary health care across nursing, medicine, and allied health. The School of Health (Nursing) and Health (AHP) programs is an initiative that integrates multidisciplinary student placements with direct service provision in primary and central schools within western NSW. This model enables learning experiences, service delivery and workforce development. The approaches to these programs are driven by “community first” concepts and shared governance models across schools, health, academia and community. A high level of student activation has been critical in establishing new models of fieldwork placement for health students in non-traditional locations. The student-run clinic model is currently being expanded and piloted across the aged care and disability sectors in Broken Hill. Deb will be travelling to the USA and Canada in early (2021) to further explore multidisciplinary student clinic programs and service delivery models for underserved populations. Deb will commence her PhD in 2021.

Introduction

This paper describes the development of an innovative model of allied health student placement in rural and remote communities in western New South Wales. Although in the early stages of program development this model is enhancing opportunities for student placements and health care access within the region. The development of this model has resulted in a paradigm shift from traditional hospital based placement with one-to-one supervision tailored to meet external requirements to other placements in sites considered non-traditional for the region, the school education system and aged care and disability sectors, that respond to community priorities of unmet health need. The integration of non-traditional host sites with a direct student service provider role has enabled the Broken Hill University Department of Rural Health (BHURH) to expand allied health student placement opportunities. The development of Student Run Clinics Programs (SRCP) has provided a framework to address the unmet health needs of rural and remote populations whilst responding to Federal initiatives to increase capacity for student placements in line with student growth. The complexities associated with the development of this model are identified within this paper and the benefits of adopting a community first solutions approach discussed.

No single intervention can address the complex interconnections associated with student placements and health delivery in rural and remote locations. The requirement to develop equally complex interventions and programs is implicit. The existence of complexity has offered us the unique opportunity to adapt service delivery models to the values and needs of local communities, health care systems and the changing landscape of student placements.

Background

For the 30% of Australians who reside in rural and remote locations, access to health services is a critical factor in addressing health inequities associated with accessibility to services, living conditions, social and geographical isolation, economic disparity and cultural diversity. Rural and remote Australians continue to be marginalized in their access to health professionals and care as a result of workforce redistribution across urban, regional and remote centres. Access to Allied Health Professionals (AHP) in these settings is less than their urban counterparts. AHP are a critical component of health service delivery to rural and remote residents. The steady increase in the number of AHP trained in Australia has to date failed to address shortages across disciplines in rural and remote locations. These
A comprehensive body of literature identifies the challenges associated with Allied Health service provision in rural and remote locations. A lack of management support, resources, and expertise is identified. These factors can impact the capacity to place students in rural and remote settings. The implementation of new strategies, such as the Rural Health Professions Education Program, aims to address these challenges.

The health reform landscape of Australia at a policy and practice level is placing increasing demands on universities and health organisations to be responsive to health policy shifts. The shift from illness-oriented care in hospitals to community-based primary health care delivery adds another layer of complexity to an already strained health environment. The need to ensure students have the capacity to integrate and respond to this changing landscape is critical.

The literature identifies linkages between students completing a rural placement and an increased likelihood of them returning to rural communities post graduation to practice. Clinical fieldwork experiences in rural settings are an increasingly important element in contemporary educational experiences for health science students. The challenge for rural and remote locations is to develop placements and experiences that meet the needs of communities, health providers, students, universities, governments and professional registration bodies.

In the development of the Allied Health Student Run Clinic Program (AHSPCP) the needs of the community were the driving factor. Communities within western New South Wales have traditionally experienced fragmented access to health services, challenges in recruiting and retaining staff, and a lack of capacity to serve allied health students. These challenges are amplified in the regions remote, predominantly Aboriginal communities. Prioritising and addressing identified community needs, limited or no access to allied health services, enabled the AHSPCP to work with partner organisations in the development of new models of community collaboration and student placement.

Responding to community need

The concept of Towards Unity for Health was developed in the 1990s. This concept sought to improve the coordination of health service delivery through partnerships across community, health service providers, policy makers, health professionals and academics institutions.

This concept reflects the ‘Community First’ approach, putting community health needs first. This approach was utilised in the development of the AHSPCP. The Community First approach has resulted in the development of sustainable community partnerships that support the provision of education for health students, on rural and remote public health needs whilst addressing priority health issues at a community and regional level. The community-academic partnerships that have evolved through this model have been critical in program progression.

Eight factors have been identified that facilitate the development of effective and sustainable community-academic partnerships. These include: (1) creation and nurturing of trust, (2) respect for a community’s knowledge, (3) community-defined and prioritised goals and goals, (4) mutual division of roles and responsibilities, (5) continuous feedback, (6) strengthening of community capacity, (7) joint and equitable allocation of resources, and (8) sustainability and community ownership. These factors underpin the AHSPCP.

The AHSPCP put community health needs first, working in partnership with involved agencies to jointly develop, implement and assess quality projects reflecting a ‘true’ partnership approach. Practical community solutions to health issues and community academic partnerships emphasising a community-first approach provided opportunities to teach public health, benefit health in local communities, and prepare students for clinical practice in the 21st century.
Formalization of Community First approaches and community-academic partnerships has been achieved through the development of a Shared Governance framework.

Shared Governance Framework

Through placing the ‘Community First’ the BiKORH has been able to establish shared health and education goals for rural and remote residents and health science students participating in the AIRHCOP. This approach has provided the foundation for sustainable partnerships through practical community solutions to unmet health needs.

The Shared Student Run Clinic Governance Model within Broken Hill and region includes all partner schools, NSW Department of Education and Training, BiKORH, the University of Sydney, Greater Western Area Health Services, Remote Services (Far West NSW Local Health Network January 2011), Riverina Division of General Practice, Naarm Ma Health Aboriginal Corporation, Broken Hill City Council, residential and community aged care providers and disability sector.

The Shared Governance Model addresses barriers associated with traditional approaches to the delivery of health care and student placements across governments, educational entities, communities, private, and public health service providers. This model addresses power-sharing, funding allocation, relationships, accountabilities, and policy and practice in the delivery of effective long term health care to improve the health outcomes for communities in the region and student learning experiences.

The model promotes the establishment of formal relationships and reflects a serious commitment across the region in the development and delivery of integrated health care. Regional stakeholders acknowledge the strategic readjustment and shift in organizational management and governance that was required to achieve these relationships.

There is an expanding body of evidence on the effectiveness of Shared Governance Models and the application of these models is the Australian health care context, focusing on improved community health outcomes and regionally responsive and appropriate models to achieve this.

The AIRHCOP has driven the development of shared governance arrangements between participating organizations in the sharing of resources, goals and outcomes. Promotion of sustainable integrated governance relationships that are focused on improving regional health outcomes is the critical unifying factor for this Shared Governance arrangement.

Student run clinics

Student Run Clinics have operated successfully in the United States of America and Canada since the 1990s. These clinics were traditionally staffed by volunteer medical students with service provision directed at disadvantaged and underserved populations. Contemporary SRCP have evolved to encompass inter-professional practice models.

SRCP offer participants leadership opportunities to expand their awareness of issues related to the inequalities confronted by disadvantaged and underserved populations—rural and remote populations. The transition to inter-professional models has resulted in a paradigm shift from diagnosis and treatment to models that encompass primary health care approaches to service delivery and student learning. A priority area identified in the Federal Governments National Primary Health Care Strategy.

The goals of inter-professional Student Run Clinics include the provision of quality community-oriented health services to underserved communities using inter-professional teams. Increased awareness of social, cultural, economic issues of underserved populations for partnerships, Universities and their health care community, promotion of an ethos of service in the University health sciences community, provision of service-oriented leadership experience to prepare students for a life of advocacy and “real world work”, and collaboration with community organisations to expand programs that are effectively serving the community.
There is a growing body of evidence that identifies quality of service provision, client outcomes and client satisfaction with SRP. The development of quality care indicators for these programs will provide additional guidelines for achieving quality student practice and client outcomes.

The student run clinic model

The BHUDHR has 13 years experience in the development and delivery of student placement programs. This provided a strong foundation for the development of the AIHSCP. The BHUDHR facilitates health science student placements across all disciplines from over 30 Australian universities. The majority of students seeking placements in the region are metropolitan in origin with limited or no rural and remote exposure.

Generic issues that are generally considered as barriers to clinical education experiences in rural and remote locations have been widely addressed. Students have free access to the BHUDHR student accommodation whilst in region, comprehensive application and placement processes, role structured orientation and induction programs which integrate cultural education, professional resilience, primary health care practices, person-centred care and rural and remote service delivery approaches. Adding strength to this approach is the provision of multiple tiers of clinical, academic, social and administrative structures accessible to students through the UDRH Program.

In 2008 concerns were raised by local primary school Principals in Broken Hill about delayed early childhood development and the lack of access to allied health services. The BHUDHR was well positioned to respond to these concerns. In 2009 the BHUDHR developed and trialled a clinical education and service delivery model for first year Speech Pathology students structured around Student Run Clinics in the primary school setting. The success of this program has resulted in discipline expansion and transference of the model to the aged and disability sector.

Extensive discussions across key stakeholders during the developmental stage of the program explored areas of clinical supervision, student numbers and cohort approaches, student competency requirements to undertake placement experiences in new sites, communication requirements across multiple stakeholders and capacity of host sites to accommodate student numbers. An extensive literature search was undertaken to identify evidence based models of practice.

The literature identified a wide variety of allied health clinical education approaches at a national and international level. What was evident in this literature was the growth in models of clinical education that challenged traditional Australian models of supervision, a single educator working face to face with one or small numbers of students.

