National Rural Education Conference
July 2006    Hobart, Tasmania

Conference Proceedings
COMMUNITY, DIVERSITY and INNOVATION in RURAL and
REMOTE EDUCATION and TRAINING

Edited by
Colin Boylan
COMMUNITY, DIVERSITY and INNOVATION in RURAL and REMOTE EDUCATION and TRAINING
Proceedings of National Rural Education Conference
Society for the Provision of Education in Rural Australia

Edited by Colin Boylan

Society for the Provision of Education in Rural Australia Inc.
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Osborne Park
Western Australia 6916

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SPERA Mission and Goals

Mission

The Society for the Provision of Education in Rural Australia Incorporated (SPERA) links people with a diverse range of interests in education and training to promote the development of rural Australia by:

• promoting a positive view of education in rural areas and encouraging innovation and initiative in the provision of rural education services; and
• providing a framework for the sharing of concerns, issues and experiences relating to education and training in rural areas.

Goals

SPERA advances the education and training opportunities for all people in rural Australia by:

• promoting State and regional delivery systems which bring about efficient and effective education for people in rural areas;
• encouraging both the collection and sharing of relevant information on the provision of education in rural areas;
• conducting an annual National Conference to exchange ideas and information about education and training in rural education; and
• serving as a national advocate representing rural education and training.
President’s Welcome Message

The Society for the Provision of Education in Rural Australia, or SPERA as it is more commonly known, links people with a diverse range of interests in education and training to promote the development of rural and remote education and training in rural and remote Australia.

SPERA, as a national, rural education and training organisation provides a strong forum through a wide raft of activities which encompass a national, annual Conference, quarterly cutting edge Rural Education Journals, the highly sought after Australian Rural Education Award and regular informative Newsletters which combine to celebrate and share the positive learning programs which are embedded in many rural and remote education and training institutions.

The 2006 Conference with its theme of "Excellence, Innovation and Diversity in Rural and Remote Education and Training" gives participants the opportunity to participate in a deep level of sharing and networking on a national and international level. The quality keynote addresses and the workshop sessions on offer will provide opportunities for highly interactive forums for celebrating our students achievements, promoting innovative strategies and programs along with talking through and problem solving the challenges encountered by those who live and work in rural and remote Australia.

The overall Conference is pitched at rural and remote education and training practitioners who are actively engaged in their profession - those who have genuine "credibility" because they are "out there" and "having a go" in order to improve the outcomes for those involved in rural and remote learning communities.

SPERA Conferences have a strong capacity for building national and international networks on a professional and social level. Thanks to the commitment and endeavour of SPERA executive members and Conference co-ordinators Kate Haddow and Colin Boylan. The Hobart Conference is located in the beautiful and scenic environment of Tasmania and will be no exception.

The Conference Proceedings are also a substantial tool for continuing the sharing of strong and innovative practice throughout all rural and remote learning communities. Sincere appreciation is extended to Colin Boylan, Vice President of SPERA, whose efforts, energy and enthusiasm have ensured that the essence of SPERA's 2006 National Rural Conference has been captured in this quality document.

I extend a warm welcome to all 2006 Conference participants and look forward to a high level of sharing and interaction within this highly valuable forum.

Anne Napolitano
SPERA President.
SPERA 2004/2005 Executive Members

President: Anne Napolitano – Exmouth District High School, Exmouth WA 6707

Vice President: Colin Boylan – 4 Stinson St., Coolamon NSW 2701

Treasurer: Kym Benson – Unit 4 1 Windsor Road, Fremantle WA 6415

Secretary: Rosa Lincoln – P.O. Box 1766, Osborne Park WA 6916

Minute Secretary: Kane Benson - Unit 4 1 Windsor Road, Fremantle WA 6415

Bronwyn Ellis – 49 Ward St., Whyalla SA 5600

Kate Haddow – PO Box 616, Katherine NT 0851

Lyn Phillips – 13 Pine St., Kirwan QLD 4817

Don Boyd – 37 Joiner Ave., Melville WA 6156

Rebecca Tims - South Australia

CHANGE OF ADDRESS

Mail Address
SPERA
PO Box 1766
Osborne Park
WESTERN AUSTRALIA 6916

SPERA Website

SPERA has an informative website that allows both members and the public to view the variety of activities that SPERA conducts. The website can be viewed at

www.spera.edu.au
SPERA History

SPERA emerged from a New South Wales in-service activity organised by Marie Dale in 1984. The activity brought together Marie Dale and Bob Meyenn, then Lecturer in Education at Riverina CAE, and the pair went on to organise a National Conference on rural education, which was held in Armidale, New South Wales in 1985. At this Conference, SPERA was endorsed as a national organisation and Marie became its foundation president.

Concerned by the effect the ‘disadvantaged’ label was having on rural communities, Marie and Bob saw the need to establish a national organisation which would advance the positive aspects of rural life and rural education and celebrate the unique features of rural education.

Around the time SPERA formed, CAP and DSP had been operating some ten years and rural communities were becoming conditioned to accept the ‘disadvantaged’ label in order to attract funds. It concerned Marie that these communities were locking themselves into such a negative mind set.

SPERA is an organisation which celebrates the ‘doers’ in rural education and has promoted many wonderful examples of education excellence in schools, TAFE, universities, adult and agricultural education at its national conferences over the last 12 years.

Its leadership has been shared by community people, adult educators, academics and school administrators from New South Wales, Queensland, Victoria, Tasmania and more recently Western Australia.

In 1991 SPERA published a journal, *Education in Rural Australia* with Colin Boylan as its editor.

In its 10th year, SPERA launched the *Australian Rural Education Award* to acknowledge education achievements in rural Australia and celebrates SPERA’s commitment to advance the positive aspects of living, working and being educated in a rural community.

SPERA has conferred life membership of two of its most ardent supporters: Mrs Marie Dale and Mrs Sheila King.

In 2004, SPERA joined with WADHSAA to conduct a joint 20th National Conference in Fremantle, Western Australia. The theme of this joint conference was *Working Together, Staying Vital*.

In 2005, SPERA conducted its 21st National Conference in Darwin, Northern Territory, with the focus *Our Stories: Innovation and Excellence in Rural Education*.

For this year, 2006, the 22nd National SPERA Conference will be held in Hobart Tasmania during July 2006, with the focus *Community, Diversity and Innovation in Rural and Remote Education and Training*. 
Refereed Conference Papers

For the 2006 SPERA Conference, presenters were able to have their paper peer reviewed by two people. A total of 14 papers were submitted and 10 conference papers were accepted for inclusion in the Conference Program and Conference Proceedings.

