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Editorial Correspondence should be addressed to:
Australian University Community Engagement Alliance Inc,
Southern Cross University
PO Box 157
LISMORE NSW 2480
Email: admin@aucea.org.au
Ph 02 6620 3503

Business Correspondence, including subscription enquiries should be addressed to:

Jan Strom
Executive Officer
AUCEA
Southern Cross University
PO Box 157
LISMORE NSW 2480

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6th Annual AUCEA Conference

Preface to Conference Proceedings

The 6th Annual National AUCEA Conference – Strategic Directions in Regional Engagement: Business, Industry and Community Partnership, hosted by the University of South Australia [UniSA], and held at the Centre for Regional Engagement [CRE] in Whyalla South Australia, provided a unique and strategic opportunity to focus on regional-based learning and engagement.

UniSA has a very strong commitment to education, research and the development of robust and sustainable regional communities. In prioritising regional engagement as a strategic direction, UniSA seeks to provide quality teaching, learning and scholarship in its regional locations and to undertake research endeavours with business, industry and community partners that reflect rural and regional priorities and interests.

Many of the exciting developments for Australia are occurring in regional areas – mining exploration and operations, agricultural developments and energy and transport initiatives. These projects cannot be successful in the longer term unless there are strong regional communities to provide the expertise and supporting services to underpin them.

The Centre for Regional Engagement [CRE] provides quality teaching, learning and scholarship in its regional locations in Whyalla and Mount Gambier, where teams of dedicated academic and professional staff who service the educational needs of these communities in the same way as the University services students studying at the metropolitan campuses.

Studying at a regional location provides a truly unique university experience and also has many social and economic benefits; many students are able to stay home, have the support of their families and are able to continue with, or gain, employment in the region.

UniSA, and the CRE, proudly hosted the 2009 AUCEA Conference in Whyalla; the breadth and quality of the papers and presentations ensured that all those that attended expanded their knowledge and understanding of ‘Strategic Directions in Regional Engagement’.

This conference which addressed five key themes, was also delighted to welcome our keynote Speaker, – Dr Rob Greenwood. Director, The Leslie Harris Centre of Regional Policy and Development, Memorial University of Newfoundland. Dr Rob Greenwood has taught, consulted, published and presented extensively on community economic and regional development, strategic economic planning, sectoral and cluster development and knowledge mobilization. His knowledge and enthusiasm and his experience from the Canadian region of Newfoundland brought international insights into the issues of regional engagement.



We are grateful to all participants for their collegiality and their scholarship. I wish also to thank most sincerely Prof Neil Otway, the Director of the CRE and Ms Sharron Jones, conference organiser and their team for their most effective and professional production of a memorable conference.

Professor Hilary Winchester
Pro Vice Chancellor: Participation and Engagement
University of South Australia

AUCEA 2009 Conference Themes

Parallel Session 1 – Experiential Learning, Teaching and Learning, Research

These sessions examined regional small business, volunteering by students through University placements and action research with community based volunteers, the integration of academic and industry experiences through short courses, and the contribution of primary school students to the on-line teaching process.

Parallel Session 2 – Community Engagement Practice, Networks, Social Inclusion and Indigenous Communities

Community Engagement practice and strategy and overcoming barriers, across a broad range of regional communities throughout Australia was the focus of parallel session 2.

Parallel Session 3 – Environment and Sustainability, Populations and Regions, Health Promotion, Business and Professions

Engaging in the learning process through university and community partnerships, identifying issues/barriers and seeking solutions, attracting and retaining professionals to regional areas, and public health covered 4 strands of parallel session 3.

Parallel Session 4 – Business, Economic Development & the Professions, Population & Regional Engagement

Themes for these sessions explored collaboration between regional small businesses and economic development, community based learning, professional networking, case studies, and community collaboration.

Parallel Session 5 – Partnerships, Networks & Social Inclusion, Health and Health Promotion

Partnerships, education and research with community, business and health and human service sectors.

Engaging Urban Aboriginal Communities in Research: Lessons learnt in the development of a school and community based safety intervention

Clapham, K⁽¹⁾, Khavarpour, F⁽²⁾, Bolt, R.⁽³⁾

(1) and (3), University of Wollongong; (2) The University of Sydney.

Abstract

Injury is a leading cause of death and disability in young people in Australia. Although the extent of injury to Indigenous children and youth is not well documented, available data shows that injury is one of the leading causes of death and illness among the Australian Indigenous population with the burden of injury over 2.8% greater than non- Indigenous population. Indigenous health policies and strategies emphasise the importance of collaboration and building partnership between Indigenous and non- Indigenous communities when dealing with complex health and safety issues. Current injury prevention research supports the view that education alone will not reduce injury risk, as a component of a multi-faceted programme education can be effective in reducing the risk of injury. Community-led approaches to child injury prevention can work well and are consistent with the community-based approaches at the foundation of many health promotion initiatives.

This paper draws on the experiences of an Indigenous led multidisciplinary research team which engaged the Aboriginal community in the development of a school and community based safety intervention (Safe Koori Kids Project) implemented in South-West Sydney between 2006 and 2008. Over a period of three years, 11 schools and community groups were involved in the design, development and implementation of the intervention of the programme. Results from pre-post testing indicated that the school based, culturally affirming, safety intervention had a positive impact on the safety knowledge and attitudes of primary school children.

The paper examines some of the theoretical, methodological and practical issues associated with 'engaging Aboriginal communities' in research. The paper explores the meaning of 'community engagement' within an Aboriginal research paradigm and compares this with other forms of community engagement and community participation found in the literature. The study shows that getting commitment, being realistic about the intended outcomes, clear expectations, willing to compromise and be flexible in dealing with various partners and target groups are important considerations in conducting a community based intervention. Such intervention requires intersectoral collaboration and partnerships between researchers and partners and must resonate with the target group, in this case Indigenous children and their families to reach the intended intervention goals. The involvement of partners and community

members in the development and implementation of projects needs close attention from the outset.

Introduction

The past three decades has seen an increasing focus on community participation in decision making across many fields, from health and education to politics and local government (AUQA 2005, Nelson et al 2008, Westfall et al 2009). This 'bottom up' approach prioritises the empowerment of 'lay' participants in programmes, services and projects. Community engagement is frequently associated with participatory action, action (Stringer 2008) or community health research (Green and Ottoson 1994) and, like other kinds of political activism, goes beyond the objective of advancement of knowledge towards an attempt to effect change in the real world (Loka Institute, 2002 cited in Savan 2004), Community engagement often involves the development of links between universities and community groups in applied research projects and the partnerships which emerge can serve a variety of research, policy, educational and action goals (Savan 2004). Collaborative projects between universities and communities can offer benefits to the community by enhancing the capacity of community groups to engage in long term advocacy, redefine issues in their own terms, and deliver significant resources to community over time (Savan 2004). Engaging disadvantaged or specific cultural groups in research poses particular challenges. Research has frequently focused on the less powerful in society; research participants have been viewed as 'subjects' in projects designed, executed and controlled by experts. A distrust of researchers and a questioning of their methods has replaced passive acceptance. There are still too few examples of mutually beneficial collaborations between university researchers and underserved communities.

This paper draws on the experiences of an Indigenous led multidisciplinary research team which explored factors surrounding injury to Aboriginal people in urban communities and engaged the Aboriginal community in the development of a school and community based safety program, implemented in South-West Sydney between 2006-8.

The paper examines some of the theoretical, methodological and practical issues associated with 'engaging communities' in research. It explores the meaning of 'community engagement' within an Aboriginal research paradigm and compares this with other forms of community engagement and community participation found in the literature. Recommendations for community engagement in Indigenous research are based on 'lessons learnt' from this study to date.

Background: Community based approaches to injury prevention

Child Injury is a leading cause of death, hospitalisation and permanent disability for children worldwide (WHO 2008). There is a strong association between injury types and the stage of life of a child, but socioeconomic factors such as poverty, the absence of protective factors, the

environment, and access to medical care, also impact on the likelihood of on injury survival and its long-term consequences (WHO 2008). Although child injury in high income countries such as Australia has been reduced over the past three decades through the implementation of successful multi-sectoral programs, legislation and advocacy, some children continue to suffer disproportionately from preventable injuries, notably males, those from low socio-economic backgrounds, rural and remote, and Indigenous children. The data on the extent of injury to Australian Indigenous children and youth is not well documented (ABS 2006, AIHW 2004, Cripps and Harrison 2008), however according to the available data, injury is one of the leading causes of death and illness among the Australian Indigenous population with the burden of injury more than 2.8% greater than the non-Indigenous population (Helps and Harrison 2004, Helps and Harrison 2006). Public health provides a useful model for addressing injury issues. The public health model involves the development, implementation and evaluation of interventions which are proven, or likely to be effective sustainable programmes (NPHP 2000). Public health research since the 1960s has underpinned vast health improvements in the developed world. It has done this through improving our knowledge of health problems by systematically collecting data; researching the underlying causes of health problems; exploring ways to prevent and reduce the severity the problem by designing, implementing, monitoring and evaluating appropriate interventions; implementing interventions across a range of settings; persuading policy-makers and decision; translating evidence from research into policies and practice; and promoting capacity building and cross-sectoral collaboration (WHO 2007, WHO 2004).

Public health practitioners and researchers using practical multi-level strategies have been able to achieve population-level improvements in health status in many health areas, including HIV/AIDS and neonatal care (Harvey 2009). Leading injury prevention researchers suggest lessons learnt from successful multisectoral interventions can be adapted and applied to the growing problem of injury and disability in children and adolescents (Harvey 2009). The growing global trend in injury has led to recent improvements in policy and political commitment to establishing injury prevention programmes and quality and appropriate care services in middle and low income countries. Less emphasis, however, is given to injury which occurs in disadvantaged sectors of high income countries.

Current injury prevention research supports the view that education alone cannot reduce injury risk, but as a component of a multi-faceted programme, education can be effective in reducing the risk of injury (WHO 2008; Klassen et al 2000). Policies and strategies developed at local and national levels emphasise the importance of collaboration and building partnership between Indigenous and non-Indigenous communities (WHO 2008). This is particularly the case when dealing with complex issues such as community safety.

Improving health status of a disadvantaged, marginalised and culturally distinct population, such as Australian Indigenous people, is complex and requires action to address not only immediate health issues and services but also the underlying determinants of health which are

outside the health sector; education, employment, housing and justice issues amongst others (Aboriginal & Torres Strait Islander Social Justice Commissioner 2005, Sagggers and Gray 2007, Aboriginal & Torres Strait Islander Social Justice Commissioner 2008). A public health approach which targets both immediate causes (proximal factors) and broader social and environmental influences (distal factors), therefore, needs to involve partnerships between many organisations and community groups. In this model community participation and empowerment are essential elements of prevention activities.

According to Klassen and colleagues, a community-based approach to injury prevention fits well with the public health priority of improving the health of population groups. Community engagement is pivotal to the success of such an approach.

For communities to maximize the potential benefit of this approach, they must become active participants in injury prevention efforts' (Klassen et al 2000)

One of the key challenges for researchers engaging in community based intervention research is achieving this active participation; in doing so they must respond appropriately to community needs and demands and while providing leadership and rigour in the research methods and processes. This challenge in relation to the Safe Koori Kids study will be discussed later in this paper.

Indigenous research and community engagement

In 2002 the NHMRC called for greater participation of Indigenous people in research through the development of their Indigenous health research agenda (NHMRC 2005). It promoted strategic research that benefits Indigenous people through improved health outcomes, and which included community consultation informing them of the aims, methods and outcomes of the research and also practical benefits such as skills transfer to Indigenous people. The new approach for the first time incorporated the Indigenous values reciprocity, respect, equity, responsibility, into ethical considerations for those conducting research with and/or within Indigenous communities (NHMRC 2005). These ideas have further developed and include partnerships as core components of research conducted in Indigenous communities.

'there has been a paradigm shift in Indigenous health research over the past 50 years, from researchers objectifying, to consulting, and more recently, collaborating with Indigenous peoples. The focus is now on partnerships and Indigenous-directed research. In practice, consultation with and negotiation with Aboriginal communities are continual and should achieve mutual understanding about the proposed research' (Wand and Eades 2008)

It is now well established in the literature that Indigenous research needs to reflect Indigenous contexts and world views (Wand & Eades 2008, Martin 2008; NHMRC 2006). Some research methods have been considered more compatible with an Indigenous paradigm than others. Indigenous researchers have favoured qualitative methods, focus groups, narrative and particularly participatory action research, because these methods build 'real' relationships

between researcher and participant rather than simple relationships solely for the purpose of data gathering'; qualitative methods minimise the objective stance with research 'subjects' that traditional research studies required. Indigenous researchers have argued that an 'Indigenist research paradigm involves not only sharing of information, building ideas and relationships in addition to data gathering and analysis but also an awareness of the 'locatedness' of Indigenous researchers (Nakata 2006; Martin 2008).

Researchers are still developing a better understanding of the ways in which standard public health approaches can be successfully applied to Indigenous health contexts; cultural, social and political factors need to be considered. For example, the term 'intervention', which in standard public health terminology 'intervention' refers to, 'an activity undertaken in order to improve the public's health'. (NPHP 2002) has become rather tainted in recent years and is seen as synonymous with the controversial Northern Territory Intervention, initiated by the conservative Howard Government in 2006, making its use in some Indigenous contexts unacceptable. Indigenous intervention is often associated with 'social' models of intervention: community based, building on capacity building and empowerment theories (Clapham et al 2007). Strategies developed are often quite broad based, in keeping with the multifaceted and multi-generational nature of health problems in Indigenous communities.

Intervention strategies in the Indigenous community need to go further than traditional longitudinal or intervention strategies and draw on ethnographic and other qualitative research that explores the major differences in history, local conditions, social structures and culture between Indigenous communities and the rest of the Australian population'. (Hamel et al 1999, p. 187).

As with any community development initiative, Indigenous research also requires lengthy timeframes to achieve intended outcomes; it is often difficult to demonstrate immediate improvements in a defined health target and to convey the importance of these models of intervention to policy-makers (Clapham et al 2007).

The Safe Koori Kids Project

The SKK intervention comprised the development and evaluation of a culturally acceptable and sustainable safety intervention targeting children, youth and their communities in South-West Sydney. South-West Sydney is on the periphery of Sydney's sprawling outer metropolis. This region was chosen for its large, diverse and young Indigenous population. The project combined public health prevention research and community based participatory 'empowerment' approaches. The project, funded by AIATSIS (Australian Institute of Aboriginal and Torres Strait Islander Studies) and the NHMRC (National Health and Medical Research Council), was implemented during 2006-8 following a two year period of extensive consultation with the local Indigenous community. The program involved primary school children, their teachers, parents, Aboriginal community members and service providers across a number of sectors. During the first phase, quantitative and qualitative data was collected on injury incidence and impact. The second phase involved the development of the intervention, an evaluation plan and dissemination plan. During the third phase the intervention was

implemented in schools and communities. A full programme evaluation and work on translation to policy is currently underway.

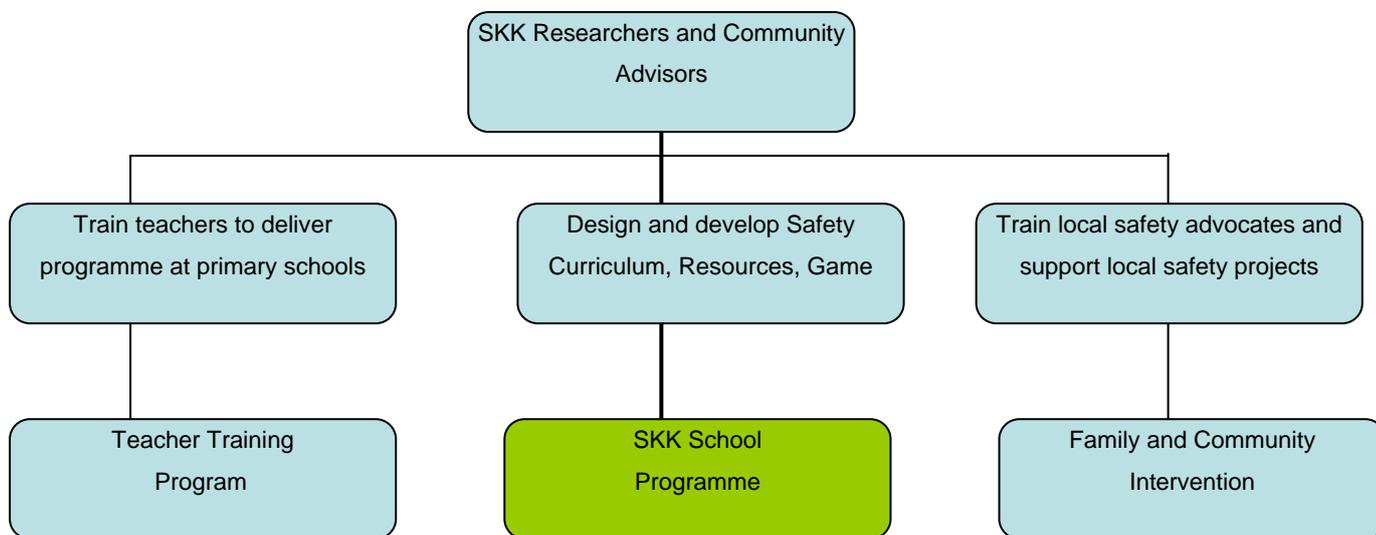
Interviews and focus groups were conducted with Aboriginal and non-Aboriginal service providers across a range of health and community sectors, teachers and school staff and Aboriginal community members. Participants were asked about injury and safety issues affecting Aboriginal children and youth, perceptions of the safety of their environment, possible intervention strategies for these identified safety issues and strategies for further engaging the local Indigenous community. The findings from the qualitative data collection further informed the development of the intervention and the ongoing direction of the research. Based on the analysis of qualitative data and in collaboration with community partners, the researchers developed a module based programme to be implemented in local schools.

A broad range of risk factors were identified in the first phase of the project. At the community level they included: risky urban environments; unsafe playing areas; poor transport and communication; lack of recreational activities for children and youth; presence of drug dealers in local area; and the prevalence of racially related bullying in schools. At the family and individual level risk factors included: risky home environments; the impact of domestic violence on kids; lack of parental supervision; absence of responsible adults; high levels of risk taking by children and young people; high levels drug and alcohol use; kids taking on adult responsibilities; and the relative freedom available to Koori children.

Analysis of the qualitative data also revealed a number of important protective factors, including: Aboriginal peoples resilience, demonstrated by their capacity to 'survive'; a strong sense of connection to family and local Aboriginal community; culturally supportive Aboriginal staff in schools; the availability of a cultural room as a 'safe place' for Koori kids in some school; kids developing street smarts or toughness; older siblings.

The development of the intervention (see figure 1) consisted of the school-based intervention, teacher training workshops and a family and community intervention. Partnership with the Indigenous and non-Indigenous people across a range of government and non-government organisations were developed and sustained throughout the project.

Figure 1 Development of Intervention



Participating schools were selected on the basis of the number of Indigenous students in the school, formal support from the school and a formal expression of interest from local Indigenous communities to participate in the study. After extensive piloting in seven schools a pre-test post-test design was used to evaluate the effectiveness of the intervention in five schools each with high numbers of Indigenous enrolments. Twenty four teachers, 790 children and children’s parents and/or carers participated in the final phase of the study. After developing and writing the modules the research team embarked on the training of the teachers to run and evaluate the programme in these schools across one school term. An educational online game was developed, and funding provided for schools to visit local resources which promoted environmental safety and Indigenous knowledge, and included Indigenous elders educators.

Aboriginal educators from TAFE (Tertiary and Further Education) Colleges and first aid organisations were utilised to provide First Aid courses. Indigenous community members participated in the First Aid Safety Programme classes run by the local TAFE College at various stages of the programme. In the evaluation phase parents were asked to provide the research team with relevant information on their experience with the First Aid course. Members of the research team held monthly meetings with the members of the Indigenous community through local Aboriginal Corporation, and participated in the annual National Aborigines and Islanders Day Observance Committee [NAIDOC] week in Campbelltown. Throughout the project members of the local Aboriginal community were provided opportunities to raise concerns as well as opportunity for input into the direction of the research. Extensive consultation was conducted with Aboriginal organizations, advisory groups and networks. It was important to recognize the key Aboriginal organizations as well as the network of relationships which exist in any local area. For example, the Tharawal Aboriginal Medical Service, is a key Aboriginal community controlled health service provider in the area: a community ‘gate keeper’. Local Indigenous and

other organizations were called upon to provide necessary input into the design and development of the research and an Aboriginal Research Advisory Committee [ARAC] was established to provide input into the direction of the research and strategies to implement the initiatives. The project was led by an Indigenous researcher and employed Aboriginal research staff. Local resources were used whenever possible, for example an Aboriginal teacher was contracted to oversee the development of school programme.

A comprehensive dissemination plan was identified during the proposal phase of this study and was considered a key component of the research. The plan took into account the varied audiences for the project and used various media to reach these audiences following guidelines developed by Flinders University Primary Health Care Research and Information Service (PHCRIS 2003). Using this model, information was disseminated throughout all phases of the project using a variety of means: participation in local Indigenous forums; regular reports to local Aboriginal Corporations, including Aboriginal Education Consultative Group and various Indigenous consultative committees; websites; flyers including pamphlets for local community; factsheets for policy makers, service providers and organisations; and presentations and workshops for teachers and community groups in the local area. Results of the research were disseminated through various academic publications and conferences.

Community engagement and early dissemination of the project, its processes and results, were priorities for the researchers from the outset of the project. The monthly advisory meeting gave the Aboriginal community members a role in the decision-making process. To address the translation of the research into policy a Translation Task Group (TTG) was set up in the early stages of the project.

The Safe Koori Kids project employed Aboriginal staff, including a Research Fellow, Project Officer, and Research Assistants. Research team members attended weekly or bi-weekly meetings with key community stakeholders in Campbelltown, as well as frequent visits to the various schools in the study. The research team met with the Principals of the schools prior to and at the conclusion of the delivery of the school program.

Lessons learnt in engaging the community in research

From the early stages of schools and community engagement it was evident that the project planning process required clear and realistic expectations that could be achieved within a three year timeframe. Despite this understanding, one of the important lessons learnt from this project is that engaging community in research is a lengthy and unpredictable process. We also learnt that conducting a community based intervention contains various time consuming tasks including commitment from community, willingness to compromise and flexibility. However we also recognise the importance of treating interaction with partners and target groups opportunistically. Building partnerships was the most important aspects of working in and with Aboriginal communities. Early and ongoing dissemination of information about the

project in order to maintain relationships of trust with the local Aboriginal community was also important.

Despite the enthusiasm for new approaches which ethically engaging Indigenous communities in research (especially one that is beneficial to the communities they serve) there are many challenges to implementing such approaches. They include the ongoing awareness of, negative attitude towards, and suspicion of research by Indigenous community, criticism over the ethics and benefits of research and the cultural inappropriateness of research methodologies, and community concerns over the publication of negative reports resulting in community stigmatization.

There are a number of practical barriers to Indigenous community engagement, including access to participants and achieving participation, where there has been a prior lack of community engagement. This is particularly true of urban environments which lack social support. Time is required to develop trust relationships within the community, which may conflict with timelines and expectations in relation to funding bodies and other institution deadlines (the school term for example). It is important that the research and in particular, the researchers whom represent the research are recognized in the study area and that they build on existing services, skills and networks.

This can be done through consultation with Indigenous people in key positions within government, health, education and other fields. These Indigenous people also occupy the position 'community or cultural brokers' and they provide a valuable key service to the broader community bridging the gap between the Indigenous community and many external organizations that require 'access to the community'. Researchers also bridge the gap between research and community and are also required to bridge the gap between the personal and professional in regards to their priorities, assumptions, styles of communication, timeframes, budgets and even language. However, such people strongly risk burnout due to the pressures and inherent conflicts in this position. At an institutional level research is still limited and there is a need for policy support which allows for a broad range of research methods and design to answer research questions relevant to Indigenous communities.

Conclusion

Results emerging from pre-post testing indicate that the school based, culturally affirming, safety intervention had a positive impact on the safety knowledge and attitudes of primary school children. Importantly, the intervention went further than trying to change the safety behaviour of children and their parents; it promoted successful safety strategies in culturally acceptable ways and attempted to harness the resources of the local community around safety in a way which would empower, benefit and build on the existing community strengths of the participating communities.

Projects need to be realistic about the complexity of 'getting commitment' from the community. Building communication network through ongoing dialogue with the community members and enhancing their capacity through involvement in various aspects of the Project provided the community members an opportunity to engage and participate in the Project's decision making process. The Project involved Indigenous people in the community, local service providers and relied on the community's input in the development and running of the Project. But the sustainability of such work requires ongoing partnerships between researchers and community and must resonate with the target group, in this case Indigenous children and their families, to reach the intended intervention goals.

The positive results arising from the Safe Koori Kids study suggest that the project could be valuable if implemented in a wider range of settings. A broader study across rural and remote in addition to urban communities is planned. Child and youth safety is a priority for the Indigenous community but ensuring that tangible outcomes are achieved requires long term sustained effort.

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Community engagement produces new perspectives on placemaking

*Dr Ros Derrett OAM,
Southern Cross University, Australia*

Abstract

Storytelling brings together disparate data that can inform decision-making at all levels of government while engaging the community. The paper recognizes implications for policy and planning practices, community consultation, the co-production of knowledge and the roles a university can play in this process through an interdisciplinary approach as a collaborator, mediator and a site for independent critical analysis Onyx (2008:91). The stories told build on the issues and ideas generated by the values, interests and aspirations held by a host community. The oral tradition particularly offers a springboard to understanding change. It helps create space design that reflects personal meaning for people, encourages heightened community use and satisfies the expectations of residents and visitors that the amenity of riverside revitalization will enhance recreation and tourism potential, will be sustainable and reflect their heritage.

There are valuable learnings for urban, regional, community planning, community place-making and university engagement. Conversations between players in the development of a substantial civic infrastructure program provide a narrative that allows for analysis of patterns of stakeholder interaction. This reveals the complexity of social and cultural partnerships and their influence on planning practice and place management. The network of players involved, some formal, others informal, shape the research and decision-making, providing both bottom-up and top down responses to strategic initiatives through a variety of communication tools. Throgmorton's (1996) claim that planning can be thought of as a form of persuasive storytelling about the future is examined. He suggests that planners should tell future-oriented stories that help people imagine and create sustainable places.

One key player in the **Wilson's River Experience Walk** is a regional university that provides a number of services. These include story making workshops, public space use inventories, the friendly use of technology, site exploration and interpretation and engagement through creative approaches ensuring there is a lived and living memory of the local collective identity. This community visioning brokered a series of public interactions in communal riverbank spaces. The community participation was encouraged through documentation of oral history, shared food from diverse cultures and information sharing. Critical reflection, linking storytelling and planning, accommodating cultural differences, creating narrative knowledge and theoretical approaches to persuasive planning techniques like using images, designs and maps endows plans with qualities that other instruments of public policy often lack (Neuman, 1998:214).

By observing good practice, it is evident that the process of engaging with the community in diverse creative ways is unending. By giving public space a story shared by many requires attention to nuance in changing attitudes, needs and engagement strategies. Such practices can result not only in enhanced 'natural capital,' of a community, but also foster social capital (Krasny and Tidball, 2008). Theories of learning that view learning as a process that transforms both the learner and the socio-ecosystem through a series of positive feedback loops and resilience theory provide useful lens for understanding community responses to change in their environment.

Introduction

Universities can play a number of roles in generating new knowledge in communities through partnerships with local stakeholders. This is a significant form of university engagement as it is seen in contemporary higher education institutions in Australia and overseas that is attracting increased attention. This suggests that knowledge is socially constructed (Onyx, 2008:92). So, the production of knowledge now not only encompasses the traditional, scientific approach, but also focuses on knowledge that can be produced in the context of its application (Gibbons et al, 1994:4). This paper examines a community framework that has emerged around a substantial infrastructure project. It draws on the formal and informal networks to demonstrate the stories members of diverse interest groups within a community can make to the creation of knowledge. The particular perspectives garnered from having a university in the mix makes a case of community empowerment in decision making that ultimately enriches local lives and reaches visitors with this shared heritage.

The stories elicited through a series of engagement activities encouraged residents to feel empowered to participate in their own development. This approach is often represented in social capital research (Cox, 1995; Onyx, 2008) where merit is seen in encouraging a bottom up approach to practical projects. The story sharing allowed links to be established within and between community members; embedded connections between professional and lay networks and generally enhanced the multiple stakeholder partnerships that the regional university had sought to develop in recent years. The perspective of each participant was respected and each contribution enriched the narrative that was transformed into accessible formats that dispersed the knowledge. The university affected the roles of broker and mediator.

Through an interdisciplinary approach as a collaborator, mediator and a site for independent critical analysis Onyx (2008:91) the university played a dynamic role. The stories told build on the issues and ideas generated by the values, interests and aspirations held by a host community. The oral tradition particularly offers a springboard to understanding change. It helps create space design that reflects personal meaning for people, encourages heightened community use and satisfies the expectations of residents and visitors that the amenity of riverside revitalization will enhance recreation and tourism potential, will be sustainable and reflect their heritage.

This experience sits well within the growing literature on the scholarship of engagement Boyer (1991, 1996) that refers to the use of university-community partnerships as foundation for research and teaching activities. Boyer and others (Powell, 2007) recognize the importance of engaged scholarship to underpin important research and student learning outcomes as a university's core business. Wessell (2008) and Bowen (2005:4 – 7) address different forms of enhanced student learning for example that encourages engagement with the learning process (or active learning); engagement with the object of study (or experiential learning); engagement with contexts (or multidisciplinary learning) and engagement with social and civic contexts (also known as community engagement). Wessell believes that oral history provides an important tool for engaging students with the learning process, objects of study, the context and community in which we live and the human condition.

University Engagement

By observing good practice, it is evident that the process of engaging with the community in diverse ways is unending. By giving public space a story shared by many requires attention to nuance in changing attitudes, needs and engagement strategies. Such practices can result not only in enhanced 'natural capital,' of a community, but also foster social capital (Krasny and Tidball, 2008). Theories of learning that view learning as a process that transforms both the learner and the socio-ecosystem through a series of positive feedback loops and resilience theory provide useful lens for understanding community responses to change in their environment. Boyer (1996) suggests the scholarship of engagement offers a balance of four general areas of scholarship: discovery, integration of knowledge, teaching, and service. The scholarship of sharing knowledge recognizes the communal nature of scholarship and also recognizes other audiences for scholarship than the scholar's peers. The recent audit of engagement activity at Southern Cross University clearly demonstrates colleagues and units exploring these dimensions in their practice.

This paper draws attention to two aspects of university engagement with a riverbank development. One is an **oral history exercise** and another is the design and delivery of **interpretative heritage signage** attributed to human and natural heritage and incorporated into a specific riverside location specifically for tourism purposes and resident recreation. Each deserves reflection as the knowledge generated and the perspectives shared inform the transformation of a space into a place embraced by broad swathes of the host community.