These newer models identified alternative supervisory approaches using a variety of modalities. These included direct and indirect contact with discipline specific clinicians, direct and indirect contact with non-discipline specific clinicians, peer supervision, and non-discipline non-facilitator supervision from senior staff in non-traditional placement sites such as schools with teachers taking on a supervisory role in the classroom.

The literature also highlighted challenges to current curriculum content and skills acquisition necessary to prepare allied health students for work in the contemporary Australian health arena. An understanding of primary health care, team work, health technology, and cross cultural competence were identified as essential attributes of new graduates. The development of generic competencies that prepare students to meet employer expectations upon graduation were identified as critical although, concerns about this approach and scopes of practice and professional association expectations were identified.

What was evident was that there is currently no "gold standard" model identified for the clinical education of Allied Health students. Key stakeholders involved in the development of programs need to explore the evidence base and support the integration of this evidence into the clinical education experience. Currently the decision regarding which clinical education model(s) to implement rest on the consideration and interpretation of the evidence.
Program structure

Based on community need and available evidence the ANHIRP implemented in Broken Hill has the following structure:

- Placement of students in cohorts (4-6 students depending on discipline)
- Intake of cohorts across each school term for school-based programs (4 cohort intakes annually) and across the year for aged care and disability sectors (4-5 cohort intakes annually)
- Placement of students in pairs (peer support)
- Promotion of extended lengths of stay for students (6 weeks plus or extending to a 2nd placement opportunity)
- Delivery of structured education across the placement period (induction/orientation linked to placement preparation, pre-professional learning opportunities, clinical discussions and debriefs)
- Development of generic learning outcomes relevant to rural and remote practice
- Continuity of student placement across host sites
- Utilisation of flexible models of clinical and non-clinical supervision (peer, discipline specific clinician, non-didactic specific clinicians, non-clinical for non-clinical supervision, on and off site supervision)

Multidisciplinary curriculum responsiveness

Ensuring appropriate, safe and rewarding education and training experiences for participating students is critical. Extensive discussions are undertaken with discipline specific academics and relevant University Schools of Health Science and faculties to ensure that student experiences are linked to curriculum requirements. Prior to the integration of disciplines pilot programs are delivered to identify connectedness of curriculum to learning experience. These discussions also involve host sites to further ensure that the role of students and curriculum requirements are responsive to identified areas of need. Findings from these pilot programs are used to inform the development of comprehensive program and service delivery strategies.

ANHIRP participants are also integrated into structured pre-professional learning (PPL) sessions delivered through the BRHN. Timelines of student placement data are maintained to assist in the scheduling of PPL sessions that are relevant to students from a range of disciplines who are on site at specific times within the calendar year. The federal transition to multidisciplinary and team-based practice underpins the importance of student participation in PPL activities that are both relevant and authentic to their placement location.

Social support

The ANHIRP structure also supports the social integration of participating students. Lack of social supports for students undertaking rural and remote placements has been identified as a deficiency in the rural placement system. Students are supported through multidisciplinary approaches to student accommodation, structured social contacts with Tharinya staff, families and community organisations, and access to community social and sporting events.

Shared governance model

Strategic meetings of key stakeholders, including participating students, were held on site in Broken Hill on 3 occasions in 2019. These meetings focused on program development, communication strategies across partners, community needs, student needs, placement processes, pilot group findings, scores of practice, evaluation and research, and future planning. These meetings allow metropolitan academics to work with stakeholders, hold discussions with local clinicians and students on placement, whilst familiarising themselves with the region and health inequalities confronted.
### Impact to date 2009-2010

<table>
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<th>Aged Care</th>
<th>Education</th>
<th>Structured Education</th>
<th>Resource allocation/development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech pathology</td>
<td>12 girls</td>
<td>2 students</td>
<td>8 sessions delivered in schools (Comprehensive Speech and Language Screen and Intervention)</td>
<td>Comprehensive orientation/induction (weekly clinical discussion, OT Program, Goal review)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>162 x children screened</td>
<td>15 + 4 Aged Care Flowerdike + 4 disability clients assessed</td>
<td>1 session delivered in Aged Care (Therapeutic/Flourished)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54 children vision tested</td>
<td>4 Residential Aged Care partners</td>
<td>1 disability service partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8 partners schools</td>
<td></td>
<td></td>
<td></td>
<td>Consent forms, Clinical Assessment Tool, Data collection tools, Referral forms.</td>
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### Occupational Therapy

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<th>Resource allocation/development</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1 OT student</td>
<td>16 children screened</td>
<td>3 basic role of OT (1 identified that the school nurse had limited knowledge of the role of OT)</td>
<td>Comprehensive orientation/induction (weekly clinical discussion, OT Program, Goal review)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18 children</td>
<td>14 students poor fine motor skills</td>
<td>1 student appeared awkward in coordination</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>21 children</td>
<td></td>
<td></td>
<td>Consent forms, Clinical Assessment Tool, Data collection tools, Referral forms.</td>
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### Physiotherapy

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<tr>
<td></td>
<td>2 Physio students</td>
<td>33 yr 7 children screened</td>
<td>12 children involved with increasing tightness, 1 identified with decreased lower limb strength</td>
<td>Comprehensive orientation/induction (weekly clinical discussion, OT Program, Goal review)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>51 children</td>
<td></td>
<td>4 referred to physio (ref for additional assessment)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>2 pilot schools</td>
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<td>Consent forms, Clinical Assessment Tool, Program C (C Stage of Gross Motor Assessment in Children), Data collection tools, Referral forms.</td>
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### 2011 Program Expansion

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<th>Aged Care/ disability</th>
<th>Remote outreach</th>
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<tr>
<td>Speech pathology</td>
<td>18</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>Mairead Williams</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>12</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>Marnievd Williams</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>12</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>Margareta Williams</td>
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<tr>
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<td>5</td>
<td>7</td>
<td>5</td>
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<td>3</td>
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<tr>
<td>Pharmacy</td>
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<td>5</td>
<td>5</td>
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11th National Rural Health Conference
Participant evaluations
To date evaluation has been undertaken with all participating students, principals, on site clinicians and relevant academics. Findings have been used to improve the program at a strategic, process, and social level. All parties and participants have identified a high level of satisfaction with the ANSREP. Although this high level of satisfaction provides a positive foundation for progression of the program the need to develop comprehensive and robust research relating to this service and clinical education model is acknowledged.

Resource implications of placement model
The literature relating to clinical education models for allied health students identifies the lack of evidence associated with the resource implications across varying stages of placement for students. The Shared Governance Model associated with the ANSREP is underpinned by sharing of resources, knowledge and skills across all partner organisations. This approach ensures that one partner is not left with a burden of resource expenditure. In contrast the Shared Governance Model enhances access to funding opportunities across a range of Federal and State entities. This has been reflected in the success of the partnerships in submissions associated with the development, expansion and consolidation of the IRP through Health Workforce Australia.

Ethical implications for student run clinics and patient care
Student Run Clinics need to balance service provision needs with education and training requirements, competency and confidence levels of participating students. The benefits for students participating in Student Run Clinics in rural and remote locations include increased cultural communication skills through interactions with clients from socio-economic, racial, and cultural backgrounds different to their own, exposure to primary health care principles and practice, experiencing first hand the challenges associated with health care access, and community driven program interventions.

Students need to be provided with the opportunity to reflect upon and interpret their experiences. This will assist in diminishing harmful stereotypes that may be reinforced through less structured and supported experiences.

The preparation of students prior to commencing their placement is an essential element of the program. The extent and quality of preparation will impact on the quality of care provided and educational experiences retained.

One of the biggest challenges associated with Student Run Clinics is to address perceptions that this model supports the delivery of lower quality care to socio-economically disadvantaged people. This can be addressed through the development of quality care indicators that provide a benchmark and expectation of level of service that will be provided and accessible to clients participating in these programs. These indicators will enable effective benchmarking to occur and external auditing to be undertaken. The BURUM and partner organisations will commence the development of these indicators in 2011.

The critical aim of Student Run Clinics is to put the clients served as the priority of the program. It is essential that client benefits are not compromised by the needs and interests of other parties.

Program evaluation
This program aims to address the current lac in evidence associated with clinical education models for allied health students, specifically within a rural and remote context. A meaningful and robust study is being developed to inform policy and practice in education. Access to sound evidence associated with clinical education models is an acknowledged priority across allied health disciplines. Research is needed to find the evidence of whether a community driven, Student Run Clinic model provides quality approaches to education and training for students, quality health outcomes for clients, rewarding interactions for clinicians and academics, and strong foundations to progress additional Community FP+H health initiatives.
32. Gayatt G, Cork D, Haynes B. Evidence-based medicine has come a long way: The second decade will be as exciting as the first. British Medical Journal 2004;329:390–1.
Appendix 3 Paper: ‘Model for rural and remote speech pathology student placements: Using non-traditional sites and partnerships’

Short Report

Model for rural and remote speech pathology student placements: Using non-traditional sites and partnerships

Debra Jones,1 Diena Grant-Thomson,1 Elizabeth Bourne,2 Paul Clark,2 Honor Beck3 and David Lyle4

1 Broken Hill University Department of Rural Health, and 2Faculty of Health Sciences, University of Sydney, Sydney, and 3 Broken Hill Health Service, Greater Western Area Health Service, and 4 Banks Ward Primary School, Broken Hill, New South Wales, Australia

The Broken Hill University Department of Rural Health (BH UDHEL) operates a successful multidisciplinary rural clinical placement program in far western New South Wales.1 However, until recently, the development of allied health programs had been constrained by the region’s limited access to allied health services and their capacity to support students. There are few placement opportunities nationally across the UDHEL network for allied health disciplines such as speech pathology (23 students in 2008/2009, J. Ramony, pers. comm., 2010).