The review committee for the 2006 Conference consisted of the following members:

Dr Colin Boylan  
Senior Lecturer in Education  
Charles Sturt University  
Wagga Wagga NSW  
Dr Aniko Varpalotai  
Associate Professor  
Faculty of Education  
University of Western Ontario  
Ontario Canada  
Mrs Sheila King  
Faculty of Education  
University of Southern Queensland  
Toowoomba QLD  
Mrs Jan Martin  
Faculty of Education  
University of Waikato  
New Zealand  
Dr Russell Yates  
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University of Waikato  
New Zealand  
Professor Ted Munsch  
Alaska Pacific University  
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Memorial University  
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Mrs Roslyn Brennan-Kemmis  
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Dr Andrew Wallace  
Faculty of Education  
Charles Sturt University  
Wagga Wagga, NSW  
Professor John Davis  
Ontario Institute for Studies in Education  
University of Toronto  
Toronto Ontario Canada
The Australian Rural Education Award

This annual award was established in 1994 by the Society for the Provision of Education in Rural Australia (SPERA). This was the first national award recognising both excellence in rural education and promoting creative ways of meeting the education needs of rural families and their communities.

A broad range of projects were eligible for the Australian Rural Education Award in 2006. The selected project had to address the positive qualities of rural education in a practical way. Eligibility was wide, and applications were sought from within and beyond schools, TAFE, university and adult education. Organisers also wanted to hear from and about individuals, Local Government, community service organisations, ethnic community groups or Aboriginal and Torres Strait Islander Groups who had set up educational projects. There was no age limit on applicants; however, the nominee must have been involved in the project in the year of submission. The nominee must also have been living in or clearly demonstrated collaboration with a rural community.

The winning entry would have needed to address the following areas:
- What prompted development of the project?
- Who was involved in its establishment?
- What are the long term goals?
- Who will benefit?
- Descriptive summary of the project.
- What effect has it had in your area?
- What are the distinctive rural features of the project?

The recipient of the 2006 Australian Rural Education Award will be announced during the 22nd National Conference. A presentation based on the recipient’s excellence in rural education will occur as part of the Conference. A report of their project will appear in Education in Rural Australia in 2007.

Information about each applicant for the award and their rural education programs can be found on the SPERA website: www.spera.edu.au
Past Conference Proceedings

A valuable source of information on developments and the provision of education in rural Australia is available through the collection of papers written by many people which have been presented at past SPERA Conferences. The writers provide insights into the types of innovative services and programs which have been developed by individuals, communities and institutions to promote the provision of education services in rural Australia.

WORKING TOGETHER – RURAL COMMUNITIES AND EDUCATION
1987 CONFERENCE Edited by Dr Don Reeves

RURAL COMMUNITIES DETERMINING THEIR FUTURE
1988 CONFERENCE Edited by Dr Don Reeves

THE FAMILY AND EDUCATION IN RURAL AUSTRALIA
1989 CONFERENCE Edited by Colin Boylan

WHAT DOES SOCIAL JUSTICE MEAN FOR EDUCATION IN RURAL AUSTRALIA?
1990 CONFERENCE Edited by Colin Boylan

TOWARDS 2000: SCHOOLING THROUGH DISTANCE EDUCATION
1993 CONFERENCE Edited by Dan Riley

THE RURAL COMMUNITY AND ITS SCHOOL: IN PARTNERSHIP FOR THE FUTURE
1994 CONFERENCE Edited by Dan Riley

LIFELONG LEARNING IN RURAL AREAS: BETWEEN A ROCK AND A HARD PLACE
1995 CONFERENCE Edited by Dan Riley

RURAL EDUCATION: QUALITY PROVISION, QUALITY EXPERIENCES, QUALITY OUTCOMES
1996 CONFERENCE Edited by Colin Boylan and Peter d’Plesse

CELEBRATING RURAL EDUCATION
1997 CONFERENCE Edited by Colin Murdoch and Giovanna Wood

SUCCESSFUL PARTNERSHIPS ENABLING RURAL ACHIEVEMENTS: LEARNING FROM THE HEART CONFERENCE
1998 CONFERENCE Edited by Cheryl Shepperd and Oriel Hawke

RURAL EDUCATION: MORE PRECIOUS THAN GOLD
1999 CONFERENCE Edited by Rosa Lincoln
DAWNING OF OPPORTUNITY
2000 CONFERENCE Edited by Sheila King

PROVIDING QUALITY EDUCATION AND TRAINING FOR RURAL AUSTRALIANS
2001 CONFERENCE Edited by Brian Hemmings and Colin Boylan

COUNTRY CLASS
2002 CONFERENCE Edited by Jacky Dodds and Colin Murdoch

GLOBAL FOCUS – LOCAL PARTNERSHIPS
2003 CONFERENCE Edited by Colin Boylan and Brian Hemmings

WORKING TOGETHER, STAYING VITAL
2004 CONFERENCE Edited by Colin Boylan and Brian Hemmings

OUR STORIES: INNOVATION AND EXCELLENCE IN RURAL EDUCATION
2005 CONFERENCE Edited by Colin Boylan

COMMUNITY, DIVERSITY AND INNOVATION IN RURAL AND REMOTE
EDUCATION AND TRAINING.
2006 CONFERENCE Edited by Colin Boylan


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Conference Proceedings
SPERA PO Box 1766
Osborne Park WA 6916
The SPERA Conference Planning Committee thanks our major sponsors for their support for the 22\textsuperscript{nd} National Conference.
Conference Convenor Message

Delegates,

Welcome to all our overseas, interstate and local delegates to S.P.E.R.A’s 22nd annual conference here in Hobart in Tasmania.

At this conference you will hear many stories from fellow delegates in the presentations and workshops - stories of isolated, remote and rural communities, diversity in ways rural education challenges are explored and innovative practices in rural and remote education and training.

These will form a rich part of your conference experience. I encourage you to add to this experience by getting to know your fellow delegates, talk to them and share your stories, expand your networks and take part in the planned 'social activities'.

Whether you are here for a few days or have plans to extend your stay to relax and explore Hobart and its lifestyle, I wish you all a productive and enjoyable time.

Kate Haddow
Conference Convener 2006
Conference Organising Committee

A special thank you to the following people who have assisted with the organisation of the 22nd National SPERA Conference. The SPERA Executive congratulates each person on their generous contribution of time and effort.

Kate Haddow  Conference Convenor and Organiser
Colin Boylan  Conference Organiser and Proceedings

The following people have assisted with the planning and / or organisation of various aspects of the conference.
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SPERA 2007 CONFERENCE

will be held
July 2007

The VENUE will be announced
at the Conference

Conference Theme:

TBA

Conference contact person: Anne Napolitano
email: anne.napolitano@det.wa.edu.au
The why and how of provision of online extension programs for highly able / gifted students in rural schools in Tasmania.

Angela Cooke, Wendy Fletcher

Centre for Extended Learning Opportunities (CELO), Department of Education, Tasmania, AUSTRALIA.

Abstract
The Centre for Extended Learning Opportunities (CELO) was set up in late 2004. CELO focuses on supporting appropriate educational provision for students who are highly able / gifted, in Tasmania. In this presentation, some of the enrichment activities that are used by CELO will be discussed.