The university engagement sought to contribute to public policy by embedding creativity in the planning context. The University was keen to ensure that their engagement was not viewed as a one-way flow of knowledge to external partners, but that it became an opportunity to create new knowledge from research questions stimulated by external relationships. As Powell (2006) suggests through European experience that there were complementary networks to achieve goals in three spheres,

Creative partnerships: between higher education institutions (HEIs) and their external stakeholders. *This network focuses on ways in which HEIs can improve their creative potential and innovative output by involving stakeholder groups in the creative development process of products and services. It explores the development of creative lifelong learning provision, research partnership with industry and the impact of cultural activities on the creativity of local communities.*

Creative learners: Innovation in teaching and learning. *This network is exploring the possible ways in which creativity can be fostered through the teaching process. In addition, although the arts have been seen as the creative field par excellence, little attention has been paid to their contribution to the overall creative potential of HEIs. This network is also considering how the arts could contribute to scientific and technical education and will identify good practices in the field.*

Creative HEIs: structures and leadership. *The network is focusing upon the internal environment of HEI and the factors that can boost creativity, particularly those issues that bear directly on academic enterprise, such as internal structures, leadership and group dynamics (2006:6).*

The Southern Cross University preparation for involvement with the series of story sites reflects a framework identified by Powell (2006), in the *Thematic Questioning Framework*, that addresses the University's engagement agenda:

1. What is truly creative in the project (not just worthwhile and relevant but developing new opportunities in a unique and innovative way)?
2. Who are the major players/actors in the relationship between you and your external city/region and what is their role?
3. What are the indicators of creative success, critical success factors that enable to determine the quality, range and success of your creative outreach projects?
4. How have you built the necessary capacities for successful outreach?
5. What has hindered you (internal and external) in your developments and what actions have you taken to overcome these obstacles?
6. Can you include partner or client endorsement in your case studies?

The following observations explore the relationships between the project's stakeholders and examines the particular elements the university contributed in two key aspects of the riverbank redevelopment.

Wilson's River Redevelopment Project

Standing on the banks of Wilson's River today, it is hard to imagine the hive of activity and roaring trade that this sleepy, meandering river once supported. It was once the lifeblood of the area and still is to the people of Widjabal Country. But with the river trade a distant memory and its propensity for periodic flooding a harsh reality, the city that grew up beside the Wilson's River eventually turned its back on it.

The Wilson's River Redevelopment Project has embraced the river as central to Lismore's history, culture and recreation and is creating an outdoor museum with four ongoing themes: recreation, environment, art and history.

It is a long-term project (15 to 20 years), based on a Strategic Plan developed in consultation with the community and adopted by Lismore City Council. It will reconnect residents and visitors to the Wilson's River that runs through the heart of the city of Lismore (www.lismore.nsw.gov.au/cmst/lcc002/lp.asp?cat=280).



Oral tradition and sense of place

'Conversations on the River' was an event organised by Southern Cross University as a public consultation and a research tool. The community was invited to celebrate, share and record stories about the Wilson's River and its upstream tributaries. In and of itself, the exchange was valuable in getting a large group of people down to the river and showcasing work that has been done over the years by the local Land Care Group and the Council. For many people it was an opportunity to see Lismore from the river for the first time. Hospitality was a key consideration. Engaging the community is based on a reciprocal relationship – serving the community while achieving academic goals. Free food and entertainment, boat rides and music were arranged. The food was provided by an Indigenous business, Gunnawannabe. Bunya nut damper and home-made jam was a good symbol of what was being attempted, an informal gathering with serious and long term implications (Wessell, 2008).



'*Conversations on the river*' was essentially a social event. This is not to diminish its significance for understanding how individuals live in history. Interviews were conducted with interested attendees of the event. There is material in the interviews that demonstrate historical processes and change, links between local history and national and international developments. But the intention was for the event to be convivial, in the historical sense of this word, as a living together, from the Latin *con* and *vivo*. Community oral history requires a long-term commitment. Eating and drinking is one of the ways we establish and maintain relationships and it is an important way of reciprocating the generosity of people willing to share their stories with the public. Acknowledging this also meant that the emphasis shifted from the research outcome to strengthening the university-community partnership as a longer-term goal (Wessell, 2008). This offered a major contribution to the co-production of knowledge that informed forward planning for the riverbank precinct.

Students were involved in recording the conversations, which provided practical experience of oral history and a means to bring teaching and scholarship together. Engagement in the local community can provide opportunities for more intense and more personal engagement with learning than less accessible objects of study (Nystrom, 2002; Wessell 2008). Staff and students situated themselves in local debates and history with a focus on everyday life in the shared geographical places and added a civic dimension to the learning experience. The outputs of the conversations were recorded for use by the local historical society, the University archive, used in media promotion and incorporated in decision-making by site planners.



'Who is telling whose story? This is the question which must be asked of most colonial and noncolonial representation' (Langton, 1996). Langton raises an important dimension to the case under scrutiny as there was a deliberate focus on the stories to be related by local Indigenous citizens, especially those of the local Widjabel tribe of the Bunjalung nation. Many elders came forward. Many elders of the European settlers came too.

I was born in Lismore and I take in interest in activities especially on the river. It was our playground when we were growing up, a place where we learned to swim and all those things, Neville Collins, 2007.

Everything seemed to involve the river because you couldn't get to anywhere social unless you went across the river and so we just had to row ourselves across if we wanted to be involved in anything really. So that's what we did. It was really a part of our life. There was no way you could avoid it. We were going across every day. If visitors came they came to the other side of the river and just called "Cooee" and we had to row across and get them and bring them over, and after the visit was over, row them back again. They'd get in the car and tootle off. It became a very very great part of our life really, Grace Moses, 2007.

Memories of the river: I used to watch as a boy I used to watch the steam, the cream boats coming in and Foley's used to have a cream shute that the butter was put on the shute and straight down on the shute down to the cream boat and they used to load the butter that way. That's going back in the late 20s of course. We've seen a lot of changes round here, Leo Collins, 2007.

The vibrant activity on the river is still a living memory for many of the older residents of the town.

There was always something going on on the river in those days. We had the ocean going steamers that went to Sydney and then there were the ferry-boats that ended up down the river – I couldn't resist talking about them. Then there was the mill tugs carting the cane from down river to the mill to be crushed. They were the biggest steam tug they had. They'd take up to ten to a dozen punts behind them. That was the freeway, George Lord, 2007.

The river was a freeway, George Lord explains, a defining feature of commercial life in Lismore. But the river also prompts discussion about the nuances of daily experience; it was a force that shaped social life, cultural experience and interactions. Interest was raised in mechanisms that

can unlock access to the river's edge in contemporary recreation, through events, plantings of endemic vegetation and interpretation of past uses of the river. Industry and entertainment also overlapped in the past and it was invoked again for planners to address. These memories of the cream boats bear this out:

Catch the old cream boat from down from the rowing club, and um, you know, a couple of hundred yards down the river or so. There you used to jump off or dive off I 'spose in the river and swim back up to the rowing club. Sometimes you couldn't make it and you used to pull in down here and walk back up. Especially if the tide's going out you know it's pretty hard swimming against the tide. Michael Roberts, 2007.

[My mother] travelled to the boarding school in Lismore by the cream boat. She come up on Monday and went back on Friday afternoon boarded in Lismore through the week. That particular boat had a piano on the top deck. They had a sing-song all the way down to Wyrallah. So, yeah, I mean it was a real mode of transport. But that would be going back into the late '20s early '30s. So that's going back a while, but certainly she always spoke about the sing-song around the piano going home on Friday afternoon, Alan Hoskins, 2007.

And we had to carry the cream, in cans, down to the riverbank, and the boat would pull in and pick the cream cans up and take them off. When we first went there our cream went to Coraki. The factory was still opened at Coraki. The beautiful Arakui, which was a bigger boat, was a steamboat. It was a very pretty boat too. It had a deck and an upper deck. The Captain was up on top. He steered the boat you know. But also on that top deck there was lots of chairs and things and they would take you for the day trip almost down to Woodburn, not quite, and back, on that boat. It was a delightful trip. You could get hot water for your tea or anything like that you wanted. You took your sandwiches with you. And down on the lower deck there was a sort of lounge in there and because it's a steam boat too it was silent. The motors were not pumping or anything they would just come with a sort of hiss and come in and gracefully pick up your cream and out again and away it would go. It was pretty. And silent. It was the biggest of the boats that would pick up cream and the nicest, Grace Moses, 2007.



Holding an oral history event on the river stimulated a range of stories and experiences that show how dynamic the relationship is between people and the environment. The value of engaging with local people about the river was recognised as of equal significance to the inquiry being undertaken. Communication is certainly not the same as community, but places can connect us with the past through their role as a repository for meanings and memories. It

is worth noting, although it's an obvious point, how significant conversations are to our knowledge. In a public site, people can share stories with each other that are not recorded. The acknowledgement and celebration of these is a significant intrinsic benefit for people involved.

While there was reflection of the past represented in the interviews, much was made of how the riverside site could become more connected to residents and visitors into the future. Such material was of interest to the Riverbank Development Project steering committee and City Council who have integrated suggestions into planning and policy development into the future. Suggestions were aligned to existing strategic and master planning tools and feedback was subsequently delivered via the project website for interested parties. Participants expressed interest in contributing to the design and policy generation for the enhanced amenity of the location, based on the spirit of nostalgia that had underpinned the conversation consultation.

Place-making

How people see and feel about their immediate environment informs the sort of definitions planning practitioners, community development workers and local government need to come to terms with. Such statements as "...making Public Space a Living Space," "...recognizing that cities are not just a collection of people but can be places of beauty and innovation" "...feeling like you belong here," "...thoughtful design," "...designing a public space that can be used by the community as a meeting place for communication, fun, relaxation, bonding, civic involvement, have been recorded in surveys

(http://www.pps.org/info/placemakingtools/casesforplaces/placemaking_is, 2008)

Contemporary regional Australia replicates what is recognized in the broader nation of immigrants and settlers. Waves of migration represent the identities and belonging in particular landscapes. Sometimes these physical landscapes are strange and inhospitable and the modification that takes places affects the behaviours of residents over time. The hosting of community celebrations provides another function that acknowledges how residents convert physical boundaries to satisfy social and cultural needs. Tourism, for example, is typified in some respects as the experience and consumption of place (Meethan, 1995). For places to achieve distinctiveness and status as places to go, or to be seen in, they have to be created. Organisers of planned events in the public domain can offer tangible and intangible experiences to connect people to places. The story telling, oral and documented in archives contributes much to how feel about their place and to forward thinking to engage new people to such places regarded positively by older residents. The views of younger people need to be canvassed as well. What do they want from specific locations and to that end planners have included broad pathways, a site specific skate park, terraced lawns for outdoor entertainments like movies and music events.

In fact, definitions of a sense of place (Stegner cited in Sandford, 1996) emphasise elements such as an appreciation of unique geography, the remembered and celebrated history and how

that is carried forward into contemporary society and a cast of characters. This can be applied to the relationship of residents and visitors to community festivals in public spaces as unique experiences are realised. Individual and collective connections with leisure experiences can demonstrate what Crouch (1999:257) describes as one way in which people practice space. He suggests 'space is used to transform the way of making sense of being somewhere and doing something chosen on one's own terms' (ibid 266). Festivals can thus assist in making sense of where people are through an understanding of the stories and unseen aspects of life in communities. Crouch (1999:260) notes the importance of photography in studying social engagement in particular places as a means of making sense of space.

By locating a sense of belonging in soil (place) and soul (McIntosh, 1999:15), the waves of migration being experienced globally contribute to the diversity and prosperity of their adopted place and community. The dual identity (from whence new settlers came and their adoptive place) underpins what is named multiculturalism in Australia and is regarded as hospitality, a core value in regional communities.

Lofgren (1989:183) claims that the same place, the same piece of land is looked upon with different eyes by different generations. Both he and Crang (1998) connect culture to the landscape in differing ways for different people. Each person makes sense independently or in groups, while Crang suggests (1998:14 - 15) that landscape implies that the environment is being collectively moulded in an ongoing way. This suggests that the landscape, the place in which residents and visitors find themselves, comes to reflect the prevailing beliefs, practices and technologies of culture and community.

This reflects the emphasis Tuan (1974) suggests that while places can exhibit spirit or personality, it is only humans who can have a sense of place. He suggests that people demonstrate their sense of place when they apply their moral and aesthetic discernment to sites and locations (Tuan, 1974; Stewart et al, 1998). What emerges, too, is that a sense of place varies for individuals over time and exposure to sites. If this can happen for residents through prolonged attachment, what is equally worthy of exploration is the experience of people visiting a place briefly for a festival, for example, and being exposed to the physical appeal and impact on their leisure experience. Their appreciation of place can become a substantial influence on repeat visitation.

Ferris (1996) notes how memory and sense of place shape individuals. The heritage quotient represented in the Lismore riverbank example reflects his concern for how people can devalue the places they are from by abandoning old worlds, attempting to achieve success - often elsewhere, by making their mark on society and by separating themselves from their roots. He suggests place is a family affair. This emphasises the notion of place being a social construct; that it isn't an extra associated only with taste, touch, sound and sight, but that it is something people can't afford to be without. People bring their 'there', 'here'. People strive to interpret place through what exists there for them.

Landry (2000:37) suggests quality of life is strongly tied to place in environmental terms and more personal, subjective connections to a location. Place attachment is seen as a centre of felt value. Much more than an environment, it provides meaning in life and is a fundamental need and is enhanced when people are involved in the shaping of places. This suggests a sense of place is about regional detail. Meaning is embedded in places, through local heritage, character, values and beliefs, and is essential in developing a sense and understanding of place and community identity and belonging. These need to be addressed by policy makers and planners as they settle to implement change to lived landscapes.

Place informing policy, planning and implementation

Placemaking is seen in contemporary terms as a tool to support local economies. A principal approach is to attract tourism (PPS, 2008). How to craft a visitor experience is a very complex process. Weaver (2008:20) suggests that to understand the visitor experience, you have to take a giant step back from your site, as if you were viewing the earth from the moon. This provides an opportunity to examine the details that can be overlooked when designers and developers of concept, of content and scale are too close to its evolution and delivery. The other dimension to consider is stimulating what happens *inside* the visitor and care needs to be taken with the intellectual and emotional journey being offered. Such interaction with a site can include environments for acceptable, comfortable social interaction, space and permission for active participation, challenging, new, or unusual experiences, the potential to learn from the amenities included in the landscape and a sense of doing something worthwhile (Weaver 2008: 26).

In creating a process that gives space a story that can be shared by local residents and visitors diverse cultural opportunities open up a layered approach to knowledge sharing. By encouraging use by community agencies, conducting events that allow stories to be shared, residents can voluntarily contribute to building a coherent narrative. While the stimulus can be a reflection on heritage the concept of a living museum offers visitors a chance to become aware of the importance of open spaces and increases responsible use of these (http://www.pps.org/info/placemakingtools/casesforplaces/10_benefits). Issues associated with occupational health and safety and duty of care are taken into consideration as suggestions from stakeholders are incorporated into ongoing plans.

Precinct activities can make for lively public destinations that keep people coming back. To ensure that the inherently public asset, like a riverbank precinct responds to the values, attitudes and aspirations of residents community engagement, and, ultimately, local ownership and pride need to be addressed. Consultation strategies that encourage regular ongoing interaction between residents and developers (often local government) provides a framework that can translate enthusiastic dreams into multiple destinations of aesthetic and practical merit. This engages visitors with diverse pursuits that can change over time. There needs to be

seamless connection between elements of the site to ensure experiences are enhanced rather than diminished, as can occur when sites are artificially divided.

Access also means that people can actually interact with the water in many ways - from swimming or fishing, dining or picnicking dockside, boarding boats or feeding the ducks (PPS, 2008). Ongoing management is essential to maintain waterfronts and sustain a diverse variety of activities and events throughout the year. Fried (2008) suggests many waterfronts become battlegrounds as various interests clash over plans for these valuable public lands. Often the amount of land available for development is small and interest intense among many parties, so sufficient public involvement is required to empower the communities who actually have the most at stake. The future of the city's waterfront may well hinge on whether a coherent process of public engagement can emerge from the maze of overlapping interests and jurisdictions. The engagement facilitated by the university allowed for substantial input into the design and delivering of innovative amenities along the riverbank.

Community stakeholders

The Northern Rivers region of NSW has experienced the intensity of the shift to a sea change lifestyle since the 1970s. The regional centre of Lismore is 50 minutes inland from one of the most dynamic and conflicted of the sea change centres, Byron Bay. It is therefore in the heart of a region which has seen great demographic transformation in the last 30 years, as internal migration from southern states to the warm north coast have brought alternative lifestyles, hobby farmers, retirees and young city families into the rural countryside with a large indigenous population of traditional custodians (Kijas & Lane, 2006).

Citizen participation in such complex issues as the quality of the environment, urban design, and economic development often brings with it suspicion of government, anger between stakeholders, and power plays by many - as well as appeals to rational argument. One project that has dealt with the diverse stakeholders inherent in such a dynamic regional environment is the Wilson's River Redevelopment Project. This project allowed a cross section of the community to engage through a contribution of storytelling, artefact sharing and feedback as an artistic feature was developed.

Lismore City Council's Wilson's River Redevelopment Project provides visitors and residents with an opportunity to share in cultural, recreational and historical aspects of the city. The ***Wilson's River Experience Walk*** is one important aspect of this Project.

A major contribution by academics and students came in the form of the research, design and implementation of huge colourful interpretive Story Site panels on the riverbank. They measure 3.6 metres by 1.2 metres each. They tell the integrated story of the settlement of the Northern Rivers region in an innovative project that showcases the community's heritage. The public recreational space currently being redeveloped transforms 'living history' into a 'class room' for

residents and visitors. The billboard-sized installations provide verbal and visual snapshots of the history of diverse European and Asian settlement of the region and also depict the Bundjalung stories of the Dreamtime, celebrate Widjabul culture and paint a picture of the Indigenous lifestyle and how it interwove with the emerging European settlements into the future.

Co production of knowledge



The material that underpinned the historian's text for the panels was gathered from the archive of the local historical society, interviews with specific interest groups and individuals, site visits to places of historical importance, artefacts in public and private collections and official documents in the public and private domain. An active team, with solid community links, co-ordinated the collection of the data collated and a reference group of regional authorities from the Indigenous and heritage sectors monitored the development of the project. Items that could contribute to the Council's planning and design of the site were referred on. Such an example was the knowledge of endemic vegetation and Indigenous food production that manifested itself as the Lyle Roberts Memorial bush garden.

Voice of the Widjabal Consultant

The river is very important to the Widjabal people – as Roy Gordon says 'it is our friend'. Traditionally, the information presented was learned through daily living and family connections, from generation to generation. It was Roy's priority that Widjabal understanding, history and knowledge were communicated clearly to the general public and in particular to the local indigenous youth (Lane, 2007).

Voice of the artist

Leonie Lane, the digital arts designer engaged with the projects, suggests that 'Place' and 'reinventions of place' are recognised as contemporary developments in visual arts practice in the traditional genre of 'landscape' art-making. Ideas about the development of personal and cultural identity are tied into notions of 'place' (Schama 1996). Rivers are evocative places,

powerful metaphors - a stage for action as well as reverie. They provide both a parallel to narrative flow and reveal a 'place' beyond civic control at the same time as a space that promotes settlement and social engagement. A river can evoke multilayered investigations (Lambert 2000). *Our river systems, more than any other aspect of our landscape, display the interplay between people and the environment. Not only do they describe the state of health of our environment, they display the culture, identity and histories of our communities. The river's identity is a composite of shifting environmental influences and cultural associations. As they carve their way through various terrains, they inscribe both subtle and sudden change to place at specific moments in time. Simultaneously, a river can convey a sense of timelessness.*

I worked closely with writer/historian, Jo Kijas to produce the text, visual content and overall design of the site. We have followed each other's process - words needing images, imagery suggesting more words... Common ground determined that the overall idea was to produce a visually stunning, multilayered representation of Lismore's social history inclusive of the many perspectives of such a diverse place.

Valuable experience has been gained through listening and negotiating with the interest groups, who came to the table with their own needs, baggage and, in some cases, grudges. Trust in some cases was hard earned through much listening, patience and persistence. Despite all, strong relationships with community members have developed over the past nine months, ensuring a positive momentum for future work (Lane, 2007).

The experience gained has been a mutually rich and challenging experience across all of these groups but no more so than with the Widjabal people. The process involved and the outcome has given me an extremely rewarding yet demanding, creative experience. For me, the challenge of imaging Widjabal lore has caused me to question my own preconceptions of image representation and a 'white fellas' design process. My role as designer became one of translator when engaging with these themes (Langton, 1996).

The use of early white contact photos carried the weight of indigenous stereotype while white interpretations of language area maps described static boundaries that didn't necessarily equate with how Widjabal people saw their boundaries. It became apparent that the photomontage strategy employed in the design of the other panels was not appropriate to the Widjabal panel. Maintaining the site's stylistic theme was essential to the project as a whole to impress the inclusive theme. Roy mapped his ideas as systematic diagrams of seasonal flow and climactic change and its relation to the river and its animals. Appropriate totemic plants and animals were selected and drawn by Sheldon. I reworked these in Illustrator very conscious of how different they were from any indigenous drawing I had seen in other parts of Australia. Roy and I discussed spatial representation and how the Widjabal narrative could look. Paramount to the success of this story telling was in the use of language and drawing styles. It was imperative to describe their world as it was and as it is. Many drafts were created with much consultation, questioning and reworking...(Lane, 2007).

Community engagement is essentially about the development of mutually supportive relationships. In the case of projects involving students and members of the community, equal consideration must be given to the needs, goals and responsibilities of both groups. People participate in interviews for their own purpose, and acknowledging this has long been recognised as good practice. Student's time is also limited and expectations must be clarified early in the project. The opportunity to make a contribution to local knowledge and their

community may be their motivation in becoming involved, but ensuring that this meets the objectives of their studies and sits within their own timeframe is a responsibility of teachers. Semester timetables don't always correspond with research projects, local government calendars or community culture. Having a clear purpose, a compatibility of goals and effective communication between the people involved develops the relationships involved in the project. For it to be mutually satisfying recognising people's different influences, interests and expectations can help maintain the relationship

Conclusion

Community engagement is now one of the core responsibilities of universities in Australia, integral to the design and delivery of teaching and learning and research. The scholarship of engagement suggested by Boyer (1996: 20) creates a special climate in which the academic and civic cultures communicate more continuously and more creatively with each other, helping to enlarge what anthropologist Clifford Geertz describes as the universe of human discourse and enriching the quality of life for all. This paper identifies such a project that uncovers layers of meaning in one culture or more culture and translates them into accessible media for broad dissemination.

Boyer (1990; 1996; Ramaley, 2004; Schon, 1995) described engaged scholarship as an approach that melds:

- The scholarship of discovery, which contributes to the search for new knowledge, the pursuit of inquiry, and the intellectual climate of universities.
- The scholarship of integration, which makes connections across disciplines, places specialized knowledge in larger contexts such as communities, and advances knowledge through synthesis.
- The scholarship of application through which scholars ask how knowledge can be applied to public problems and issues, address individual and societal needs, and use societal realities to test, inspire, and challenge theory.
- The scholarship of teaching, which includes not only transmitting knowledge, but also transforming and extending it beyond the university walls (Gibson, 2005).

In situating exercises such as this case study, Gibson also cites Holland (2005a:7) who recognises general components of engaged scholarship to include many sources of distributed knowledge; being based on partnerships; is shaped by multiple perspectives and expectations; deals with difficult and evolving questions – complex issues that may shift constantly; is long term, both effort and impact, often with episodic bursts of progress; requires diverse strategies and approaches; and crosses disciplinary lines – a challenge for institutions organized around disciplines.

The style of engagement outlined in this paper recognises practices that can facilitate practical and timely participation in the planning processes. In so doing, there are opportunities to

demonstrate creativity in knowledge creation by encouraging story telling by integrating interpretation and theoretical insights to respond to community perspectives on public places they hold dear.

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E-commerce in Regional Small Businesses: A Service Learning Approach

Dr Nina Evans,

School of Computer and Information Science, University of South Australia

Dr Janet Sawyer,

Centre for Regional Engagement, University of South Australia

Abstract

The Internet offers opportunities for electronic communication and trading in the global market place and as such it can provide substantial benefits to a business. Regional small businesses often do not realise the value of using the Internet and e-commerce and are reluctant to use the Internet or adopt technology that might enhance their operations. The rate of adoption of this technology by small and medium-sized enterprises (SMEs) in Australia has also been slower than anticipated. According to the Whyalla Economic Development Board (WEDB) many small businesses in the Whyalla region in South Australia have been losing market share and there is a need to provide information to raise awareness of the advantages of using the Internet and to provide practical assistance in the design, implementation and maintenance of a web presence. The University of South Australia (UniSA) can play an important role to determine and increase the awareness and technical know-how of small businesses in regional South Australia through research and student service learning projects. The university is currently optimising the capabilities and use of the Internet in two retail businesses by developing a web presence and empowering them to maintain their own web site. Students from the School of Computer and Information Science (CIS) at UniSA are executing service learning projects involving requirements specification, iterating through different prototypes, setting up a website, training and documentation.

Introduction

The phenomenon of the Internet has forced businesses and organisations to examine their existing business practices and adopt new methods of working. E-commerce has emerged as an important business strategy, providing substantial benefits to many businesses as it offers a range of services for electronic trading with both existing and potential customers (Shiels, McIvor & O'Reilly, 2003). According to the [Organisation for Economic Co-operation and Development](#) (OECD, 2001) definition, an e-commerce transaction consists of the sale or purchase of goods or services between businesses, households, individuals, governments and other public or private organisations, conducted over the Internet. The goods and services are ordered over the Internet, but the payment and the ultimate delivery may be completed either online or off line.

Smaller firms have been described as the 'mainstay' of national economies (Drew, 2003), a 'powerhouse of economic potential' (MacGregor & Vrazalic, 2006) and it is argued that small businesses might 'become an even more important engine' in the future (Tse and Soufani, 2003: 306). In Australia small to medium-sized enterprises (SMEs) are generally considered to be the 'backbone of the desert economy' (Desert Knowledge CRC, 2009) as they constitute approximately 95% of commercial organisations (Australian Bureau of Statistics, 2007).

Various authors (Chapman et al., 2003; Chau, 2003; Pease & Rowe, 2003; Fillis, Johannson & Wagner, 2004a; Laudon & Laudon, 2007) believe there is a link between the use of the Internet and small business success. The online environment is one of the very few places where small businesses are able to effectively compete with their bigger rivals. Hsieh and Lin (1998) comment that sites on the Internet are equal and small businesses can launch complex sales programs and implement effective globalisation strategies on the Internet just like the bigger companies. Increasingly the tools of e-commerce can enable electronic transactions to occur, but they can also transform internal systems and help build relationships with customers, suppliers, business partners and competitors by direct communication, sensitivity to customer needs, information dissemination, brand development, larger market penetration, added flexibility and reduced costs (Chau, 2003; Fillis, Johannson & Wagner, 2004a; Simpson & Docherty, 2004). The businesses can trade and receive payments non-stop and the business is always open; therefore customer and supplier satisfaction is improved.

Poon and Swatman (1999) developed a matrix of benefits of smaller firm e-business adoption. Short-term direct benefits include savings in communications costs and generation of revenues while short-term indirect benefits were potential business opportunities and marketing. Long-term direct benefits include the ability to secure returning customers and develop business partnerships while long-term indirect benefits include the transformation of the way in which business is carried out and the identification and implementation of new business initiatives. Matthews and Healy (2006) refer to the capabilities of internationalising even SMEs to open up international markets which changed the 'once slow and cumbersome process of advancing the firm's product into international markets' (Matthews & Healy, 2006: 1). In the long run this will create more social, economic and environmental prosperity for both the business and society (Haynes, 1998; Hearn, 2004).

Whyalla is an industrial city, with a population of approximately 23 000, located on the upper Spencer Gulf, South Australia. The city is currently undergoing considerable change due to developments in the mining and resources sector in the region and while small businesses in Whyalla can look forward to taking advantage of new opportunities, they also face a number of risks and challenges. Competition from large multi-national companies, enhancing the skills of their employees and attracting more customers are important challenges (Arndt, 2006). In accordance with the opinion of Pease and Rowe (2003) the competitive nature of business should force small firms to develop and sustain any possible source of advantage and

Castleman and Coulthard (2001) suggest that strategies required for the development of the Internet and e-commerce in regional areas should focus on SMEs.

The Internet and e-commerce in small businesses

Although access to the Internet is relatively inexpensive and readily available, smaller enterprises have been slow in using the Internet for electronic commerce. Managerial perceptions and attitudes are identified as specifically important to the adoption and implementation of technology in a small business, given that the owner/manager is the most important decision-maker in these businesses (Martin and Matlay, 2003; Spence & Rutherford, 2001; Sweeney, 2007). Condon (2004: 57) noted that some SME owner/managers lack the 'strategic mindset' that regards changes in the business environment as opportunities and a source of potential advantage, rather than as an additional burden on the firm.

A number of studies have focused on the use of the Internet in SMEs in regional Australia (Blackburn & Athayde, 2000; Darch & Lucas, 2002; Fillis, Johannson & Wagner, 2004b, 2000; Hearn et al., 2004; Lawson et al., 2003; Pease & Rowe, 2003; Ramsey, Ibbotson, Bell & Gray, 2003). They found that these businesses do not use the Internet to its full capacity due to a lack of awareness of the benefits and dynamics of the Internet; lack of IT expertise of managers and staff; lack of understanding and training of small business managers and employees to implement online solutions independently; poor knowledge of the Internet start-up process; technology 'phobia' amongst proprietors; cost of implementation; lack of time; lack of business opportunities; concern about security and privacy; lack of suitable software standards; lack of easily accessible, the availability and cost of advice and consultants; electronic authentication issues; and bandwidth capacity and infrastructure issues. Castleman and Coulthard (2001:38) indicate that regional towns and cities are characterised by a number of different social dynamics and that small businesses in these regions have marketing difficulties due to the lack of profile, logistical support difficulties. Regionally based businesses often find it difficult to break into urban markets because their location is often taken 'to indicate of inferiority by urban markets, regardless of the quality of their products'.

According to the Small Enterprise Telecommunications Centre (SETEL) 'simplification' and 'demystification' are required to address the fears and improve the acceptance of e-commerce. In communicating the virtues of e-commerce, the focus needs to be placed on the benefits to the business rather than the benefits of technology itself (Brown, 2002: 18). Simpson and Docherty (2004) refer to the need of owner/managers of SMEs for assistance as they often feel isolated and alone. It is useful to bring external experience into such a firm and provide impartial advice.

The information on websites in small businesses is often not up-to-date. Updating a website usually refers to the update of contents and not the actual layout or 'look and feel' of the website. In many cases firms lose the business of a potential customer due to incomplete

information. Paying a web development firm for each update is always a costly affair and business owners/managers often prefer to update their own sites, or allow their staff members to maintain different areas of the website. Due to this demand of staff being able to manage the contents, various Content Management Systems (CMS) have become available. The website developer would use a preferred CMS to develop the site and leave it to their clients for updating the site afterwards. Some advantages of using a CMS are that the business is no longer dependent on the web designers making to make changes, changes can be made any time they are needed, day or night, the technical details are handled by the CMS, allowing anyone to manage and update the site, multiple staff can keep the site up to date, the CMS ensures that all the pages are consistent in design, and will build all the menus and other navigation for the business. (Robertson, 2003).

However, using some of the readily available, feature-rich CMSs requires an understanding of the contents and the layout, which is normally more than the managers/owners would be able to do. Also most of the CMSs have further settings and menu items that confuses the not-so-technology-oriented staff who have to update the contents. The user will therefore have to go through a short training on how to update the contents, which is different in each CMS. For this a bottom-up approach can be used - the knowledge and experience within the business is evaluated and then a CMS is developed based on this experience, with minimum features so that the user is not confused with too many options. Only limited features are required, as a web developer can build most functionality into the code. The layout of website is defined in CSS and ASP files and hence is totally independent of the contents. When the user starts making changes, what they see is only the contents and nothing related to the layout or other settings, making the update process really easy (Robertson, 2003).