In Broken Hill, local primary school teachers and parents had raised concerns about the lack of paediatric speech pathology services and the impact this was having on educational attainment. We proposed a novel solution using a clinical education model12 structured around student-run clinics13 in the primary schools. The development relied on non-traditional partnerships with school education, a commitment by speech pathologists from the Area Health Service to allocate time for clinical supervision and work by BH UDHEL staff to engage academic partners from a founder university, recruit students and manage the placements.

Participants, methods and results

The program was piloted in 2009 and three groups of final year students (15 students) completed a fieldwork placement during 2010. The six-week placements were scheduled for school terms 1, 2 and 3, and each included orientation and three days of structured teaching on cross cultural education, primary health care principles, preparation for fieldwork and professional resilience. Students worked in pairs running clinics at local primary schools supervised by local speech pathologists. Clinical activity varied with each placement. The first group of the year focused on screening kindergarten children while subsequent rotations screened other children referred by parents or teachers. The students delivered speech pathology interventions for children with straightforward problems, assisted speech pathologists in complex cases and referred to associated services if required. They also provided teacher and parent education. Each consultation was documented on a standard form, reviewed by the speech pathologist and filed in school records. The supervising speech pathologist referred children for ongoing treatment or further assessment to the speech pathology service as required.

Individual student modes were closely monitored and tailored levels of clinical and non-clinical supervision/support developed to enhance participant experiences. Students also participated in the local inter-professional learning program.

The curriculum requirements for the placement were determined and monitored by academic staff from the Faculty of Health Sciences, University of Sydney and delivered collaboratively on-site.

A total of 231 primary school aged children, including 167 from kindergartens (93% of enrolments were assessed in 2010. Fifty-eight per cent of kindergarten children had a speech pathology intervention. Furthermore, the number of new referrals on the speech pathology service waiting list has decreased from 258 clients in September 2009 to eight in September 2010 (E. Grant-Thomson, pers. comm., 2010).

Both formal and informal feedback from speech pathology students, teachers, parents and health staff about the program has been positive and three students have already returned for an "adult" placement in Broken Hill. A formal evaluation of the program is planned.

Comment

A greater investment in rural and remote fieldwork placements for allied health students is required to...
respond to the rural health workforce shortages and difficulties in accessing sufficient placements in those regions. The development of a community-led placement model has dramatically increased the number of speech pathology placements in the Broken Hill region. The program had an immediate impact through the provision of clinical services that would otherwise not be available to primary school children, and has played a role in attracting a clinician (D.G.-T) to the region with an interest in direct clinical service provision and teaching.

Acknowledgements

We wish to thank the primary schools and their staff for organising the clinics and housing the students. This program is supported by a grant from the Department of Health and Ageing, Increased Clinical Training Capacity (ICTC) Program. The Broken Hill University Department of Rural Health is funded by the Australian Government Department of Health and Ageing.

References


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Australian Journal of Rural Health © National Rural Health Alliance Inc.
Appendix 4 Ethics Approvals

1. Human Research Ethics Committee, The University of Sydney (Approval no. 2014/178)


3. New South Wales Catholic Education, Diocese of Wilcannia-Forbes (Written Approval)

4. La Trobe University, Faculty of Health Sciences, Teresa Iacono, Professor of Rural and Regional Allied Health, Head, La Trobe Rural Health School (Written Approval).
Research integrity
Human Research Ethics Committee

Monday, 26 May 2014

Prof. Lindy McAllister
Health Systems and Global Populations; Faculty of Health Sciences
Email: lindy.mcallister@sydney.edu.au

Dear Lindy,

I am pleased to inform you that the Health Low Risk Subcommittee has approved your project entitled “Allied Health in Outback Schools Program Study”.

Details of the approval are as follows:

Project No.: 2014/178
Approval Date: 26 May 2014
First Annual Report Due: 26 May 2015

Authorised Personnel: McAllister Lindy; Jones Debra; Lyle David; McAllister Lindy; Roberts Christopher;

Documents Approved:

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The University of Sydney
NSW 2006 AUSTRALIA
HREC approval is valid for four (4) years from the approval date stated in this letter and is granted pending the following conditions being met:

**Conditions of Approval**

- Continuing compliance with the National Statement on Ethical Conduct in Research Involving Humans.
- Provision of an annual report on this research to the Human Research Ethics Committee from the approval date and at the completion of the study. Failure to submit reports will result in withdrawal of ethics approval for the project.
- All serious and unexpected adverse events should be reported to the HREC within 72 hours.
- All unforeseen events that might affect continued ethical acceptability of the project should be reported to the HREC as soon as possible.
- Any changes to the project including changes to research personnel must be approved by the HREC before the research project can proceed.
- Note that for student research projects, a copy of this letter must be included in the candidate’s thesis.

**Chief Investigator / Supervisor’s responsibilities:**

1. You must retain copies of all signed Consent Forms (if applicable) and provide these to the HREC on request.
2. It is your responsibility to provide a copy of this letter to any internal/external granting agencies if requested.

Please do not hesitate to contact Research Integrity (Human Ethics) should you require further information or clarification.

Yours sincerely

Dr Rachel Skinner  
Chair  
Health Low Risk Subcommittee  
Of the University of Sydney Human Research Ethics Committee

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This HREC is constituted and operates in accordance with the National Health and Medical Research Council’s (NHMRC) National Statement on Ethical Conduct in Human Research (2007), NHMRC and Universities Australia Australian Code for the Responsible Conduct of Research (2007) and the CPMP/ICH Note for Guidance on Good Clinical Practice.
Ms Debra Jones  
Broken Hill University  
Department of Rural Health  
Corinna Court PO Box 457  
BROKEN HILL NSW 2880  

Dear Ms Jones,

I refer to your application to conduct a research project in NSW government schools entitled Allied Health in Outback Schools Program (AHOOSP) Study. I am pleased to inform you that your application has been approved. You may contact principals of the nominated schools to seek their participation. You should include a copy of this letter with the documents you send to schools.

This approval will remain valid until 26 May 2015.

The following researchers or research assistants have fulfilled the Working with Children screening requirements to interact with or observe children for the purposes of this research for the period indicated:

<table>
<thead>
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<tbody>
<tr>
<td>Debra Maria Jones</td>
<td>28/02/2019</td>
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I draw your attention to the following requirements for all researchers in NSW government schools:

- School principals have the right to withdraw the school from the study at any time. The approval of the principal for the specific method of gathering information must also be sought.
- The privacy of the school and the students is to be protected.
- The participation of teachers and students must be voluntary and must be at the school’s convenience.
- Any proposal to publish the outcomes of the study should be discussed with the research approvals officer before publication proceeds.

When your study is completed please email your report to serap@det.nsw.edu.au.

You may also be asked to present on the findings of your research.

I wish you every success with your research.

Yours sincerely,

Dr Susan Harriman  
Leader, Quality Assurance Systems  
27 May 2014
7 July 2014

Debra Jones
Director Primary Health Care
PhD Candidate
University of Sydney
Broken Hill Department Rural Health
Sydney Medical School
PO Box 457
Broken Hill NSW 2880

Dear Debra,

Re: Participation in Allied Health in Outback Schools Program Study

Thank you for the documentation provided to Mr Trevor Rynne in relation to the Allied Health in Outback Schools Program Study. After review of the Project Overview and provision of the appropriate study approvals I can advise that I would be pleased to approve Mr Trevor Rynne’s participation in your study. As stated in your letter a summary of findings report should be provided to myself and Mr Trevor Rynne, Principal, Sacred Heart Parish Primary School, Broken Hill, on completion of your study in 2015/2016.

Please contact Mr Trevor Rynne directly to negotiate a convenient time for the interview.

Yours sincerely

Anthony Morgan
Director of Schools
Diocese of Wilcannia-Forbes
Teresa Iacono  
Professor of Rural and Regional Allied Health  
Head, La Trobe Rural Health School  
Faculty of Health Sciences  
La Trobe University  
PO Box 199  
BENDIGO VIC 3552

Dear Teresa  

Re: PhD and Research

I write to seek approval for La Trobe Speech Pathology students undertaking their clinical placement in the Broken Hill Allied Health in Outback Schools Program through the Broken Hill University Department of Rural Health (BHUDRH), The University of Sydney, to participate in a phenomenological study that seeks to explore student perceptions and experiences of program participation. The research forms part of my PhD thesis.

My intention is to undertake Occupational Therapy and Speech Pathology student focus groups in Term 3, 2014. Four University of Sydney Speech Pathology students and two La Trobe Speech Pathology students will be engaged in the program at this time. My preferred pathway is to obtain La Trobe approval for their students’ participation rather than exclude them from the focus group discussions.

The research proposal is broader, seeking perceptions and experiences from a number of key stakeholders including:

- Occupational Therapy and Speech Pathology students (Focus Group)
- Primary School Principals and Pre-School Managers (Focus Group)
- NSW DEC Senior Executive (Individual Interview)
- BHUDRH Senior Manager (Individual Interview)
- BHUDRH Academic (Individual Interview)
I have received ethics approval from the University of Sydney ¹ and NSW DEC ² and have attached same for your information, along with:

3. ethics paper showing details of how the students will be selected and recruited
4. the consent form
5. Health Science Students Participant Information Statement
6. Allied Health Student Question Schedule
7. Email introduction Health Science Students

Thank you for your consideration and I look forward to hearing from you in the near future.