The Centre for Extended Learning Opportunities (CELO) was set up in late 2004 as part of the major restructuring that followed the implementation of the Essential Learnings. The primary focus of CELO is provision for students who are highly able/ gifted. This provision includes assessment and other guidance officer services; resources including journals; quality texts and kits to support student activity in a class situation; face to face extension programs including the Kidzed holiday program; planning and education program assistance for schools; links with the University of Tasmania and the supported delivery of online extension programs.

CELO focuses on supporting appropriate educational provision for students who are highly able / gifted, in Tasmania. These students are defined as those who show advanced development, or have the capacity for advanced development, in any valued area relative to their age peers, to a degree that modification to their educational program is necessary.

Research shows us that students who are gifted exist in all our schools, they range from mildly to profoundly gifted. The Gifted Education Research, Resource and Information Centre suggests their prevalence is as follows:

Figure 1: Gifted student incidence incidence in the population
mildly or basically gifted IQ 115-129 1 in 6 to 1 in 44
moderately gifted IQ 130-144 1 in 44 to 1 in 1,000
highly gifted IQ 145-159 1 in 1,000 to 1 in 10,000
exceptionally gifted IQ 160-179 1 in 10,000 to 1 in 1 million
profoundly gifted IQ 180+ fewer than one in 1 million

Using these figures all schools are likely to have students who are highly able / gifted but not all schools have traditionally identified or made provision for these students. Lack of teacher training in teaching and identifying students who are highly able / gifted was identified as a key factor in the Senate Report 2001 (The Education of gifted and talented children), as was a persistent belief that these students will succeed without intervention and modification of their educational program, a claim not supported by research.

Some students were particularly at risk of not being identified or catered to effectively. The Senate report found that students who are gifted from low socio-economic areas, rural communities, non-English speaking backgrounds and Koorie communities are less likely to be identified as gifted despite research indicating that giftedness does not respect these boundaries (3.9). Even if these students are identified there are difficulties for rural students in accessing appropriate programs because ‘there may be no choice of schooling, no intellectual peers and no cultural enrichment in the town. Counselling services for families and professional development for teachers are more difficult. There are likely to be no opportunity classes or focus schools within reach.’(3.136)

Grouping gifted students for at least part of their time at school has been found by numerous researchers to be desirable both for their educational and their social needs. (Rogers, K, 1993)
Tasmania has 218 schools and colleges, with some rural schools having approximately 20 students in total. This means that there may be just one or two students in any one school, which makes ability grouping problematic. Not giving children access to groupings that allow them to be taught at an appropriate pace and level of difficulty is doing them a disservice because ‘the removal of opportunities for these students to learn at the pace and level of complexity with others like themselves may conceivably result in substantial declines in achievement and attitude toward the subjects being studied.’ (Rogers, K, 1993)

The effects of the social isolation gifted students may feel being the only one who thinks and learns like them can not be overemphasised. Freedman and Jensen (1999) suggest: ‘one of the most common experiences of gifted children is a unique way of perceiving… the result is a child growing up with a reality somewhat different than that of her peers… somehow these multiple tendencies toward isolation reinforce each other to the point where the majority of gifted children feel lonely, left out or different.’

For these reasons CELO has developed a series of online programs aimed specifically at students who are highly able / gifted from all over Tasmania, including the Bass Strait Islands. Children are nominated by their schools for inclusion in the appropriate program.

CELO has been liaising closely with schools to determine their needs and is continuing to develop programs in response to these needs. The programs being delivered in 2006 are Ad Astra Junior and Senior (cross curricular programs), ArtyFacts Junior and Senior (art programs), GameMaker (students developing games and looking at the IT and maths concepts involved), Infinity Squared (a maths program), Socrates Café (two programs based on classroom philosophy and Socratic dialogue, one using a story book as a stimulus and the other based on current events and topical subjects), So Far So Good (based on the ACTF program Worst Best Friends addressing relationships), and the Pegasus Project (a program for secondary students looking at their thinking and how their world and culture impacts on their thinking).

The newest program CELO has developed, Infinity Squared, has been in response to the specific needs of students who are highly able / gifted in Mathematics because ‘one of the most common areas of educational mismatch for gifted students, especially for highly and exceptionally gifted students, has been in the area of math education. Schools typically take differences in reading achievement into account by using flexible instructional groups and can, thereby, make adjustments in the language arts curriculum. (Osborne, J) This program is especially useful for our rural students because they may not have access to extension possibilities available in larger centres. Osborne suggests that ‘rural and low-income families with mathematically gifted children have faced exceptionally difficult obstacles to obtaining quality education.’

**Online extension programs – how do they work?**

By using a virtual learning environment such as an online ‘classroom’, ability groupings for students who are highly able / gifted become possible regardless of the location and population of their school, unbounded by time and place, enabling these students to share, work and socialise online with like minded peers. This is one of the overarching goals for the online provision of extension programs for the student who is highly able / gifted, and is supported by the use of the available communication tools as well as the program design. ‘One of the main tasks of childhood is to establish friendships with other children, both in one-to-one relationships and in-group situations. This can sometimes be difficult for gifted children who are limited in their choice of peers either because of their exceptional abilities or because of geographic or cultural isolation.’ (Osborn, 2000) All the online extension programs provide opportunities for students to get to know one another and converse in a social environment as well as providing appropriate content. The delivering teachers require the use of asynchronous tools such as discussions (also known as forums or bulletin boards), email and sometimes synchronous tools such as chat. In most programs there is the clear expectation that students will not only communicate with the teacher, but fellow students as well. Student work is also displayed within the environment which raises the bar for the participants by providing a wider audience than peers in their immediate physical locality.

All of this can combine to create an environment where a child who has never been challenged may suddenly find that others are as quick and knowledgeable, or even more so. This is important learning for them. However, even more importantly, students can discover that others are of like mind – they may read the same books for example, or have similar opinions.
In many of the CELO online extension programs, students are able to exercise choice, selecting the area of study (see Figure 2), or the process that will be employed.

**Figure 2: Sample list of activities**

Read the list of activities below and choose which ones.

1. Getting to know our Ad Astra class
2. Number mysteries
3. alien critters
4. *Jack’s book
5. How old?
6. Calling all writers
7. money bags

Students are also able to make choices in relation to the difficulty or complexity of the topic, as some indicators are used, for example a star rating or a points allocation (see Figure 3). Depending upon the age and/or ability of the student, the delivery or support teacher may put some expectations in place in relation to activity type.

**Figure 3: Star rating**

15. *Thinking about counting
16. Some mental gymnastics
17. *Some addition trails
18. Mysterious number
19. *Sports mystery
20. ****Structures investigation, engineering website

Where students have a specific talent or passion such as mathematics, this can lead to them being selected for a specific program which addresses the preferred area. Students with a mathematical bent, for example, would be best suited by Infinity Squared, the maths extension program (Figure 4).

**Figure 4: Sample Maths challenge**

The council has received quite a lot of emails and phone calls from concerned parents. Children and teenagers have been rolling their bikes and skateboards through the playground as well as on the play equipment. A number of parents have stated that this behaviour has increased since parts of the safety fence has fallen down. Although a safety fence with gates does not stop children from taking their bikes and skateboards into the park, parents felt that the fence does reduce the likelihood of this occurring.