Collaborative Research on the needs of small businesses in Whyalla

The Whyalla Economic Development Board (WEDB) is a State government-funded organisation established for the purpose of 'strengthening the economic base of Whyalla' (WEDB, 2006: 4). Its mission is to 'facilitate business growth in Whyalla' and one of its objectives is to 'foster an enterprise culture by assisting small and medium businesses to prosper and expand' (WEDB, 2006: 5). The University of South Australia's positional statement is 'Educating professionals, creating and applying knowledge, engaging the community' (UniSA, 2008). The university therefore has an important responsibility to empower people.

Research was conducted during 2007 and 2008 by the Centre for Regional Engagement (CRE) at UniSA, in collaboration with the WEDB, to investigate the Internet usage by small retail and services businesses in the Whyalla region with the ultimate purpose of developing technologically aware and capable local businesses through support programs. The research aimed to:

- Investigate the current awareness, capability and commitment to the use of the Internet in these businesses and addressed issues such as the experience of managers and employees in using the Internet, whether the business has a web

presence as a means to increase market share and expand their operations and whether they use the Internet to buy, market and sell their products and services;

- Determine how e-commerce awareness, capability and commitment can be increased through active collaboration between the WEDB and the local university.

Both quantitative and qualitative research was conducted as part of an interventionist research project. Interventionist research means that the researcher directly intervenes in practice, usually as part of a mixed practitioner-academic team effort to change a current situation or solve a problem. Interventionist research implies an active engagement, but the practical involvement needs to lead to theoretical contributions in order to qualify as research instead of consulting. Interventionist research can involve 'weak intervention' and 'strong intervention' with the interventionist researcher as part of a joint team (Argyris, Putman & Smith, 1985; Jönsson & Lukka, 2005). The weak intervention used in this research project involved a low level of participation by the researcher through questioning and dialogue with small business owners to determine future intervention opportunities for the WEDB and the local university. The findings of this research provide useful evidence-based information to the WEDB and University as they develop plans for supporting small businesses in the region.

Potential research participants were identified from the WEDB database using the criteria that the business is located in Whyalla, is from the retail and services sector and has fewer than twenty employees. In a small firm most of the decision-making and control is in the hands of the owner/manager. Therefore, the motivation of the owner/manager is a determining factor in the attitude towards the use of the Internet and whether they view technology as an opportunity for business development. Nineteen small business owner/managers were included in the final sample. The owner/managers were asked to indicate their personal level of experience with using computers in their business, as well as the experience of the majority of their employees. The ability to send and receive e-mails and access and browse the Internet received the highest proportion of responses. The owner/managers have far greater experience with using the Internet than their employees, although their ability to create a web page and knowledge of how to set up an e-commerce site is very limited.

Despite the lack of technical knowledge, the majority of owner/ managers use the Internet to buy and/or sell their products. Supporting the opinion of Blackburn and Athayde (2000) it was found that most small businesses use the Internet for communications (email) and searching (getting product information before purchasing). Most business managers believe that e-commerce will be beneficial for increasing profits and improved marketing and that the security threat would not deter them from creating a web presence for their business. It is noteworthy that 35% of the owners were planning to establish a new website for their business. Suitability of the product for sale via e-commerce was mentioned as a prerequisite for success and that some firms provide products or services that are unsuitable for selling via the Internet. This does not mean, however, that these services and products cannot be advertised via a web presence. The most important reason for not having a web presence was

a lack of time and/or knowledge - most of the respondents mentioned some aspect of time pressure during the interviews.

Respondents were asked to indicate the type of support mechanisms that would help them to deploy e-commerce in their business. There is a demand for information in relation to the value and use of e-commerce, as well as assistance to develop and maintain a web presence and e-commerce capabilities (Table 1).

Table 1 Number and percentage of Respondents reporting demand for Support Mechanisms

Item	N	%
An information session about the value and use of e-commerce	11	58
Practical assistance with the creation of a web presence (design and implementation)	11	58
Assistance to maintain a web presence	11	58
Assistance to develop and maintain e-commerce capabilities	12	63

Although some of the businesses are planning to commence business online, their knowledge of the potential benefits offered by e-commerce is only superficial. The challenge is to stimulate interest among small business owners who do not have a web presence to encourage them to evaluate the possible use of e-commerce. However, small businesses are often managed by busy and practical people who want instant answers to their problems. They need more than a campaign to raise awareness; they need someone to create a web presence and e-commerce site for their business and empower them to be self-sufficient from there onward. These owners have been targeted for initial intervention strategies and support projects by the university and WEDB.

Service learning at UniSA

Service learning is a particular application of practice based learning. More specifically, it is an educational philosophy that promotes active learning by involving students in community projects. On the UniSA website (2008), the University includes service learning as part of its Teaching and Learning strategy as the university believes that ‘the benefits of an individual’s education in civilised societies are not simply those of self-interest, but admit an element of mutuality; a recognition that the societal support of higher education for some carries an expectation that the community as a whole will benefit’.

Students learn by doing a project in the community, thereby contributing to meeting the needs of society. The amount students learn is directly proportional to their level of involvement in the learning process, and is linked to a number of active learning strategies, especially collaborative learning and problem-based learning. Service learning requires a relationship based on mutuality - the student and the community both benefit. As business owners are assisted to seek solutions to their problems and to discover new ways of using the Internet to enhance their business, they take ownership of the initiatives. The experience of service learning benefits students in many ways: it builds their resume, builds their self-confidence,

provides valuable lessons in citizenship by exposing students to societal issues they might never have encountered before, and it connects students to the community outside the university in a way that benefits all stakeholders (Sanderson & Vollmer, 2000).

The responsibility for implementing service learning lies within the various Schools of the university. The process of assisting small businesses with developing a web presence is driven by the university's metropolitan-based School of Computer and Information Science (CIS). Assessment of student performance is a crucial part of a service learning program. The students' accomplishments are assessed on a number of activities, e.g. discussing requirements, iterating through different prototypes, setting up the website, training personnel and documentation (UniSA, 2008).

As was evident from the research, most business managers believe that e-commerce will be beneficial for increasing profits and improved marketing. While almost all the businesses in Whyalla use computers, the majority have Internet connections that they exclusively use for e-mail and only a small number are involved in transaction processing. Although some of the businesses are planning to start doing business online, their knowledge of the potential benefits offered by e-commerce is only superficial and they indicated that they will need assistance to create a web presence and e-commerce site for their business. The Australian Electronic Business Network (1998) agree that businesses should be assisted to establish a web presence for information exchange and marketing purposes, and to implement e-commerce in the cases where it would enhance the business. Business development officers within the WEDB and university staff and students with the technical knowledge and skills would be very suitable to play this role.

Stockdale & Standing (2006) found that SMEs have significantly different attitudes towards going online and they cannot be regarded as a homogenous group for e-commerce initiatives. Therefore, specific targeting would enhance participation and lead to more effective use. The underlying problem with business web sites is the focus on technological issues amongst designers and the inevitable lack of online business experience of managers. Designers need to consider the usability of the site, its design and its ability to meet the business goals of the client (Thelwall, 2000). The challenge is to identify small business owners who do not have a web presence, determine their technical knowledge and skills and then assist them to develop and maintain a web presence to address their specific business needs.

Case studies

Two clients of such service learning projects are i) a boutique that sells women's clothing and accessories to clients of all ages, mainly based in Whyalla and the rest of South Australia and ii) a scuba diving business that provides services in two distinct areas, namely recreational and commercial diving. Whyalla is the only place in the world where cuttlefish are known to congregate in large numbers to perform a mating ritual and the recreational diving is focused

around this unique phenomenon. This includes diving training and certification, excursions, information sessions and boat charters. The commercial diving activities include underwater work such as welding, cutting, repair work and fish farming.

Small businesses such as these usually approach a web-design and development firm to design and maintain their websites, which could be very costly. In this case the work is done by two Information Technology students of the School of CIS at UniSA. The projects involve the design and implementation of an online payment system that is linked to the existing web site of the boutique and a brand new web presence for the diving business. These businesses were selected because the owners wish to enhance their businesses through a professional web presence. Both business owners also indicated that they prefer to update and maintain their own web sites to be up to the minute, rather than having to rely on an outside party. Furthermore the client requirements were that student should never assume that the person reading the manual has prior knowledge (keep language simple and make sure that all steps are clear), give opportunity for techno-savvy people to be more creative, explain the 'why' in many processes and enable the backup of data and maintenance of the health of the equipment.

The projects require the students to work closely with the small business owners/managers to gather information on their business models, the different products and services, the image of the business, the required functionality of the website, et cetera. In order to address important maintenance issues, the students remain in close contact with the owner for two months after installation to support them with the effective initial management of their web presence.

The clients were extremely pleased with the final product and found it easy to update and maintain the website. Some comments were:

'This website is a very important business tool for me. I need it for my business to grow and in order to take it to the next step.'

'I think it is a great collaboration between the uni and small businesses, because we need help to be competitive.'

'The students came up to Whyalla to show me everything. I had a very big headache at the end of the day!'

Lessons learnt

From the service learning experience, a number of lessons were learnt, of which the major two were that

1. different people have different understanding and views about the technology.
'Many business owners in regional areas do not know what technology can do for them. Instead of asking them questions in technical terms, students should put themselves in their shoes and come up with a solution to meet their requirement.' (Student)

1. clients should realise the value of the product being developed and how it could help them in shaping their business.
'The university should ensure that business clients are really interested in the project and that it is something that they need desperately.' (Student)

Student reflection is an important aspect of service learning process and the students each had to produce a reflection report. Some of the comments in the reports were:

'Two different solutions designed for two different types of clients worked and it proved that if we are able to smartly design the solution, business owners are eager to maintain it.'

'The concept of service learning is great. The desire to do something for the community was achieved.'

'We were able to put the small businesses in regional areas on a global map. Although we will have to wait for another year to see the effect in terms of increase in sales, the whole idea of empowering small businesses in regional areas to optimally use technology was really satisfactory.'

Summary

E-commerce can provide substantial benefits to a business as it enables electronic trading with existing and potential customers. Small business owner/managers in regional areas have specific issues to deal with in their day-to-day running of their businesses, such as lack of technical knowledge within the business, time constraints which limit the optimal use of technology, lack of technical support and an inability to further expand their business within their geographic regions.

Research done by the University of South Australia and the Whyalla Economic Development Board investigated the Internet usage and technical abilities of small businesses in the Whyalla region to determine how the university can assist the owner/managers to develop and maintain a web presence to address their specific business needs. Owners/managers often prefer to update their own web sites, or allow their staff members to maintain different areas of the website by using a simple Content Management Systems (CMS). Training in the maintenance of a web site is therefore an important part of the process, enabling business owners to be self-sufficient after the design and implementation of the web site has been completed. Students from the School of Computer and Information Systems are given the opportunity to do a service learning project in the Whyalla business community. Both student and the community benefit from this approach and the process could be used in future to assist other small businesses in Whyalla.

The strength of the approach described by this paper is that collaboration is established between regional small businesses and the local university, not only through research to identify business needs, but also by addressing the needs as expressed in the research findings in a practical way. This approach creates a win-win situation for both businesses, university staff, students and the WEDB and has opened up many opportunities for future collaboration between different stakeholders from both regional and metropolitan areas.

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Reflections on academia and partnerships with rural human service organisations: The importance of practice wisdom and practitioners in social work education.

Dr. Cate Hudson and Mellissa Kruger

Centre for Regional Engagement, University of South Australia

Abstract

Creating a link between theory and practice is not necessarily an innate or simple connection for Social Work students to make. As one early and one mid career academic we have recently had the opportunity to critically evaluate our own teaching practice, specifically about bridging abstract theory and real world human service practice. Drawing from our own experiences as Social Work educators, this paper reflects on the authors' experiences with academia and partnerships with rural human service organisations. The paper focuses explicitly on the concept of practice wisdom, that is, an integration of theory and knowledge gained through personal experience. The importance of engaging with current practicing practitioners and drawing on the authors' own practice wisdom in the delivery of Social Work education will be explored. Reflections will show that the educational experience for students is maximised with this partnership approach to teaching.

Introduction

As an early career (3.5 years) and mid career (7 years) academic we have recently been motivated to reflect more deeply on our teaching practice. Reflection on practice is increasingly emphasised as a necessary skill in both social work practice and education (Osmond & Darlington 2005). Its purpose is to critically analyse and identify the knowledge and assumptions upon which one's practice is based (Fook & Askeland 2007). Further, it affords practitioners the opportunity to consider possible alternatives to improve their understanding and practice (Osmond & Darlington 2005). The catalyst for our reflections has been our involvement in professional development and program review activities ensuing from UniSA's move to a teaching and learning framework promoting student engagement through experiential learning (Lee 2007). As social work educators we also believe it is important for us to critically reflect on 'the dynamics that influence the construction of the curriculum, which, in turn, constructs our prospective social workers' (Lam, Wong & Leung, 2007 p. 103). This paper presents the insights gained from reflecting on our teaching practice and our efforts to help students bridge the theory to practice gap. We explore the nature of our partnerships with professionals from the field in educating the next generation of social workers and then identify some of what we believe to be the mutual benefits and challenges of a partnership approach to social work education on a regional campus.

The context for our practice

The Centre for Regional Engagement (CRE) was established at the Whyalla campus of University of South Australia in 2004 and in Mt Gambier in 2005. In prioritising regional engagement as a strategic direction, the University of South Australia sought to provide quality teaching, learning and scholarship in its regional locations and to undertake research endeavours with business, industry and community partners that reflect rural and regional priorities and interests (UniSA 2008). The social work school has had a presence at the Whyalla campus since 1985, and in Mt Gambier since 2005. Over that time the school has been involved in educating social work professionals to fill the need for qualified social workers in regional areas.

We are part of a team of five fulltime social work academics and two part time field liaison officers delivering a four year social work degree to approximately 200 students in two regional locations and approximately 40 external students from four states of Australia. The team is itself spread across two locations, five staff based at the Whyalla campus and two at the Mt Gambier site of the Centre for Regional Engagement. We use videoconferencing equipment to deliver lectures to students at the other site (Mt Gambier or Whyalla depending on location of the staff member) and tutors lead students in tutorial discussions and activities following lectures. Student learning is further supported by online resources which include recordings of lectures, discussion boards and links to relevant readings. However, educating the next generation of workers is not done in isolation. We have a long history of working with social work professionals in the region to enhance student learning. The thinking and reflections offered here are based on our experiences as academics teaching social work on a University campus based in regional South Australia.

By engaging in reflection on our practice we critically question our approach to teaching and the assumptions we had about the influence the field had on student learning at the CRE. It is incumbent on lecturers, irrespective of how much teaching they do, to develop their own abilities and to learn how to become effective teachers (Davis 2004, p. 252). We sought to better understand the influence that the practitioners had on the social work curriculum and the students of the CRE. In particular we reflected on how they helped us as academics to bridge the theory to practice gap in student learning. First we turned our attention to the philosophical influences which underpin our teaching and the strategies we employed in the classroom

Our teaching is underpinned by a 'a social constructivist approach to knowledge development based upon the belief that cognitive activity allows for understanding of our world' (p. 110) and knowledge development can be enhanced through social interaction which facilitates active discussion to help individuals to share, cognitively reorganise and build on their knowledge (Ashcraft, Treadwell & Kumar 2008). This strategy is supported by Ringel (2004, p. 18) who explains that knowledge and understanding evolves as a result of interactions between student and instructor. At the CRE our maximum class sizes average 20 students and thus we

are afforded the opportunity to get to know the students and encourage questions and discussion of concepts to building the collective knowledge of the group. Ramsden (2003) found that where staff had created an atmosphere of trust and freedom to question students were more likely to learn and make sense of course content.

Bridging the practice to theory gap

We recognise the impact that the learning environment has on students and strive to create an environment which promotes active student involvement in learning to help bridge the theory to practice gap. Such an environment is one which helps students to make sense of the content being taught and this is made possible when teachers relate that information to the real world (Ramsden 2003). Our experience has shown that theory taught without situating it in a context is difficult for students to understand, see its place in practice, or how it builds on other knowledge. Research suggests that this is not uncommon. In a study of undergraduate students perceptions about theory Collingwood, Emond and Woodward (2008, p 73) found that some students struggled to see the link between theory and practice, instead seeing theory as a requirement of the University rather than a guide to practice. Instructors sharing their own experiences can help students bridge the gap between theory and practice (Kemp 1998, p. 3; Ringel 2004, p 16). As teachers we try to help students make sense of social work theory and concepts by relating them to our own experience of practice from the field. Kemp (1998, p. 3) argues that practice experience is essential in classroom teaching, explaining that it gives the teacher credibility in the eyes of the student. However, we also realised that our experiences are limited to the specific context of our previous professional careers. Those contexts are therapeutic counselling and youth work in non government organisations and youth work in the Juvenile Justice system.

Schon (1983) proposes that two types of knowledge are required for competent professional practice. Those types of knowledge are theoretical knowledge such as that gained in academic study and professional artistry. This professional artistry is the ability to appropriately apply theoretical knowledge in action and is described by Goodfellow (2003, p.50) as the 'how to' knowledge needed to practice effectively in a professional situation. It is the 'how to' knowledge that we argue is practice wisdom, and that practitioners from the field bring this valuable knowledge into the classroom. Practice wisdom can be defined as an alternate form of knowledge to theoretical knowledge, gained through the experience of applying theory to practice in the meeting of practitioners and service users, it involves the actualisation of professional values grounded in personal context and local sites (Chu & Tsui, 2008; Cooper, 2001, cited in Lam, Wong & Leung 2007). Further, that the practice wisdom they share helps our students bridge the theory to practice gap.

Partnerships with the field

This discussion now turns to focus on the contribution the field makes to education at the CRE. Our reflections identified three main areas of partnership with the field and how that

contributed to the education of students. Those areas of partnerships were active participation in the classroom, supervision of field education placements and consultation.

Classroom

We believed that students were more likely to understand and recall theory for later use if they could see the relevance of it as soon as possible after they became aware of it. Further, that an understanding of theory early in the degree was an important foundation upon which to build the knowledge base need for practice. We had realised that our own experiences were limited to certain context. Consequently we found that by working in partnership with the field we are able to draw on a wealth of current practice experiences from a variety of human service organisations around the region. Thus, students have an opportunity to hear about theory in practice from many different perspectives. As guest speakers and tutors, practitioners from the field tell stories that are rich in examples of applying theory to practice in the context of current human service work in the region. They also share their own practice wisdom developed from their time in the field. Their practice wisdom and to help students situate the new academic knowledge within the context of social work in rural and regional human service organisations. The added dimension contributes to student learning by providing still more examples of what it means to understand social work theory in the way it needs to be understood (Biggs 1999) in order to practice in those contexts.

We have also learned that preparing students for rural practice needs to include knowledge about some of the unique situations and difficulties that they may encounter as a result of living and working in rural areas. Chenoweth (2004 p. 280) argues that social work students need to develop an appreciation of the realities of living and working in small communities. The majority of CRE students live in the region and therefore it could be argued they are aware of the benefits and challenges of living in the country. What that argument ignores is the professional identity and resulting community expectations that they must incorporate into their way of living upon graduating. Indeed some social work students report feeling the pressure to live up to those expectations while they are still students. Being a social work professional living and working in a rural/regional area has been well researched and reported. Some of the challenges that workers face include; the need to be self-reliant, creative and resourceful due to lack of resources (Lonne 1999; Chenoweth 2004); have knowledge and skills in diverse fields such as mental health, domestic violence, child abuse, youth and community work (Chenoweth 2004); manage dual and multiple relationships and ethical dilemmas involved in maintaining confidentiality (Green 2002); and establishing and maintaining professional identity while highly visible in rural practice settings (Munn & Munn 2003).

Responding to these situations can pose problems for new graduates and once again our experience has been that while theory offers the students the standardised expectations of them in such circumstances, it is rarely context specific and is of little practical use to students.

The practice wisdom that practitioners share is rich in examples of dealing with situations that rural social workers can face, for example trying to maintain confidentiality in small towns where you can be in the same sporting team as a client, a client becoming a friend of your partner or child, clients easily identifying where you live, dealing with the emotional struggle over having to report clients (with whom you have developed a good working relationship) after seeing them in social settings doing something that breaches conditions imposed on them, needing to stop and think about the impression created by being seen in a particular setting before deciding whether or not to attend a function, and even the impact on professional identity of running into a client in the supermarket while wearing your shabby clothes or coming out of the bottle shop with a cask of wine or slab of beer. All of these examples are those experienced by ourselves or the practitioners with whom we work. It is this practice wisdom that practitioners share with students during informal question time and class tutorial sessions. Our experience has shown that the opportunity to interact with practitioners from the field, hear their stories and ask questions does help students to see how to apply theory to practice therefore bridging the theory to practice gap.

Supervision of Field Education placements

The second significant aspect of our partnership with Human Service Organisations in the region is their role in providing Field Education Placements for social work students of the CRE. A major portion (equivalent to one academic year) of the social work program is devoted to two fifteen week field education placements undertaken by students, one in the third and another in the fourth year of the degree. The field education experience for students is dependent on the combined efforts of the student, social work team at the CRE, regional Human Service Organisations and Practitioners. Practitioners play a crucial role in education as a student experiences learning in a practice environment. A designated staff member from the Human Service organisation acts as the Field Teacher (formally known as Supervisor) to support the learning that occurs on placement. This involves guiding the student's learning throughout placement and more closely reflects the mentor and novice style of teaching and learning as described by Martinez-Brawly & Zorita (2007) in their discussion of the importance of practice wisdom to social work education. Whilst on placement the student learns the what, why and how to of practice through direct observation of qualified practitioners and then their own interaction with clients (Noble 2001). To support the learning the student and Field Teacher also engage in regular consultation and reflection on practice through a formal process of supervision.

A requirement of the AASW is that each student receives a minimum of one hour of formal supervision per week of full time placement (AASW 2008). In the supervision session Field teachers share their practice wisdom with students as they discuss how theory is applied to practice. Schön (1983, p. 138) describes this sharing as the practitioner drawing from a repertoire of examples, images, understandings and actions gained from years of experience. To share practice wisdom in supervision the practitioner asks questions, offers varying

perspectives and seeks clarification from the student to encourage closer linking of theory and the student's interaction with clients. Field teachers have described this experience as mutually beneficial to themselves and the student. The student gains from their practice wisdom and the Field Teacher benefits from the opportunity to reflect on social work theory, their own practice and keep up to date with trends in social work education. In addition to formal supervision the agency field teacher reviews and provides feedback on student learning tools and also offers guidance on a variety of practice and agency matters as they arise on a day to day basis. This equates to a considerable time commitment on the part of the Field Teacher which is not always recognised in their workload. Finding placements in rural and regional organisations can be difficult (Alston 2007) and the regional areas in which we operate are no different. Hence the social work teaching team and students rely on the strength of our relationship with Human Service organisations and practitioners in the region to provide placement experiences for social work students.

Consultation

Curriculum consultation is the third major aspect of our partnership with Human Service Organisations in the region. Feedback from the field helps shape the curriculum and this approach to program change is supported by Ashcraft (2000) who reports on the positive benefits that involvement of the profession can have on shaping the curriculum to ensure it remains relevant to the context of contemporary practice. He suggests that by working in partnership with practitioners (in that case youth workers) a program will be informed by theory and practice wisdom ensuring its relevance to the field (Ashcraft 2000, p. 45). When major changes to the Social Work curriculum are proposed the practitioners from the region are invited to comment and their feedback used in deliberations with our metropolitan colleagues before final decisions are made. In the past this has meant that our program has included courses that are not offered in the metropolitan version of the degree. This practice is not unusual for regional campuses with Winter, Wiseman and Muirhead (2006) suggesting that it is one way that Universities can ensure the curriculum remains relevant to the local areas by providing the knowledge and skills which meet the needs of the region.

The collaborative approach to tailoring the curriculum to meet local needs is not without its critics. In general our metropolitan colleagues are supportive of our efforts to add local content to the courses that we teach. In contrast to this there have been times when we have chosen to divert slightly from the curriculum in order to meet local needs and concerns were raised that we were letting the field dictate the curriculum. Consequently, this can cause some strain on our relationship with colleagues on the metropolitan campus. We do not believe that the education experience for students at the CRE is negatively impacted by our decisions to shape the curriculum to meet local need however, this has never been empirically tested and may be worthy of consideration.

A further criticism related to field involvement in educating students and shaping the curriculum came from the Australian Association of Social Work (AASW) review panel. The social work program offered at the CRE is reviewed by the AASW as part of a five yearly accreditation process. From the last review the feedback and recommendations expressed some concern that representatives from the Field who met with the panel were all graduates from our program. The panel expressed concern that the input from the field may not be impartial and therefore they were less likely to critically appraise our approach to teaching at the CRE. The panel recommended that we find ways of exposing students to the views of practitioners who had graduated from other social work programs. Reflecting on this feedback we find it to lack a real appreciation of the current context of rural practice. Human Service organisations struggle to find qualified social work practitioners to fill vacancies; they rely heavily on graduates from our program to meet staffing requirements. That reliance comes about partly from the reluctance of city based practitioners to relocate to regional areas. Further, we know that not all of our tutors and field teachers have graduated from our program and those who have are constantly updating their knowledge and skills through practice and professional development opportunities. None-the-less we have taken the feedback under consideration and will factor it in when consulting with the field.

Mutual benefits and challenges of a partnership approach to education

By working with social work practitioners we attempt to bridge the theory to practice gap for students and build a partnership approach to teaching and learning in the early years of the social work degree and later in field education placements. We have acknowledged the benefits that we believe the students gain from this partnership approach but in order for the relationship to be an equitable partnership practitioners and organisations should also benefit. Studies have shown that relationships between Universities and the professional communities are more likely to endure if both parties feel valued and benefit from the partnership (Bringle & Hatcher 2002; Ashcroft 2000). Our informal discussions with practitioners sought feedback from them about what motivated them to make time for sharing their practice wisdom and what they thought they gained from the experience.

Practitioners shared that their preparation for involvement with students gave them the opportunity to critically reflect on their practice so as to adequately explain to students what they did and why. When reflecting on practice professionals seek to uncover the personal and professional values, theoretical knowledge and contextual factors which influence their practice (Fook & Askeland 2007). In doing so they see opportunity for change and thus reflection is a way of improving practice. Reflection can also correct over learning which comes from repetitive work and potentially prevent worker burn out (Schön 1983, p 61). Fook and Askeland (2007) suggest that some current social work organisational cultures have become more procedure and regulation based (p 526) warning that this works against critical reflection. The nature of work in some organisations in the region may mean that practitioners

do not often get the time to reflect on practice therefore they appreciate the opportunity to do so in order to prepare for interacting with students.

The second benefit that practitioners saw in spending time with students was the opportunity to promote their organisation. This may be a reflection of the staff shortage in the region and thus is seen as a chance to encourage students to consider a career in that agency once they complete their degree. In some cases organisations will employ students who are studying and that creates a less than ideal situation from an academic perspective. Our experience has shown that students who accept work whilst studying tend to lose focus on their study in the short term and often miss classes and grades suffer. Some settle into the position and return to their pre work academic performance but for others study remains a lower priority than their paid work. The situation is further complicated when students are required to undertake their Field Education placements in third and fourth year. Research indicates that where human service workers who are also students often struggle with the competing demands of work and study. As a result of these findings Postle et al. (2002) recommend that agencies and academics work together to identify ways that learning can be accommodated in both settings. To this end we have begun to explore ways of incorporating service learning into our courses see Kruger and Hudson (2009).

Like Alston (2007) we also find that supporting the Field Teachers in their role means often we are called upon to assist with problem solving, effective supervision strategies, updates on theory, assessment and program requirements. Two full day workshops per year are offered to potential Field Teachers around the region to provide this information and we offer ongoing support as the need arises. Assisting Field teachers does add to our workload but to maximise the quality of the learning experiences for students and as a reciprocal gesture to agency staff we believe the support is important. However, we also recognise that we gain from our interaction with practitioners and their organisations. Through our visits to organisations, conversations with practitioners and provision of training opportunities we stay abreast of trends in the field, we are informed about the factors impacting on service provision in the region and it is that information which we incorporate into the lectures that we deliver and the learning activities we plan for students. Clapton et al. (2008) also found that there were mutual benefits arising from academic and agency staff interaction suggesting that agency staff appreciate the opportunity to learn from the academic, and academics become more aware of current policy and procedures were thus able to incorporate it into teaching practice and adjust curriculum.

Building and maintaining relationships

'Arguably, the greatest challenge to mutual, respectful, power-sharing partnerships between universities and communities is cultural: specifically, the persistent notion that universities alone create and transfer knowledge and that communities simply consume it' (Eversole & Allison 2008, p. 78). We suggest that our partnership approach to teaching social work in the

region challenges that position and enhances student learning in the process. Bringle and Hatcher (2002) argue that for partnerships to be established and maintained there needs to be compatibility of values and goals. We believe that the field and ourselves as staff are working towards the mutual goal of producing quality social work graduates who are prepared to stay and work in the region.

There is a huge untapped potential for the professional field and academia to work together in enriching social work education, research, policy and practice and for this to occur academics and the profession need to challenge any assumptions which present barriers to collaboration (Clapton et al 2008). We believe our partnership approach to learning and teaching in the social work program has benefits for student learning, the field as a profession and ourselves as academics. However, it is a partnership that must be nurtured and maintained. To that end we are about to embark on an action research project to evaluate and improve the quality and effect of our partnerships with the field. From the research we hope to identify and act on potential areas for future partnerships including service learning opportunities for students, professional development needs of practitioners and projects that would mutually benefit the profession in the region and the Centre for Regional Engagement students and academics.

Conclusions and Recommendations

In this paper we have acknowledged the importance of practice wisdom to the knowledge base of social work as a profession, identified the place it has in educating students and explained the crucial role the Field has to play in imparting their practice wisdom to our students. We contend that their practice wisdom helps students to bridge the theory to practice gap by contextualising academic knowledge gained in the classroom. Further, we argue that exposure to practice wisdom from the field is particularly necessary for the education of social work students who are likely to practice in rural areas. We recommend that Schools of Social Work explore ways of developing partnerships with the Field in their Region to facilitate student exposure to field practice wisdom.

Our relationship with the Field has mutual benefits for both the Field and ourselves as academics. Those benefits include professional development opportunities for both groups which helps ensure our knowledge and skills are current and relevant to the contemporary social work practice in regional and rural areas. Academics in all disciplines could benefit from developing partnerships with practicing professionals in their field to explore mutual opportunities for professional development that might come from the relationship. We recommend that Academics challenge the notion that Universities alone create and transfer knowledge by actively seeking to acknowledge the practice wisdom the Field can contribute to professional development and build partnerships with their respective fields to explore potential opportunities.

Finally, to maintain and strengthen our relationship with the Field in our region we have realised our need to understand more about the partnership so as to maximise its potential for students, the Field and ourselves as Academics. We strongly suggest that any relationship with the field be critically evaluated to identify mutual values and goals to establish a shared purpose of both parties. Once a shared purpose has been identified it can be the basis for planning and exploration of opportunities to promote a relationship which continues to be mutually beneficial rather than a drain on the resources of either the Field or the Academic Institution.

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Friendly concern: what key university partners really think.

*Associate Professor Anne Langworthy
University of Tasmania,*

Abstract

As part of the AUCEA Benchmarking Community Engagement pilot project, one key methodology was a sample survey of key university partners.

The partner perception survey was designed to test the importance of and assess perceptions of university performance in four broad categories: accessing the university; working in partnership and providing assistance to the community and/or region; and student learning and research. The survey also sought the views of respondents on the importance of and current performance of the university in maintaining and developing the partnership. In addition respondents were also asked to identify up to three specific impacts that have benefited their organisation based on the partnership with the university.