Yours sincerely

[Signature]

Debra Jones
Director Primary health Care
PhD Candidate

23 June 2014

Attached – 7 documents
Dear Debra:

You have my approval to recruit LRHS students to participate in this project. We ask that you provide us with a copy of the outcomes, not least because this is an area of research activity and interest for our School.

Good luck with the project, and please give my best to Lindy.

Kind regards

Teresa

Teresa Iacono, Ph.D.
Professor of Rural and Regional Allied Health
Head, La Trobe Rural Health School
Faculty of Health Sciences

| La Trobe University | PO Box 199 Bendigo 3552
T: 03 5448 9110 | F: 03 5444 9199 | M: 0407363653 |
E: liacono@latrobe.edu.au | W: www.latrobe.edu.au

CRICOS Provider 00115M

La Trobe University - ranked top in Victoria for student satisfaction (Sweeney Uni Student Report, 2009)

CRICOS Provider 00115M

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Hello Teresa

I am seeking approval for La Trobe Pathology students to participate in a phenomenological study during their placement at Broken Hill University Department of Rural Health in Term 3, 2014

Please find attached request and supporting documentation for your consideration.

Thank you

Regards

Deb

Debra Jones
Director Primary Health Care
The University of Sydney, BH UDRH
PO Box 457, Broken Hill NSW 2880
T: 08 8080 1239
F: 08 8087 0051
E: Debra.Jones1@health.nsw.gov.au
Web: www.sydney.edu.au/medicine/drh

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Appendix 5 Schedule of Questions

1. Rural Academic
2. Allied Health Students
3. School Principals
4. Metropolitan Academic
5. Senior Manager – Broken Hill University Department of Rural Health
6. Senior Manager – School Education
1. Rural Academic – Individual Semi-Structured Interview Question Schedule

1. Can you tell me how you came to your position in Broken Hill and why you are here?
   Possible prompts: Why did you come? How did you feel about coming? What did you expect? Why are you still here?
   Probes: Program, location, model, community, social, professional, personal

2. Can you explain what you thought your role would be and why?
   Possible prompts: What made you think that? How did this make you feel?
   Probes: Community based, hospital based, traditional roles, innovative roles

3. How does this role compare with previous roles you have had?
   Possible prompts: What contexts? What models of service delivery? Did you work as a team?
   Probes: Leadership, values, academic, workload, return on investment, professional, service, equity and access

4. Can you tell me why the Allied Health in Outback Schools Program started?
   Possible prompts: Who played a role in the program starting and why?
   Probes: Community led, unmet need, workforce development

5. Can you tell me about an experience you have had in your role in the AHOESP that has had a significant impact on your approach as an educator?
   Possible prompts: What impacted on you? How did it impact on you? Why did it impact?
   Probes: Student, child, family, teacher, academic, social, civic

6. Can you tell me about an experience you have had in your role in the AHOESP that has had a significant impact on your approach to the work that you do here?
   Possible prompts: What impacted on you? How did this impact? Why did it impact?
   Probes: Student, child, family, teacher, academic, social, civic

7. If you were approached by external community agencies wanting to understand the program how would you describe it and why?
   Possible prompts: What would the key features be? Why would they be the key features?
   Probes: Community role, service access, workforce development, civic responsibility

8. If you were approached by external university agencies wanting to understand the program how would you describe it and why?
   Possible prompts: What would the key features be? Why would they be the key features?
   Probes: Supervision, model, aims, gains, challenges, workforce, education, teamwork
9. **What do you think this program aims to achieve and why?**
   Possible prompts: Who does it impact on? How does it do this? Why does it do this?
   Probes: Kids, schools, students, community, health, education, social, civic, workforce

10. **Can you describe your interactions with other supervisors involved in the program and their roles?**
    Possible prompts: How do you work with each other in the program? Why do you work this way?
    Probes: Role of teachers, parents, other allied health academics – multi-disciplinary supervision

11. **How important do you think the location or place of delivery is for the development and delivery of the AHOBS?**
    Possible prompts: Why is this important? Could this work in other remote settings? Could this model work in urban settings?
    Probes: Remote location, community context, independence in model development, community leadership/partnerships

12. **Can you identify ways to make the program better and why?**
    Possible prompts: How would this happen? Who would make it happen?
    Probes: Staffing, infrastructure, resources, diversity of services, integration

13. **Where do you think this program will be in five years’ time and why?**
    Possible prompts: Why would it be like this? What would happen to make it like this? Who would play a role?
    Probes: Staffing, infrastructure, resources, diversity of services, integration, challenges, opportunities, sustainability

14. **Any other comments?**
2. Allied Health Students – Focus Group Question Schedule

1. Can you tell me how you came to do your placement in Broken Hill?
   Possible prompts: Why did you come? How did you feel about coming?
   Probes: Made to come, volunteered to come, heard about the program from past participants,
   interest in rural and remote practice, attraction to location (? What and why)

2. Can you explain what you thought this placement was going to be like and why?
   Possible prompts: What made you think that? How did this make you feel?
   Probes: Same/different to other placements, not sure, if different how and why.

3. How does this placement compare with other placements you have experienced?
   Possible prompts: Has it been similar? Has it been different? If so how and why? What have
   you done? Why have you done this?
   Probes: Learning environments, learning process, roles undertaken, learning sources, team
   work, impact, primary health care practice location/approach?

4. Can you tell me about an experience you have had on this placement that has had a
   significant impact on you as a learner?
   Possible prompts: What has impacted? Why has that impacted? How has that impacted?
   Probes: Academic, peer, child, family, community partner, education approach, theory to
   practice?

5. Can you tell me about an experience you have had on this placement that has had a
   significant impact on you as a person?
   Possible prompts: What has impacted? Why has that impacted? How has that impacted?
   Probes: Academic, peer, child, family, community partner, connections?

6. How would you describe this placement to other students who haven’t been involved in
   the program?
   Possible prompts: What would you tell them about the program? Why would you tell them this?
   Probes: Social, educational, community, skills, team work, communication, role/leadership,
   problem solving (work readiness skills), professional, clinical, civic knowledge?

7. What do you think this program aims to achieve and why?
   Possible prompts: Who does it impact on? How does it do this? Why does it do this?
   Probes: Pupils, schools, parents, families, health science students, workforce, health,
   education.

8. Can you identify ways to make the program better and why?
   Possible prompts: How would this happen? Who would make it happen? Why would it make it
   better?
   Probes: Supervision, time spent on site, learning opportunities, transport.
9. Can you explain if you will take anything from this program into your future practice and what would that be and why?

Possible prompts: What aspects would that be? Why would you do that? How will that happen?
Probes: Professional, community, education, role, leadership, skills

10. Where do you think this program will be in 5 years’ time and why?

Possible prompt: Why would it be like this? What would happen to make it like this? Who would play a role in this?
Probes: Staffing, infrastructure, resources, diversity of services, integration, challenges, opportunities, sustainability

11. Any other comments? Thank You
3. **School Principals - Focus Groups and Individual Semi-Structured Interview Question Schedule**

1. Could you explain what the circumstances were that led up to the development of the Allied Health in Schools Program and have others experienced these circumstances?

   Possible prompts: Who approached who? Why was the approach made? What happened? What do other schools and regions experience? How do you know this?
   Probes: What was the need? Who was contacted from which agencies and why? Similar needs, alternative models, unmet need and implications

2. Can you describe other programs that have sought to address these issues and what they look like?

   Possible prompts: What other programs? Where were/are they delivered and how?
   Probes: What has been the experience? Who have the partner organisations been? Who has delivered them?

3. What have your experiences been like working with an academic Department such as the Department of Rural Health? Can you identify challenges or enablers to this work?

   Possible prompts: Who have you worked with? What have you worked on? Why do you work with them? How does this relationship work?
   Probes: Benefits, challenges

4. In what ways do you think working with this Department has impacted on you and your school community?

   Possible prompts: What impacts have occurred? Who has the impact been associated with?
   Probes: Benefits, challenges, demands, commitments, collaborations

5. Do your colleagues in other communities know about this program and partnership? If they do what are their thoughts?

   Possible prompts: Why do they think this? What does that mean to them?
   Probes: Partnerships, networks, relationships, time, turf, trust

6. If you were approached by other schools who wanted to understand the program how would you describe it and why?

   Possible prompts: What would you tell them about the program? Why would you tell them that?
   Probes: Health, education, workforce, partnerships, commitment, ownership, investment

7. What do you think this program aims to achieve and why?

   Possible prompts: Who does it impact on? How does it impact? In what ways does it impact?
   Probes: Children, schools, families, students, workforce, education, access, equity
8. How would you improve this program?
   Possible prompts: In what ways? Why? What would be needed to do this?
   Probes: Resources, clinicians, longer stays, more/less students, more/less disciplines

9. Where do you think this program will be in five years' time and why?
   Possible prompts: Why would it be like this? What would happen to make it like this? Who would play a role in this?
   Probes: Sustainable, challenges, opportunities, staffing, resources, infrastructure, diversity of services, integration

10. Any other comments?
    
    Thank you
4. Metropolitan Academic - Individual Semi-Structured Interview Question Schedule

1. Can you describe your relationship with the Broken Hill University Department of Rural Health and how and when this started?
   Possible prompts: Who contacted who? Why was that contact made? What happened? Probes: What is the relationship (personal, professional, clinical, social)? Who is the relationship with (staff, community organisations), history, chronology of events, community need, communication pathways?