The playground is in the shape of a kite. Its short diagonal is 30m and its long diagonal is 50m. The diagram to the right shows a birds eye view of the playground (looking at it from above). The long diagonal cuts the short diagonal exactly in half (at the 15m mark). But the short diagonal bridges the long diagonal 20m from the top.

The Playground Committee has decided that they wish to install a loop top fence. It comes in panels that are 2.5m wide and costs $24 per panel including gates.

How much will it cost the council to fence their playground?
Students are also able to negotiate the direction and timeline for their study, with the depth of study required being the important factor. Subject areas and levels become flexible, and the participants can come from a range of grade and age groups and still be on a relatively equal footing.

The CELO online extension programs may be accessed with a receiving school as:
1. a withdrawal model where participants are gathered at one location with a support person who may be a teacher, aide or other designated adult;
2. an integral part of the classroom program for the student, perhaps replacing already mastered areas or topics; or,
3. a combination of both.

An example of a combined approach is where students come together for a designated timeslot each week, access the program, complete any required responses such as a reflective posting, choose any new topics and discuss possible approaches with the support person. They then work on their selected topic in any class time that is available, or in their own time, for example at home.

In a secondary school, one model for implementation is the creation of an online option. This option is one of a number that occur on one timetable line. The students in CELO extension programs or any other online program (for example a program delivered from the Online Campus) may be in the computer lab together, with a support teacher. The teacher is there for general supervision, including duty of care, technical help with the machines or any software being used, supporting students in developing good work habits and collaborating with the delivery teacher and the students’ grade teacher or supervisor. The support teacher does not have to learn all the material and become a subject expert – that is the role of the delivery teachers.

Student opinions of learning online have been most positive. They clearly articulate why they find the program engaging.
'I like the activities because they are much harder than the classroom stuff. It’s good to have stuff that’s not boring. It’s good cos you actually have to think and solve them before other people.'

Other comments are available from TalentEd, Vol 21 N0 1, 2003 page 5.

In the annual review of the largest online extension program delivered through CELO, ‘Ad Astra’, teachers assessed student engagement, performance and attainment as being equal to or better than in face to face learning.

Supporting teachers of students who are highly able / gifted in rural schools

CELO supports the delivery of online extension program for students who are highly able / gifted in a number of ways. There is the provision of professional learning (PL) in gifted education and online learning for teachers; phone, email and ‘at the elbow’ support as they develop their programs; some assistance with graphics so programs have a quality look and feel; region or cluster based PL to inform support teachers about the programs, strategies and expectations; an identification kit and PL in its use; a SharePoint workspace where all teachers and support personnel as well as department staff with an interest in educating the highly able / gifted can share information and experience; face to face sessions with students while accessing program materials and school and cluster visits to inform and support the development of local provision of extension programs (including online programs). The state’s Microsoft Partners in Learning project is also aiming to increase capacity in online delivery through PL and support for teachers to develop online extension programs for their local school or cluster.

How it all works in a rural school from a teacher’s perspective.

In the second part of this keynote address, Marietta Sansom-Gower will discuss the support teachers perspective. Her paper is on the following pages in the Conference Proceedings.
The benefits of online programs for gifted students from rural schools – a support teacher’s perspective.

Marietta Sansom-Gower
Centre for Extended Learning Opportunities (CELO),
Department of Education, Tasmania, AUSTRALIA.

Abstract
Through the Centre for Extended Learning Opportunities (CELO), the benefits of supporting students who are highly able / gifted are explored in the case study of one rural school.

Introduction to the Rural School
The Oatlands School is situated 85km north of Hobart, which is not very far away at all and if one lived in Sydney, Melbourne or Brisbane it would hardly be classified as a rural school. However, due to the unique demographics of Tasmania - namely its low population of which more than 60 percent of the population live outside the capital city - The Oatlands School is considered a rural school. It is only a one hour drive from Hobart and as such a high number, but not all, of its teachers commute to and from Hobart each day.

Oatlands has a population of approximately 500. The school’s population fluctuates between 400 and 450 students, ranging from kindergarten to grade 10 but only approximately 50 of these would come from the township. If one was to draw a circle with Oatlands as the centre and used a radius of 50km this would give a rough guide of the area from which all its students come. It only has one feeder school - Levendale Primary School. Levendale Primary School currently has 22 students which are grouped into two classes, one for students in kindergarten through to grade two and another for students from grades three to six.

Facilities within Oatlands include a Multipurpose Health Centre which has 21 beds ranging from acute care to low-care. There are two GPs who provide private practice and at various times of the week specialist and private health services visit the Centre. Other services situated in Oatlands are the police, fire brigade, council chambers, churches, post office and library. There are quite a few businesses in Oatlands and during the past five years they have continued to increase in number. Sporting facilities include an outdoor pool which is open for a couple of months each year, a bowls club, golf course and recreation ground which is home to the local football team and association. There are a number of properties within Oatlands and the surrounding smaller towns which are managed by Housing Tasmania.

Oatlands is part of the Southern Midlands and the economy is based on agriculture, in particular sheep, cattle and crop farming. Generally the population at The Oatlands School consists of children of farmers, of farm/seasonal employees, of families who had chosen an alternate lifestyle, of local professionals and business providers and of the unemployed. Over the past five years a high percentage of students enrolled at The Oatlands School have been eligible for financial assistance through the state Student Assistance Scheme.

The Benefits
The benefits to gifted and talented rural students to be enrolled in an online extension program are numerous. To be enrolled in such a program firstly acknowledges the skills and interests of the highly able / gifted student; for some it is as though they have finally received recognition for what they have felt all along, that they are different. To be validated as such can only promote healthy self-esteem.

The actual curriculum is also highly valuable to the student. It exposes them to new and challenging ideas which they can absorb at their own, usually rapid, pace. The frustration of having to work at the same pace as the rest of their regular class is removed. Their natural heightened curiosity, their desire for immensely varied topics and their capacity for processing information is met. Gifted students’ yearning to integrate ideas and relationships is also met by the program.
Social and emotional development of such students is also extended and advanced though being part of such a course. Students are encouraged to interact with one another and for some it is their first introduction to students of similar ability. It is also character building for them to meet students of higher ability. They are exposed to other ways of seeing things and solving problems. At times they are required to be self-directed which improves organisation and self motivation. The requirement to interact with other students within the program and the skills that this enhances filters through to social relationships within the school.

A teacher of rural students who are gifted students also benefits from them being enrolled in such programs. Students who are highly able / gifted are by no means automatically model students, especially not in terms of behaviour or achievement. Feelings of isolation and difference, boredom, frustration with the pace of learning and work requirements and a natural inclination to argue often lead to disruptive and inappropriate behaviours by these students. Having such a program available not only reduces such behaviour but also improves behaviour generally. Intolerance of students within their school dissolves, possibly because of the reassurance that there are other students like them, not necessarily in their school but definitely within their state. Attitudes towards achievement also change. Rather than doing the bare minimum to outdo the next most highly skilled student, the students who are highly able / gifted begin to set their own standards according to their perception of what they can achieve. Now that they are grouped in an online course with other highly able / gifted students the intrinsic motivation appears to change for the better.