Nine participating universities identified a small number of key partners to participate in the pilot. This paper examines the ninety-seven responses from the diverse organisations represented in the sample. Not surprisingly, given the category of partners surveyed, overall satisfaction is on average positive. However, closer examination of the responses provides a strong signal that, in relation to our partners priorities, we might not be doing quite as well as we think.

Introduction

In 2005 the Australian University Community Engagement Alliance (AUCEA) identified a need to encourage the development of national and international benchmarks for engagement activity in order to support the inclusion of engagement as a part of institutional profile assessments by government and as part of the AUQA assessment regime. AUCEA also recognised that developing engagement benchmarks would provide a tool for accountability and an evidence base to support improvement in university community engagement.

The benchmarking pilot had its origins at workshops conducted at the AUCEA conferences in 2005 and 2006 where 28 universities registered an interest in participation. The Benchmarking working group formed in 2006 and met twice before the next conference workshop in 2007. This process developed and tested a framework and indicators (Langworthy & Garlick, 2008).

The basis of the initial AUCEA benchmarking pilot development was an analysis of national and international methodologies for measuring and managing engagement (for example: Charles & Benneworth, 2002; Garlick and Pryor, 2002; Garlick & Langworthy, 2006; Gelmon et al., 2001;

Kellogg Commission, 1999; Ramaley, 2005; Ramaley, 2006; Scott & Jackson 2005; Stella, 2007). This analysis revealed three broad types of assessment that are undertaken by universities in assessing their community, or in some cases regional engagement. They are either a guided self-evaluation assessment with expert peer review and iterative agreement; a metric assessment based on an agreed schedule of measures; or a combination of both. Often the focus is on the process of engagement rather than the outcomes of engagement because of the necessarily longitudinal nature of many of these outcomes. None of these approaches involved the partner voice.

Because the partner voice was considered an essential component of any assessment of engagement, one of the two instruments designed to collect data related to the key measures identified in the Benchmarking Framework was the Partner Survey. This paper examines the outcomes of the survey in the light of two questions:

1. Do the survey questions identify the areas of importance for university partners in regard to their engagement with their partner university?
2. Does university performance in relationship to these areas of importance match partner expectations?

Participating universities were asked to select a small sample of partners with whom they had a good relationship, asking them to assist in trialling the partner survey instrument. The survey was completed online (56) or on hard copy (41) with responses sent to the project leader who also analysed responses ensuring that all individuals were de-identified to maintain confidentiality.

Universities who participated in the pilot partner survey were:

- Deakin University, Victoria (metropolitan/provincial/rural)
- James Cook University Queensland (metropolitan/provincial)
- Macquarie University, New South Wales (metropolitan)
- Murdoch University, Western Australia (metropolitan)
- Swinburne University of Technology, Victoria (metropolitan)
- University of South Australia, Centre for Regional Engagement, South Australia (metropolitan/provincial)
- University of the Sunshine Coast, Queensland (provincial)
- University of Western Sydney, New South Wales (metropolitan)
- University of Wollongong, New South Wales (provincial)

Ethics approval 0708/122 was obtained from Swinburne University's Human Research Ethics Committee for the partner survey.

Limitations

Consideration should be given to the limitations of this research. The partner sample is not representative nor is it random so conclusions cannot be assumed for all University partners.

The online survey used software that did not allow for partially completed surveys to be saved and completed at a later date or to be saved after completion. Given the length of the survey, this may have been a deterrent to completing the survey for some partners.

Where mean level of importance scores are contrasted with mean level of University performance, there has been no significance testing undertaken for the levels of disparity.

Profile of Survey Respondents

Invitations to complete the survey were sent to between 15 and 25 partners for each University with the exception of one University who sent the survey to 125 partners. Ninety-eight partner responses were analysed as part of the Benchmarking Pilot. Not all respondents answered all survey questions. The average response rate was 47%.

Most identified participating organisations were from the business, government, including local government, and education sectors. The people who completed the surveys were mainly Chief Executive Officers and Senior Managers.

Although there were local variations, overall most university partner representatives surveyed indicated that their organisation had a length of association with the university of between 5-8 years and most categorise their interaction level with the University as “medium” on a five point scale from very low to very high. The main areas of contact with the university were using university services including consultancy, expert services, technical assistance and staff development, relating to students through volunteerism co-operative education, internships, community service and service learning, and participating on university committees and using university facilities.

The Effectiveness of University Partnerships

The effectiveness of University partnership arrangements from the perspective of responding partner organisations was assessed over four broad areas: 1) accessing the University; 2) working in partnership and providing assistance to the community/region; 3) student learning and research; and 4) benefits of regional partnerships with the University.

Respondents were asked to rate the importance of a suite of items related to each area of analysis on a 5 point Likert scale ranging from ‘not important at all’ to ‘essential’. Respondents were also required to rate the current performance level or level of change brought about by their partnership with the University, for each item. For the fourth area that focuses on the benefits of regional partnership, respondents are asked to rate the level of change from “worse” to “better”.

In each of the four areas, the mean importance score is contrasted with the mean performance scores in order to examine the University performance relative to partner organisation’s expectations or rated level of importance. The numbers of respondents for each

item (importance n=) and (performance n=) indicates a level of reluctance on the part of some respondents to complete the performance assessment. However the majority of respondents do complete the assessment scales and thus provide a foundation for conclusions drawn.

Accessing the University

As shown in Table 1.1 below, mean performance scores are below mean importance scores in all eight areas of this category, although in some cases the difference is marginal. The three areas ranked on average as most important to partner organisations also demonstrate the largest gap between mean importance and mean performance. Although the mean performance scores are good for providing a highly visible and easily accessed point, for being responsive to requests and queries and for communicating regularly and well, they do not match the high mean levels of importance which tends to suggest these are areas that could be benchmarked for improvement.

Table 1.1: Access performance/importance matrix for all University respondents

	Mean Importance Score	Mean Performance Score
All University Respondents:		
Provides a highly visible and easily accessed point of contact for organisations/groups/individual like yours (n=96) (n=95)	4.20	3.76
Provides expert advice on key community issues important to your organisation/group (n=96) (n=87)	3.36	3.25
Uses its economic and political significance to promote improvements in the region's facilities, infrastructure & institutions (n=97) (n=81)	3.57	3.28
Uses University Advisory Panels and similar groups to share knowledge, resources and ideas (n=9) (n=79)	3.66	3.37
Makes available its facilities to the surrounding communities (n=9) (n=80)	3.56	3.23
Promotes cultural events that link its campuses and their local communities (n=9) (n=76)	3.32	3.04
Is responsive to requests and queries (n=96) (n=96)	4.36	3.85
Communicates regularly and well (n=9) (n=9)	4.42	3.66

Working in partnership and providing assistance to the community/region

Table 1.2 contrasts the mean importance and performance scores in order to examine the University's performance relative to partner organisation's expectations in regard to regional/community assistance.

In all five areas mean performance scores are below mean importance scores. The greatest area of disparity between importance and performance relate to responsiveness to knowledge

needs, providing up to date knowledge and providing forums for discussion of community issues and concerns.

Although the mean performance scores are good for responsiveness to knowledge needs and providing access to up to date knowledge and above average for providing forums, they do not match the high mean levels of importance which tends to suggest these are areas that could be benchmarked for improvement.

Table 1.2: Performance/importance matrix for all respondents regional assistance items

	Mean Importance Score	Mean Performance Score
In its community interactions, the University:		
Is responsive to your organisation's/group's/individuals knowledge needs (n=97) (n=94)	4.13	3.30
Gives individuals/organisations/groups like you/yours access to knowledge which is relevant and up to date (n=97)(n=94)	4.19	3.38
Successfully leads and coordinates regional partnerships & alliances (n=97) (n=83)	3.73	3.14
Provides forums for discussions of community issues and concerns (n=97)(n= 78)	3.46	2.85
Actively participates in community governance bodies, communities and groups (n=97) (n=78)	3.66	3.10

Student Learning and Research

Table 1.3 below presents the importance/performance matrix for university student learning and research items. In all seven areas mean performance scores are below mean importance scores. The greatest area of disparity between importance and performance relate to offering continuing education/professional development courses and placing students for real world experience.

Although the mean performance scores are above average for these items, they do not match the higher mean levels of importance which tends to suggest these are areas that could be benchmarked for improvement.

Table 1.3: Performance/importance matrix for all respondents student learning & research items

	Mean Importance Score	Mean Performance Score
The University:		
Effectively uses regional leaders and experts as advisers to the University (n=97)(n=74)	3.71	3.09
Places students in your organisation to learn about real world practice (n=97)(n=84)	3.73	2.98
Offers continuing education/professional development courses specific to your organisation's/group's needs (n=96)(n=79)	3.55	2.70
Helps your organisation/group with specific research needs (n=96)(n=79)	3.48	2.94
Develops research outcomes that benefit your organisation/group(n=97)(n=80)	3.47	2.99
Has demonstrable research outcomes that benefit your organisation/group(n=97)(n=79)	3.47	2.93
Provides opportunity for participation in research projects(n=97)(n=80)	3.44	2.81

Table 1.4 below contrasts the mean importance scores with the mean level of change scores in relation to the ten identified area of benefit of the partnership. In four areas the mean level of improvement in university performance is marginally higher than the mean importance to the partner organisation. However the greatest level of disparity is demonstrated for the item with the highest mean level of importance (Increased profile in community) although this item still demonstrates partner assessment of positive level of university improvement.

In this question, the performance items were tested as level of change/improvement. Thus we are left with a question when mean performance outweighs mean importance in this area. Are universities demonstrating the most improvement (better performance) in the areas that are of lesser importance to the Community?

Table 1.4: Performance/important matrix for regional partnership benefits items (all respondents)

	Mean Importance Score	Mean Level of Change Score
From my/our interaction with the University, I /my community/community organisation/business/group have/has:		
Influenced University teaching and research directions (n=97)(n=69)	3.14	3.08
Put research findings into action (n=97)(n=67)	3.12	3.11

Enhanced our ability to plan effectively (n=97)(n=73)	2.93	2.98
Enhanced staff capacity to serve clients (n=97)(n=70)	3.02	3.23
Given us new ideas about our work (n=97)(n=83)	3.10	3.19
Created opportunities to leverage new resources (n=97)(n=79)	3.38	3.19
Enhanced staff development (n=97)(n=75)	3.08	3.01
Help build new community networks (n=97)(n=74)	3.19	3.09
Have a greater sense of agency effectiveness (n=97)(n=70)	2.91	2.92
Increased our profile in community as an effective agent of change (n=97)(n=76)	3.97	3.08

Overall Partner Satisfaction Levels

Respondents were asked to rate their level of satisfaction with their relationship with the University on a five-point Likert scale ranging from 'very dissatisfied' to 'very satisfied'.

Figure 2.1 below summarises the distribution of responses divided into ordinal categories. The graph shows that most surveyed partner organisations are satisfied or very satisfied with their relationship with the University. Given that participants were selected on the basis of their "good" relationship with the University, it is perhaps surprising that a small percentage is neutral or dissatisfied.

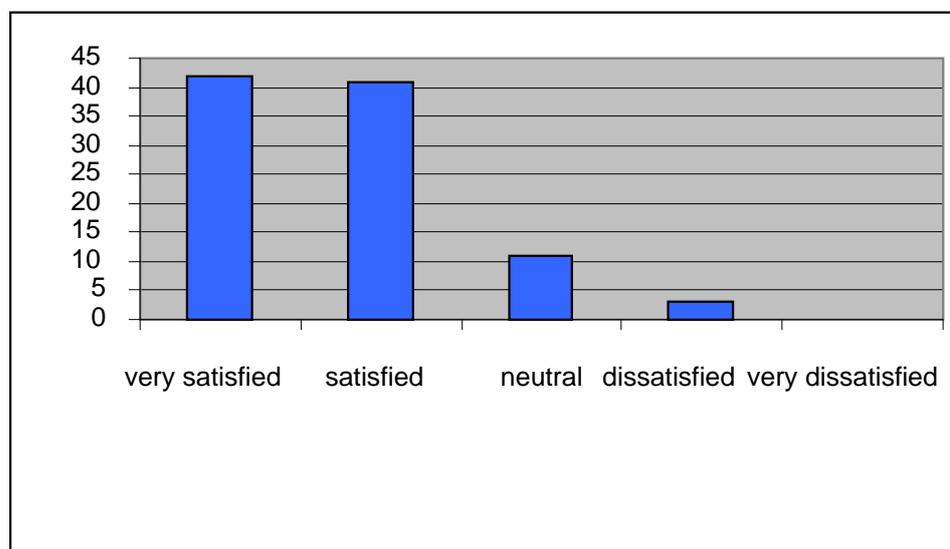


Figure 2.1: Distribution of all University regional partner satisfaction scores (n=97)

The Impact of Engaging with Universities

Survey respondents were asked to state in their own words up to three impacts that have benefited their organisation resulting from their association with the University. Most respondents answered this question. Responses to this question for all nine university partner

responses have been broadly categorised into eleven themes, which create a picture of the broad impact of the university on the wider community.

Student connections and employment (n=53)

Many impacts identified in this theme relate to student and graduate outcomes, student placements and the mutual benefits provided by co-operative programs, learner pathways and graduate employment.

Access to University resources and expertise (n=52)

The impacts in this theme involve access to and relationships with University staff; access to university expertise, specific advice and different ways of thinking; access to university resources, facilities (including resource sharing) and funding; university contribution to boards and committees. Impacts categorised here relate strongly to those impacts categorised under the following knowledge information innovation, business development, networking, independent advice and regional development headings.

Knowledge information and innovation (n=40)

Many respondents identified new knowledge, ideas, problem solving, access to research and technological improvement as impacts of their relationship with the University. The value of University independence is highlighted by four comments referring to independent advice and evaluation that have been categorised under this theme.

Business development and improvement (n=35)

Impacts identified by some respondents relate directly to their business or organisation. Benefits identified included: professional development; industry awareness; global and industry specific knowledge; improved processes and technology; strategic development and access to good graduates. Many also reported raised profiles for their organisations resulting from the partnership with the university.

Regional development (n=26)

Particularly for respondents in rural and regional areas, impacts identified relate to benefits for the region including increasing student numbers, future employment and identifying regional priorities. The university's capacity to facilitate networks is also identified as an impact.

Research partnerships and outcomes (n=23)

Collaborative research, commercialisation, improved research processes and the translation of research into practice are identified in this theme. Impacts identified in this category often strongly relate to new ideas and innovation.

Positive capacity and approach to partnering (n=23)

A number of comments relating to partnering indicated appreciation of the working relationships with and approach of the University.

Collaborative development of curriculum (n=13)

New and/or improved learning and teaching programs and the opportunity for community members to contribute to the development of these models have been identified as impacts.

Establishing and maintaining networks (n=11)

The capacity of the University to facilitate networks, cross fertilisation and community and professional links is generally identified as an impact in the comments categorised under this theme.

Profile and promotion(n=10)

Other Areas of Concern

Survey respondents were given the opportunity to outline any other areas of concern to them not covered in the questionnaire. Most respondents opted not to add any further comments; however, thirty-two comments overall were recorded. These comments relate to:

- University teaching programs either identifying new collaborative opportunities, reinforcing the importance of a particular course or raising issues of quality(12);
- Communication issues including timing and regularity of communication, knowing the right person to contact and the importance of not over-communicating (5);
- Networking opportunities;(5)
- Funding issues; (4)
- The positive contribution of the University(4);
- Partnership issues (2); and
- The need for research

Discussion

The high level of importance given by partners to most items tends to suggest that the survey has identified important aspects of the partnership. This perception is reinforced by the analysis of impacts identified and the smaller number of additional comments whose themes align closely with the four broad areas used to categorise items to be assessed against performance and importance scales. Thus it can be argued that the survey questions do identify the areas of importance for university partners in regard to their engagement with their partner university.

However, discussions since the administration of the survey suggest that, despite the best intentions, the terminology used in the survey is still very university-centric. This may be one factor to consider in regard to the lower than anticipated response rate given that “good” partners were selected to pilot the partner survey process. In addition not all partners answered all questions which could tend to suggest a certain level of survey fatigue which could influence the quality of response by the end of the survey.

The method of sampling, although useful in recruiting good partners to assist in refining the process, does not provide us with a representative sample and thus conclusions cannot be drawn for partners in general. However, targeting the sample does provide a benefit, in that areas highlighted by the responses of their good partners for particular universities are likely to warrant further consideration.

The comparison of mean importance against mean performance is useful in considering the second question: Does university performance in relationship to these areas of importance match partner expectations?

Whilst mean performance scores are above average to good, they are generally below mean expectation with the exception of the final category 'benefits of regional partnerships with the University'. In this question the performance items were tested as level of change/improvement. Universities are more likely to be assessed at higher levels of improvement when the area is rated at lower levels of importance. Thus, as noted earlier, we are left with a question when mean performance outweighs mean importance in this area. Are universities demonstrating the most improvement (better performance) in the areas that are of lesser importance to the community?

In the other three categories (accessing the University; working in partnership and providing assistance to the community/region; and student learning and research) the areas of greatest disparity can provide direction for improvement although it is noted that levels of disparity do vary between universities. The overall picture presented by the combined responses highlights areas of greatest difference between partner expectation/importance and university performance as: access to up to date and relevant knowledge; responsiveness to requests and knowledge needs; regular communication; easily accessed point of contact; and providing a forum for discussion of important issues. It is worth noting that, overall, the area of regional partnerships and alliances demonstrates a level of disparity but this is not reflected in the individual reports for regional universities which are more likely to receive high to very high levels of approval from partners. The survey did attract some negative comments from partners but these comments were more likely to come from partners identified by metropolitan universities.

Although differences may be quite small in some areas and there has been no significance testing undertaken at this time, there is still quite a clear signal that performance falls below expectation (importance) which is again highlighted because the sample was taken from identified "good" partners" who are more likely to have a friendly perspective of university performance.

Conclusion

Despite some clear methodological concerns with the initial partner survey and overall levels of satisfaction, closer examination of the responses provides an indication that, in relation to our partners priorities, universities may not be meeting expectation. The outcomes of the partner survey can provide a basis for further investigation with a wider sample using both qualitative and quantitative methodologies to ascertain what our partners really think.

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‘CO2 and You’ – La Trobe University Engagement at the Elmore and District Farm Machinery Field Days

John Martin and Eben Quill,

Centre for Sustainable Regional Communities La Trobe University

Abstract

The Elmore Farm Machinery Field Days (EFMFD) Committee has identified that the effects of climate change on primary production is a critical issue for farmers and rural communities in Australia today. The ‘CO2 and You’ project was planned with the aim of promoting awareness of climate change impacts and creating greater understanding of the mitigation and adaptation issues and opportunities for farmers and rural communities. The Centre for Sustainable Regional Communities at La Trobe University, Bendigo, worked with colleagues from the Faculty of Law and Management and final year undergraduate students to initiate this climate change awareness project at the EFMFD.

Mitigation of climate change through carbon management developed as the major undertaking for the research project. Addressing five key carbon management strategies provided the basis of this work, namely: energy measurement, finding energy efficiencies, renewable energy applications, carbon trading and offsets (from Greening Australia) and community engagement as part of a social learning model (Keen et al 2005). The carbon management approach encompassed solar, wind and renewable energy systems, in so much as these technologies apply to the EFMFD Committee’s vision of becoming carbon neutral at their field days site. The operation of carbon markets, trading and offsets – how carbon emissions affect consumers, households, industries and businesses - was also elaborated on at the Field Days.

The involvement of local primary school children can be seen as an important outcome for the project. Following the principles of social learning the children were engaged in a wider community process of education and learning about the importance of effective carbon management on the sustainability of their region. Through their involvement these children gained a deeper appreciation of the climate change issues impacting their rural community.

To obtain information on farmer understanding of climate change and carbon management strategies we used both quantitative and qualitative techniques through the administration of a survey, based, in part, on the regional participation and engagement model outlined by Eversole and Martin (2005). In order to investigate the effectiveness of the EFMFD’s new Climate Change programme, survey statements were purposefully explicit, reflecting both the language and culture of the ‘CO2 and You’ feature at the field days. Linking survey questions to the promotional material of the ‘CO2 and You’ programme was an important objective of the research.

Our research team generated two surveys based on five research imperatives: measurement, efficiency, renewable energy, CO2 trading and social learning. Two local schools in Elmore, the Elmore Primary School and Our Lady of the Sacred Heart, participated in collecting the data at the entrances to the 2008 Elmore Field Days. La Trobe University students also collected data from visitors and exhibitors. The information derived from these surveys was used to make a quantitative assessment of the CO2 emissions from travel and on-site energy use attributable to the event. Data was also compiled on the use of energy on-site to gain a preliminary understanding of the total emissions created by the event..

Introduction

In 2007 the Elmore and District Machinery Field Days Committee approached LaTrobe University's Centre for Sustainable Regional Communities (CSRC) seeking a partnership to make climate change a key feature of the 2008 field days. In particular to assist the Committee to find ways in which it can reduce its carbon footprint in the management and conduct of the event. This paper outlines the approach taken by the CSRC to develop a partnership with the EFMFD Committee to assist them to achieve this outcome. Both parties agreed that we would attempt to engage undergraduate students in this task, along with local primary schools that historically have undertaken projects supporting the annual field days.

In this paper we provide a brief overview of the EFMFD, its history and important community connections, outlining how the EFMFD Committee came to take on the 'CO2 and You' project. We then discuss the literature informing our research before discussing our approach to the research, the results and the implication for a focus on carbon management in future field days. We conclude with a discussion of how regional universities can engage with their region to address important issues relating to the viability and sustainability of these places.

The EFMFD

The Elmore Farm Machinery Field Days (EFMFD) started with humble beginnings over forty years ago on the banks of the Campaspe River at Elmore in central Victoria. The event is now one of the largest of its kind in Australia. It is owned and run as an incorporated body, with a paid staff of four and an active group of volunteers working across seventeen sub committees. The revenue raised from the field days, and more recently other events, such as the Australasian Scouting Jamboree in 2006, has been used to purchase and maintain a 10 hectare site two kilometres out of Elmore. Local community groups receive funding for the time given by their volunteers who provide services during the field days. This has resulted in substantial funds being made available to these community groups over the last few decades. The EFMFD is an award winning event and has one of the highest levels of visitation for events of this type.

The Social Learning Literature

The social learning literature captures a phenomenon that is now regarded as an important characteristic of sustainable communities: the capacity of groups with a common place, or issue, to work together to address their common concerns. Leeuwis and Pyburn's (2002) collection of essays recognising the contribution of the Dutch rural sociologist Niels Röling gives contemporary definition to the concept of social learning, which he defines as

'the interactive way of getting things done in theatres with actors who are interdependent with respect to some contested natural resource or ecological service. The interactive way of getting things done is based on conflict resolution, negotiated agreement, convergence of goals, theories, and systems of monitoring, and concerted action.' (Leeuwis and Pyburn's 2002, pp. 11-12)

Röling's research on the adoption and diffusion of innovation, knowledge systems thinking and platforms for ecosystem management is well documented in Leeuwis and Pyburn's (2002) collection. The context of Röling's early research was in 'extension education' and his main concern was 'to explain why and how farmers came to adopt (or not) new agricultural technologies and practices' (Leeuwis and Pyburn's 2002, p. 13). Insights which are central to our work with the EFMFD Committee as it attempts to influence effective carbon management by farmers.

In Australia Keen, Brown and Dyball published an important collection addressing Social Learning in Environmental Management: Towards a Sustainable Future' in 2005. This book took social learning to a wider setting, environmental management, and provides additional insight into this phenomenon assisting our work with the EFMFD Committee and its aspirations to make a real impact to assist farmers address climate change issues. Their braided model of social learning; the intertwining of reflection, a systems orientation, integration, negotiation, participation provides a set of criteria which informed our research and coaching of the undergraduate students who engage with the EFMFD Committee, exhibitors, visitors and the primary school children and their teachers.

More recently Wals (2007), also from the Wageningen University in The Netherlands, published a collection titled Social Learning for a Sustainable World: Principles, perspectives and praxis'. This book provides numerous examples of where social learning has been a guiding framework for people involved in social change across a wide range of settings, from rural to urban.

This literature has informed our work over the last few years. It provides frameworks which are readily accessible allowing people to work together and to identify the necessary steps to ensure people are engaged in meaningful ways.

Our approach to the research

The most critical issue for farmers and rural communities in present times are the effects climate change is having on primary production. In response to this challenge, a project was planned with the aim of promoting awareness; a greater understanding of the issues and to educate exhibitors and patrons on just how to tackle this serious challenge to farmer livelihoods and lifestyles.

The project team, under the auspices of the Centre for Sustainable Regional Communities, La Trobe University, Bendigo developed a project titled 'CO2 and You' to elaborate strategic planning for climate change awareness at the EFMFDs. This project addressed five key Carbon management strategies: energy measurement, energy efficiency, renewable energy systems, carbon trading and offsets and community engagement for social learning. Encompassing the most salient aspects of solar, wind and renewable energy systems, in so much as these technologies apply to Elmore's carbon neutral strategy. Carbon markets, trading and offsets – how carbon emissions relate and affect primary production, consumers, households and business.

The involvement of the primary school children was an important part of the project rationale, driven by the social learning concept, as summed-up by Dresner:

If a community is to be truly sustainable, socially as well as economically and environmentally, then its members need to be directly involved in making the decisions that shape its future.
(Dresner, 2002 – quoted in Alexander et al.)

The challenges which faced the project team related to the way we use measure and audit the use of energy produced by carbon emitting methods. As Blainey (1966) noted long ago Australian's suffers 'the tyranny of distance' and the relative isolation of many people in rural Australia today makes the use of carbon based energy for the most basic social and domestic needs essential. One obvious example of this is that distance excludes many rural communities the opportunity to access public transport. This feature has been the greatest contributing factor to high levels of private automobile ownership.

Mitigating the scope and impacts of climate change needs to involve all levels of participation in society: enterprise, universities, schools, private business and government. In this instance, climate change mitigation and the 'CO2 and You' feature have been successful in evincing data for the interests of the EDMFDs committee to plan out their evidence based management for the event in 2009.

While the core objective of the EFMFD Committee is to preserve the tradition of the field days and develop the events future potential, the Committee is equally keen to use the field days site and its facilities for functions and events other than the field days; for example,

conferences, demonstrations, expos and festivals. The 'CO2 and You' feature is an excellent example of an alternative development at the field days site.

In consultation with the organising committee, the following research objectives were identified as being relevant to the goals specified above:

1. determine how patrons and exhibitors viewed the EDMFDs mitigation of climate change;
2. identify the extent to which patrons and exhibitors experienced the feature 'CO2 and You';
3. assess the multitude of environmental components at the EDMFDs event.

The objectives of the Centre for Sustainable Regional Communities were to:

1. to build collaborative relationships with the stakeholders previously identified and demonstrate the potential for ongoing links between the university and the said stakeholders;
2. provide students with practical research skills;
3. obtain data and experience for the purposes of advancing our research and teaching activities.

Data pertaining to the five imperatives for mitigating the effects of climate change was collected from Tuesday, 7 October-Thursday, 9 October 2008. Two surveys were conducted based on five research imperatives: measurement, efficiency, renewable energy, CO2 trading and social learning. The data compiled was then analysed by the LaTrobe University team to make an approximation of the EFMFD's carbon emissions.

The data collected from the gate surveys gave an excellent indication of the emissions created by patrons travelling to the EFMFDs., Field day patrons appeared more than happy to be surveyed by the schoolchildren and seemed cooperative and happy to give time for this. This approach may be used in the future to survey exhibitors to benchmark the data over time. Technical considerations need to be considered in the calculations of emissions generated from travel because of the many inherent variables and assumption.

We also recognised that the overall quality of data collected could be maximised by having site holders fill out surveys prior to the event. This may encourage a more accurate overall summation of distances travelled and fuel used, providing comprehensive data from which a measure of CO2 could be derived. At times, there seemed to be some confusion over who was attending and the distances that they had to travel and the types of vehicles being used. This could be alleviated by having all exhibitors' complete surveys prior to the event.

Research findings

Patrons and exhibitor surveys formed the basis for an evidence based approach towards mitigating climate change. Surveys defined the energy profile of the EFDs event and revealed

the prevailing attitudes about climate change of both patrons and exhibitors. In order to provide solutions to help mitigate CO2 the energy use and actual amount of energy currently used needed to be determined. Electrical audits can be effective in collating information on every electrical appliance used. Type, age, size and use should be recorded; this data could then be used to measure and evaluate the effectiveness of the machine. The building audit revealed that there are a number of older style fridges, heaters, and so forth in the Administration buildings. It is advised that energy labelling and metering ought to be used on these electrical appliances as well. In order to restrict use of energy consuming equipment, the EFDC might implement a procedure in which each vendor could put forward planned energy use and methods for offsetting these emissions. This process will not only reduce the EFD's carbon secretions but also bring awareness of the EFD's environmental concerns into the spotlight.

Approximately 50% of the population interviewed had not considered their CO2 emissions; however, 65% of exhibitors and 40% of patrons indicated some level of knowledge regarding ways in which CO2 emissions could be reduced. This does not mean to say that they actually actively reduce their own footprint as there appeared to be a common scepticism about climate change whereby many patrons and exhibitors considered this phenomenon attributable to weather patterns or drought. In contrast small factions of EFD's attendees were found to be extremely environmentally aware and do all they can to reduce their Carbon Footprint. Our analysis of exhibitors' sites revealed that 57% used electronic equipment; 49% of which used multiple appliances.

An evaluation of the initial cost of the actual appliances versus the ongoing running costs is required. Newer equipment such as a four and a half star 400 litre fridge, may initially cost more however ongoing running costs amount to approximately \$21.90 cheaper per month than a 20 year old machine¹ and due to the fact that refrigerators consume the most amount of power compared to any other household appliance. The EFDC must improve their usage sooner rather than later. The EFDC could evaluate the amount of use and need for that item and may find that a single larger item could reduce the need for five or six smaller, less efficient items.

'An active program of turning off non-essential lighting and equipment [individual heaters, exhaust fans, photocopiers, some computers and printers, water urns and office lighting] would assist in reducing energy costs' (Simpson, 1995). A simple step such as wearing warmer clothes in cool weather reduces energy use and cost as heaters will not be needed. Methods such as these can be implemented straight away, but in order to reduce a greater amount of energy consumption, the Committee is advised to invest in energy efficient equipment.

From data obtained through surveys, it was found that 81% of exhibitors used printed media to distribute information to potential customers. Both exhibitors and the EFDC are obliged to reduce the amount of handouts printed. Creating order lists for those attracted visitors, ensures resources are only spent on those who are truly interested. The information can then either be printed or posted, or be made available through electronic means. Printing on both sides of the page, reducing the font size, and using soy or vegetable based inks are all simple and effective ways to cut costs. All office supplies, brochures and handouts ought to be reused and recycled in order to become energy efficient. The EFD's can limit its paper use by converting all correspondence, among the committee, exhibitors and visitors/guests onto the computer. For example; invitations to the launch of the Elmore Field Days 2008 Feature: Capitalising on a Climate of Change, were printed off and posted out to all attendants. These should have been emailed. Official show bags were plastic and contained paper, the Committee should reassess the need for these and consider alternatives such as calico bags. The majority of the marketing should also be concentrated on the internet. PDF formats, downloads, websites, email, and CD/DVDs are the key tools that are available to minimize the use of paper and ink.

The location of the EFD's is a disadvantage when it comes to transportation of patrons in terms of distance travelled to the venue. Of the surveyed patrons 53% travelled more than 100km's and knowing that 57% use petrol, the price of transporting patrons has an amounting environment effect as 'the average car emits five tonnes of CO₂ per year' (McClatchy, 2008). Localisation of attendees is one method commonly used, combined with the Victorian Railway Network, localisation can be utilised by the greater region. For example Bendigo can act as a hotel hub whereby people use the accommodation then travel by train to Elmore where transport from Elmore to the Field Days site is available, however further issues arise such as limited parking at Bendigo's Train Station. Perhaps charging for car parking at the EFD's site could be implemented to maximise car pooling and alternative modes, such as trains and buses, this could also provide a source of revenue that could then be used to purchase solar panels to produce the energy needed to provide power.