2. Can you tell me what you do in your role?
   Possible prompts: Professional, academic, clinical Probes: Strategic, management, coordination, trouble shooting

3. What role/s have you/does your play in this program?
   Possible prompts: In what ways? How do you feel about this role? Probes: Strategic, management, coordination, trouble shooting

4. What do you think the program aims to achieve and how does it try to achieve this?
   Possible prompts: What happens? How does it happen? Who does the program impact on and how? Probes: Pre-graduate students, Children, families, schools, teachers, education, health, workforce

5. Has this program contributed to any strategic approaches within the Faculty of Health Sciences? If it has how has it contributed and what have those contributions been?
   Possible prompts: In what ways? Who for? How do you measure this? Probes: Education, health, social, civic, leadership, empowerment, control, ownership, resources, infrastructure

6. In what ways do you think this placement may differ from other placements the allied health students have had?
   Possible prompts: Previous learning environments? Previous activities? Who would they learn from? Who would they work with? How would this impact on them? Probes: Community, illness versus wellness, social, civic, supervision, independence, leadership, valued

7. What do you think this program offers Broken Hill and region, schools and the allied health students?
   Possible prompts: What do students/schools gain/loose from their involvement? What do students learn? How do they learn it? Why do they learn it this way? Probes: Networks; capacity building; other opportunities; Students - Work readiness, real world learning, real world work, complexity, work of meaning

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8. Do colleagues at the same senior level as you from other universities know about this program? If they do what do they think about the program and what statements do they make and why?

Possible prompts: Why do they think that? What does it mean?
Probes: Would they like to have this program in their universities and why/why not? Why would this be an attractive/unattractive model for them? What sort of relationships do you need to develop this model? Do other universities have these?

9. If you were approached by external community agencies wanting to understand the program how would you describe it and why?

Possible prompts: What would you tell them about the program? Why would you tell them that?
Probes: Health, education, workforce, partnerships, commitment, ownership, investment

10. Where do you think this program will be in five years’ time and why?

Possible prompts: Why would it look like this? What would happen to make it like this? Who would play a role in this?
Probes: Sustainability, challenges, opportunities, staffing, infrastructure, resources, diversity of services, integration, gone

11. Any other comments?

Thank You
5. **Senior Manager, Broken Hill University Department of Rural Health – Individual Semi-Structured Interview Question Schedule**

1. **What are your connections to Broken Hill and region?**
   
   Possible prompts: Who are you connected to and how? What sort of connections are they? 
   Probes: Family, professional, social, civic.

2. **Can you tell me what you do in your role?**
   
   Possible prompts: How do you do this? Why do you do this? 
   Probes: Strategic, management, coordination, professional, civic, social.

3. **Can you explain how and when you became involved in the Allied Health Schools Program?**
   
   Possible prompts: What happened? How did it come about? 
   Probes: History, chronology of events, community need, instigators, pilot/program responses, evidence of models.

4. **What role have you played in the program?**
   
   Possible prompts: What do you do? How do you do it? Why do you do it? 
   Probes: Strategic, management, coordination, community influence/impact, professional influence/impact.

5. **Can you explain if your community connection directly or indirectly affects how you have/continue to engage in the program?**
   
   Possible prompts: Has community influenced your role? Why does it/doesn’t it influence your role? What does this mean to you? 
   Probes: Social, civic, professional, personal.

6. **Who are the community agencies in this program and what are their roles?**
   
   Possible prompts: Why are community agencies involved? What do they do? Why do they do this? 
   Probes: Schools, parents, children, health services, principals, teachers.

7. **What has driven the way the program has been developed and how is this similar or different to previous approaches that you have experienced?**
   
   Possible prompts: What has occurred previously? How have you experienced this? 
   Probes: Fragmentation, sustainability, resourcing, access, focus of programs.

8. **If you were approached by external community agencies wanting to understand this program how would you describe it and why?**
   
   Possible prompts: What are the key features (essence)? Why are they the key features? 
   Probes: Community role, service access, workforce, education, civic responsibility, community leadership, empowerment.
9. If you were approached by external university agencies wanting to understand this program how would you describe it and why?

   Possible prompts: What are the three key features (essence)? Why are they the key features?
   Probes: Education, Multi-disciplinary, rural and remote practice, Community role, service access, workforce, civic responsibility, community leadership, empowerment

10. Where do you think this program will be in five years time and why?

    Possible prompt: Why would it be like this? What would happen to make it like this? Who would play a role in this?
    Probes: Staffing, infrastructure, resources, diversity of services, integration, challenges, opportunities, sustainability

11. Any other comments?

    Thank You
6. Senior Manager, School Education - Individual Semi-Structured Interview Question Schedule

1. Can you tell me what you do in your role?
   Possible prompts: How does your job impact on you? How do you manage this impact?
   Probes: Strategic, management, coordination, trouble shooting

2. What is your connection to Broken Hill, the region, and the Principals and does this impact on your role?
   Possible prompts: How does this impact? Why does it impact? Does it impact in the same way for other regional directors?
   Probes: Personal, professional, social, civic, identity

3. Can you explain how and when you became involved in the allied health program being delivered in primary schools?
   Possible prompts: What happened? How did it come about?
   Probes: History, chronology of events, community need, communication pathways.

4. What role have you/do you play in this program?
   Possible prompts: In what ways? How do you feel about this role?
   Probes: Strategic, management, coordination, trouble shooting

5. What do you think the program aims to achieve and how does it try to achieve this?
   Possible prompts: What happens? How does it happen? Who does the program impact on and how?
   Probes: Children, families, schools, teachers, education, health, workforce

6. Has this program contributed to strategic achievements for NSW DEC in the region? If it has how has it contributed and what have those achievements been?
   Possible prompts: In what ways? Who for? How do you measure this?
   Probes: Education, health, social, civic, leadership, empowerment, control, ownership, resources, infrastructure

7. In what ways do you think this placement in your schools may differ from other placements the allied health students have had?
   Possible prompts: Previous learning environments? Previous activities? Who would they learn from? Who would they work with? How would this impact on them?
   Probes: Community, illness versus wellness, social, civic, supervision, independence, leadership, valued

8. What do you think this program offers Broken Hill and region your schools and the allied health students?
   Possible prompts: What do schools gain/lose from their involvement? What do students learn? How do they learn it? Why do they learn it this way?
9. Do colleagues at the same senior level as you know about this program? If they do what do they think about the program and what statements do they make and why?

Possible prompts: Why do they think that? What does it mean? Probes: Would they like to have this program in their schools and why/why not? Why would this be an attractive/unattractive model for them? What sort of relationships do you need to develop this model? Do other Directors have these?

10. If you were approached by external community agencies wanting to understand the program how would you describe it and why?

Possible prompts: What would you tell them about the program? Why would you tell them that? Probes: Health, education, workforce, partnerships, commitment, ownership, investment

11. Where do you think this program will be in five years’ time and why?

Possible prompts: Why would it look like this? What would happen to make it like this? Who would play a role in this? Probes: Sustainability, challenges, opportunities, staffing, infrastructure, resources, diversity of services, integration, gone

12. Any other comments? Thank You
Appendix 6 Email Invitations to Participate in the Study

1. Senior Manager – School Education

2. Allied Health Students.

3. School Principals

4. Rural and Metropolitan Academics

5. Senior Manager – Broken Hill University Department of Rural Health
1. Email Introduction to Study: Senior Manager – School Education

The Allied Health in Outback Schools Program has been running since 2009. The Program provides Speech Pathology and Occupational Therapy assessment and treatment services for pre-school and primary school students in far western NSW. These services are provided by health science students undertaking clinical placement in the region under the direct supervision of academic clinicians.

Key stakeholders involved in the Program include Public and Catholic Education, Far West Local Health District, Faculty of Health Sciences the University of Sydney, and the Broken Hill University Department of Rural Health.

Much of the research on this type of program focuses on the impact for universities with limited research on the experiences of community based agencies, remotely located university staff and health science students participating in service-learning programs.

This study seeks to explore the experiences of key stakeholders in the AHOSF to contribute to our understanding of program impacts and contribute to the national and international literature.

Should you consent to participate in the study you will be invited to participate in an individual interview with a researcher from the Broken Hill University Department of Rural Health. It is anticipated that this interview will take approximately 90 minutes and be held at the Broken Hill University Department of Rural Health on a date and time to be negotiated with you. An audio recording of the interview will also be made to ensure accuracy of the data collected.

To ensure your privacy all data will be de-identified and a broad descriptor used to denote your position to assist with data analyses and interpretation (eg Senior Manager NSW Education). You will also be provided with a de-identified transcript of the interview prior to analyses and reporting being undertaken to ensure all identifiable information has been removed.

Should you wish to obtain further information on any aspect of this study please contact Ms Debra Jones at the Broken Hill University Department of Rural Health. This research study is associated with Debra’s PhD studies. Debra can be contacted on 08 80801239 or email djones@govahs.health.nsw.gov.au.

If you are interested in participating in this study please read the Participant Information Sheet attached and sign the consent form that is also attached. Participation in this study is completely voluntary. A decision not to participate in the study will not affect your relationship or schools access to programs run by the Broken Hill University Department of Rural Health or the University of Sydney.