Schools in rural areas can see many positives to having students enrolled in online extension programs. As already mentioned classroom management issues are significantly reduced when students feel that their needs are being met. These behavioural changes are not confined to the classroom - behaviour within the playground improves as well as outside school such as on the bus trip home. Students in such online programs are informed of extra-curricular activities that they may represent the school in. Another very important benefit to the school is that when a school meets students’ educational needs retention rates improve.

It is yet to be discovered and researched as to what benefits there are for rural communities when their gifted young are able to be catered for at their local school. It can only be assumed that this is positive for rural communities in that it keeps its gifted young in the area. It hopefully may inspire them to become adults who will further promote, vote for and fight for the provision of education in rural Australia.

References


Centre for Extended Learning Opportunities (2005) Ad Astra Project; Project Review Report June 2005
Rural and Regional Australia: Change, Challenge and Capacity

Anne Hampshire,
National Manager, Research & Social Policy,
Mission Australia

Abstract
This presentation will overview some of the latest data on the 36% of Australians who live outside our capital cities. It will use a capitals framework - economic, social, natural, human and institutional - to explore some of the changes and challenges facing rural and regional Australia as well as showcasing some innovative responses which are meeting community needs. The showcases will highlight the great capacity and resilience of rural and regional Australia as well as identify some common threads for successful initiatives. Some key recommendations in the areas of health, education, training and mobile services will be presented.

Australia, like nations across the world, has experienced unprecedented economic, social and environmental changes over the past couple of decades. It is arguably those living outside our capital cities who have felt these changes most deeply. This paper provides an overview of some of the data on the 36% of Australians who live outside our capital cities and presents it within a ‘capitals framework’. The data highlights the changes and challenges being experienced by rural communities. Gathering such data is itself a major challenge, given there is no common definition of ‘rural’ and ‘regional’ and statistics at the macro level can hide local or regional variations. There can also be a compounding effect of some data (for eg between education, employment and health), but this can be lost when a single indicator is considered. The paper will also showcase some innovative responses which are meeting community needs. These responses highlight the great capacity and resilience of rural and regional communities and some common threads of these initiatives will be identified. Some key recommendations in the areas of health, education and mobile services will also be proposed.

Australia’s population: Characteristics and change
In 2001, an estimated 7.1 million Australians lived outside the nation’s capital cities. They live in very diverse communities – in terms of size, population characteristics, economic and social activities, and their environments range from large regional cities, mining towns, farming communities and ‘the outback’. One of the major challenges for those working in this area is to be aware of that diversity.

Population change in rural and regional Australia involves a complex mix of both growth and decline. The non-metropolitan areas with growing populations tend to be areas surrounding capital cities and those located along the more fertile coastal areas. This includes towns and regions such as the Mid North Coast and Illawarra (NSW), Moreton (QLD), Darwin (NT), and Augusta-Margaret River (WA). In a number of cases, it is both retirees and families with young children who are moving to these communities, creating some significant opportunities and challenges for the local community.

The Local Government Areas with the fastest declining populations are all located in rural regions, predominately in remote and very remote areas of Western Australia (eg Meekatharra). More generally, it is smaller towns, particularly those with a population of 2,000 or less, that have been particularly affected by population decline, often to the benefit of the larger nearby regional centres.

Internal migration is having the greatest impact on the size and composition of non-metro areas. In the year prior to the 2001 Census, 78% of residents who moved to high growth coastal areas moved from within their own state or territory and two thirds came from non-metro areas (Australian Bureau of Statistics (ABS), 2004). For these areas, migration patterns are largely determined by the cost of housing, employment and training options and proximity to the coast. However, there is a growing ‘geographical mismatch’ between where housing is affordable and jobs are located. In 2000, about 9,500 more welfare recipients moved from metropolitan areas than moved into them (Australian Housing and Urban Research Institute, 2005).
Age, gender and location
Internal migration is also having an impact on the age structure of non-metro areas, with parts of rural and regional Australia ageing faster, either because of the movement of young people out of these areas and/or the movement in of older people. Between 1996 and 2001 almost three times the number of young people migrated out of country areas than moved into them and the majority moved to capital cities. During the same period, large population centres in regional areas also experienced a net gain of young people, mainly from smaller towns and communities. It tends to be young men who remain in many rural towns, with various factors contributing to this, including fewer employment and apprenticeship opportunities for young women in rural areas, and a culture that sometimes reinforces ‘traditional’ gender roles within the family and community (Alston and Kent, 2001).

Indigenous Australians
At the 2001 Census, a significant proportion (31%) of Indigenous Australians lived in major cities, however almost half lived in outer regional, remote and very remote areas combined, compared with 13% of the total Australian population (ABS, 2003). Indigenous Australians are generally younger than the total population and have lower socio-economic, health and educational status at the aggregate level. This can have a significant impact on the overall profile of particular rural and regional areas.

A ‘capitals framework’
This paper uses a ‘capitals framework’ to group data on rural and regional Australia. A balanced and robust supply of all the capitals is required to sustain and develop healthy functional communities and enable them to respond to change. The framework is useful for any community and enables an assessment of the strengths of a community. It also provides a more holistic evidence base to inform government and non-government agencies in targeting their policy and service delivery responses.

The five capitals of the framework\(^1\) are:

- **Economic** – includes income, wealth, land and machinery and produced capital.
- **Institutional** – the three tiers of government, the built environment including public and private infrastructure and the non-government sector.
- **Social capital** – is embodied in the ways people live together. The networks, shared norms, values and understanding that facilitate cooperation within and between groups.
- **Human capital** – embodied in the education, knowledge, skills and health of people.
- **Natural/environmental capital** – embodied in our land, air, fresh water, seas, flora, fauna.

A. Economic capital
The national and international economic changes of the past decades have particularly impacted on much of rural Australia. Whilst agriculture remains a major contributor to these communities, they have an increasingly diversified economic base, including mining, service, tourism, government, forestry and manufacturing activities. Changes to technology have altered the way farms operate, with interaction via IT occurring with a range of businesses outside the local area. Some of these new arrangements have directly impacted on business and employment opportunities in rural towns.

Employment and unemployment
As the dominance of primary industries has declined in non-metro areas, there has been an accompanying growth in retail, business, tourism, transport and property services (see Table 1).