When buildings are oriented correctly, facing north, there is less need for equipment and efficiency methods to create the right air flow and light as it will occur naturally. Rebuilding existing sheds and buildings needs to be viewed as a long term project as it requires a considerable amount of time and money to complete but as highlighted in the literature review, buildings involve substantial energy requirements and by improving the EFD's buildings over the long term, they will be able to obtain sizable rewards. When calculating the energy performance of buildings the EFDC must 'take into account thermal insulation, efficiency and control of heating systems.... The energy costs are derived from space heating, water heating, ventilation and lighting' (Todd, 2006).

The Administration buildings are re-locatable, with single skin walls, floors and ceilings, and small single glazed windows. The Catering shed is located in an exposed position, the roller

doors were down on most days during the 2008 EFD's, in order to keep out the heat, making it dark inside. The main pavilion is essentially a large and very tall tin shed, with a bitumen floor. Lights are positioned high above the ground and skylight material is located along the tops of the walls. The EFDC should evaluate what they use that area for as it currently holds small stalls selling craft and household items, underutilising the huge space above. The shearing shed is a smaller version of the main pavilion however it has concrete floors, fluorescent lights and small strips of skylight material in the roof. The EFDC ought to re-evaluate all these buildings, focusing on adding 'compact fluorescent, high pressure sodium or halogen lights...double-or triple-glazed windows, [and insulation should be placed in]... ceilings, walls, doors and roofs to keep heat inside in winter and outside in summer' (Warner, 1992). These buildings will need to undergo regular maintenance to sustain performance and to reduce aging and repair needs. The EFDC wishes to use the site for other events during the year; if they have modern sheds and buildings in which to hire out, they could gain a greater interest in the overall site. EFDs may begin the long task of becoming carbon neutral. This has already begun in the sanctioning of this report; the committee is aware of the need to change and is investigating how this can be achieved. We have seen from the 2008 show that the EFD is already tackling the climate change problem with guest presentations by Rob Gell and Ben Keogh in the areas of climate change and policy change respectively.

Extensive monitoring of on site electricity was also undertaken. Through increased monitoring of meters, we identified 'spikes' in electricity use, and future energy efficient strategies can be adopted to minimise such loads. In the future an extensive investigation into the use of individual site holder's electricity use may need to be undertaken to identify major energy users at the EFMFDs. A comprehensive measure of CO₂ emissions that are a result of participation in the event should also include energy used by the EFMFD Committee, in the organisational and operational phases of the event. Not only is this information vital to ascertain the overall CO₂ emissions that are produced from the event, but also to provide leadership and goal congruence with the well publicised, 'CO₂ and You' campaign. Without a complete understanding of their own emissions, it will be difficult to not only become an environmental leader in rural Australia, but also achieving the goals of becoming carbon neutral.

We suggested that a future plan of action that the EFMFDs should consider applying include a more extensively practical approach to the education of their patrons regarding climate change. The recent nature of carbon trading as an industry and practice in Australia presents a challenge with respect to the implementation of it as a climate change strategy with the general populous. Although carbon trading is the most economical choice for the EFMFDs, the general attitude towards this new market by patrons is one that occasionally induces a sense of avoidance because everyday duties on the farm demand so much time, that it negates the preparedness of the agricultural community from exploring opportunities in new sectors of development and technology that do not directly benefit their environment. A shift to more extreme weather events has brought the issue into the forefront for farmers but economical

solutions such as carbon trading are seen as radical and ineffective, where as alternative renewable energies that exhibit direct benefits such as the production of private wind and solar power are seen as more attractive to the EFMFDs patrons.

Conclusion

This paper has illustrated that a significant local event represents an important enterprise for mitigating the affects of climate change and that correspondingly, events-based research provides a mechanism by which universities can engage with communities in meaningful and mutually beneficial ways. There are both immediate and long-term benefits to university-community engagement. It was realised that the ultimate payoff for each of the parties involved in the Elmore project was the mitigation of climate change; more specifically, the education and appraisal of the elements that contribute to environmental sustainability at Elmore. These strategies can be replicated at other regional events around Australia.

In 2008, the EDMFDs report 'CO2 and You' involved academic staff attached to the CSRC at La Trobe University Bendigo working collaboratively with the EFMFD Committee. Within this collaborative framework, research objectives were identified from the perspective of each of the stakeholders and matched with the resources and capabilities of the CSRC. It was determined that the EFMFDs committee should investigate energy use as a means of mitigating their carbon emissions. Recommendations were both short and long term, aimed at current energy use, paper reduction, food and catering, waste management – food and sanitation, transport, design orientation and buildings.

Importantly this project reveals meaningful ways in which a university can work with communities within its immediate vicinity to address important sustainability issues. The CO2 and You project of the EFMFD Committee in partnership with LaTrobe university staff and students, local primary schools, the community at large and visitors to the field days is an excellent example of university community engagement which characterises much of the applied research done by the CSRC, LaTrobe Bendigo.

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Forging the way forward: attracting professionals to regional areas through strategic partnership.

*Faye McCallum and Briony Carter,
University of South Australia*

Abstract:

Teacher retention issues have been highlighted and there is also a growing shortage of teachers attracted to rural and regional areas. Current cohorts of teacher education students appear reluctant to undergo a regional professional experience because of personal and professional factors that impinge on their involvement in a potentially exciting area of future employment. The Whyalla region in South Australia is undergoing a period of economic growth and the region offers an exciting future for teaching graduates to work and live in a growing environ. This paper will discuss a project which was developed in collaborative partnership with the University of South Australia and local stakeholders which aimed to address this issue by designing and delivering a pilot study with a cohort of graduate entry pre-service teachers. We will demonstrate how a collaborative program focussed on practice-based teaching and learning and wellbeing management, was able to benefit both the local community and pre-service teachers.

Introduction

Teacher retention and attrition rates influence the sustainability of graduates to the teaching profession (Hugo 2007; Top of Class Report 2007; Moon 2007; Green & Reid 2004; Loudon 2008; MCEETYA 2004 and Ross & Hutchings 2003). This issue is amplified for regional, rural and isolated areas where there is a growing shortage of teachers (Halsey 2005; Salt 2004; Boylan 2004 and Miles et al 2004). In addition, current cohorts of teacher education students appear reluctant to, or do not see the long-term benefits of, undergoing a regional professional experience during their degree. This can be for personal and/or professional factors that may impinge on their immediate lifestyle, future goals or because of a lack of awareness about living and working in regional areas.

Globalisation, global job competition, and the digital world in which we are now socialised make it imperative for educators to rethink conventional aims and means of education. In this case, we needed to rethink the traditional professional experience (the time spent in schools practicing the skills of teaching) for pre-service teachers and the way we expected them to embrace the local community during such experiences. We wanted to acknowledge the learning that occurs in and out of schools in diverse environments and that this could be maximised if pre-service teachers experienced the community as a holistic living and educative one. This point of difference, we hoped, would enable pre-service teachers to experience living

and teaching in a region that could enhance their employment options post graduation as well as provide them with a positive professional experience that would ultimately 'hook' them into the benefits of teaching in regional settings. It was also acknowledged that placing pre-service teachers in a 'new' place for their first professional experience may involve an element of risk. Therefore, we drew on the work of Banks et al (2007) who promotes learning as being life-long, life-wide and life-deep to assist in the conceptualisation of the learning program. In addition, a wellbeing framework that enabled pre-service teachers to identify personal and professional risk factors and coping strategies that enable resilience in the new teaching role, was developed which we believe would ultimately improve sustainability for new teachers.

In South Australia, the Whyalla district (5 hours drive from the CBD) is undergoing massive economic development (due to a mining boom) and with this comes the potential of exciting future employment with lifestyle advantages for many young professionals including teachers. Key stakeholders in the local community and staff situated at the School of Education, Mawson Lakes campus, University of South Australia became engaged in discussions around these key issues. The key question was: How can regional South Australia attract recent graduates to employment in a potentially exciting area approximately 5 hours drive from the CBD? Partnerships were formed with the Centre of Regional Engagement (CRE), the local education stakeholders of the Department of Education and Children's Services (DECS) and the Catholic Education South Australia (CESA), the Whyalla Economic Development Board (WEDB), the Australian Technical College (ATC), and the Whyalla Council to provide a rural professional experience for a cohort of graduate entry pre-service teachers.

Unique aspects of this program included: joint funding by the stakeholders to support the economic viability of the program; educators from Whyalla were involved in the design and delivery of coursework on campus at Mawson Lakes in Adelaide; pre-service teachers devised electronic ways of communicating with mentors and students through the use of photo story and e-journals; mentor involvement included personalised professional development; pre-service teachers experienced what it was like to live and work in the local community through involvement in professional associations, social and cultural activities; and, a wellbeing framework was used as a structure to prepare, guide and support teaching and learning.

Method

The aim of this study was to work collaboratively with local stakeholders to design a holistic professional experience program that linked pre-service teachers learning to the local community. Qualitative methodology was applied to this study because of its appropriateness for dealing with the various data sets and specific sample. This involved an interpretive, naturalistic approach to the subject matter which according to Denzin and Lincoln (1994),

.... means that qualitative researchers study things in natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (500).

Qualitative research therefore involves the use and collection of a variety of empirical tools like case study, personal experience, life story, interview, observation, interactions, and visual texts. These allow for the descriptions of routine and problematic moments and meanings in individuals' lives (Denzin and Lincoln 1994). The interpretive emphasis allowed for a detailed examination of text obtained through the written word and interviews which aimed to find embedded meaning in order to develop deep understandings of how small parts relate to the meaning of the whole.

Graduate entry Bachelor of Education (primary/middle and middle/secondary) students enrolled in the Program as new pre-service teachers were the targeted group for this initiative. University of South Australia staff, key personnel from DECS school sites in the Whyalla region and staff from the CRE marketed the initiative in the first week (February) of their studies. Volunteers were sought for the pilot project which resulted in 25 (19 female and 6 male) pre-service teachers (aged 21 – 34 years) forming one class group which was to be taught by a key university lecturer who would also support their learning and practice during the professional experience in Whyalla for 2 weeks in June. Previous degrees (see Table 1) obtained by this group were:

Engineering	Human Movement/ Health Sciences	Applied Science	Humanities	Arts (visual/dance)
2	8	5	6	2

Table 1: Previous degrees of participants

Numerous sets of data were collected to ensure validity and to capture the learning experience over a one year period. These included: an initial survey completed on the first day at university in this degree; mid-professional experience reflections; a survey completed post the professional experience; a narrative paper completed at the end of the first semester; and, evaluative data was sought from mentors, principals, teachers and other stakeholders and analysed according to the aims of the program. Themes were developed through the qualitative methods of data collection and included: quality of learning outcomes in professional experience for graduates, identifying the effectiveness of a wellbeing framework for preparation in professional experience, and personal perceptions of identity formation as a graduate student in teacher education. This paper will draw on the first theme (quality of learning outcomes in professional experience for graduates) according to: reasons for selecting a regional experience as part of a first professional experience; perceived anxieties and possible strategies to ensure success in the placement; and influences on future employment aspirations as a result of undertaking a regional professional experience. The outcome of the analysis of this section will provide four key factors that contribute to the changing climate of the sustainability and retention of teachers through regional engagement.

Findings

Participants in graduate programs, in this case teacher education, bring a set of knowledges, skills and experiences that increase their adaptation to, and enable them to opt for new challenges. Many of them come from social ecologies in which cultural or economic factors differ from those of many of the educators in the rural areas we have known. With this in mind, the reasons given for volunteering to undertake a rural placement as their first one is of academic interest.

Reasons for selecting a regional experience as part of your first professional experience

Regardless of the newness felt by these pre-service teachers in the profession, their initial thoughts and feelings about 'becoming a teacher' were open and positive. Some had never left the metropolitan area and others had mixed experiences living, working and learning in regional communities. They approached this opportunity as one not to be missed (A5) and despite predicting certain challenges (diverse student groups, isolation, unfamiliarity) they saw that benefits far outweighed negatives. One of the key benefits is that regional areas have a more positive and balanced lifestyle. Some respondents considered that people living and working in regional communities are open, accepting and friendly to newcomers, a new experience ... people in the country are often happy and open which I like! (A12). They expected strong links between school and community enabling teachers to work in an environment where they could make a difference. They predicted the schools would offer better professional development opportunities, a more flexible curriculum, and support on the ground... I have no previous experience in the country. This allows me to experience a range of schools, Professional Development opportunities and work with large groups of students (A21). They acknowledged that the experience of something new being outside their comfort zone was also an opportunity to meet others in the same program and begin the process of cementing professional relationships with colleagues. And, they also appreciated that the university was supporting the project with committed staff and resources which assisted their travel, accommodation and some other expenses, but more importantly, that there would be personal support available if needed. As illustrated here,

A new experience. I've never spent time in a rural area - seems like a good and well supported opportunity. I'm also interested if seeing if rural schooling is more flexible and open to including outdoor education in the curriculum (A13).

On an individual level, many commented that the experience would contribute to their professional growth, assist them to work out future options, and be a valued addition on a resume. For example,

I want to experience working in a regional area as I may go there in the future. Adds an interesting perspective to my teaching experience - gives me an advantage over someone without the experience of working in a regional area (A8).

I am wanting to work out in the regional areas once I have finished, Whyalla is a step in the right direction for me (A20).

The researchers were surprised yet affirmed by the motives given by this group of pre-service teachers for undertaking a regional placement as their very first educational teaching experience and felt it augured well for the success of the pilot program according to the aims that had been constructed.

Perceived anxieties and strategies for success

Although the pre-service teachers came into the program with positive views and a 'have a go' attitude, they also admitted feeling anxious. The anxieties identified by this group of pre-service educators showed atypical patterns to those described by others' research (McCallum & Price, 2008; Fimian and Blanton, 1987; Gold et al, 1991). For example, as reported in McCallum & Price (2008), Veenman cites the most common problems as being classroom discipline, assessing students' work, relationships with parents, inadequate teaching resources and being time poor. Fimian and Blanton found trainee teachers' role problems, struggles with motivating and disciplining students, and teacher fatigue to cause stress and burnout (1987).

In this study, the actual context, a regional one, presented as a less anxious issue for most pre-service teachers although one individual acknowledged, I will be out of my comfort zone – will not feel comfortable in my surroundings and away from family (A8). The dominant anxious moments related to personal and professional qualities and expectations. Nearly all pre-service teachers recognised they felt nervous, underprepared, and doubted their own confidence and skill level. They had a strong sense of desire to want to fit in and to be accepted. They wanted to be able to make a real difference to the lives of children but realised they may not be able to achieve this because of their own literacy and numeracy levels, lack of prior knowledge about working in schools, under-developed teaching skills and lack of experience if things went wrong. On a professional level, they acknowledged that key survival skills were necessary if they were to meet an accepted level of respect and to be a positive role model. These included being able to develop positive relationships with varied groups (learners, teachers, other staff and the community), having strong methodologies, acquiring teacher presence, being organised enough to manage student behaviour and allow for flexibility, an understanding of individuals diverse learning needs, and ensuring that teaching and learning was enjoyable and productive.

The researchers note the prior achievements of this group of pre-service teachers (eg successful tertiary study; varied life experiences; work experiences, international travel) and how this impacted on their maturity, self confidence and identity. So, although they shared their anxieties, they were also able to draw on previous life experiences for strength. This complex journey toward developing teacher identity is recognized as an emerging one where links are also required between the intertwining relationships of professional knowledge and action. Identity is seen as an ongoing and performative process in which individuals draw on diverse resources to construct selves. The pre-service teachers in this study drew on their inner strengths and personal qualities to adapt and achieve at teaching: patience, friendliness,

passion, excitement, confidence, determination, organisation, open-mindedness, motivation, willingness, and being approachable and adaptable. One participant who was afraid of overcoming nerves shared,

I will keep reminding myself that there's nothing to be afraid of – I've done bigger things before and survived (A1) and another suggested, ... keep an open mind, be prepared to learn from the challenges and accept that I won't always know how to deal/cope with things at first (A15).

They identified resources that would be there to support: a critical friend, family and friends (from distance), making connections with their 'new' colleagues, the rural community networks, and the university program. Additional resources were based more on a sense of instinct that they would be able to apply previously acquired skills to a new situation. For example, the fact that they liked, enjoyed, understood and cared for children; an identified knowledge base in particular subjects or disciplines; previous work experience in school or learning sites; sporting or musical achievements and interests; and an awareness of wellbeing strategies like physical fitness, an equilibrium of work-life balance, cognitive acclaim and organisational skills.

Influences on future employment aspirations

The stories of the pre-service teachers thus far have told us of their professional expectations on entering a new career change as a challenge but also as one of optimistic advantage. The benefits of a regional professional experience as their first teaching placement alluded to positive future employment outcomes, whether these were to be eventually in city or regional /rural places. For those indicating they would prefer to seek employment in the city post-degree, unexpected professional benefits were realized. These included gaining experience teaching a diverse range of learners, being involved in extensive teaching and learning experiences across various year levels and whole school structures, and having an opportunity to be flexible and adaptable when required. Ten of the 25 pre-service teachers indicated they would pursue a regional, rural or remote teaching after the degree. Reasons were varied and quite profound, as illustrated here,

I want to gain work in a small, regional possibly outback teaching environment. This will allow me to be flexible in my teaching so I can work across a broad range of subjects with strong links between school and community (A1).

I want to work in an environment with other young people and where I feel I am supported, included and valued. I think this will possibly be in the country (A8).

I want to work in an upper primary school, an Area school would be perfect. I hope to teach PE as a coordinator as well and this will happen more quickly in the country (A9).

Discussion

The success of the learning for this group of pre-service teachers appears to have been dependant on four key elements. These include: the development and maintenance of key stakeholders in partnership; the acknowledgement, valuing and building upon pre-service teachers' lifeworlds; quality of the teacher preparation courses; and, the inclusion of wellbeing as an integral framework in teaching and learning.

Partnerships with stakeholders

The study treats the problems of attracting, recruiting and retaining teachers as a problem that can not be solved only by teacher education or by employer authorities. It values the fact that all participants in the education community: schools, community groups, pre-service teachers, employer authorities and university teacher education programs can help to make a difference in the qualitative experience for pre-service teachers and teachers. Other research has highlighted the value of mutually beneficial partnerships between universities and specific communities (Baum 2000; Bringle & Hatcher 2002; and Buys & Bursnall 2007). However, simply just creating the partnership does not solve the problem as partners need to focus energy into analysing, strategising and organising resources that address the problem. Baum (2000) suggests two principles to achieve this: begin with a clear purpose, goal and means of support; and, accommodate ambiguities and changes in partners separate and shared purposes (234).

A definition of partnership applicable to the context of this study is derived from Baum (2000) who describes organizational partnerships as those derived from

... the result of considerable deliberations. They are carefully planned. They have a common rationale: an entity can better serve its interests by pooling resources with another that has compatible interests. By combining resources, groups and organisations not only draw on a larger pool but also may cross-pollinate in ways that create new resources (235).

Stakeholder meetings were created at the outset of this initiative and shared goals and outcomes were set, as well as thorough planning where various groups took responsibility for different aspects of the project. For example, the WEDB arranged a networking and social event for the pre-service teachers with the young professionals group; Rotary arranged a welcome event; CRE covered accommodation costs; and schools provided social, cultural and sporting activities. Resources, both financial and in-kind, were pooled to enable a rich and meaningful professional experience for pre-service teachers and schools. However, the success of this unique partnership related to the level of engagement of the various partners which Buys and Bursnall (2007) suggest provides a partnership to flourish rather than being a series of unrelated links. They purport that collaborative partnerships increase the likelihood that organisations reach a larger population, avoid duplication of services, make better sense of resources, and deal more effectively with the myriad of problems faced by communities (73).

In fact, University-community partnerships provide many benefits to university research, teaching and learning, community recognition and status. In this study, the teaching-research nexus was actualised by seeking additional sources of funding, publication and conference paper output, collaborative research opportunities and the development of 'cutting edge' research projects that acknowledge place-based education and service learning. Teaching and learning quality was enhanced for this group of pre-service teachers through peer support, enhanced learning outcomes and relevance, the opportunities to inform practice through applied research, and better informed community practice. Despite the existence of a small regional university campus in this particular area (that does not provide education programs), the University's profile and the School of Education was enhanced because professional development opportunities were provided by academics for mentors working in the project. Media exposure through local newspapers and radio and the University's publications also assisted in this process. In addition, there were long-term benefits related to increased student placements, increased job opportunities and further research possibilities.

The success of this project with university-community partnerships was dependent on open communication, trust, transparency, respect, tolerance and having a good sense of humour. Future research is needed to investigate further the interaction among these groups to enable understanding of emerging successful professional identity in a range of rural sites and its relation to both professional and geographic communities.

Valuing pre-service teachers life worlds

Banks et al (2007) acknowledges that learning is life – long, life-wide and life-deep acknowledging that learning has occurred along the continuum of our lifespan and this includes learning which has occurred from career choices (12). In the on-campus component of the Bachelor of Education degree, pre-service teachers were encouraged to share their life experiences at the beginning of the course. This information provides information for peers and the workshop tutor to identify the transferable skills which may support the students in the transition to classroom practice. One student commented that, in critiquing our own histories we create a lens through which we continue to observe and reflect on what effective teaching and learning is (A1).

The pre-service teachers also developed a photo story which was used as an introduction to the schools and their mentor. The photostory reveals to others personal and professional data about the student's lived experiences, skills and knowledges relevant to teaching. The school community then becomes a part of the network in valuing what the pre-service teacher can contribute to the learning process. This enables the pre-service teachers to avail themselves of the opportunity to 'showcase' their emerging identity as teachers.

During on- campus workshops, the pre-service teachers examine the work of Pat Thomson (2002) in relation to the metaphoric term “virtual schoolbags”, which they unpack in relation to what they bring to teaching in terms of their personal-professional knowledge, narratives and interests. This identifies relevant prior learning which can be transferred to teaching and helps to support them as beginning teachers, to appreciate the community context they are about to engage with, and how an understanding of this can influence the learning of the students in regional areas.

In this study the researchers have attempted to address a global and public concern about the education of teachers for a sustainable future. We have applied this concept to one state in Australia, and more specifically to one region where this problem is of particular concern. The outcomes of this study shape the work of policymakers, funding and institutional bodies, and educational climates that impact on the work of both teachers and educational researchers. The pre-service teachers in this study provide educators and policymakers with rich opportunities to create learning environments in which prior learning is enriched, the academic achievement of diverse graduates is enhanced, and the education of students is improved. Rather than discount what graduates bring from their past experiences, educators should build upon the cultures and languages in order to progress their learning. An overarching tenet of this paper is that educators can enhance the professional experiences of pre-service teachers if they make use of, and build upon, the knowledge, skills, and languages of these graduates.

Quality Teacher Preparation

Cochran Smith and Zeichner (2005) identify a major challenge facing teacher education today as the preparation of teachers with the appropriate knowledge, skills and dispositions to work successfully with an increasingly diverse pupil population different from the teachers’ backgrounds and in rural areas (57). This Report, *Studying Teacher Education*, identifies the global significance of teacher preparation for regional areas and addresses teacher preparation as key to the successful preparation of resilient pre-service teachers to integrate into regional schools.

The teacher education program described in this paper aims to:

- prepare pre-service teachers for the professional experience;
- assist pre-service teachers to develop the skills and understandings which make for systematic, rigorous and critical reflection;
- foster pre-service teachers disposition to think critically about current educational ideas organisational arrangements and teaching practices; and,
- encourage pre-service teachers to apply this reflective knowledge in the professional experience placement.

The content of the course is aimed to develop early teaching skills in relation to an understanding of good teaching and learning, interpersonal skills, communication, an understanding of the education system, planning for learning, managing learning, diversity, early career planning and well being. The Professional Teaching Standards for registration as a teacher in South Australia have an overarching influence on the development of the pre-service teachers ability to evidence professional relationships, knowledge and practice.

The on-campus learning is situated for the pre-service teachers by addressing the community context and environment where their placement is and emphasizes the development of peer relationships as providing a supportive learning structure for success. One pre-service teacher's commented that, I found the opportunity to share experiences and ideas with my Reflective Practice 1 colleagues to be one of the highlights of this practicum experience.

Wellbeing is integral

The personal and financial costs associated with pre-service teachers undertaking rural or regional placements has been documented as has the educative justification for them to do so (Halsey 2008; Boylan 2004). Beginning teacher stress and burnout has also been well documented (Goddard & O'Brien; Hakanen, Bakker & Schaufeli 2006; Hart et al 2000; Troman 2000; Brotheridge & Grandey 2002) but little has been written about the importance of beginning teacher wellbeing as preparation for their success in professional experience and the early years of teaching as they transition to work (McCallum & Price 2008). The inclusion of the teaching of wellbeing in schooling structures has, however, been well supported (DECS, 2007) and acknowledged as a crucial component of school curricula. It was evident to the authors that wellbeing, as a teaching and learning framework, was well suited for the pre-service teacher preparation courses that this group undertook, particularly because they were prepared to experience a new and challenging placement within the social context of rurality.

Pre-service teachers were introduced to the DECS wellbeing framework (2007) which acknowledges holistic interrelationships between the five dimensions (social, emotional, physical, cognitive and spiritual). This provided a tool for the pre-service teachers to look at how they connected with their preparation and how their beliefs and values fitted in relation to this framework. Strategies to support and sustain wellbeing were developed using a rural/regional context so possible barriers or inhibitors which may impact on success could be eliminated. This helped the pre-service teachers situate the experience and the personal and professional implications for them. The wellbeing framework provided a structure to ensure the needs of the pre-service teachers were met during the on campus course work and in their placement. During meetings with stakeholders the dimensions were used to plan, design and implement all avenues of support and to provide experiences for the pre-service teachers which contributed to their resilience. The framework was also used during the placement to enable pre-service teachers to reflect on their state of wellbeing and coping levels. This enabled them to, collectively, identify support structures of which peer support was identified

as crucial in maintaining and sustaining their wellbeing as well as providing a structure for their learning. At the end of each school day the pre-service teachers gathered to reflect on and share their daily experiences in the varied schools. They acknowledged that the peer support provided through this mechanism supported their cognitive as well as their social and emotional wellbeing as they grappled with the many challenges schools provided. The community provided opportunities for them to be involved in physical wellbeing activities through local sporting and recreation experiences, school district sports day and access to university facilities like gyms. Schools also planned social events like music festivals, cultural activities, socio-professional development and the WEDB staged a networking event for all young professionals working in the area.

It is envisioned that the structures provided in this project auger well for teacher education programmes and should promote notions of ‘well being’ that encompasses social, emotional, physical, spiritual and cognitive dimensions. This “whole person” learning is seen by Rogers (1980), Berman (1989), Wilber (2000) and others as necessary for personal and community well-being and the development of well-being implies the promotion of positive personal and physical identities as well as a sense of belonging. It emphasises how social and cultural forces shape individual and group identities which we argue are needed if beginning teachers are to be attracted to and sustained in rural areas.

Summary

This research has enabled us, as teacher educators, to gain an understanding of the ways in which pre-service teachers learning can be enhanced for sustainability and possible retention in the teaching profession. Pre-service teachers bring acquired sets of learning from their past experiences, studies and informal settings, and then the formal learning structured throughout the graduate degree positively influences their adaptation to life and work in a new community. This increases their sense of belonging and achievement and makes schools in regional communities an inviting place to work and stay. Our hope is that the ideas posed here will enable other practicing educators and future researchers to better utilise what the pre-service teachers bring to the teaching profession by identifying, drawing upon, and creatively using the cultural and linguistic capital of graduates.

The outcome of these rich experiences of learning enabled the researchers to consider a set of principles that educational practitioners, policymakers, and future researchers could use to understand and build upon the learning that occurs for graduate pre-service teachers who are new to the profession and who experience regional/rural placements during their degree. These are based on the assumption that informal and formal learning exists for graduates which may influence their sustainability and retention in these areas. The principles are:

- Learning takes place not only in educational institutions (schools and universities) but also in a multitude of contexts which values the practices of everyday living;

- Learning in regional/rural communities is facilitated when an agreed number of interested parties work together in partnership to welcome, induct, value and retain new teachers;
- New teachers require multiple sources of support embedded in teacher preparation to enable their adjustment to, and retention in a rewarding career; and,
- Acknowledging prior life experiences brings a 'value add' to new challenges

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Answering the Wingspread call for change – Community Engagement as Radical Change.

Dr Glenn Mitchell

University of Wollongong

Abstract

In 2004, the Wingspread conference called the question – Is Higher Education Ready to Commit to Community Engagement? The conference then proceeded to seriously interrogate this healthy and robust question. Moreover, it produced a detailed report with a six point plan at its heart to bring change to higher education. Sadly, this is not a question which is at the heart of most Australian universities.

This article examines the possible consequences of an effective engagement between a university and the communities it seeks to serve. It uses a rare opportunity within the academy – the creation of a committee within a Faculty – to build a successful community engagement strategy. The Faculty of Arts at the University of Wollongong has established a committee which draws its membership not only from the Faculty but also from the community. Its early work is beginning to develop a plan which goes way beyond the affirmation of community engagement as an exercise to be completed with some urgency in the hectic weeks before the Christmas break – complete the checklist and get it to Administration ...quickly!

It shows how community engagement can and should go to a level which embraces radical change. Instead of activities which might best be described as community service, this paper shows that by linking community engagement to teaching and research, we can change very notion of community engagement and also change the moral and learned skills of staff and students.

This paper owes much in spirit and tone to a recent review by Amy Driscoll of a book edited by Kevin Kecskes. In her professional life, Driscoll confessed she felt ‘pressured’ to write in language which did not reflect her. As she put it, it was ‘language that masked my identity, quelled my passions, and distilled my reflective inquiry’ (Driscoll 2007). This article is personal; it is intimate and abandons many of the professional conventions which attend an academic presentation. Put simply, it is a raw call for universities to accelerate what Ernest L. Boyer called ‘the scholarship of engagement’.

The question posed by the Wingspread conference – now more than eight years old – should have a powerful resonance within Australian universities. Sadly I fear it is a question which, while raised by our universities, is not at the heart of Australia’s higher education. This is not to say that the question is being totally ignored or not addressed.

This article looks at one modest attempt to redefine and to refocus attention on community engagement. It is modest because it examines one proposal in one Faculty at one university. In late 2008, the Dean of the Faculty of Arts at the University of Wollongong decided to revise the Faculty's Community Engagement Plan. To describe the Faculty's commitment to Community Engagement as constituting a 'Plan' is being generous. The 'plan' in effect was a list – an extensive list it should be noted – of things that Faculty members did. While members of the Faculty make significant contributions to Community Engagement, there is little coherence between the various activities and for many the 'Plan' was nothing more than a document which Administration required the Faculty to report on in the form of a checklist. And the 'Plan' was not supported by a committee or any form of internal infrastructure. The Dean's decision to establish a committee to revise Faculty's community engagement work was a major break with past practice.

The revised community engagement plan by the Faculty of Arts has benefited from the conjunction of three events. First, investigations by the NSW Independent Commission Against Corruption (ICAC) and the subsequent sacking of Wollongong City Council had raised serious questions about good corporate governance and good citizenship. ICAC's work brought matters of public probity and moral authority to light in an unprecedented way.