A signed consent form can be returned by being scanned and emailed to rphillips@govahs.health.nsw.gov.au or mailed to:

Robyn Phillips
PO Box 457
Corrindah Court, Broken Hill University Department of Rural Health
BROKEN HILL NSW 2880

Thank you for your time and consideration of this request.
2. Email Introduction to Study: Allied Health Students

The Allied Health in Outback Schools Program has been running since 2009. The Program provides Speech Pathology and Occupational Therapy assessment and treatment services for pre and primary school students in far western NSW. These services are provided by health science students undertaking clinical placement in the region under the direct supervision of academic clinicians.

Key stakeholders involved in the Program include Public and Catholic Education, Far West Local Health District, Faculty of Health Sciences the University of Sydney, and the Broken Hill University Department of Rural Health.

Much of the research on this type of program focuses on the impact for universities with limited research on the experiences of community based agencies, remotely located university staff and health science students participating in service-learning programs.

This study seeks to explore the experiences of key stakeholders in the program to contribute to our understanding of program impacts and contribute to the national and international literature.

Should you consent to participate in the study you will be invited to participate in a focus group interview with other Speech Pathology and Occupational Therapy students at the end of your placement, prior to your departure from Broken Hill. It is anticipated that this interview will take approximately 90 minutes and be held at the Broken Hill University Department of Rural Health. An audio recording of the focus group interview will be made to ensure accuracy of the data collected.

To ensure your privacy all data will be de-identified and a broad descriptor used to denote your role to assist with data analyses and interpretation (eg Health Science Student Focus Group # 1, Health Science Student # 1). You will not be identified by name or discipline.

Should you wish to obtain further information on any aspect of this study please contact Ms Debra Jones at the Broken Hill University Department of Rural Health. This research study is associated with Debra’s PhD studies. Debra can be contacted on 08 80801239 or email djones@guahs.health.nsw.gov.au.

If you are interested in participating in this study please read the Participant Information Sheet attached and sign the consent form that is also attached. Participation in this study is completely voluntary. A decision not to participate in the study will not affect your relationship with the Broken Hill University Department of Rural Health or the University of Sydney or your clinical placement opportunities.

A signed consent form can be returned by being scanned and emailed to rphillips@guahs.health.nsw.gov.au or mailed to:

Robyn Phillips
PO Box 457
Corrindah Court, Broken Hill University Department of Rural Health
BROKEN HILL NSW 2880

Thank you for your time and consideration of this request.
3. Email Introduction to Study: School Principals

The Allied Health in Outback Schools Program has been running since 2009. The Program provides Speech Pathology and Occupational Therapy assessment and treatment services for pre-school and primary school students in far western NSW. These services are provided by health science students undertaking clinical placement in the region under the direct supervision of academic clinicians.

Key stakeholders involved in the Program include Public and Catholic Education, Far West Local Health District, Faculty of Health Sciences the University of Sydney, and the Broken Hill University Department of Rural Health.

Much of the research on this type of program focuses on the impact for universities with limited research on the experiences of community based agencies, remotely located university staff, and health science students participating in service-learning programs.

This study seeks to explore the experiences of key stakeholders in the program to contribute to our understanding of program impacts and contribute to the national and international literature.

Should you consent to participate in the study you will be invited to participate in a focus group with other Pre-School Managers and Primary School Principals. It is anticipated that this focus group will take approximately 90 minutes and be held at the Broken Hill University Department of Rural Health on a date and time to be negotiated with you. An audio recording of the focus group will also be made to ensure accuracy of the data collected.

To ensure your privacy all data will be de-identified and coding will be applied to assist with data interpretation (e.g. Focus Group #1, Pre-School Manager #1, Primary School Principal #1, School #1).

Should you wish to obtain further information on any aspect of this study please contact Ms Debra Jones at the Broken Hill University Department of Rural Health. This research study is associated with Debra’s PhD studies. Debra can be contacted on 08 80801239 or email djones@gwahs.health.nsw.gov.au.

If you are interested in participating in this study please read the Participant Information Sheet attached and sign the consent form that is also attached. Participation in this study is completely voluntary. A decision not to participate in the study will not affect your relationship or schools access to programs run by the Broken Hill University Department of Rural Health or the University of Sydney.

A signed consent form can be returned by being scanned and emailed to rphillips@gwahs.health.nsw.gov.au or mailed to:

Robyn Phillips
PO Box 457
Corrinthian Court, Broken Hill University Department of Rural Health
BROKEN HILL NSW 2880

Thank you for your time and consideration of this request.
4. Email Introduction to Study: Rural and Metropolitan Academics

The Allied Health in Outback Schools Program has been running since 2009. The Program provides Speech Pathology and Occupational Therapy assessment and treatment services for pre-school and primary school students in far western NSW. These services are provided by health science students undertaking clinical placement in the region under the direct supervision of academic clinicians.

Key stakeholders involved in the Program include Public and Catholic Education, Far West Local Health District, Faculty of Health Sciences the University of Sydney, and the Broken Hill University Department of Rural Health.

Much of the research on this type of program focuses on the impact for universities with limited research on the experiences of community based agencies, remotely located university staff and health science students participating in service-learning programs.

This study seeks to explore the experiences of key stakeholders in the AHOBSF to contribute to our understanding of program impacts and contribute to the national and international literature.

Should you consent to participate in the study you will be invited to participate in an individual telephone interview with a researcher from the Broken Hill University Department of Rural Health. It is anticipated that this interview will take approximately 90 minutes. A date and time would be negotiated with you. An audio recording of the interview will also be made to ensure accuracy of the data collected.

To ensure your privacy all data will be de-identified and a broad descriptor used to denote your position to assist with data analyses and interpretation (eg Senior Academic Faculty of Health Sciences). You will also be provided with a de-identified transcript of the interview prior to analyses and reporting being undertaken to ensure all identifiable information has been removed.

Should you wish to obtain further information on any aspect of this study please contact Ms Debra Jones at the Broken Hill University Department of Rural Health. This research study is associated with Debra's PhD studies. Debra can be contacted on 08 80801239 or email djones@govhs.health.nsw.gov.au.

If you are interested in participating in this study please read the Participant Information Sheet attached and sign the consent form that is also attached. Participation in this study is completely voluntary. A decision not to participate in the study will not affect your relationship or schools access to programs run by the Broken Hill University Department of Rural Health or the University of Sydney. A signed consent form can be returned by being scanned and emailed to rphillips@govhs.health.nsw.gov.au or mailed to:

Robyn Phillips
PO Box 457
Corindah Court, Broken Hill University Department of Rural Health
BROKEN HILL NSW 2880

Thank you for your time and consideration of this request.
5. Email Introduction to Study: Senior Manager - Broken Hill University Department of Rural Health

The Allied Health in Outback Schools Program has been running since 2009. The Program provides Speech Pathology and Occupational Therapy assessment and treatment services for pre-school and primary school students in far western NSW. These services are provided by health science students undertaking clinical placement in the region under the direct supervision of academic clinicians.

Key stakeholders involved in the Program include Public and Catholic Education, Far West Local Health District, Faculty of Health Sciences the University of Sydney, and the Broken Hill University Department of Rural Health.

Much of the research on this type of program focuses on the impact for universities with limited research on the experiences of community based agencies, remotely located university staff and health science students participating in service-learning programs.

This study seeks to explore the experiences of key stakeholders in the Program to contribute to our understanding of program impacts and contribute to the national and international literature.

Should you consent to participate in the study you will be invited to participate in an individual interview with a researcher from the Broken Hill University Department of Rural Health. It is anticipated that this interview will take approximately 90 minutes and be held at the Broken Hill University Department of Rural Health on a date and time to be negotiated with you. An audio recording of the interview will also be made to ensure accuracy of the data collected.

To ensure your privacy all data will be de-identified and a broad descriptor used to denote your position to assist with data analyses and interpretation (eg Senior Manager BHUDRH). You will also be provided with a de-identified transcript of the interview prior to analyses and reporting being undertaken to ensure all identifiable information has been removed.

Should you wish to obtain further information on any aspect of this study please contact Ms Debra Jones at the Broken Hill University Department of Rural Health. This research study is associated with Debra’s PhD studies. Debra can be contacted on 08 80801239 or email djones@ghwh.health.nsw.gov.au.

If you are interested in participating in this study please read the Participant Information Sheet attached and sign the consent form that is also attached. Participation in this study is completely voluntary. A decision not to participate in the study will not affect your relationship or schools access to programs run by the Broken Hill University Department of Rural Health or the University of Sydney. A signed consent form can be returned by being scanned and emailed to rphillips@ghwh.health.nsw.gov.au or mailed to:

Robyn Phillips
PO Box 457
Corrindah Court, Broken Hill University Department of Rural Health
BROKEN HILL NSW 2880

Thank you for your time and consideration of this request.
Appendix 7 Consent Forms

1. Rural Academic
2. Allied Health Students
3. School Principals
4. Metropolitan Academic
5. Senior Manager – Broken Hill University Department of Rural Health
6. Senior Manager – School Education
PARTICIPANT CONSENT FORM – Rural Allied Health Academic

I, ___________________________________________________________ [PRINT NAME], give consent to my participation in the research project.

TITLE: Allied Health in Outback Schools Program Study

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researchers.

3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.

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5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) the University of Sydney or the Broken Hill University Department of Rural Health now or in the future.

6. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

7. I consent to:
   - Audio-recording YES ☐ NO ☐
   - Receiving Feedback YES ☐ NO ☐

If you answered YES to the “Receiving Feedback” question, please provide your details i.e. mailing address, email address.