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\(^1\) There is no ‘hierarchy’ of importance regarding the five capitals – all are seen as significant for individual and community wellbeing.
Table 1: Employment by industry sectors and remoteness, 2001,

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Major Cities</th>
<th>Inner Regional</th>
<th>Outer Regional</th>
<th>Remote</th>
<th>Very Remote</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Mining</td>
<td>1</td>
<td>8</td>
<td>19</td>
<td>31</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>13</td>
<td>12</td>
<td>9</td>
<td>5</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Govt &amp; defence</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Health, Education</td>
<td>17</td>
<td>19</td>
<td>16</td>
<td>14</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Private services</td>
<td>50</td>
<td>43</td>
<td>38</td>
<td>32</td>
<td>26</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Infrastructure sector includes construction, communications, transport, electricity, gas & water. Private services sector includes wholesale, retail, accommodation, cafes & restaurants, property & business, finance & insurance, cultural & recreational, personal & other services.

Source: Department of Transport and Regional Services (DOTARS), 2004

Whilst increased mobility, particularly in regional areas adjacent to major cities has seen an increase in the number of people working in metro areas and living outside it, for significant parts of rural Australia, the net number of jobs lost in recent years has resulted in generally higher unemployment rates than their metropolitan contemporaries (see Table 2). Youth unemployment data reflects a similar picture. Data at the macro level can also mask higher unemployment levels at the local or community level. Source: ABS, 2005a

Indigenous unemployment

Table 2: Unemployment rates 15 years of age and over, by state, August 2005

<table>
<thead>
<tr>
<th>State/Territory</th>
<th>Unemployment rate (%)</th>
<th>Capital City</th>
<th>Unemployment rate (%)</th>
<th>Balance of State</th>
<th>Unemployment rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>4.6</td>
<td>Sydney</td>
<td>3.8</td>
<td>NSW</td>
<td>6.2</td>
</tr>
<tr>
<td>Victoria</td>
<td>5.1</td>
<td>Melbourne</td>
<td>4.8</td>
<td>VIC</td>
<td>6.1</td>
</tr>
<tr>
<td>Queensland</td>
<td>5.0</td>
<td>Brisbane</td>
<td>4.5</td>
<td>QLD</td>
<td>5.5</td>
</tr>
<tr>
<td>South Australia</td>
<td>4.8</td>
<td>Adelaide</td>
<td>5.3</td>
<td>SA</td>
<td>3.5</td>
</tr>
<tr>
<td>Western Australia</td>
<td>4.3</td>
<td>Perth</td>
<td>4.0</td>
<td>WA</td>
<td>5.1</td>
</tr>
<tr>
<td>Tasmania</td>
<td>6</td>
<td>Hobart</td>
<td>5.6</td>
<td>TAS</td>
<td>6.4</td>
</tr>
<tr>
<td>Australia</td>
<td>4.8</td>
<td></td>
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</tr>
</tbody>
</table>

The unemployment rate of Indigenous Australians is approximately three times higher than that of non-Indigenous Australians with the proportion of unemployed Indigenous people significantly increasing with remoteness. The significant number participating in the Community Development Employment Program (CDEP) also means that unemployment rates are often artificially lower.

Income levels

Income levels in metro areas are generally higher than those in non-metro areas. In 2001, 16.3% of non-metro households were considered low income (weekly income of $300 or less) compared to 12.8% of metropolitan households. The highest concentrations of people on low incomes tend to be in the drought affected broadacre farming regions, coastal areas with high numbers of retirees and remote areas with high proportions of Indigenous residents.

B. Institutional capital

The government sector

Government agencies in rural areas not only enable access to essential services, but also generate significant employment opportunities. Therefore a withdrawal of government services from an area...
can have a multiplier effect. Public housing is an important component of institutional capital and as with many metropolitan areas, there is insufficient stock to meet demand in many rural areas. Similarly, transport, or the lack of it, is a recurring theme in needs analysis concerned with rural and remote areas. It impacts on most areas of life, including work, education, and social participation.

Local government, as the level of government closest to the community, is strategically placed and at “the forefront of efforts to maintain the economic, social and ecological viability of rural areas” (Tonts, 2005 p 208). The traditional role of local government has expanded, partially in response to the devolution of responsibilities from other tiers of government. Many rural local governments however, lack sufficient resources to adequately fund these responsibilities and planning between the tiers of government at the regional level is often fragmented.

The private sector
The loss of private sector services from rural and regional areas can also have a multiplier effect and can include a loss of social and intellectual capital as former private sector employees and their families leave a community (Economic Development Committee, 2002). Whilst the introduction of options such as telephone and internet banking services have brought some benefits, for some, the costs and limitations of these methods often fail to compensate for the loss of face to face services.

The third sector or non government sector
The third sector provides a diverse range of services across rural and regional Australia. A NSW Council of Social Service (NCOSS, 2004) report identified the following trends across rural NSW:

- In towns where the main industries have closed down and no major economic activity has replaced the jobs lost, a lack of support services is leading to entrenched social problems. This is particularly the case for older men, Aboriginal communities and young people.
- An increasing demand for non government services.
- State agency restructures are felt significantly and result in a critical mass loss of human services policy expertise at the local level. This has a social and economic impact on the towns affected.

C. Social capital
Social capital is often an area of great strength for rural and regional communities. Alston (2002) notes the strong fibre of rural community networks, particularly evident during crises such as bush fires. It is also reflected in local clubs and associations such as Landcare Groups. However, some towns experiencing significant population decline and loss of young people, and/or those experiencing sustained drought are finding it challenging to maintain such networks (Alston, 2004).

Research by Healy et al (2003) indicates that the type and level of social capital in non-metro communities differs from that of metro communities, particularly in the area of intra-community networks (based on geographical proximity, ie neighbourhood ties) and inter-community networks (ties across the borders of local communities). Some of these differences included:

- Rural and regional respondents reported much higher levels of intra-community social capital.
- Local community networks were stronger in rural and regional areas than in metro areas.
- Rural and regional areas have lower levels of inter-community social capital than metro areas.

The last point is particularly important for agencies working in rural and regional communities, as it is inter-community networks that play a major role in facilitating access to resources and opportunities such as education and employment. Healy concludes that a continuing focus on intra-community social capital is unlikely, in isolation, to assist communities faced with on-going rapid change. “Non local networks such as networks facilitated by the institutions of government, business, and NGOs, have a vital role to play in assisting communities to respond to rapid social and economic change” (Healy p 39).

Social capital has a particular relationship to levels of social cohesion and resilience. Those communities with strong networks are likely to be more cohesive and thus better able to ‘bounce back’ from adversity. A Victorian study of disadvantaged localities (Vinson 2004) found that rural communities exhibited much higher levels of social cohesion and whilst not wanting to minimise “the importance of macroeconomic factors to the economic and social health of a neighbourhood”, it concluded that social cohesion could provide a formidable ally to community renewal projects.
D. Human capital
It is perhaps human capital indicators that are the cause of greatest concern for rural and regional Australians.

Education
Education plays a crucial role in the life opportunities of people and a healthy supply of human capital within regional populations is essential for wellbeing. Many of the barriers to education faced by rural young people are location based and school retention rates decrease with distance from the metropolitan areas, as shown in Table 3 (Productivity Commission, 2005).