In 2007 and 2008, ICAC investigations and detailed media reports told Wollongong's citizens about extensive corruption at, in, of and by its council. ICAC released three reports in 2008 – 4 March, 28 May and 8 October – detailing its findings (These reports and transcripts can be found on ICAC's website at <http://www.icac.nsw.gov.au/index.cfm?objectid=58416A39-AF1E-B096-566E403021EC2F65>). This is the most far-reaching and detailed discussion of corruption in Wollongong. One consequence was the removal of the council and its replacement with three government appointed administrators. The context of the public good not being served by Council and ways to move forward is obvious.

Second, a prominent anti-corruption campaigner, John Hatton, the former independent NSW MP, had been developing a subject – initially for TAFE – on civic leadership and good governance. When an anti-corruption group in Wollongong was formed, he met Professor Stephen Hill. Hill had just returned to Wollongong where more than 10 years earlier he was Foundation Professor of Sociology. After leaving academia, Hill worked for more than a decade for United Nations Educational, Scientific and Cultural Organisation (UNESCO) in South-East Asia. Hill had a longstanding view about the transformative power of education in community change.

Third, the then Dean of the Arts Faculty, Professor Andrew Wells, encouraged by developments of the University's Community Engagement Committee, proposed a Faculty Community Engagement Committee. Membership of the committee had only one caveat – there was to be at least two representatives from each of the Faculty's three schools. Hill, as a Professional

Fellow in the Faculty, was an obvious choice and he in turn suggested Hatton who brought his proposal for a subject.

For the first time in the Faculty's history, the Committee drew members from outside the University – Hatton, a former member of the NSW Legislative Assembly (also a Fellow of the University of Wollongong), a high school principal and a community activist. It also includes representatives from the student-run group, the Centre for Student Engagement.

The first meeting discussed a range of options. For example, it looked at a scholarship for an East Timorese student and adopting a local high school whose University entrance scores could do with improvement. It decided in the first instance to develop a first year entry level subject which dealt with the broad themes of community engagement while at the same time encouraging Faculty members to continue with their existing engagement work.

While all these ideas and more are still being considered, the Committee's principal focus for 2009 will be the development of a subject on community engagement. It will be offered for the first time in Summer Session 2009/2010. This subject will begin the process of redefining community engagement in the Faculty as something more than doing public service.

The subject has wonderful and far-reaching possibilities. It not only begins a conversation that students can have with contemporary social issues, it also begins to connect this subject to other subjects offered by the Faculty of Arts. Put simply, even at these early days and before the subject has had its first class, this subject is beginning to bring significant changes. However, before I look at these changes, let us look at the new subject.

In many ways the subject will look like an entry level subject in Sociology, Politics or Political Theory. It will look at the legal system, political process at local, state and national levels, notions of power, community building and empowerment. It draws strongly on Hatton's "Dream" and in doing so, becomes perhaps the first subject in the history of the Faculty largely developed by someone from outside the academy.

Hatton's "Dream" underpins the subject. He writes

With apologies to Martin Luther King, I have an Australian Dream in which our leaders do not play on fears, greed and prejudice, but cultivate harmony, tolerance and the beauty of a multi-cultural where tolerance is the reward, where love of difference is the norm, where the gross national product is a measure of happiness, education, rounded personalities and where opportunity, health and wealth sharing is a right. An Australia in which professional sporting prowess is overshadowed by productive careers, nurses and social workers, where national defence accords with standards of freedom, justice and human rights and not might or capacity to kill and control, where democracy is not sacrificed to pre-selection, party discipline, secrecy, cover-up and mendacity, where National Theatre is not the parliament but a creative nation, school spectaculars, writers' festivals, paintings of light and life, and drama of cultural richness, depth and difference, where religion is wide, tolerant, humane and passionate about life and liberty (Hatton 2007).

The University's Community Engagement Committee had previously proposed that Faculties could consider introducing a minor in Community Engagement in the first instance with the idea of converting this to a major. The Committee took the proposal to a working breakfast of all Deans and their response redefined underwhelming! With the mantra 'To be daunted by Deans is to fail' still fresh in my ears, we have decided to look at the teaching and scholarship of community engagement in another way.

First, the subject challenges the traditional notions held by Faculty staff and prospective students about Community Engagement. It takes Community Engagement from an activity outside the academy and relocates it within the business of the Faculty – while at the same time keeping an eye on events outside the academy. So while Community Engagement is about connecting the university to the community this is NOT a one way process – it is also about providing opportunities for the 'community' to influence and direct what the university might do. To think of this relationship as one way traffic is to miss the point.

Second, it firmly states that the Faculty of Arts sees itself as a change agent. It is in effect saying 'We offer subjects and degrees which will lead students to acquire a tertiary qualification. This subject however we see as confronting significant contemporary issues in ways hitherto unexplored by an undergraduate subject.

Third, the lecturers plan to turn their lectures in effect into master classes. It is proposed to have guest lecturers with a national profile – drawing on the extensive networks established by John Hatton and Stephen Hill – to take each topic within the subject. Their presence in turn will generate significant publicity and there may well be an opportunity for local ABC radio to cover the lectures.

Fourth, the University's Centre for Educational Development and Interactive Resources (CEDIR) is keen to help develop this subject and to turn it into one which could be taught not only to the University Access Centres on the NSW South Coast and Southern Highlands but to other parts of Australia. It also has the potential to go to other countries.

And finally, the Faculty proposes to open the subject to students who may not be enrolled in a degree. In other words, interested members of the community will be able to enrol and participate in the subject.

Put simply, this subject aims to, as John Hatton has observed, 'challenge, change and create political, social, economic and environmental landscapes'. In doing so, it may also reposition the university in the community's mind as a place which can actively provide a range of tools and skills to deploy within the broader community. This is a long way from the call by Ernest L. Boyer for universities to be part of an 'urgent national endeavor'. This is one subject, offered over summer, to what will be most likely a small group of students.

It is, however, entirely consistent with Boyer's invocation for universities to become part of activities which go beyond the mere provision of degrees. Boyer argued that tertiary institutions were

...one of the greatest hopes for intellectual and civic progress in this country. I am convinced that for this hope to be fulfilled, the academy must become a more vigorous partner in the search for answers to our most pressing social, civic, economic, and moral problems, and must reaffirm its historic commitment to what I call the scholarship of engagement.

Boyer wrote these words in his oft-quoted article 'The Scholarship of Engagement' in 1996. His arguments, enthusiasms and perceptive observations are as pertinent today as the mid 1990s. What is also apparent in this and other work by Boyer is his despair and frustration at opportunities lost or forfeited by universities to address relationships with other agencies. When he asks 'To what extent has higher learning in the nation continued this collaboration, this commitment to the common good?' his frustration is palpable. A discussion of Boyer's arguments is beyond the scope of this paper except to say that Boyer raises words and ideas which are embedded in but not always addressed explicitly – words like 'moral problems', 'common good' and in another quotation he uses from Oscar Handlin at the conclusion of the article, 'service to the nation'. And then there is his important phrase 'the scholarship of engagement'.

John Hatton's proposed subject does not refer to the work of Ernest Boyer. It is, however, entirely consistent with Boyer's broad themes. Their works, ideas and visions for a new society as such that one could have been the speechwriter for the other! Hatton has devoted a life to exactly these matters of 'moral problems' and 'the common good' (Lee and Mitchell 2006). He wrote up his ideas on the public good in his Churchill Fellowship Report entitled Accountability (Hatton 2000). His motion in the NSW Parliament which called for a Royal Commission into the NSW Police Service is replete with these sentiments. His introductory paragraph is a strong example.

This motion strikes an important blow for the vast majority of honest police in the New South Wales Police Service - for those too intimidated to speak out or forced to turn a blind eye. It especially gives hope and speaks out for those with courage who have spoken out, who have been ostracised, who have been vilified, who have been set up, who have been threatened, sometimes assaulted and, in two cases, shot at - of course, I refer to Drury and Katsoulas. Corruption is entrenched in senior levels of the New South Wales Police Service. Internal affairs is corrupt. Senior police officers in New South Wales close ranks to prevent exposure of corrupt activities. Those not part of this culture are spectators too afraid to do anything about the corruption or are whistleblowers who are immediately isolated, vilified and have their career paths curtailed. (NSW PD, 11 May 1994, p.2287]

The new subject and its contribution to community engagement sees the university as an active change agent, restates its moral authority and actively engages with contemporary issues in a deliberate and scholarly way. It is a call not only for community engagement and connection but for radical engagement and connection. It is entirely consistent with Boyer's assessment that what is required of universities is

...not just more programs, but a larger purpose, a larger sense of mission, a larger clarity of direction in the nation's life ...Increasingly I'm convinced that ultimately, the scholarship of engagement also means creating a special climate in which the academic and civic cultures communicate more continuously and more creatively with each other...and enriching the quality of life for all.

The case for the 'larger sense of mission' is convincingly argued in many places, not just in the work of Boyer or the parliamentary life of Hatton. A detailed bibliography of this work for this paper would be tedious; however, we can see it in the work of the Carnegie Foundation Elective Classification Scheme for community engagement, the Community-Campus Partnerships for Health publications on engaged scholarship, and other works related to conceptions of the scholarship of engagement.

It is also clear that Community Engagement is bringing change. Let us look at some of these. When the prestigious US agency, the Carnegie Foundation for the Advancement of Teaching re-examines and re-designs its long-standing classification system to include 'institutions of community engagement', it is clear that change is afoot (Driscoll 2008). As Driscoll notes, the Foundation was keen to 'broaden the categorization of colleges and universities'. When she outlines the process by which this framework was developed, it is immediately clear that the American experience, which has much to offer to Australian universities, draws on a far more robust process than anything we have in Australia. Driscoll outlines three phases - consultation, review of current works on engagement and a pilot study. We can see the differences between the American and Australian experiences when we unpack the first phase. Consultation commenced with national leaders - national leaders!

When I look at the reach and organization of the American Community-Campus Compacts, the participants in the Wingspread conferences, the networks which include agencies such as the Association for Community Higher Education Partnerships, the Milwaukee Idea and the National Service-learning Clearinghouse, I see why there is an accessible body of national leaders (Sandmann and Weerts 2006). I can also see how far we in Australia have to go to reach their stage of development.

When I first proposed my ideas and plans for community engagement, many of my Faculty colleagues were either wholly disinterested or sceptical. When I countered their fears by saying that in some ways I was being shamelessly imitative of plans from American universities such as Brown, Harvard and Stanford, the wholly disinterested became very interested and the

sceptical became supportive. They all got very excited when I told them 'And they have been doing this since the mid 1980s!'

The history of the American experience far outweighs Australian practice. The Campus Compact which grew out of the Campus Outreach Opportunity League (COOL) in 1984, has witnessed hundreds of universities signing up to community engagement/outreach/service learning programs, new courses and many centres whose focus is community engagement (Hollander and Meeropol 2006). It is a significant part of university life in North America.

So we have a lot of catching up to do. We too need to create national leaders so that national conversations can take place about community engagement. We too need to begin to drop into that conversation phrases like the 'public good', 'public service' and 'scholarship of engagement'. We too need a Wingspread network which can bring a serious focus to this work. And perhaps the Summer Session subject in 2009/2010 – one modest little subject – will be an active contributor to that conversation. It may even begin to refocus attention on the purpose of the university.

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A Discussion of Issues, Challenges and Preliminary Results of the “Mental Health Help” Collaborative Research Project

*Dr. Julie Reis and Dr Jenny Klotz,
Nursing and Rural Health, University of South Australia*

Abstract

Key tenets underpinning the role of the University of South Australia (UniSA) Centre for Regional Engagement, are that of collaboration and community engagement. Within Nursing and Rural Health, collaborative relationships have been formed with both local and wider South-East regional nursing communities. A recent example of a collaborative endeavour is the conduct of a research project between Nursing and Rural Health staff at the Mount Gambier Regional Centre and a regional health service.

“Mental Health Help (MHH)” is a computer based resource program developed by a Mental Health Consultation Liaison Nurse at one of the hospitals within the regional health service. The MHH program was developed in order to assist rural and remote nursing staff with readily available and easily accessible information when caring for clients who may have mental health concerns. Working in collaboration with the Regional Directors of Nursing, the purpose of the research project was to evaluate the MHH program, in order to determine its usefulness for Registered Nursing (RN) staff at a particular hospital within the region and to identify if the program has wider applicability in rural and regional South Australia. This paper provides a discussion of the issues and challenges encountered in undertaking the research and presents preliminary results of the research.

Introduction

Foundational to the role of the UniSA Centre for Regional Engagement (CRE) are the principles of collaboration and community engagement. Within Nursing and Rural Health at the Mount Gambier Regional Centre, collaborative relationships have been formed with both the local and wider regional nursing community. The Mount Gambier Regional Centre has delivered the UniSA’s School of Nursing and Midwifery’s Bachelor of Nursing program since 2005. Since the program’s inception, networking and collaborative professional activities between nursing academics and the wider nursing community have been undertaken mainly to enhance the learning opportunities available to support nursing students. More recently, at the request of the aged care nursing community, individual, and group workshops have been undertaken by CRE nursing faculty to update acute care clinical skills for Registered Nurses (RN) working in the aged care sector. It could therefore, be assumed that good collaborative professional relationships had been formed between nurse academics and the wider nursing community

when in early 2008 the authors were invited to meet with the Regional Directors of Nursing (RDONs) at their monthly meeting to discuss collaborative nursing research opportunities.

Whilst a number of potential areas for collaborative research were identified, it was decided by the group that an evaluation of a computer based program designed to assist generalist RN staff caring for clients who may be assessed as having mental health issues - the Mental Health Help program (MHH) - was the priority for investigation. This paper outlines the need for such a program, discusses some of the issues and challenges encountered whilst undertaking the research project, and finally reports some of the preliminary findings.

Introducing the MHH Program

Since the adoption of the National Mental Health Policy in the early 1990s, the Australian health care system has witnessed a significant decline in the number of purpose built psychiatric institutions (Whiteford, Buckingham and Manderscheid 2002). Instead, the care of clients with mental health issues is increasingly occurring in generalist hospitals, medical clinics and community based organisations (Hundertmark 2002; Reed and Fitzgerald 2005; Sharrock and Happell 2000). Fuller et al (2004) suggest that community based General Practitioners (GPs) are currently the main providers of primary mental health care. However, it could be argued that RNs who constitute the most significant percentage of the health care workforce (Australian Institute of Health and Welfare 2008), are in a key position to recognise and provide care for these clients in the general hospital setting. This is especially so in rural Australia where dedicated mental health specialists including psychiatrists, psychologists and specialist mental health nurses are under-represented (Reed and Fitzgerald 2005).

Fuller et al (2004, p. 76) identified that GPs, 'have not been well trained in the recognition of mental health problems when a person may present and be diagnosed with a physical complaint. This statement also applies to the profession of nursing. In recent years, university based schools of nursing have made provisions for a greater emphasis on mental health issues in their curricula. However, many nurses report that they still do not feel equipped to adequately recognise and care for clients with mental health issues regardless of whether such conditions are diagnosed or undiagnosed (Happell and Plantania-Phung 2005; Reed and Fitzgerald 2005).

It is within the hospital ward and accident and emergency departments that nurses encounter clients who may present with either specific, diagnosed mental illness or indeed with a variety of co-morbid physical and psychological issues. Judd and Humphreys (2001) recognise the co-existence of physical and mental ill health and cite for example, depression in clients with chronic physical conditions. This situation is exacerbated with an increasing aging population requiring hospitalisation in Australia. Indeed, it has been well noted that depression amongst the elderly is significantly under-diagnosed and treated and 'one cause is the failure of health

professionals to recognise the symptoms, which can present or be described differently in older people' (Bird and Parslow cited in Hunt 2005, p. 258).

Contemporary nursing practice 'espouses holism as its philosophy of care' (Happell and Plantania-Phung 2005 p. 41). In order to effectively fulfil their obligation to provide holistic health care, nurses are thus required to look beyond the physical to the emotional, social and psychological health of their clients (McMurray 2005). Whilst time constraints and staffing resource issues have seen nurses focus their care on the immediate physical needs of their clients at the expense of psychosocial needs (Reed and Fitzgerald 2005), inadequate knowledge, skills and preparation have also been identified as barriers to providing care for clients with mental health issues. Studies conducted by Reed and Fitzgerald (2005), Judd and Humphreys (2001) and Muirhead and Tilley (1995), further identified that in rural areas, where many hospitals have limited mental health care facilities, resources, and support from psychiatric services, health professionals including nurses report poor knowledge and skills, lack of assistance and a need for ongoing support and education in order to provide effective care for clients with mental health issues.

Noting similar issues amongst nursing staff working within the Regional Health Service, a computer based resource program was developed by a Mental Health Consultation Liaison Nurse at one of the hospitals within the region. The MHH program comprises a collection of easily identified resources to support the practice of registered generalist nurses caring for patients with mental health concerns and issues. More specifically, it provides access to a range of current categorised information sources that are evidenced based. It is also linked and referenced to professionally recognised websites that provide mental health screening and decision making tools that are able to assist nursing staff to assess, plan, implement and evaluate their interventions. Furthermore, the program contains live links to local referral networks to assist in continuity of care.

The overarching aims of the study were thus to evaluate the MHH program's ability to provide this resource support and to determine if the program had wider applicability across multiple sites in remote, rural and regional areas of the State. The conduct of this project however has also provided a site for reflection of the collaborative relationships between nursing academics at the Mount Gambier Regional Centre and colleagues in the Regional Health Service.

Collaboration and Collaborative Processes

The Oxford Dictionary of English (2003, p. 338) defines collaboration simply as the action of, 'working with someone to produce something'. However, the process of collaboration is anything but simple. Through federal government research granting institutions, successive Australian governments over the past two decades have actively supported the policy of collaborative research between industry and academe. Academic nursing research has followed this financially imperative trend toward collaboration between academics and the

wider nursing community. Consequently, much has been written in the nursing and health science literature about the value of collaborative research being undertaken between nurse academics and nurse clinicians or health agencies (Brown, White and Leibbrandt 2006; Boswell and Cannon 2005; Downie et al 2001; Gaskill et al 2003; Storch and Gamroth 2002).

Downie et al (2001) citing Spross (1989) suggest that the three elements essential to establishing a successful collaborative partnership are: commonality of purpose, diverse and complimentary skills, and effective communication processes. Alternatively, Boswell and Cannon (2005) identified that networking, leadership, and vision were key elements of successful collaboration. Whilst all of these elements are no doubt important, they are but rhetorical principles underpinning the imperative trend towards collaborative research efforts. Linden (2002) cited in Brown, White and Liebbrandt (2006, p.172) reassuringly noted that 'collaboration, rather than yet being one more 'new-age' management trend pursued for its own sake, has a worthwhile goal: improvements in service, value and outcomes for customers, stakeholders and communities'. Collaborative research opportunities within nursing are therefore worth pursuing, when the goal remains improved nursing care for individuals and communities.

Much is written about the benefits of collaborative research. There remains however a paucity of discussion in the literature surrounding issues that challenge the establishment and maintenance of meaningful collaborative partnerships. Gaskill et al (2003, p.348) poignantly suggest that in reality 'bringing two distinct institutional groups together with a common research purpose is sometimes tantamount to mixing water with oil'. McWilliam, Desai and Greig (1997) described the classic tension existing between "town" and "gown". In this case, between nurses based in hospitals and other health agencies - identified as being the "real" world of nursing - and nurse academics situated within the university. It is argued that this tension still exists and often covertly underlies difficulties experienced in contemporary collaborative research efforts. Issues pertaining to differing institutional imperatives, priorities and culture of the workplace further compound this situation. Thus, in order to overcome some of these difficulties, developing trust between research partners is important. Gaskill et al (2003, p.353) suggest that:

It is unlikely that a so-called 'quick and dirty' approach to research of obtaining funding, completing a project and moving on to the next would ever result in productive collaboration. Trust is vital to successful collaboration and takes time to develop.

Trust also requires acknowledgement that within nursing, clinicians, nurse managers, nurse educators and nurse academics have the required skill level and ability to competently fulfil their roles. Given that a professional, collaborative relationship had already been developed between the researchers and the RDONS prior to undertaking the research, it was assumed, at least by the nurse academics, that such a trusting relationship already existed. As it transpired, establishing and maintaining this relationship became one of the challenges not only to the collaboration, but the research project itself.

The Research Process – Issues and Challenges

In mid-February 2008, the two full time nursing staff at the Mount Gambier Regional Centre were first invited by a Director of Nursing (DON) at one hospital to attend the bi-monthly RDON's meeting. The purpose of this meeting was to discuss possible collaborative research opportunities and existing projects. A wide-ranging discussion occurred relating to the MHH program and its potential for utilisation at various rural and remote sites across South Australia. Also discussed were issues such as the researchers' strengths and capabilities, resources available, including the investment of time and potential financial support. Some initial thoughts and comments relating to an appropriate methodological approach to this study were also canvassed.

Following this initial meeting the researchers followed standard processes for further developing the research project. Steps undertaken by the researchers included:

- Meeting with the Mental Health Liaison Nurse who developed the program
- Reviewing the MMH program to gain an understanding of its content
- Reviewing the relevant literature
- Identifying appropriate methodology
- Developing a research proposal
- Development of questionnaire and focus group questions
- Establishment of timelines for the project
- Beginning preparation of funding application to the CRE

Subsequently, a second meeting was held in April 2008 with the RDONs. Here the researchers presented the research proposal and questionnaire which they had developed and invited the RDONs to provide feedback, to clarify any issues relating to the research process, evaluate and amend the questionnaire in preparation for submission to both the UniSA and institutional Human Research Ethics Committees (HREC). This proved to be a productive meeting as the RDONs gave valuable input into refining the project and questionnaire and a real sense of collaboration and joint ownership of the project was evident. However, it was also at this point that some challenges to the collaborative research process began to emerge.

In presenting approximate timelines for the research project, the researchers had been somewhat optimistic in regards to the time it would take to gain ethical approval for the project from two HREC committees as well as being successful with their funding application. In retrospect, these processes were not well explained by the academics, nor well understood by the RDONs. Whilst Gaskill et al (2003) identified that it takes time to develop trust, it could also be said that failure to adhere to proposed timelines, for whatever reason, erodes trust. Trust that is, in the ability of the researchers to bring the project to successful completion, or commencement in this case. A significant delay in progressing the project, left both the researchers and the RDONs with a sense of frustration.

The second challenge encountered at this meeting related to the proposed site for the research. Whilst initially the proposal identified only one key site for data collection, the suggestion was made, that this be expanded to two sites, even though the MHH program had not yet been installed at the second site. The researchers explained that inclusion of this cohort of participants could jeopardize the validity of the research. However in the interest of maintaining positive group cohesion, the second site was included in all associated research applications (HREC and funding) on the proviso that they would not be included unless the MHH program was operationalised well prior to the data collection phase of the study. This cohort was subsequently excluded; however the issue remained contentious and somewhat unresolved, thus perhaps further eroding trust in any future collaborative research projects.

The researchers met once more with the RDONs group in August. At this meeting, it was reported that ethics approval had been attained from the hospital institutional organisation, however approval had yet be advised from the university HREC. In addition, the funding body, the Whyalla Research Management Committee (WRMC), had not yet approved the finance required for the project to go ahead. These delays were due to the postponement of both the scheduled UniSA HREC and the WRMC meetings, thus were institutional processes beyond the researchers' control. Nevertheless, this situation further diminished the strength of the collaborative relationship.

By early November 2008, the researchers were ready to start the data collection phase. A meeting was held with the DON of the primary site and it was then that another significant challenge to the project emerged. It was identified that although the MHH program had been available and accessible at ward level for the past ten months, little if any staff education had been carried out in relation to its availability, use, and purpose. Co-jointly, the decision was made to withhold distributing the research package for a period of at least eight weeks to allow this process to occur. Downie et al (2001 p.28) highlighted the importance of stakeholders having 'clear goals and purposes in order to ensure a clear understanding of the partnership'. Without actually defining each other's roles in the collaborative research process and project, assumptions had been made by the researchers that staff education relating to the MHH program would have been under-taken by the appropriate hospital staff prior to the research commencing.

At the end of February 2009, having been given the assurance that appropriate staff orientation to the program had been undertaken, a final meeting was held with the DON and this time included all the Clinical Nurse Specialists (CNC) to explain the purpose of the research and the data collection processes. In addition, this meeting also provided an opportunity to elicit the support of the CNCs in encouraging nursing staff to complete the questionnaires. In retrospect, meeting with the CNCs and the researchers should have occurred much earlier in the process. The data collection process finally commenced on the 2nd of March 2009 with the surveys distributed to staff for a period of 3 weeks. A focus group was also conducted in late April.

Downie et al (2001 p.31) identified that in many collaborative research projects nurses are relegated to the role of data collectors and devalued as partners in the research process. Bond and Paterson (2005 cited in Andrew, Tolson and Ferguson 2007 p.249) further support this concept and identified that ‘...academics are more likely to regard communities as potential research participants than research partners’. By directly involving the CNCs much earlier in the research project, the partnership could have extended beyond that of the researchers and the RDONS and strengthened the collaborative relationship between the academics and clinical staff, at unit management level. It may also have allowed generalist RN staff, at least indirectly through the CNCs, the opportunity to become better informed about the MHH program prior to the data collection phase. Alternatively, the researchers had to consider whether inclusion of the CNCs as partners in the research process might have the effect of unduly influencing the validity of the research, given that the project was about evaluating the use, applicability and impact of the MHH program on nursing practice. In any case, the entire research project was undertaken predicated on the notion that RN staff were well aware of the MHH program’s existence. However, preliminary analysis of the data has revealed this not to be the case.

Inclusion of the CNCs, even though late in the process, did have a significant impact on the research, at least in terms of the response rate. 120 questionnaires were distributed to full time, part time, and casually employed RN staff. 71 questionnaires were returned, giving a response rate of 59%. Of these, 3 were excluded from the data analysis because the respondents identified themselves as midwives only and thus did not complete the questionnaire. This response rate was considered as more than adequate to support data analysis.

A preliminary analysis of the data revealed that the majority (69.4%) of respondents were employed on a part-time basis, 22% were working full-time and 2.7% were employed on a casual basis. Of the 68 respondents who completed the questionnaire, it was disappointing to note that 40.3% were “not at all aware” and 28.4% were “a little aware”. Alternatively, 16.4% were “very aware”, and 14.9% were “extremely aware” of the MHH program. A cumulative percentage therefore indicated that 68.7% of respondents were either “not at all aware” or only “a little aware” of the program’s existence. Related to this, when asked the question “have you undertaken any professional development activities in relation to the MHH program”, 87% of respondents answered “no”. 13% of respondents answered “yes”. Of significant note, data revealed a high correlation between the numbers of full time staff and participation in some professional development activity relating to the program. Respectively, there was a high correlation between the numbers of part-time and casually employed staff and a lack of participation in professional development activity relating to the MHH program.

While it would be easy to surmise from these statistics that a lack of professional development of the MHH program was a significant factor in determining the usefulness of the program, this

would be an oversimplification. Indeed, preliminary data suggests the exact opposite; of the 40 respondents who were aware of the MHH program, 90% found the program to be relevant, useful, and applicable to support their nursing practice.

Further insight into the high number of respondents (40.3%) who were not at all aware of the MHH program emerged from the focus group discussion, which supported the finding that a lack of formal professional development was tantamount to the lack of awareness of the MHH program. However, it was interesting to note a comment by one participant who suggested that even with the provision of formal education relating to the MMH program, RN staff may not utilise the program. Discussion surrounding this comment revealed a culture of avoidance of dealing with clients who may have mental health issues. Indeed, it was proposed that many RNs did not wish to actively engage with clients who had mental health issues as this was seen as belonging to the realm of specialist mental health nurses. Thus, generalist RNs avoided either pursuing a holistic assessment of client needs in terms of mental health and wellbeing, or doing more than simply referring to the two part time specialist mental health consultation liaison nurses.

Although a number of assumptions could be made here, it would be unwise to provide such a discussion of related issues given that data analysis is only in its preliminary stage. Likewise, it is far too early to suggest any future action that might be undertaken based on this preliminary evaluation of the MHH program. Nevertheless, whilst in-depth data analysis of this research project is still to occur, the researchers in undertaking this project have identified a number of important lessons about collaborative research endeavours. These are discussed below.

Lessons Learned

Research endeavours are often deemed to be successful or unsuccessful based on the outcomes that prevail. As is well understood within academe, a research project is viewed as successful if it has culminated in the production of several publications, final reports and executive summaries addressed to the appropriate institutional bodies and participants (McWilliam, Desai and Greig 1997). However, in the case of collaborative research, McWilliam, Desai and Greig (1997) propose that what is learned experientially about the process of conducting research, is as equally important as the research itself to the building and maintenance of collaborative relationships.

Issues relating to the challenges experienced by the researchers in relation to the collaborative nature of the project are thus acknowledged. In the first instance, assumptions relating to the research process, roles and responsibilities of the research partners need to be clearly identified, discussed and clarified by all parties prior to the commencement of the research project. Secondly, open and honest discussion about any issues relating to collaboration, including issues that might undermine successful collaboration, for instance, the unspoken divide between academia and the clinical environment, need to be discussed in a non-

threatening and supportive environment. Thirdly, it is important to identify and articulate from the outset that ownership of the project and its consequential results are shared by both parties.

Downie et al (2001 p.31) in discussing their practice research model (PRM) highlight the importance of “collaborative ownership”, not just of the process but also the outcomes of the research. In their model, they suggest that ‘...both the university and the clinical setting have equal ownership of the outcomes and achievements of the research, so that both groups can claim ownership and become true partners’. This statement holds equally true if anticipated positive outcomes are not realized in the actual results of the research project. Finally, as espoused by Gaskill et al (2003 p.353), ‘Research partnerships need to be long term for everyone’s benefit’. Therefore, investment by the researchers in the time taken to establish good and productive collaborative research relationships, should ultimately lead to increased research opportunities that benefit all stakeholders, not the least of whom are the recipients of nursing care.

Conclusion

The MHH project evaluation was the first collaborative research project involving nurse academics employed at UniSA’s Mount Gambier Regional Centre and the regional health service. The purpose of the research project was to determine the ability of the MHH program to provide useful, relevant, and easily accessible resources to support generalist registered nurses in caring for clients experiencing mental health issues. Whilst it is too early in the research to provide any solid conclusions about the usefulness of the program, the research project has provided a site for reflection on the process of undertaking collaborative research and the issues and challenges arising from that process. Ultimately, reflection on the collaborative process, sharing with partners the outcomes of the research and determining a way forward should provide benefits for all stakeholders and contribute to better nursing care.

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Regional Engagement and the Regional University

*Prof. Guy M Robinson,
University of South Australia*

Abstract

Regional university campuses have significant potential to act as catalysts in the process of regional socio-economic development by bringing together various types of knowledge, especially that pertaining to particular localities and places. Regional university campuses themselves specialise in knowledge creation and transfer of knowledge, often in new and innovative ways. If this aspect of the work of regional campuses can be harnessed to other forms of knowledge production and consumption in a region there may be opportunities to generate competitive advantage and innovation at a regional scale. However, for successful outcomes new ways for regional campuses to engage with their region need to be explored.

Previous research has identified various barriers to be overcome if regional campuses are to be effective engagers with their regional community. These include the nature of the institutional setting and previous history, leadership, existing structures and what have been termed the boundary-spanning roles faculty and staff. These factors tend to focus regional campuses onto particular trajectories that may or may not yield productive relationships with various constituencies, stakeholders and communities. Hence one implication is that both the barriers and the relationships they foster or impede need closer investigation for a greater potential of regional engagement to be released.

This paper addresses three of the issues identified above, namely:

1. The types of knowledge production and consumption associated with engagement between regional campuses and the wider regional community;
2. Identification of barriers to productive engagement and possibilities for addressing these in order to advance both the evolving missions of universities and enhancing the economic, social, cultural and environmental capital of a region.
3. Examining the nature of the regional stakeholders and how new forms of linkage between stakeholders and the regional campus can be mutually beneficial.