**Feedback Option**

Address: 

Email: 

----------------------------------------
Signature

----------------------------------------
Please PRINT name

----------------------------------------
Date

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PARTICIPANT CONSENT FORM – Allied Health Students

I, .............................................................................................................[PRINT NAME], give consent to my participation in the research project

TITLE: Allied Health in Outback Schools Program Study

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.
5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Sydney or the Broken Hill University Department of Rural Health, my clinical placement opportunities, and my assessments now or in the future.

6. I understand that I can stop my participation in the focus group at any time if I do not wish to continue; however as it is a group discussion it will not be possible to exclude individual data to that point.

7. I consent to:
   - Audio-recording YES ☐ NO ☐
   - Receiving Feedback YES ☐ NO ☐

If you answered YES to the “Receiving Feedback” question, please provide your details i.e. mailing address, email address.

Feedback Option

Address: __________________________________________

______________________________________________

Email: __________________________________________

............................................................

Signature

............................................................

Please PRINT name

............................................................

Date
PARTICIPANT CONSENT FORM – School Principals

I, .........................................................................................................................................................................................., give consent to my participation in the research project.

TITLE: Allied Health in Outback Schools Study

I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher(s).

3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.
5. I understand that I can withdraw from the study at any time. If I choose to withdraw from the study during the focus group I understand that it will not be possible to exclude individual data collected to that point. I understand that I can withdraw from the study without affecting my relationship with the researcher(s), the Broken Hill University, Department of Rural Health or the University of Sydney now or in the future or access to allied health services through the AHOBSP.

6. I consent to:
   - Audio-recording  YES ☐ NO ☐
   - Receiving Feedback YES ☐ NO ☐

   If you answered YES to the “Receiving Feedback” question, please provide your details i.e. mailing address, email address.

   **Feedback Option**

   Address: ________________________________________________________________
   ________________________________________________________________

   Email: _________________________________________________________________

   ________________________________________________________________

   Signature

   ________________________________________________________________

   Please PRINT name

   ________________________________________________________________

   Date

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PARTICIPANT CONSENT FORM – Metropolitan Academic

I, ................................................................................................................[PRINT NAME], give consent to my participation in the research project

TITLE: Allied Health in Outback Schools Program Study

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.

5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Sydney now or in the future.
6. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

I consent to:

- Audio-recording  YES  □  NO  □
- Receiving Feedback  YES  □  NO  □

If you answered YES to the “Receiving Feedback” question, please provide your details i.e. mailing address, email address.

**Feedback Option**

**Address:** __________________________________________

________________________________________

**Email:** __________________________________________

________________________________________

.................................................................

*Signature*

.................................................................

*Please PRINT name*

.................................................................

*Date*
PARTICIPANT CONSENT FORM – Senior Manager, University Department of Rural Health

I, .................................................................[PRINT NAME], give consent to my participation in the research project.

TITLE: Allied Health in Outback Schools Program Study

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.
4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.

5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s), the University of Sydney, or the Broken Hill University Department of Rural Health, now or in the future.

6. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased, and the information provided will not be included in the study.

I consent to:

- Audio-recording  YES ☐  NO ☐
- Receiving Feedback  YES ☐  NO ☐

If you answered YES to the “Receiving Feedback” question, please provide your details i.e. mailing address, email address.

**Feedback Option**

Address: ____________________________________________

___________________________________________________

Email: _____________________________________________

___________________________________________________

Signature  __________________________________________

___________________________________________________

Please PRINT name

___________________________________________________

Date  ____________________________________________
PARTICIPANT CONSENT FORM – Senior Manager, School Education

I, ............................................................................................................................................[PRINT NAME], give consent to my participation in the research project.

TITLE: Allied Health in Outback Schools Program Study

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.

5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Sydney now or in the future.

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6. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

I consent to:

- Audio-recording ☐ YES ☐ NO ☐
- Receiving Feedback ☐ YES ☐ NO ☐

If you answered YES to the “Receiving Feedback” question, please provide your details i.e. mailing address, email address.

**Feedback Option**

Address: ____________________________________________

____________________________________________________

Email: ______________________________________________

_____________________________ _________________________
Signature

____________________________________________________
Please PRINT name

____________________________________________________
Date

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Appendix 8 Participant Information Statements

1. School Principals
2. Allied Health Students
3. Rural and Metropolitan Academics
4. Senior Manager – Broken Hill University Department of Rural Health
5. Senior Manager – School Education
Allied Health in Outback Schools Study

SCHOOL PRINCIPALS
PARTICIPANT INFORMATION STATEMENT

1. What is the study about?

You are invited to participate in a research study of the Allied Health in Outback Schools Program (AHOBSP). The AHOBSP has been operational since 2009 and sees Speech Pathology and Occupational Therapy students delivering services directly into pre and primary schools in far western NSW. Much of the research that has been undertaken around these programs has focused on the impact for universities. Little systemic research has been undertaken in Australia and internationally on the experiences of community based agencies involved in these programs.

Your experiences of the program are of great interest to us.

2. Who is carrying out the study?

The study is being conducted by Debra Jones, Director of Primary Health Care, Broken Hill University Department of Rural Health and will contribute to the degree of Doctorate at the University of Sydney under the supervision of Professor Lindy McAllister, Faculty of Health Sciences, the University of Sydney.

3. What does the study involve?

The study involves your participation in a focus group with other Pre-School Managers and Primary School Principals involved in the AHOBSP. The focus group will be audio recorded. In the transcript all identifying details of individuals and school sites will be removed (eg. you will be identified as Principal # 1).
4. How much time will the study take?

It is estimated that the focus group interview will take approximately 90 minutes to 2 hours. Additional time may be required should the researcher wish to further explore with you individually matters that you may raise during the focus group interview process. This should take no more than 20 minutes if required and a date and time would be negotiated with you. You are under no obligation to participate in any further one-on-one interviews.

5. Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to consent. If you choose not to consent to participate in this study your decision will not impact on your relationship with the University of Sydney or the Broken Hill University Department of Rural Health or your access to allied health services through the AHOBS. If you do take part in the focus group interview and later decide to withdraw it will not be possible to exclude individual data once the interview and recording has commenced however you can still withdraw at any time from the Focus Group interview.

6. Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study will be submitted for publication and as part of a doctoral thesis, but individual participants will not be identifiable in such a report.

7. Will the study benefit me?

The study will provide us with greater insight into the impact of the AHOBS for communities and health science students. Although there may be no immediate benefit to you, future benefit may occur from the development of new approaches to programs and clinical training. We cannot and do not guarantee or promise that you will receive any benefits from the study.

8. Can I tell other people about the study?

Yes, you are encouraged to tell other people about the study.

9. What if I require further information about the study or my involvement in it?

When you have read this information, Debra Jones will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Deb Jones, Director Primary Health Care, Broken Hill University Department of Rural Health, The University of Sydney on 08 80801230 or email djones@gwahs.health.nsw.gov.au

10. What if I have a complaint or any concerns?

Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8627 1876 (Telephone); +61 2 8627 1877 (Facsimile) or hr.humanethics@sydney.edu.au (Email).

This information sheet is for you to keep.
Allied Health in Outback Schools Program Study

PARTICIPANT INFORMATION STATEMENT – Allied Health Students

1. What is the study about?

You are invited to participate in a study of the Allied Health in Outback Schools Program (AHOBSP). The program has been operational since 2009 and sees Speech Pathology and Occupational Therapy students providing health services to pre and primary school aged children in far western NSW. The program is delivered through the Broken Hill University Department of Rural Health (BHUDRH) in partnership with NSW DEC, Catholic Education, Far West Local Health District and the University of Sydney. Much of the research that has been undertaken around these types of programs has focused on the impact for universities. Little systemic research has been undertaken in Australia and internationally on the experiences of community agencies and Health Science students involved in these programs.

As a Speech Pathology or Occupational Therapy student in the AHOBSP your experiences of the program are of great interest to us.

2. Who is carrying out the study?

The study is being conducted by Debra Jones, Director of Primary Health Care, Broken Hill University Department of Rural Health and will contribute to the degree of Doctorate at The University of Sydney under the supervision of Professor Lindy McAllister, Faculty of Health Sciences, the University of Sydney.

Due to Debra’s senior role at the BHUDRH interviews will be conducted by Dr Sue Kirby, BHUDRH, to avoid any perceived bias or coercion in the interview and research process.

3. What does the study involve?

The study involves your participation in a focus group on site at the Broken Hill University Department of Rural Health with other Speech Pathology and Occupational Therapy students involved in the AHOBSP. Questions during the focus group will focus on your experiences in the AHOBSP.
The interview will be audio recorded. In the transcript all identifying details of individuals (Names and Disciplines) and sites of placement will be removed (eg: you will be identified as Focus Group # 1-Student # 1).

4. How much time will the study take?

It is estimated that the focus group will take approximately 90 minutes to 2 hours. Additional time may be required should the researcher wish to further explore with you individually matters that you may raise during the focus group process. This should take no more than 20 minutes if required and a date and time would be negotiated with you. You are under no obligation to participate in any further one-on-one interviews.

5. Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with The University of Sydney or the Broken Hill University Department of Rural Health. You can choose not to consent to participate in this study and it will not affect your relationship with the University of Sydney; the Broken Hill University Department of Rural Health, your clinical placement opportunities and assessments.

If you take part in a focus group and wish to withdraw, as this is a group discussion it will not be possible to exclude individual data once the session has commenced.

6. Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study will be submitted for publication, but individual participants will not be identifiable in such a report.

7. Will the study benefit me?

The study will provide us with greater insight into the impact of the AHOBS for communities and health science students. Although there may be no immediate benefit to you, future benefit may occur for other communities and students from the development of new approaches to programs and clinical training. We cannot and do not guarantee or promise that you will receive any benefits from the study.