<table>
<thead>
<tr>
<th>Metropolitan zone</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>WA</th>
<th>SA</th>
<th>Tas</th>
<th>ACT</th>
<th>NT</th>
<th>Aust</th>
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<tbody>
<tr>
<td>Male</td>
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<td>68</td>
<td>71</td>
<td>63</td>
<td>62</td>
<td>73</td>
<td>78</td>
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<td>67</td>
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<tr>
<td>Female</td>
<td>75</td>
<td>79</td>
<td>76</td>
<td>70</td>
<td>80</td>
<td>85</td>
<td>82</td>
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<td>76</td>
</tr>
<tr>
<td>All students</td>
<td>70</td>
<td>74</td>
<td>73</td>
<td>66</td>
<td>71</td>
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<td>52</td>
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<tr>
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<td>72</td>
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<td>..</td>
<td>61</td>
<td>..</td>
<td>43</td>
<td>66</td>
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<tr>
<td>All students</td>
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<td>68</td>
<td>60</td>
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<td>56</td>
<td>..</td>
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<table>
<thead>
<tr>
<th>Other provincial &amp; remote</th>
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<td>58</td>
<td>69</td>
<td>65</td>
<td>52</td>
<td>47</td>
<td>..</td>
<td>32</td>
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<tr>
<td>Female</td>
<td>74</td>
<td>82</td>
<td>85</td>
<td>78</td>
<td>81</td>
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<td>71</td>
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<th>Very remote</th>
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<td>56</td>
<td>28</td>
<td>35</td>
<td>..</td>
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<td>..</td>
<td>65</td>
<td>31</td>
<td>41</td>
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<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

| Male                       | 62   | 65   | 69   | 62   | 59   | 61   | 78   | 26   | 64   |
| Female                     | 72   | 79   | 76   | 70   | 80   | 73   | 82   | 32   | 75   |
| All students               | 67   | 72   | 72   | 66   | 69   | 67   | 80   | 29   | 69   |

Indigenous participation rates
Indigenous educational participation rates have been improving, but as Figure 1 shows, there is still a very significant gap between the participation of Indigenous and non Indigenous young people, especially in rural and remote areas.

Figure 1: Proportion of Indigenous and non Indigenous 15-19 year olds with educational attainment of Year 12, by locality, 2001

A number of factors have been identified by Biddle et al (2004) as contributing to the poorer educational participation rates of Indigenous young people:

- The presence of primary schools in or near Indigenous communities is fairly common but there are very few secondary schools within a reasonable distance.
- Indigenous students are less likely to access the internet at home.
- Indigenous students tend to be disproportionately affected by any reallocation of resources between the public and private school systems.

**Further education**

In 2001, the proportion of the population with tertiary qualifications (including TAFE) was 15.5% in metro areas compared with 8.4% in non-metropolitan areas. The lower rates for regional areas partly reflect the lack of tertiary opportunities in these areas and the trend of out-migration for young people to access these facilities in metro areas. The inadequacy of tertiary allowances has also been cited as a barrier for those living outside of metro areas (Alston and Kent, 2001). In contrast, participation in Vocational Education and Training (VET) (predominately TAFE) is of particular importance to people in non-metro areas, as it is often the only post school option. It enables people to participate in higher education and remain in their local community.

**Figure 2: Vocational education and training (VET) Participation Rates**

![VET Participation Rate as % of Population](image)


**Health**

Australians living in non-metro areas suffer from higher rates of injury, mortality, suicide, diabetes and coronary heart disease than metropolitan Australians. They also tend to have higher levels of health risk factors, including smoking and drinking alcohol in unsafe quantities. The rate of alcohol attributable death among young people living in non-metro areas is 1.7 times greater than for their metropolitan counterparts (Chikritzhs and Pascal, 2004). Many of the pre-conditions for good health are unavailable to some Indigenous people, particularly in remote areas. A 2003 study (Quine et al, 2003) comparing the health needs of 12-17 year olds in NSW, showed that depression was a concern identified more often by young people in rural areas. Issues such as youth suicide and teenage pregnancy were almost exclusively raised by this group. Structural issues, including the lack of female doctors, confidentiality issues, and a lack of transport and bulk billing doctors were also raised, particularly by young females. Limited educational and employment options were also identified as impacting adversely, particularly on mental health outcomes, and contributed to risk-taking behaviour.

**Mental health**

Stress, depression and unsafe consumption of alcohol often accompany major changes in the lives of individuals and communities. When these combine with poor access to preventative and primary mental health care services, the results can be devastating. Research by the Centre for Rural and Mental Health (Rajkumar et al, 2004) identified the following key issues within rural and remote communities:

- The occurrence of more than one disorder at the same time, particularly mental illness and substance abuse, predominately involving depression, anxiety and alcohol misuse.
- Suicide rates, particularly amongst young males.
- Indigenous mental health and the need for culturally appropriate interventions.
- Farming communities/families affected by high levels of stress, compounded by isolation.
- Recruiting and retaining adequate numbers of mental health professionals.

E. Natural or environmental capital
A few indicators of Australia’s environmental performance include:
- **Land degradation**: In 2000, about 5.7 million hectares of land were affected by or at high risk of developing dryland salinity.
- **Inland waters**: In 2000, about a quarter of Australia’s surface water management areas were classed as highly used or overused.

**Non metro and disadvantaged?**
There are many larger regional towns and areas that are thriving, with improved transport and telecommunications infrastructure contributing to significant growth and the possibility of enhanced wellbeing. But much of rural Australia is more exposed to a range of challenges than their metropolitan contemporaries by virtue of the inter-related dimensions of distance, access and opportunities. Work done by the ABS at the level of Statistical Local Area, (SLA) (see Table 4) shows that seven of the ten most disadvantaged SLAs in NSW are located in rural areas and for South Australia half of them are in rural areas. A significant number of these SLAs have a high proportion of Indigenous residents.

**Table 4: Most disadvantaged SLA’s and percentage of Indigenous population in 2001**

<table>
<thead>
<tr>
<th>South Australia Statistical Local Area</th>
<th>% of population Indigenous</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unincorporated Riverland</td>
<td>65.8</td>
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<tr>
<td>2. Playford – West Central</td>
<td>3.8</td>
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<tr>
<td>3. Port Adel - Enfield Port</td>
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<tr>
<td>4. Whyalla</td>
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<tr>
<td>5. Far North</td>
<td>34.7</td>
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<td>6. West Coast</td>
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<tr>
<td>7. Port Adel - Enfield Inner</td>
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<td>8. Salisbury Inner North</td>
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<tr>
<td>9. Peterborough</td>
<td>3.6</td>
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<td>10. Salisbury Central</td>
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Source: ABS 2002b

**Responses to the needs of rural and regional community needs**
There has been a broad range of policy responses from all levels of government and the non-government and business sectors, to the needs of rural Australia. The case studies below are some
practical examples from Mission Australia’s experience of innovative responses to community needs. Effective service responses could also be illustrated by many other outstanding community services.