Whilst much of this paper is theoretical and could be applied in different regional contexts, some specific examples will be drawn with respect to the Whyalla campus of the University of South Australia and the surrounding Eyre Peninsula region.

Universities in Regions

Regional engagement by universities necessitates interaction with a wide array of interest groups within regional communities including regional and local government, business interests, community organisations, non-governmental organisations (NGOs), other educational providers and financial intermediaries. Through various forms of interaction with these groups, universities are increasingly recognised as possessing a 'third mission', to accompany teaching and research, namely community engagement or, when referring to the role of a remote or regional campus, regional engagement (Charles and Benneworth, 2002; Goddard, 1999; OECD, 2007). The interactions are frequently diverse and chaotic, reflecting the difficulty of translating the notion of regional engagement into a well-defined set of activities. They may have a teaching- or research-based focus, but often reflect a need for the university itself to diversify its own funding and support. This may be achieved by the establishment of new university-industry partnerships in a regional context and specific teaching and research initiatives that have particular regional relevance or applications. In the United States especially, this has frequently been translated into concerted attempts to stimulate regional economic development (Paytas et al., 2004).

The Kellogg Foundation describes 'engagement' as "involving lasting relationships formed between institutions and communities, which influence, shape and promote success in both spheres" (W.K. Kellogg Foundation, 2002, p. 5; see also Chatterton and Goddard, 2000). Another definition referring explicitly to the role of universities states that engagement "involves a set of activities through which the university can demonstrate its relevance to the wider society and be held accountable," (Jongbloed et al., 2008, p. 313). This includes not only the knowledge transfer function typically associated with universities but also a broader community function that embraces regional economic and social development. The 'embrace' generally involves the creation of partnerships for the growth of mutually beneficial relationships, usually incorporating elements of either or both of teaching and research.

Amongst these partnerships there are growing examples of links between regional campuses and local industry through industry-funded research projects, training schemes for industry work-forces and capital intensive ventures such as science/technology parks and spin-off companies. These links have been referred to as a component of 'Mode 2' knowledge production in which research favours broad trans-disciplinary contexts (Gibbons et al., 1994). Mode 2 involves a blurring of distinctions between pure and applied research programmes, with "the possibilities of application ... increasingly shaping programmes of 'pure research'" (Harloe and Perry, 2004, p. 214). It also implies closer connections between different institutions and key actors in the knowledge production system, and hence necessitates universities co-operating much more with industry and government than has been the case hitherto. In addition, this reflects the growing importance of networks in various domains, including the social, political, economic and technological (Castells, 1996), and the emergence of what has been termed the knowledge-based economy that has accompanied changing social forms of organisation. In turn, these emerging organisational arrangements have

encouraged networking, collaboration and permeability between formerly fixed organisational boundaries.

Universities make a direct economic contribution to their regions' development. They also shape human capital and institutional actors in networks (Thanki, 1999) as summarised in Table 1. With respect to Universities located outside major metropolitan centres, perhaps the best analogy is that regional campuses can promote a learning environment in the region, helping to develop skills and building resources to foster competitiveness and social cohesion. Regional campuses "are in a key position to catalyse regional development outcomes by bringing together different forms of knowledge, including place-based knowledge, in new ways" (Allison and Eversole, 2008, p. 95). In this context regional development can be regarded as a "set of functioning institutions, organizations, funding structures and streams, inter-active networks and forums for collaboration, for the pursuit of common economic, social and cultural goals" (Holttta, 2000, p 4). Hence, the extent of interaction between structural, institutional and social factors is crucial to the positive development of regional engagement. In theory there is a capacity to generate intellectual property that can be commercialised and contribute to the establishment of new enterprises and industries (Feller, 2004; Stephen et al., 2004).

Barriers to Effective Engagement

Despite the apparent potential of universities to become actively involved in regional engagement, experience from many regional campuses suggests that various barriers exist to the realisation of universities' regional engagements. Barriers include the research agenda and curriculum offered by the regional campuses, the extent to which the university embraces its stated regional engagement mission and the lack of ability of regional campuses to take particular initiatives, most notably with respect to entrepreneurial developments.

In terms of research, a university's agenda is usually rooted in disciplinary bases, which may be far removed from that of the private sector's interests within a region. One clear mismatch may be researchers' desire to engage in blue-skies research likely to gain high academic kudos and recognition within the academy in contrast to the applied research that a major regionally-based business may wish to support. Similarly, the curriculum offered on a regional campus may bear little resemblance to the needs of the local economy. Re-alignment of both teaching and research so that they more closely meet the needs of the local community probably requires very close interaction between the university and the community. It is also the case that individual academics, even those based on regional campuses, may have little incentive to become involved in regional engagement as either this is unlikely to bring much recognition within the institution or it is simply not specified as part of their contractual duties.

Jongbloed et al (2008, p. 317) highlight the lack of an entrepreneurial culture in academia as a barrier to more effective interactions between universities and the worlds of commerce and industry. Although there are some notable examples of institutional successes in developing

commercial products and creating science parks in conjunction with industry, many academics do not regard their work as having a commercial dimension. Moreover, some may reject the demands likely to be placed upon them by taking on consultancy or contract work as these may restrict their independence. They may simply lack knowledge of the commercial potential of their research or of how to deal with private companies. In general, academics tend to be more motivated by their own research agenda rather than a concern for entrepreneurship (Lee, 2000). Academics also have a poor understanding of the technology transfer process and, often, little interest in dealing with private companies (Siegal et al., 2003). Academic reward systems are poorly aligned with such activities (Lee, 2000), and there is a common perception that research within the context of regional engagement is either solely applied research or takes the form of consultancy, both of which are not necessarily valued highly by many academics and institutions (Gunasekara, 2006, p. 158). Collaborative ventures between university and industry usually reflect the research interests of the academics as opposed to entrepreneurship, a concern for outreach or improved pedagogical practice.

Beer and Cooper (2007) highlight some of these problems that affect the creation of effective partnerships between universities and regionally located enterprises:

- The perception that universities behave in ways that are different to either public or private sector organisations.
- The absence of universities from the networks and communication protocols central to the world of economic development practitioners.
- The sporadic nature of university engagement with regional issues.
- The gap between university funding models and local economic aspirations.

In order for these barriers to be broken down for most regional campuses, universities may require different types of governance that can generate a more active form of community engagement in which the community itself can play a more substantive role in the affairs of the university. This probably comprises a level of involvement beyond the traditional presence of members of the community on a governing body or advisory board. One possibility is a move towards new paradigms of university governance that incorporate the needs of a diverse set of communities and stakeholders (Benington, 2005). New paradigms may be represented in ways in which universities can respond to the demands to make their teaching and research more publicly accountable and relevant to society. However, this alone is unlikely to transform longstanding academic norms and values. Hence there also needs to be recognition from high-level university management, which may not even be located in a regional campus, that there are benefits to be gained from regional engagement.

These benefits need to extend beyond simply tapping a different market for supplying students into the realms of enabling an institution to establish a distinct regionally-based identity. Indeed distinctiveness of identity has become a marked feature of the higher education sector in general as competition for public and private funding has become increasingly intense. Yet, whilst there may be a political advantage to a metropolitan-based university by maintaining a

regional presence through having a 'distant' regional campus, there must be more tangible benefits directly linked to regional engagement if this regional role is to be fully embraced. One critical aspect may be the research opportunities offered by focusing on particular regional problems, attracting funding from businesses and government from the region and potential for leveraging additional funds from outside the region, e.g. from national government sources. One reason why regional campuses may not develop a strong regional engagement role is because of the nature of universities' management structures. In situations where a regional campus is part of an institution with its base in a metropolitan area it is likely that the needs of the (usually larger) metropolitan campuses will hold sway, with the needs of regional engagement relegated to a more minor role. This may be indicated by the academic staff on regional campuses not having autonomy. For example, they may be members of faculties/divisions or schools/departments based in the metropolis and/or they may not control the management of courses taught on regional campuses. Metropolitan campuses may be both reluctant to 'lose' students to regional campuses and could be unaware of the possibility that a different context or different programme might need to be offered in a regional context. Centralised university management may also have concerns about the potential costs involved in launching new areas of teaching on regional campuses or may not appreciate that courses offered on a regional campus may require a different emphasis from those offered in metropolitan areas.

Regional Engagement: An Australian Illustration

The nature of regional engagement by universities and the barriers to successful engagement as outlined above can be illustrated by the experiences of a range of regional campuses. Some specific and additional general observations are presented herewith drawing on the example of the University of South Australia (UniSA) Whyalla Campus and its smaller regional centre at Mount Gambier.

The reforms to the Australian university sector in the early 1990s greatly increased both the size of the sector in terms of numbers of institutions and numbers of students as well as a growth in non-metropolitan campuses, often by claiming campuses previously belonging to what had been non-university educational institutions. More recently some of these smaller regional campuses have been closed, though many of the 'new' universities, e.g. those now badged as the Advanced Technology Universities, have tended to retain well developed links with regions in which they have a presence. This may help tackle the issue of under-representation in higher education that regional and rural Australia has experienced for many decades (Callaghan, 2002). In terms of research the regional campuses offer opportunities to take more advantage of the proportion of National Competitive Grant funding that is earmarked for so-called rural and regional collaborative projects.

Of Australia's 39 universities, 14 have their principal campus located outside a state capital. It is estimated that these 14 directly employ 20,000 people and account for over one-quarter of

all Australian university students. In Toowoomba, the home of the University of Southern Queensland, the University contributes around \$300 million to the local economy (Cencigh-Albulario, 2009). In addition, a further 12 universities based in state capitals have regional campuses. Hence there are significant opportunities for two-thirds of the Australian universities to develop regional engagement strategies.

In the case of South Australia the state capital, Adelaide, enjoys huge primacy in terms of population (around two-thirds of the state's population live in Greater Adelaide) and concentration of universities in the state. The state's three universities are all based within the metropolis and only one, the University of South Australia (UniSA), has established a campus beyond the metropolitan region, though the other two universities, Adelaide and Flinders, have research stations in non-metropolitan locations; the latter also teaches medical students in hospitals throughout the state, whilst UniSA and Adelaide jointly support the Spencer Gulf Rural Health School (SGRHS), which has a presence in various regional locations in the west of the state.

At Whyalla (400 km north-west of Adelaide) there has been a campus of a higher education institution since 1965 whilst degree-level courses have only been taught at the University's centre in Mount Gambier (400 km south-east of Adelaide) since 2005. Both the campus and the centre are now functionally part of UniSA's Centre for Regional Engagement (CRE),¹ which administratively sits outside the University's divisional/faculty structure that manages the majority of the University's academic staff.

Both Whyalla and Mount Gambier are towns with populations just above 20,000, which makes them respectively the second and third largest urban centres within the state outside metropolitan Adelaide. However, their regional contexts are starkly contrasting. Whyalla is part of the so-called 'iron triangle' around the Upper Spencer Gulf, with the industrial towns of Whyalla itself, Port Augusta and Port Pirie providing employment in iron and steel manufacture, lead and zinc smelting, other metal-based manufacturing, and engineering and supporting trades. Mining in the broad hinterland of the Eyre Peninsula and Flinders Ranges provides the natural resources for these industries, with major employers from the heavy industry sector, including OneSteel and Nyrstar. In contrast Mount Gambier is at the centre of a prosperous agricultural region that includes dairy and beef production, wine (from the Coonawarra and Limestone Coast regions) and forestry, with 20 per cent of Australian plantation forest production occurring in the town's hinterland along the southern border area between South Australia and Victoria. Food processing and the timber products industry are prominent in the region and Mount Gambier is also the home town of Scott's Transport, one of the largest freight companies in Australia.

Teaching

The significance of the opening of UniSA's Mount Gambier Centre in 2005 was recognised by the local community in terms of raising skills levels in the region, creating new opportunities,

helping to eliminate barriers to higher education, economic benefits (Watkinson and Ellis, 2006), and retaining skilled workers in the community (Penman et al., 2003). The initial sphere of influence of the Centre was quite local: of the first intake of students, over 80 per cent lived within 50 km of the campus and 40 per cent within 10 km. Half the cohort came from outside the standard 18 to 22 years of age group (Pullin and Munn, 2006).

These advantages and characteristics of regionally-based teaching are also apparent at the Whyalla campus. For example, “the Whyalla Campus pioneered flexible delivery of the first year of the Bachelor of Nursing in 1997, for the first time in Australia, and expanded this to the whole program” (Ellis et al., 2008, p. 72). However, in recent years the curriculum within the CRE has been dominated by the focus on nursing and social work, emphasising the need to meet a high demand for health-care and social welfare workers in regional South Australia. This highlights the extent to which health-care and welfare service workers can find jobs both in the small urban centres and farming settlements beyond metropolitan Adelaide, but also in more remote small communities, including those with a significant Indigenous population. There is also an introductory engineering course, a small business studies programme and a foundation studies course that provides a ‘regional strand’ stepping stone for entry to degree courses in any of the University’s programmes in the form of a one-year no-fee bridging programme to university entrance. However, education is a notable absence from the curriculum, despite the difficulty in attracting teachers to regional parts of the state, and there is no regional campus-based provision (beyond the foundation course) for science or information technology, arguably vital components of the regional economy. However, some of the potential demand in Mount Gambier for teaching directly related to the local forestry and timber products industries is currently met by Southern Cross University (SCU). Although SCU’s home base is on the northern New South Wales coast, in Mount Gambier it offers degrees in Environmental Science and Forestry taught using the facilities of two local schools, the technical and further education (TAFE) college and teaching (in part) provided by ‘fly-in, fly-out’ staff based on campuses in New South Wales.

It would appear that in the case of regional engagement within UniSA, the teaching dimension is relatively narrowly based in that it does not provide access within the non-metropolitan regions themselves to a wide range of disciplines, and specifically ones likely to generate an economic benefit through retaining in regional localities graduates with desirable skills, e.g. in teaching, IT, science and environmental management. The outcome is that students wishing to study these subjects must move beyond non-metropolitan South Australia in order to do so or engage with distance-learning options. Indeed, there is evidence that the lack of tertiary opportunities available in regional areas effectively prevents some regional school-leavers from going to university (Harvey, 2004). Particularly for those with limited financial resources, the lack of ability to attend university whilst still living at home in a non-metropolitan area simply means that a university course ceases to be an option for many.

One possible alternative is for these potential university students to undertake tertiary studies based on distance-learning modes of study. In recognising this and other needs for distance-learning teaching, the Open Universities Australia (OUA) initiative has currently an enrolment of nearly 70,000. The initiative involves a primary consortium of 7 institutions, with 15 others providing input (including universities and TAFEs) (OUA, 2008), and with administrative operations focused on UniSA's Whyalla Campus under the management of the CRE. As one-third of the OUA students are enrolled through UniSA, it can be argued that this is a significant regional engagement dimension within the institution, greatly adding to the range of courses that it is offering to regionally-based students.

Research

Regional engagement in the form of research activity is present on the Whyalla Campus and Mount Gambier Centre of UniSA through the Centre for Rural Health and Community Development (CRHaCD), created in 2006. This is the research arm of the CRE, and also receives some support through the Spencer Gulf Rural Health School (SGRHS). The research emphasis on health and community mirrors the predominant themes within the teaching portfolio of CRE and has provided a very particular form of engagement within regional South Australia, one that to date has tended not to emphasise economic or environmental dimensions. In this respect it would seem that so far the capacity for regionally-based research located on the regional campus to play a part in regional economic development has not been fully realised, and various opportunities to attract funds from the major industries, economic development boards and natural resource management boards remain to be pursued. Nevertheless there are other activities of the CRE that extend the nature of its regional engagement into economic and environmental areas, including some with a research component.

The CRE functions as a facilitator of new and 'non-traditional' linkages between the University and the regional community. Simple examples are the use of the Whyalla Campus as the host for various community and other organisations, including the University of the 3rd Age, the Globally Make a Difference program, the South Australian Regional Communities Leadership Program (SARCLP), the Whyalla Intergenerational Study of Health (WISH) and various facilities, such as a gymnasium and café, accessible to and frequented by the local community. It has also established partnerships with other parts of the University to enable particular types of teaching and research to be established and flourish within the region. In particular this can be seen in the use of the campus by the SGRHS, which has an extensive network of offices and facilities throughout western areas of the state, and the Regional Sustainability Centre (RST), the regional node for UniSA's Institute for Sustainable Systems and Technologies (ISST), working collaboratively with local industry to utilise UniSA's expertise in sustainable systems and technologies. The RST's main project is to demonstrate a solar power plant that can deliver base-load electricity through the integration of unique thermo-electrical solar energy storage technology. A second project will use solar energy combined with waste heat to provide

a thermal solution for producing deionised water. Therefore both of these projects are geared towards generating outcomes of direct value to industry within the region, and they are sponsored by key representatives from local industry.

Limitations to the research base of CRE/CRHaCD are being addressed in various ways in a new wave of research projects that are tackling engagement on new fronts. These include work on corporate social responsibility in regional businesses, e-commerce in small and medium-sized enterprises (SMEs), the experience of in-migrant groups attracted to Whyalla by skilled employment opportunities, analysis of regional environmental initiatives, impacts of major mining developments on remote communities, and evaluation of various social projects in regional South Australia, including some with an Indigenous dimension. Moreover, the previous lack of focus on economic and environmental research does not mean that the institution itself is not involved in this type of research in the region, just that it is not necessarily being organised by and directed solely from the regional campus. Indeed, there is a wide range of regionally-focused research directed both from the University's metropolitan campuses and through CRHaCD/CRE, including work on Indigenous issues, environmental problems, urban planning and a range of socio-economic development projects (e.g. Baker, 2007; Bryant and Livholts, 2007; Cheers et al., 2005; Wells and Mallawaarachchi, 2008). However, this raises important questions about the role of the regional campus per se as opposed to that of its host institution based hundreds of kilometres away from the regional campus. In particular, how should linkages between the institution and regional communities best be organised to deliver mutual benefits? And what governance and managerial relationships need to be in place to enable regionally-based academic and professional staff to best deliver the institution's regional engagement targets.

The dominance of heavy industry in Whyalla and its hinterland may inhibit the development of new networks for sharing knowledge involving the regional campus, simply because there is a lack of the range of 'players' that would be present in more economically diversified regional contexts. However, as the only locally-based representative of higher education institutions in the region, the campus is well placed to shape the regional agenda and there is substantial unrealised potential for institutional linkages and growth of productive networks, e.g. potential to exploit its vocational and professional focus as a 'new' post-1992 university, especially in terms of entrepreneurship by providing various forms of support for new businesses, and acting as agents for science and technology transfer, especially through small and medium-sized enterprises (SMEs), with potential for campus-based partnerships such as a mini-science park. In contrast to Whyalla, the more diversified economy of Mount Gambier may offer a different set of opportunities for regional engagement from the University Centre located there.

Conclusions

Garlick and Pryor (2002, p. 3), writing in the Australian context, concluded that "stronger regional development and university returns will only emerge if there is active and purposeful

engagement of the knowledge and learning aspects of the university with the priorities of the milieu in which it is located.” Engagement means ensuring a two-way flow of information and ideas from regional campuses to the community, which may be hindered if the engagement agenda is not controlled by the regional campus, as in cases where such campuses are effectively small offshoots of universities based in metropolitan areas. Barriers to engagement may prove to be particularly difficult to overcome in such cases. However, there are other factors that can create barriers. For example, in the context of South Australia, the non-metropolitan areas themselves may be an inhibiting factor by virtue of a lack of regional resources to support research initiatives or perhaps the inability to implement recommendations arising from applied research projects. These potential constraints reflect the overwhelming dominance of the state capital, Adelaide, and its metropolitan region within the urban hierarchy so that not only does regional South Australia lack major urban centres but the overall population numbers in individual non-metropolitan regions is very small (generally <50,000).

In many universities, there may be a lack of clarity in the meaning of ‘engagement’ within the institution, and academics working at a regional campus can have difficulty in recognising a link between the institution’s regional engagement mission and their own work. Gunasekara (2006) describes this as “a disconnect between the discourse of engagement and sense-making on the ground” (p. 156). In the particular case study referred to herewith, there is a clear opportunity to transcend this ‘disconnect’ through effectively co-ordinating regional engagement activities by virtue of these being the responsibility of the CRE, which itself is based in two non-metropolitan regions.

In terms of research, federal and state government could do much more to encourage research that focuses on regional Australia. There is a lack of a dedicated federal funding stream attached to regional engagement (Beer and Cooper, 2007), in contrast to the levels of support for regional partnerships in the UK and the ongoing and substantial roles of the land grant universities in the USA. For example, there are opportunities for more community participation in environmental management programmes through locally-based natural resource management boards (NRMBs), with regionally-based universities also possessing the necessary expertise to contribute to this process (Lane et al., 2005). Indeed, regional delivery of NRM has been enthusiastically embraced by federal government. In addition there has been generous federal and state support for regional and local cultural heritage projects, as seen in the proliferation of festivals celebrating specific places and regions (Derrett, 2003). Increased involvement of regional campuses with such projects may offer one important route towards generation of regional partnerships. On the negative side, the lack of substantive regional government possibly restricts regional pressure on state governments to encourage more R & D beyond the state capitals, and hence there may be an inbuilt limitation on the extent and effectiveness of regional engagement.

Turning to the issue of regional engagement as a means of retaining more graduates within non-metropolitan regions, there needs to be a regionally relevant educational system to provide opportunities for graduates to remain in or relocate to the region, as in the case of the entrepreneurial education programme operated at the University of Joensuu in northern Finland (Holttä and Malkki, 2000). The expansion of the Australian national broadband network may mean that more students in non-metropolitan areas will be able to participate in real-time virtual lectures produced from metropolitan centres. Harnessing this technology to ensure that more students remain in the regions to study and then work after graduation remains a key task for regional campuses.

In conclusion, effective partnerships to develop community/regional engagement will need to take note of the five 'lessons' recommended by the W.K. Kellogg Foundation (2002):

- Community ownership
- Targeted foci
- Rigorous selection processes that include community readiness
- Achieving early results by 'harvesting low hanging fruit' to maintain motivation of participants
- Having patience with the way the communities work and honouring the pace of change.

In pursuing these lessons as part of an engagement strategy the Australian universities will be operating within a changing environment as Federal Government higher education strategy is championing the notion of collaborative 'hubs and spokes' for the future of Australia's research efforts, and clearly this can embrace a strong input from regional campuses as well as increased collaboration between existing regional universities and between existing regional and metropolitan-based universities. Greater collaboration between regionally-based universities has been advocated in the 2009 Bradley review of Higher Education in Australia, with encouragement for two (Charles Sturt and Southern Cross Universities) to merge.

The brief study of UniSA's regional campus and centre highlight the need to identify and overcome barriers to regional engagement, whether these be associated with factors related to institutional management, regional character or relationships with government. There is a strong suggestion that there is a need for new forms of relationship to be developed between universities and potential regional partners/stakeholders. One way forward may be the adoption of a new set of 'rules of engagement', as UniSA has proposed, based on mutual respect, responsibility, timeliness and communication. These 'rules of engagement' are designed to realise a key goal of delivering practical outcomes for community stakeholders and academic outcomes for investigators. This recognises that research may be both 'pure' and 'applied' but with a 'bottom line' of delivering outcomes desired by stakeholders. The process of engagement is specified in terms of researchers being responsive to the needs and perspectives of community stakeholders, with a requirement for researchers (and stakeholders) to respect each other's background, expertise, knowledge and insights. Necessarily this involves a need to respect the pressures, sensitivities, confidentialities and perspectives that each person or agency brings to the discussion. This form of engagement

requires academic researchers to ensure both internal and external team members are fully involved in all stages of project planning and decision-making so that all members share responsibility for successful development and execution of the project. For such partnerships to work the agreed timeframes must reflect the intersection of community need with external funding opportunities, and especially they must address opportunities to leverage government research funds to supplement money from the stakeholders. It is vital that communication protocols are agreed between the researchers and the stakeholders so that misunderstandings or discussions at cross-purposes are avoided.

Successful regional engagement can take many forms beyond the basic aspects of attracting students to study at a regional campus and conducting research in conjunction with regionally-based collaborators. However, as competition both for students and for research funds increases in the Australian context, the need for regional engagement successes will also rise. Those Australian universities located in the regions or with regional campuses will have to strive harder to overcome the barriers to engagement and to develop new ways of interacting with regional communities.

Note

The CRE also has responsibility for UniSA's Northern Adelaide Partnerships (UNAP) whose staff are based at one of UniSA's metropolitan campuses and which focuses on educational disadvantage in Adelaide's outlying northern areas (in the Cities of Playford and Salisbury). As this project has a metropolitan focus, it is not discussed in this paper.

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Table 1 Universities' contributions to their region's economic development

*	The university as an economic entity Universities make a direct economic contribution to their region's economy: act as employers, purchasers of local products & services, attract students who spend money locally
*	The university as a producer of commodified knowledge Intellectual property rights, technology transfer, science parks, spin-offs
*	The university as a shaper of human capital Attracting, educating and retaining students; producing knowledge- and skills-based graduates for local firms

- * The university as an institutional actor within networks
 - Formal and informal participation as an institutional actor with other regional actors developing linkages and networks of learning, innovation and governance

Based on the work of Armstrong et al (1997), Boucher et al (2003), Charles et al (1995), Goddard et al (1994), Keane and Allison (1999), Oakey (1995), and Thanki (1999).

Establishing a professional networking organisation and keeping it going: A Case Study

Dale Trott, CQ University

This case study reviews the development of a networking organisation in Central Queensland for Occupational Health and Safety (OHS) professionals and students of the OHS program offered by CQ University Australia. The networking group was organised keeping in mind that a similar local area network group for CQ had failed some years previously. The new networking group was established identifying any existing professional networks in the Central Queensland area, identifying the reasons behind the previous local area group disbanding and finally determining the benefits to students and professionals alike of organising such a group. The benefits of re-establishing the network for students and industry professionals at first seemed obvious. This networking group would mean increased contact between industry and the OHS program offered by CQ University Australia; industry professionals would gain an opportunity to collectively engage with their own professional safety organisation; tertiary students would benefit from engaging with industry professionals in their own discipline; the CQ area would benefit from the establishment of a professional networking organisation discussing issues unique to their immediate area; and the links between the tertiary sector, the peak safety organisation and industry professionals would have added benefits to future curriculum development. In the end it just made good business sense to re-establish links between the tertiary sector, the professional safety organisation, industry and tertiary students. However, garnering the initial interest of OHS students and industry professionals, and maintaining that interest, would prove difficult. This study will not only review the benefits of such a professional networking group, but also investigate possible options for developing a continued long term interest in the continued development of a professional networking group.

Introduction

Being involved with a professional networking group can be of huge benefit to OHS Professionals, Managers and students alike in the sharing of skills, knowledge and experience. Professionals in networking groups can be more positive about their careers than those not in networking groups (Friedman, Kane and Cornfield, 1998). The obvious benefits for students are increased contact with their peers, a practical understanding of issues in the workplace and an added stepping stone into possible future employment.

The Professional Networking Organisation (PNO) for Occupational Health and Safety (OHS) Professionals in Central Queensland (CQ) titled 'PNO-CQ' was launched in Rockhampton in April 2008. The group was established as a unique opportunity for CQ professionals and OHS students from CQ University Australia to network and share experiences. This was not the first

offering of a professional networking group in the region, there previously existed another OHS specialist networking group 2 years prior to the establishment of this group. This previous networking group, funded largely by the peak professional safety organisation the Safety Institute of Australia (SIA), was not large but had a dedicated following of regionally based professionals. The group was hierarchal in nature with a Chairperson and committee arranging the forums and presentations. The group eventually folded after years of struggling with their own professional industry body over control of financial affairs. With the demise of this earlier group few opportunities for specialised networking existed for OHS professionals and students of CQ University Australia. Thus prompting the timely establishment of the PNO-CQ in 2008 where emerging OHS issues in the CQ area could again be identified and discussed. The PNO-CQ was formed to provide industry with the opportunity for industry to engage with Academia and discuss interests in research and teaching. Networking groups are also useful for employees in enhancing their chances of gaining mentors to support their career development (Friedman, Kane and Cornfield, 1998). The networking group was also seen as an invaluable opportunity for industry to engage with students.

The structure of the PNO-CQ is flexible enough to take into account industry needs, with special consideration given to graduates of the CQ University Australia OHS program. Support and funding for this networking group comes via both the peak industry body the Safety Institute of Australia (SIA) (Qld) and CQ University Australia.

When initially contacted respondents felt the idea of establishing a regional networking group was well overdue.

I have thought for several years that this needs to happen.

Start-up survey of interest in PNO-CQ, 2008

...just wanted to say that a CQ professional networking group... sounds really beneficial for all the OH&S people in our area

Start-up survey of interest in PNO-CQ, 2008

The vast majority however were just pleased and enthusiastic about being involved.

Well done what a great idea!

Start-up survey of interest in PNO-CQ, 2008

This is a great concept and I'm keen to be a part of (it).

Start-up survey of interest in PNO-CQ, 2008

Purpose of the PNO-CQ

The simple purpose of the PNO-CQ was the development of a community of practice, inclusive of professionals, industry and students from the OHS program offered by CQ University Australia. Network groups can be seen as an effective means of providing social support for members (Friedman, Kane and Cornfield, 1998), as well as improvements in scholarly work and institutional credibility and visibility (Ismail and Rasdi 2007). Most importantly the PNO-CQ was designed to be Central Queensland focussed; a group specifically intended to address issues of a regional nature.

Some of our issues can be quite unique (particularly when you are talking about (sic) heavy industry or mining) and I would hope that the network could "share" some of our

experiences and pass on some of our learnings (from issues raised onsite, near misses etc).

Start-up survey of interest in PNO-CQ, 2008

This networking group was always intended to meet the needs of the regional community of practitioners, with a long term commitment to meaningful participation, with due consideration of those involved (Denison 2009).

Goals

When setting goals for this group it was considered a vital first step to address the visibility of the networking group amongst OHS professionals in Central Queensland. OHS professionals, especially those in the Resources Industry, anecdotally appeared to be unaligned with any professional networking group, with little opportunity to regularly communicate with other OHS professionals that weren't directly linked to their employer.

Establishing links with related professions to expand the visibility of the networking group was seen as vital (Ismail and Rasdi 2007). Other professional industry bodies such as the Australian Institute of Occupational Hygienists, Australian Institute of Management (AIM), Engineers Australia, Australian and New Zealand Society of Occupational Medicine, and the Health and Safety Professionals Alliance would be invited to attend the forums and network with the participants. The increased visibility of this group would also be an opportunity to tout for future membership, as well as building upon existing resources and developing network links with other professions.

I am fortunate as we have good internal networking (links) amongst the Safety Officers in QR but it would be good to come together with Safety officers from other industries and see how issues are handled in other industries and work areas.

Start-up survey of interest in PNO-CQ, 2008

The physical and intellectual resources within a networking group are also of benefit to the OHS students of CQ University Australia. Interaction with local professionals can enhance their understanding of their profession as well as developing an increased level of interest in their education. These forums also provide opportunities for further research, professional engagement and possible employment.

Increased engagement with industry is of tremendous benefit to the tertiary institution of choice, it can mean increased visibility, credibility and influence over curriculum. The youth of this networking group, only 17 months old since the first forum, means substantial changes to curriculum are not immediately obvious.

However, student exposure to practical skills has already allowed them the opportunity to apply these experiential lessons to their current assessment. Student assessment in the future will account for these practical lessons, with more direct links drawn. The intention in the future is to have network members take a more hands on approach to the curriculum involvement, establishing a more mature relationship between industry and CQ University Australia.