8. Can I tell other people about the study?

Yes, you are encouraged to tell other people about the study.

9. What if I require further information about the study or my involvement in it?

When you have read this information, Debra Jones will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Debra Jones, Director Primary Health Care, email: debra.jones1@health.nsw.gov.au or Ph: 08 80801239.

10. What if I have a complaint or any concerns?

Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 9327 8175 (Telephone) or +61 2 9327 8177 (Faxsimile) or humanethics@sydney.edu.au (Email).

This information sheet is for you to keep.
Allied Health in Outback Schools Program Study

PARTICIPANT INFORMATION STATEMENT – Rural and Metropolitan Academics

1. What is the study about?
You are invited to participate in a research study of the Allied Health in Outback Schools Program (AHOBSP). The AHOBSP has been operational since 2009 and sees Speech Pathology and Occupational Therapy students delivering services directly into pre and primary schools in far western NSW. Much of the research that has been undertaken around these programs has focused on the impact for universities. Little systemic research has been undertaken in Australia and internationally on the perceptions and experiences of community agencies involved in these programs as well as the experiences of health science students and supervising academics. This research study proposes to provide a voice for these key stakeholders within this literature. As an academic who has been involved in the AHOBSP your perceptions and experiences of the program are of great interest to us.

2. Who is carrying out the study?
The study is being conducted by Debra Jones, Director of Primary Health Care, Broken Hill University, Department of Rural Health and will contribute to the degree of Doctorate at The University of Sydney under the supervision of Professor Lindy McAllister, Faculty of Health Sciences, the University of Sydney.

Due to Debra’s senior role at the BHUHDRH interviews will be conducted by Dr Sue Kirby, BHUHDRH, to avoid any perceived bias or coercion in the interview and research process.

3. What does the study involve?
The study will involve a one-on-one interview with you that will be audio recorded. Interview questions will focus on your perceptions and experiences of the AHOBSP. Due to the nature of small communities and your unique position all endeavours will be taken to ensure your privacy and confidentiality. Your position will be described in the broadest terms of a Health Science Academic. You will also be supplied with a de-identified transcript of the interview for comment prior to reporting being undertaken to ensure your privacy is maintained.

The interview will take place at the Broken Hill University Department of Rural Health at a time and date to be negotiated with you.

4. How much time will the study take?
It is estimated that the focus group will take approximately 90 minutes to 2 hours. Additional time may be required should the researcher wish to further explore with you individually matters that you may raise during the interview process. This should take no more than 20 minutes if required and a date and time would be negotiated with you.
5. Can I withdraw from the study?
Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with the University of Sydney or the Broken Hill University Department of Rural Health.

You may stop the interview at any time if you do not wish to continue, the audio recording will be erased, and the information provided will not be included in the study.

6. Will anyone else know the results?
All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study will be submitted for publication, but individual participants will not be identifiable in such a report.

7. Will the study benefit me?
The study will provide us with greater insight into the impact of the A-HOEBP for communities and health science students. Although there may be no immediate benefit to you, future benefit may occur for other communities and students from the development of new approaches to programs and training. We cannot and do not guarantee or promise that you will receive any benefits from the study.

8. Can I tell other people about the study?
Yes, you are encouraged to tell other people about the study.

9. What if I require further information about the study or my involvement in it?
When you have read this information, Debra Jones will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Debra Jones, Director Primary Health Care, email: djones@quahs.health.nsw.gov.au or Ph: 08 80801239.

10. What if I have a complaint or any concerns?
Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8027 8178 (Telephone); +61 2 8027 8177 (Facsimile) or ce.humanethics@sydney.edu.au (Email).

This information sheet is for you to keep.
Allied Health in Outback Schools Study

SENIOR MANAGER - BHUDRH
PARTICIPANT INFORMATION STATEMENT

1. What is the study about?

You are invited to participate in a research study of the Allied Health in Outback Schools Program (AHOBSP). The AHOBSP has been operational since 2002 and sees Speech Pathology and Occupational Therapy students delivering services directly into pre and primary schools in far western NSW. Much of the research that has been undertaken around these programs has focused on the impact for universities. Little systemic research has been undertaken in Australia and internationally on the experiences of community agencies involved in these programs. This research study proposes to provide perspectives of community agencies, remotely located university staff and health science students involved in the AHOBSP. Your experiences of the program are of great interest to us.

2. Who is carrying out the study?

The study is being conducted by Debra Jones, Director of Primary Health Care, Broken Hill University Department of Rural Health, and will contribute to the degree of Doctorate at the University of Sydney under the supervision of Professor Lindy McAllister, Faculty of Health Sciences, the University of Sydney.

As Debra holds a senior position in your workplace the interview will be conducted by Dr Sue Kirby, Broken Hill University Department of Rural Health, to avoid any perceived bias or coercion during the interview and research process.

3. What does the study involve?

The study will involve a one-on-one interview with you that will be audio recorded. Interview questions will focus on your perceptions and experiences of the AHOBSP. Due to the nature of small communities and your unique position all endeavours will be taken to ensure your privacy and confidentiality.

Your position will be described in the broadest terms of a Senior Manager BHUDRH. You will also be supplied with a de-identifies transcript of the interview for comment prior to reporting being undertaken to ensure your privacy is maintained.

The interview will take place at the Broken Hill University Department of Rural Health at a time and date to be negotiated with you.
4. How much time will the study take?

It is estimated that the interview will take between 90 minutes to 2 hours. Additional time may be required should the researcher wish to further explore a comment you make during the interview process. This should take no more than 20 minutes if required and a date and time would be negotiated with you.

5. Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with the University of Sydney or the Broken Hill University Department of Rural Health.

You may stop the interview at any time if you do not wish to continue, the audio recording will be erased, and the information provided will not be included in the study.

6. Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants.

A report of the study will be submitted for publication and as part of a doctoral thesis but individual participants will not be identifiable in these documents.

7. Will the study benefit me?

The study will provide us with greater insight into the impact of the AHOSSP and service-learning programs for communities. Although there may be no immediate benefit to you, future benefit may occur from the development of new approaches to community programs. We cannot and do not guarantee or promise that you will receive any benefits from the study.

8. Can I tell other people about the study?

You are encouraged to tell other people about the study.

9. What if I require further information about the study or my involvement in it?

When you have read this information, Debra Jones will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Debra Jones, Director of Primary Health Care, Broken Hill University Department of Rural Health, on 08 80001239 or email djones@qwhs.health.nsw.gov.au.

10. What if I have a complaint or any concerns?

Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or humanethics@sydney.edu.au (Email).

This information sheet is for you to keep.
(1). What is the study about?

You are invited to participate in a research study of the Allied Health in Outback Schools Program (AHOPSP). The AHOPSP has been operational since 2009 and sees Speech Pathology and Occupational Therapy students delivering services directly into pre and primary schools in far western NSW. Much of the research that has been undertaken around these programs has focused on the impact for universities. Little systemic research has been undertaken in Australia and internationally on the experiences of community based agencies, remotely located university staff and participating health science students involved in these programs. This study aims to understand the impact for key stakeholders in the AHOPSP.

Your perceptions and experiences of the program are of great interest to us.

(2). Who is carrying out the study?

The study is being conducted by Debra Jones, Director of Primary Health Care, Broken Hill University Department of Rural Health, and will contribute to the degree of Doctorate at the University of Sydney under the supervision of Professor Lindy McAllister, Faculty of Health Sciences, The University of Sydney.

Due to Debra’s role in the program and professional relationship with you the interview will be conducted by Dr Sue Kirby, BHUDRH, to avoid any real or perceived bias or coercion associated with the interview and research process.

(3). What does the study involve?

The study will involve a one-on-one interview with you that will be audio recorded. Interview questions will focus on your experiences of the AHOPSP. Due to the nature of small communities and your unique position all endeavours will be taken to ensure your privacy and confidentiality. Your position will be described in the broadest terms of a Senior Manager NSW Department of Education and Communities. You will also be supplied with a de-identified transcript of the interview for comment prior to reporting being undertaken and to ensure all identifiable data has been removed.

The interview will take place at the Broken Hill University Department of Rural Health at a time and date to be negotiated with you.
(4). How much time will the study take?
It is estimated that the interview will take between 90 minutes to 2 hours. Additional time may be required should the researcher wish to further explore a comment you make during the interview process. This should take no more than 20 minutes if required and a date and time would be negotiated with you.

(5). Can I withdraw from the study?
Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with The University of Sydney or the Broken Hill University Department of Rural Health.

You may stop the interview at any time if you do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

(6). Will anyone else know the results?
All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants.

A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

(7). Will the study benefit me?
The study will provide us with greater insight into the impact of the AHOBS and service-learning programs for communities. Although there may be no immediate benefit to you, future benefit may occur from the development of new approaches to community programs and health student training.

We cannot and do not guarantee or promise that you will receive any benefits from the study.

(8). Can I tell other people about the study?
You are encouraged to tell other people about the study.

(9). What if I require further information about the study or my involvement in it?
When you have read this information, Debra Jones will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Debra Jones, Director Primary Health Care Broken Hill University Department of Rural Health The University of Sydney on email: djones@qwhs.health.nsw.gov.au or Ph: 08 80801239

(10). What if I have a complaint or any concerns?
Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 9351 8176 (Telephone); +61 2 9351 8177 (Facsimile) or research@sydney.edu.au (Email)

This information sheet is for you to keep.