One other major goal of the PNO-CQ is to establish the group as a vital member of the regional community. Sharing lessons learnt with the wider regional community, consulting the wider community, becoming inclusive of the diversity of the region, as well as increasing the visibility of the profession in the region. By undertaking this community engagement the longevity and importance to the region of the networking group is hopefully assured.

The first meeting

The inaugural networking forum was held on 14th April, 2008 at the Rockhampton campus of CQ University Australia. The first forum was well attended by 49 students and professionals. The expected awkwardness of the first meeting didn't eventuate. Discussion focused on emerging OHS issues and the direction of the PNO-CQ. Students and professionals did their best to break the ice with the hope of developing stronger ties. Some professionals travelled over 200 kilometres just to attend this first session.

The initial forum topic was national and international trends in ergonomics and safety science. This topic and subsequent topics would be chosen with the student's needs and current studies in mind. The initial and subsequent forums were organised to fall within the residential school period for both undergraduate and postgraduate students. Topics for each forum would be chosen on their fit within the student's curriculum, for example trends in ergonomics closely aligns with the student's studies into ergonomics. A later forum highlighting the incident investigation tool ICAM, closely aligns with the student's studies of Risk Management. Even though student attendance was not mandatory, the student numbers continued to be strong.

Reasons for attending a networking group are varied and often about maintaining or enhancing a connection with others in the same profession. It can also be about visiting a topic of interest. Occasionally attendance can be as a result of an expectation by the employer or just because attendance is politic. Attendance on the part of OHS professionals can simply be for reasons of employability (Osnowitz 2006). Others are motivated to attend by the person leading the forums. Seth Godin (2009) talks about how in the era of the internet and 'personalised' mass media, communities of like-minded, geographically separated people are aligning themselves in tribes. These tribes are changing the notion of leadership, Godin (2009) believing that people join tribes, or in this case a networking group, not because of the need to or that they are persuaded to, but because they *want* to. The belief by Godin (2009) is that leaders find their group, or tribe, as a collective that has a yearning and motivate them to follow.

It is supposed that student attendance of the PNO-CQ forums was due in large part to the convenient placement of the forums during Residential school periods. However, OHS professional's attendance tapered off with each subsequent forum within the first year. Queried on their attendance at each forum, both verbally and by email, the responses identified non-attendance due to work commitments; others suggesting geographical location

of the forums. However, this decline in attendance by professionals was not something new. The attrition rate for professionals attending the old networking group was also significant by the end of the group's operational life. The reason offered for this decline was thought to be apathy, though no reason for this apathy was identified by the previous committee.

To address this attrition it was put to the members, to identify what would make the group meaningful to their needs. In response some suggested greater attendance could be guaranteed by holding the forums in their local area. So in 2009 the decision was taken to increase the outreach of the networking group by holding forums in other regional centres. As the networking group was originally designed to represent all of Central Queensland, it was only thought prudent to offer the forums from other regional centres. CQ University Australia offers its OHS program with a substantially online flexible component and a number of the students live and work close to other regional centres in CQ, so moving the forums to other regional centres would hopefully mean greater attendance at forums by students in their own regional area. This would mean an immediate reduction in the number of forums physically offered from Rockhampton, but hopefully this would be compensated for by video-linking these presentations to other regional centres. Each session would be recorded and offered via a website for later viewing by members unable to attend the session. Offering the forums from other centres could mean an even wider familiarity and acceptance of the networking group by industry and the regional community. At the time of publishing this paper these forums were yet to offered in this format so there are no findings as yet identified.

Developing a long term interest

Factors that can influence or detract from the success of networking forums are numerous, e.g. the quality and location of the venue, the supply and quality of food, the presenter and their topic, even the coffee offered, all can influence the level of engagement. Accounting for these influences is a major responsibility of the forum organiser(s).

Always remember:

The importance of engaged professionals cannot be overstated as word of mouth can be a strong influence on future attendance.

Conversations either side of a one hour forum are all too short, as was realised at the first forum. People who don't know each other can often have limited interest in engaging with others. The first encounter can be a struggle, with opinions and views swayed by cultural personality, perception, identities, and communication style (Vuckovic 2008). People often base their impressions on a perceptual screen (Singer 1987) and sometimes that perception can be somewhat selective.

Don't judge a book by its cover.

American proverb

Tolerance and respect are useful virtues to apply during these first encounters, they can ease tensions and aide discourse. Flexibility, being aware of culture, perceptions, social role, identities and our own personality as well as other factors, may help with making those first encounters progress more smoothly. Maintaining interest in the conversation can be difficult when this first meeting has numerous influences, such as our tone of voice, our expression, our reaction to being touched, and literally hundreds of other factors (Vuckovic 2008), all these factors and influences are seemingly determined to prevent an effective level of communication occurring.

To assist communication a risk management approach was applied to addressing issues that arose with the organisation of these forums. Risks to free flowing conversation and a useful exchange of ideas were anticipated i.e. be those poor communication skills, vested interests or any other myriad of factors. These risks to conversation were assessed i.e. the likelihood that that would occur and the consequences if they did occur. Controls were then put in place e.g. provide topics for discussion or describe who is in attendance and their interests. Early anticipation of risks can eliminate or reduce future disinterest. Choice of presenter can also have a major influence over maintaining a connection with the people in the networking group, to wit the topic of their presentation. A droning presenter, with little knowledge of their topic, inattentive to the audiences needs, will speak volumes to the audience and may influence future attendance. Presenters and their topic were researched beforehand to save embarrassment and to aid in maintaining the future interest of the audience. It was also thought important to be aware of the topic's relevance to CQ professionals is the focus of the group.

The effectiveness of the forums in engaging the audience had to be constantly monitored. Even before the first forum was established the previous networking group committee were surveyed for their opinions on whether establishing the networking group was worth doing. At the first networking forum the audience was surveyed on their level of engagement and the appropriateness of the topic presented, the findings were resoundingly positive. At each subsequent forum the membership was surveyed, both verbally and electronically, on their level of interest and future attendance. Without this constant monitoring of member's needs it was believed the networking group would have a limited future. As a result of surveying professionals a suggestion was put forward to have the group consider developing a key collective of ex-graduates and professionals to talk to students about changes in industry and the 'real-life' implications to their studies. With the first year's offering of the PNO-CQ greater past graduate input was difficult to accomplish, but in 2009 the forums were opened up to a wider group, including ex-graduates and professionals who would be encouraged to speak to the current students and also consider a mentoring role. It was realised early that subtle changes to the presentations and recognising the need to broaden the invitation to the networking group, instead of continuing with simple talking head sessions, would ultimately benefit all by maintaining interest, as well as potentially reducing levels of attrition.

Always remember:

Internal and external influences on the continuance of the group can only be confirmed through constant monitoring.

One of the greatest external influences on the networking group and its membership yet to be realised is the current world economic crisis. The current economic crisis is being seen as the biggest economic downturn since the great depression of the 1930s (Bloom 2008). Anecdotal evidence is that its influence on unemployment trends for OHS professionals in CQ is yet to be realised. How this worldwide financial maelstrom will potentially deal a blow to the aspirations of early career OHS graduate stocks is yet to be understood. Currently OHS graduates from CQ University Australia are not voicing in any sizeable number their difficulty in gaining employment in the construction or resources industries. However, the future is uncertain and with predictions of national unemployment rising to over 8% early next year (ABC News 2009), the influence of the current economic downturn is yet to be fully realised. As industry groups continue to offload employees, and graduates are caught up in these lay-offs, it can only be a matter of time before OHS graduates, of any tertiary institution, start to question their choice of career. Initially swayed to seek out this career by the lure of high pay and potentially long term employment, the resilience of these young professionals could take a battering in a protracted downturn. It is hoped that the robust nature of this professional networking group will offer a place of refuge to these early career professionals, and any feelings of uncertainty they may be having about future employment. Professionals connected with this networking group are encouraged to nurture and support the graduates, whilst accepting an advocacy role for emerging graduates seeking employment.

The multidisciplinary nature of OHS means individuals within the network will always have differing attributes and values. To identify the OHS culture as a homogenous blend is to be unaware of the varying specialisations, including but not exclusively Occupational Hygienists, Risk Professionals, Safety Specialists, Ergonomists, Rehabilitation Coordinators and more, all with their varying professional needs and wants. OHS professionals undertake numerous complex and multifunctional roles within the wider profession. As a network the PNO-CQ doesn't try to blend all professionals and students under the one banner. Central to bridging the knowledge gap between professionals and students is being mindful of the profession's diversity and building into the group a means by which their knowledge, experience and skills can be shared. The PNO-CQ is set up to be considerate of the locality and the need for a networking group that validates learning and experience in a professional setting in Central Queensland (CQ). This group is unique in that it attempts to address the needs of future OHS professionals (students) and existing professionals located in CQ. The networking group brings the students and professionals together to share existing knowledge and experience, whilst providing a safe environment in which mistakes are shared, lessons are learnt and judgements are left at the door.

A common language

For in the temporal world God and I cannot talk together, we have no common language.

Søren Kierkegaard

1813-1855

A most important consideration in establishing a professional networking group is to have professionals link with one another to share practical lessons learnt. To achieve a satisfactory level of communication all must speak a common language. Many OHS professionals often work on their own or in small collectives. Often these professionals have few opportunities to share their experiences, and little reason to share this experience with students. Included in these life lessons is a need for students to understand the whole professional, including their emotional experience of joy and tragedy. OHS professionals need networking time with a sympathetic and understanding audience in which they feel comfortable sharing these emotional experiences. Caring for one another and each other's emotional needs is just as important psychologically as sharing professional knowledge. This is a delicate issue that is yet to be addressed at these forums.

Bureaucracy in network groups

The decision was taken early in consultation with committee members of the previous networking group located in CQ to maintain a flat organising structure. All decision making would be taken initially by one person. The intention was to make the group easily reactive to changes, encouraging innovation, whilst limiting the amount of time spent having decisions referred to committee. Networking is about pooling the creativity, innovation and knowledge of individuals for the betterment of all, not slowing the ability of the networking group to react to emerging issues. Establishing a network is not an excuse or reason to bureaucratise the decision making processes. Bureaucratisation can mean a slow death to a networking group as individuals in the group become elected to positions of higher duty only to become isolated from the group as a result of those decisions. As identified by Dr Sydney Brenner, Director of the Medical Research Council's Laboratory of Molecular Biology at Cambridge University (Adair, 2007) creeping bureaucracy can be a threat to an innovative organisation.

It is the current intention of this networking group to bring on board interested, supportive and innovative individuals from within and outside the group to enhance the decision making processes, whilst continuing to maintain a flat decision making structure. Innovation, commitment, money and leadership are primary turnkeys for any evolving organisation, there lose or suppression tolls the death knell of any group, so it is felt that the future success of the group is best served with the current management arrangement.

Future directions

There are many ways to make a networking group work beyond the simple formats of old. The following suggestions are to be considered:

1. **Develop a vision statement.** A means of evolving the networking group so the professionals clearly understand the need for networking and maintaining interest and commitment to the group. The vision statement for developing and driving this networking group is yet to be developed, but put simply is a method 'To inspire and motivate the group'. A work in progress this statement, once developed, is expected to change as the PNO-CQ matures, but as a starting point the vision statement will be the foundation upon which to grow the group into the future (Wheatner 2008).
2. **Create a fun environment.** It doesn't take a great deal of time or money but the spirit of the group and level of conversation is immediately uplifted. Taking the time to share a joke, getting the group to stretch before a session, putting up a funny image on a screen or wearing some funny clothing during a presentation doesn't take much from your credibility and can mean so much to the audience.
3. **Move away from the simple show and tell type forum.** This type of forum won't hold the attention of anyone long term and will see an increasing level of attrition as other professional forums become available in CQ. Alternatives being considered to the standard forum format include workshops, exercise sessions, non-conferences, role plays, site visits, just to name a few.
4. **Get buy in from professionals, professional bodies and students alike.** These groups have differing needs, so to encompass as many of these concerns as possible the networking group will need to be flexible and the organisers will have to get involved. Professional's will need to consider the needs of their immediate level managers. For management to see the value in this networking group they will want their OHS professionals to be learning and engaging with others in these forums to the benefit of their workplace, e.g. education, training, communication, management skills, technology usage, development of links of convenience, web & resource dissemination, logistics, professional membership. Student's unique needs and wants will include employment, professional guidance, and curriculum relevance to their future practice, as well as support from their peers. Importantly for students and professionals skills to be enhanced as a result of attending this networking group will include those of problem solving, time management, team work, and most importantly communication.
5. **Monitor the needs and wants of the individuals within the group.** As has already been demonstrated surveying the group both collectively and individually keeps all engaged and the networking group relevant. Without constant review the networking group may dissolve away before anyone is aware.
6. **Small membership numbers can see the demise of a networking group.** As an ongoing concern, small numbers mean reduced attendance to forums and limited growth. To reduce the level of attrition the forums will be opened up to allied professionals. The added benefit of opening up the forums to other professions is not just the sudden influx of numbers but the potential injection of new ideas, knowledge and leadership. This will also mean a greater level of understanding of the profession by industry and the local community. For the students this can mean

greater employment opportunities, sharing of practical knowledge and experience, plus the possible development of a mentoring program connected with local professionals and past students of CQ Universities' OHS program. The benefit to the University can mean practical advertising of programs, as well as opportunities to link in with possible funding sources. For the price of a few sandwiches, drinks and the supply of a venue the university, students and industry benefit enormously.

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A case study of a university experience program: Linking sciences to health professions

*Frances White, Dr. Julie Watkinson, and Ms. Joy Penman,
University of South Australia*

Abstract

The 'How Science is Utilised by Health Professionals' program was requested by secondary school students following the Centre for Regional Engagement (CRE), University of South Australia, Open Day. A half-day pilot program was devised which included how the sciences are used by health professionals, personal experiences from current university students, science experiments and some 'hands-on' experience which permitted participants to apply scientific concepts to health practice. The planning of the program was done in close consultation with school teachers.

The program was promoted through the school Principals and Year Coordinators. Year 10 students were invited along with those who made the initial request. Fifteen school students from two local secondary schools and two teachers accepted the invitation to attend. However, only four students, representing both secondary schools, and one teacher attended. The poor response was thought to be due to students being on end-of-year holidays.

The evidence of impact of the program was based on the evaluation administered at the conclusion of the program. The survey instrument sought to determine the perceptions of participants about the experiences provided and to examine the factors that might entice or deter high school students in pursuing tertiary education. Other questions asked for a response of components of the program which could be strengthened to more positively enhance the relationship between science and the health professions.

Information from the evaluation indicates that 3 out of 4 participants would be the first within their family to attend university; all students felt the experience was a positive one; and that they gained a more comprehensive understanding of scientific concepts. Participants also felt that they better understood the relationship between science and health and the benefits of science to the work of health professionals. The school teacher and participating lecturers agreed that the program provided learners with opportunities to build positive perceptions about what science brings to the practice of health professionals.

Future plans include conducting the activity on an annual or biannual basis at both CRE university sites (Whyalla and Mount Gambier), inviting Year 10, and possibly Year 9 students, from secondary schools across regional South Australia. Offering the program earlier in the year and during the school term would enable students to make informed career decisions and

to plan their studies accordingly. The enthusiasm demonstrated by the participants and the teacher to enhance the program was positive and encouraging. It was agreed that more appropriate marketing is required to attract male participants.

Introduction

This paper is an exposition of a University Experience Program designed to support the engagement of secondary school students in developing careers in Health Science. This program is a collaborative project between secondary schools in Whyalla and the Nursing and Rural Health Unit, Centre For Regional Engagement (CRE), University of South Australia. The University Experience Program has three components: , a half-day program on 'How Science is Utilised by Health Professionals' for year 10 students , a 3-day 'Experiencing University Program' for years 11 and 12, and a 5-day 'Preparation for science Program' for commencing university students. It is the former which is reported in this paper.

The 'How Science is Utilised by Health Professionals' program was developed at the request for further information by secondary school students following a recruitment Open Day held at the Whyalla campus, a regional campus of the University of South Australia. The main goal of the program was to highlight the importance of science to health professionals through the application of scientific principles to the work of health professionals. Secondary goals were to introduce school students to a health science career, thus stimulating their interest in science and influencing their decision to pursue tertiary studies. Other goals were to provide an opportunity for students to experience the university; and to stimulate their interest in learning more about the programs being offered by the local university, and more widely, all universities.

The impetus to the development of this program was threefold. Firstly, students attending the CRE, Whyalla campus during a University Open Day wanted to learn more about how science was used within nursing and other health professions. Secondly, and as a follow up to the first, prospective students entering higher education courses may not be aware of how much scientific knowledge is necessary to be, for example, a nurse, or physiotherapist, or occupational therapist. The importance of science to secondary school students and to the non-recent school leaver, entering health program at university is not strongly emphasised in some recruiting literature, and it is often poorly understood by people outside of the health professions. This has resulted in students who enter these courses to have a poor understanding of the level of science expected within the program, and the influence that scientific knowledge has on the work of a health professional. Finally, there is a steady decline in the study of science at secondary school level, so this component of the 'Experiencing University Program' was to apply the scientific principles to the work of health professions in order to stimulate curiosity, interest and some knowledge of the work of health professionals.

Background and Purpose of the Project:

Overall there has been a steady decline in interest among secondary school students studying science in recent years both nationally and internationally (Bunce, Griest, Howarth, Beemsterboer, Cameron & Carney, 2009; Goodrum & Rennie 2007; Rocard, Jorde, Lenzen, Walberg-Henriksson, & Hemmo 2007; Alexander & Fraser 2001). In Australia, according to the *Trends in International Maths and Science Study* (Gonzales, Williams, Jocelyn, Roey, Kastberg & Brenwald 2008) 10 percent of year 4 students are failing maths, and 7 per cent have no basic science skills. Furthermore, Kovac (2005) states that the number of compulsory school students in the Australian Capital Territory studying physics and chemistry declined by 7% between 1994 – 2003. Internationally, Este (1996, cited in Plonczak 2008) estimated that 42 percent of students between first and sixth grade dropped out of science related courses in Venezuela. This poor interest in science has resulted in a reduction in students studying science related courses at secondary and tertiary levels of education. Neilson (2003) attributes this decline to the reason why there are insufficient numbers of medical students entering a physician-scientist course within the tertiary educational sector, and it could also account for the decrease in both entry and the graduation of students within other health related professions, for instance, nursing.

Many reasons for the declining interest in science and scientific related careers have been put forward. At the core of the issues, according to Aikenhead (2006), is that primary and secondary school students do not see the relevance of the science they study to their future career goals. Duggan and Gott (2002), attribute the poor relationships between science and health professions to how science is taught within the primary and secondary school systems. This is supported by Rocard, et al. (2007) who concluded their European report stating that the primary reason for the decline is how science is taught to children at school. Goodrum and Rennie (2007, p.10) believe that many students ‘find the school science curriculum to be unimportant, disengaging and irrelevant to their life interests and priorities’, and that the way science is taught is ‘at odds with these students’ self-identities, so for them, science has little personal or cultural value’.

Aikenhead (2004, p. 243) using the work of Chin et al.(2004) postulates that there is a difference between secondary school science and university science. While this could be put down to the applicability of workplace science, it is also likely to be a result of how science is taught within secondary schools. Students, according to Duggan and Gott (2002), find science at schools difficult and irrelevant to their studies and future goals. These authors attribute this to the difference between declarative knowledge or ‘knowing that’ which is the predominant method of teaching science in secondary schools, and procedural knowledge or ‘knowing how’, which is knowledge gained from experience of work and through the acquisition of knowledge that is relevant to this work. Students feel that what they learn within the classroom, while it provides background knowledge, is not the actual knowledge, or ‘knowledge in use’ (Aikenhead 2004) that professional’s process in order to carry out their practice. Fourez (cited in Plonczak 2008, p. 168) points out that the motivation to study science increases if the

science studied is made significant and relevant to the learner's needs. Farmer's et al. (2006) study reported that the scientific topics students found the most interesting were those that had a human interest quality to them (eg human health). As early as 1993, Ebenezer and Zoller in their study with year 10 students found that the 'majority of students suggested that teachers could provide a more effective framework for studying science by incorporating the life experiences of students' (p.184).

The Organisation for Economic Co-operation and Development (OECD, 2008, p.11) report, highlights that many teachers in primary and secondary schools have a lack of resources, and that they often feel 'uncomfortable with science subjects and with hands on demonstrations', and that this may 'disconnect' the students from the reality of usefulness of science and 'dampen the interest' of students. Rural science teachers work within a relatively isolated and isolating environment, and the chance of providing students with a 'lived-experience' of the impact science has on the work of health professionals is not readily available to them. This disadvantages both students and teachers, but it also limits which health profession the student may choose as a career. While Australian data is lacking, Morrison, Raab and Ingram (2009) point out that many science teachers in primary and secondary schools may not have experience of the 'every-day' utilisation' of science. It would also be extremely difficult for school teachers to relate the notions of science to the knowledge and abilities of health professionals not having had this experience, except perhaps as a client or patient.

Of relevance to the health professions, is that while there is a general decline in students studying science, Farmer, Finlayson, Kibble and Roach (2006) report that females have a greater negative attitude towards science than males. This may have critical impact on those health professions that are traditionally female dominated, for instance, nursing. It is a well known fact that the study of biological sciences causes the most angst for nursing students, the majority of whom have not studied maths or science during their latter secondary school years (Penman 2005; Strube, Thalluri & Kokkinn, 2004; Gresty & Cotton 2003). Although knowledge of science related concepts is not a necessity for enrolment into most Bachelor of Nursing programs across Australia, most science courses within this program are a pre-requisite for progression through the program. Failure in a scientific related course therefore, has a significant impact on student's emotional and financial well being, and their smooth progression through the course.

Activities of the Project

During the CRE University Open Day, which is open to all high schools within the regional area covered by the Whyalla campus, students who visited the School of Nursing and Rural Health science and the nursing clinical practice laboratories were asked to enter their name and contact details. Subsequently, these students were asked if they would like further information in regard to how and why science is important in the health professions. Discussions were held with teachers in order to organise an appropriate half-day program. Students who placed their

name on the list were invited, but a general invitation was also sent to the local secondary schools in order to offer the program to a wider audience.

The program included science related activities within the science as well as the nursing clinical practice laboratories. These activities were based around two broad categories. One activity was more general in that it is used by all health related professions – the prevention of cross-infection. The other was more specific, but, to a certain extent is used by many health professions – the taking of vital signs. The vital signs component commenced with a brief précis of physiology so that students understood what is actually measured when health professionals take a pulse, count respirations or measure blood pressure.

The program opened with a general session asking questions on what science is and what it offers health professionals. It then moved into the practice based component where students discussed infection control and what is done within the home and school to prevent cross infection. Following the introduction, students examined slides that had been prepared by the lecturer from swabs taken around the home, personal possessions and public toilets. Information about the specific type of microbe found and how to decrease their presence within areas that are used frequently by family, friends and colleagues ensued. A hand washing experiment was used to demonstrate that effective hand washing is rarely carried out by the public and requires greater care within the home, school and especially the workplace.

This was followed by clinical experience within the nursing clinical practice laboratory where students learned about the science and the scientific application of blood pressure, pulse and the measurement of oxygen saturation. Student comments during this session indicated that they were applying their acquired knowledge to previous knowledge gained either from their studies or personal knowledge of health and illness. To complete the program, the main aims of the sessions were discussed and students were asked to evaluate their learning and the effectiveness of the program.

Evidence of Impact

The evidence of impact on school students was based on the evaluation administered at the conclusion of the program. Participants were requested to complete an evaluation instrument which consisted of open and closed questions. The survey instrument sought to determine the participants' perceptions about their experiences, examine the factors that might entice or deter high school students in pursuing tertiary education, and components of the program which could be strengthened to more positively enhance the relationship between science and the health professions. It also elicited a socio-demographic profile of the participants.

While 15 students applied to participate only four actually attended. All four students who participated in the program and its evaluation were females, with an average age of 15 years. No one identified as an Aboriginal or Torres Strait Islander. Three of the four participants were

born in Whyalla. Three students were enrolled at a Government school, and one attended a Private school. Information from the evaluation indicated that 3 out of 4 participants would be the first within their family to attend university. In the event they did not pursue tertiary studies, two were interested in obtaining a TAFE qualification.

The questionnaire (see Appendix 1) was administered at the end of the workshop. Prior to completing the questionnaire, the students were given a brief information statement explaining the purpose of the evaluation and assuring the students that participation in the survey was voluntary and confidential. Completing the questionnaire was taken as consenting to participate in the study. An ethics protocol was submitted to the University's Human Research Ethics Committee and permission to conduct the study was granted

The questionnaire had 30 items. The participants' socio-demographic data were obtained from questions 1-13. The overall experience of the academic visit, learning opportunities available, organisation of program activities and impact of the experience were surveyed in questions 14 to 22 and question 25. Responses that sort information concerning what enhanced or deterred their understanding were surveyed in question 23 and 24. Question 26 sought participants' opinions as to how a similar university experience might benefit other high school students, while question 27 was intended to provide an indication of the activities that the young students had found most engaging, enjoyable or positive. Participants were queried about their future career plans after high school in question 29. Suggestions as to how the program might be improved and additional comments were gathered in questions 28 and 30.

The items querying students' perceived value of the learning experience required participants to respond to a set of criteria using a Likert scale from 'strongly disagree' to 'strongly agree'. Other items were closed questions requiring the participants to select from pre-determined choices while the remaining items were open-ended questions that sought information and opinions about pertinent topics.

Overall, perceptions about the program were positive and encouraging. All students 'agreed' (1) or 'strongly agreed' (3) that the academic visit was a positive learning experience and that there were many learning opportunities available to them during the visit. All reported that they had a better understanding of some science concepts, the scientific concepts used within varying health professions, and the link between science and the work of health professionals. In addition, the participants stated that the activities were well organised and should be conducted regularly for high school students. As a result of their experience, all felt positive about university studies and might consider pursuing them. All participants believed that other high school students would benefit from the experience.

When asked to list three careers that they might like to take up after leaving school, the following responses were given: midwife, dentist, doctor, forensic investigator, nurse, social work, and teacher. There were a variety of responses to factors that might make it easier to go

to university including having an understanding of how the university works and the environment and bringing more courses to Whyalla. Factors that made it difficult to go to university were: moving, having to leave family and friends; having a part time job; and adapting to a new environment.

Discussion

With many years of experience within the workplace and in teaching within a variety of situations, both within the clinical area and within universities, the lecturers were acutely aware that it is important to get and maintain the attention of learners. The activities were specifically selected to demonstrate how science informs the practice of health professionals and the applicability or 'knowledge in use' of scientific tenets. It was considered that the sessions must be genuine and offer valid experiences to the learner. Students were encouraged to participate in the activities and to ask questions of the 'client' and/or the instructor throughout the process.

Hsu, Roth and Maxumder (2009) report that secondary school science must be 'authentic' to learners, which indicates that the science must engage them with situations of how scientific tenets are used within the workplace, thus enabling students to experience the benefits of scientific knowledge to their future careers. These authors postulate that making science learning 'authentic' promotes student inquiry which, in turn, increases the learner's problem-solving abilities enabling them to become better workers within what is generally, a very complex work environment. In a cross-cultural study by Hill, Pettus and Hedin in 1990, during the process of developing a Science Career Predictor Scale, it was found that 'the major factor affecting science-related career decisions appears to be personal contact with a scientist' (p.314). Varelas, House and Wenzel (2005) extend this concept and believe that it is not only permitting secondary school student to experience how science is used within the work environment, but also allowing them to work alongside those already in the workforce, which assist students to relate the tenets of science to the workplace, thus increasing their understanding of what science can offer them personally and professionally.

Participants reported that the best things about the university experience included the practicals and interesting activities, finding out about courses, and the friendly instructors. Although there was a small number of participants, both the students and teacher were very enthusiastic and positive about the program and at least one student was re-evaluating subject choices for years 11 and 12. Additional comments were:

I loved it.

It was very informative and really helps me to get to uni.

Thank you for a great experience!

It is possible that engaging students within present learning will have long-term effects on their motivation to undertake further education and to complete that education. Engagement, according to Hu and Kuh (2001, cited in Krause & Coates 2008, p.1) is the 'quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes', but if students are unaware of, or do not know the full extent that science has on the work of health professionals, their engagement may be superficial and it may result in them deciding not to pursue a health career. While engaging in authentic scientific exercises is beneficial to students, Greenfield (2006) also believes that if science is presented in a relevant and entertaining way, more secondary students will pursue science within the tertiary educational sector. Offering the program outside of the school and within a nursing clinical practice and scientific laboratory, was ideal for these students as they could use relevant equipment within an area that represents a health care centre, in this case, a hospital ward. In addition, the program was conducted by people working within the field of health, and who were able to relate scientific principles to the work of health professionals. The school teacher and participating lecturers agreed that the program provided learners with the opportunity to build positive perceptions about what science brings to the work of health professionals.

Benefits for each partner

The pilot of the 'How Science is Utilised by Health Professionals' concentrated on the local (Whyalla) secondary schools and while a number of students intended to participate in this program, only a small number actually attended. However, the outcome data of the program was very positive.

The evaluation indicated that, for the students, the main benefit was the linking of scientific concepts to the work of health professionals and the understanding of why science is important to health professionals. They also gained greater understanding of what is expected of them at a university and this went some way in decreasing the myths of university study as being hard and difficult and only for academically exceptional students.

The program was also a recruitment drive to attract more students to the campus, especially in nursing which is the only health profession which includes science as part of the course offered by the campus. There were advantages in linking with the teachers, namely, the sharing of information in regards to the science curriculum within secondary schools. This benefited both the secondary school teachers and the university lecturers as it increased their knowledge and understanding of what students are expected to know within the different educational systems. Other advantages for the university were the increased publicity the program attracted and the development of networks that strengthened the school-university partnership.

Future Directions

Future plans include involving the Mount Gambier campus and conducting the activity on an annual or biannual basis, inviting Year 10 students from secondary schools across regional South Australia. In addition, the program could be extended to include students in Year 9 as this would better inform them to commence their career planning process, and Years 11 and 12 who have participated in previous university experience programs.

To obtain full benefits from the program, it needs to be more strongly linked with the work experience program offered between the schools and local health agencies. Although the School of Nursing and Rural Health is a part of this program, it does not strongly link sciences to what health professionals do, and, because the school student is placed within the health agency along side a health professional, it would be a good opportunity to make these links stronger.

Timing of the program needs to be examined to more detail. Greater information must be given to prospective participants so that they can see personal advantage in attending such a program. More information about a variety of health professional courses needs to be available with guest lecturers attending the program to talk about their profession and also about how they apply scientific principles to their practice is important for the continuation of the program.

It was obvious in the planning and subsequent evaluation of the program that there needs to be more liaisons between secondary school teachers and the university especially within campuses in regional areas of Australia. University lecturers found that there is a lot in common between the two organizations and that both parties would benefit from a closer understanding of the roles, but also to build stronger links in the continuation of education for students.

A further program will be undertaken later this year and it is hoped that representatives from the secondary schools, the local health agencies and the university will take part in the planning, implementation and evaluation of this program.

Conclusion

While the attendance at this pilot program was small, the value of the program and in making greater links between secondary schools and universities was extremely beneficial to all who participated in this program. The main goal of linking the study of science to the work of health professionals was achieved and with the implementation of the future directions the achievement could be enhanced and made available to a greater number of secondary school students. Some implications for the schools and the university are to build stronger links: to meld student learning, and, to make the transition from secondary to the tertiary education system as seamless as possible. This pilot program provided the university lecturers with the impetus to build on the concepts that proved to be beneficial and which increased student

learning, in order to provide stronger partnerships in relation to students' career knowledge and subsequent career choices in health professions.

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