Case study 1: Youth Services Dubbo, New South Wales
Mission Australia provides a varied range of services in Dubbo for young people (mainly aged 14-18 years) who are unemployed, have been juvenile offenders or are at risk of disengaging from the education system. It is not unusual for some young people to fit all these categories. Many young Indigenous people access this service, with all programs designed to be flexible and culturally aware. Partnerships with other local services, a flexible approach to meeting the needs of young people, and young people’s active involvement in developing the options they want from the service, are the cornerstones of the approach.

Major issues for their clients include:

- Unemployment
- Disengagement from school
- Domestic violence
- Hidden homelessness
- Poor literacy
- Racism
- Drug and alcohol abuse
- Lack of transport
- Boredom

Mission Australia Dubbo supports its clients by:

- Working with local schools to support students to complete Year 8 and hopefully go on to complete Year 10.
- Providing a Leadership and Cultural Development program to enable young Indigenous people to learn about their culture. The program includes Aboriginal art classes, story telling and regular camps that include visits to sites significant to their culture. Involvement of Indigenous Elders is a key feature. Outcomes include increased self esteem and involvement in the community, increased understanding of Indigenous culture and continued participation in school.
- Initiating groups for young girls such as ‘It’s a Girls World’ with a focus on life skills, health and self esteem, in partnership with local schools and the Adolescent Family Counsellor.
- Running a ‘Teen Mums’ group with a focus on sexual, emotional and physical health, before and after the baby arrives.
- Partnering with TAFE Outreach to provide stimulating and practical activities that develop skills, confidence and employability. Recent examples include a Vineyard Course, delivered by TAFE over 14 weeks, with a 98% attendance rate. The Small Motors/Go Kart Course was equally successful with students learning skills in metal fabrication and welding.
- Supporting juvenile offenders to reintegrate into the community once they leave detention centres through a culturally aware and flexible case management approach. Staff from the Post Release program visit the young people weeks before they are released to ensure their needs are assessed and met when they leave. The average age is 16 years and the program covers the area from Lithgow to Cowra to Lake Cargellico, Bourke to the Queensland border.

Case study 2: Regional Environmental Employment Program (REEP), Victoria
The REEP Program, currently operating in Bendigo and Shepparton in rural Victoria, is an employment program that provides training opportunities for young people (15-24 years) while addressing local environmental issues.

The program’s major goals are to:

- Assist young people in their transition to employment, education and training.
• Build community capacity through the provision of opportunities for participants to be involved in the program within their community.

Over a 12 month period nine trainees in each area undertake a structured work and learning program. A typical working week for the selected trainees includes:
  • TAFE - training in either Certificate II in Conservation and Land Management or Rural Operations.
  • Group conservation work - team work on community land care projects through sponsored works with local authorities (2 days).
  • Host employment – a supporting agency sponsors the employment of a trainee(s) within their organisation to broaden the skills and experience available to trainees. Host employers range from local governments to Catchment Management Authority (2 days).

Most of the participants are unemployed before joining the program and have either limited or a negative experience of education and employment. Of those who completed these nationally accredited traineeships last year, the majority progressed to further employment. Likewise Indigenous participants have also found positions as Cultural Officers within environmental agencies. With the growing demand for environmental workers, REEP is able to equip these young people for future jobs, while supporting rural communities in their efforts to address the multiple impacts of land degradation. The REEP Programs are managed by Mission Australia, who auspice local Steering Committees comprised of representatives from local government, environment, training and youth groups, business as well as state government authorities. Some of these agencies are also significant host employers, providing valuable work experience to REEP participants. The partnerships formed with training providers such as TAFE and other agencies are key to the success and sustainability of the program. The pro-active development of a region’s capacity to form networks to solve local problems through joint ventures is an important characteristic of REEP.

Case study 3: Job Placement, Employment and Training, Whyalla and Port Augusta, SA
Mission Australia’s Job Placement, Employment and Training program (JPET), based in Whyalla and Port Augusta supports young people aged 15-21 who are homeless or at risk of homelessness. The service is a stepping stone to enable these young people to re-engage with education or make the transition to employment assistance programs like Job Network.

<table>
<thead>
<tr>
<th>Area</th>
<th>% of unemployed</th>
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<tbody>
<tr>
<td>Port Augusta</td>
<td>8.7</td>
</tr>
<tr>
<td>Whyalla</td>
<td>9.8</td>
</tr>
<tr>
<td>South Australia</td>
<td>6.1</td>
</tr>
<tr>
<td>Adelaide</td>
<td>6.4</td>
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<tr>
<td>National</td>
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Situated approximately 400 kilometres north of Adelaide these services cover an extensive area including Whyalla, Franklin Harbour, Port Augusta, Roxby Downs, Cowell, Kimba, Coober Pedy and the Finders Ranges.

The most common barriers and problems faced by participants include:
  • Poor education
  • Domestic violence
  • Inadequate income
  • Legal and financial issues
  • Lack of local employment opportunities
  • Lack of stable and affordable accommodation
  • Mental health issues and anger management

The multiskilled staff at JPET Whyalla and Port Augusta provide an exceptionally broad range of supports including individual counselling, group activities, relationship education and advocacy in the
areas of housing and income support, while building on-going relationships with the young people, their families and communities. Distance and the spread of young people across this area of South Australia create particular challenges. Consequently outreach is a significant component of delivering services to these regions to ensure access to those young people in the more remote areas of the region.

Key features
The above case studies provide some diverse examples of how rural and regional communities are responding to some of their local needs. Critical to the success of these initiatives has been:

• Multi-sector collaborations owned by local communities – they involve a range of sectors working together to address identified community needs. They share resources (human, financial and other) across sectors to maximise impact. There is often a key ‘facilitator’ (organisational and individual/s) who is critical to ensuring broad and ongoing engagement of the diversity of players.

• Multi-level strategies – they all deal with more than one issue (eg environmental and employment) in an integrated way and in a way which builds local capacity.

• A level of creativity, flexibility and innovation.

Recommendations
In light of the above data on rural and regional Australia and our experience working with communities across the country, Mission Australia has identified a number of recommendations for improving the wellbeing of Australians living in non metropolitan areas. These include:

• An increased focus and additional investment from all levels of government and the community and business sectors in rural and regional Australia. This should be complemented by more comprehensive impact assessment statements for policies and enhanced multi-level planning and implementation involving all levels of government and the business and community sectors.

• A national rural mental health strategy, as part of the new COAG agreement, and including additional early intervention and prevention strategies and a focus on young people.

• A new national apprenticeship program for girls and young women in rural and regional areas given the relative scarcity of opportunities for them and the fact that they are disproportionately leaving these communities.

• An increased use of mobile (‘on wheels’) and ICT to take a diverse and integrated suite of services (education, community, employment, health etc) to where people live. It is now possible to live in rural and regional areas in new and different ways. Mobile services are flexible, highly responsive and engage service users. They can also be used to extend community capacity.

• Increased domestic violence, rural financial counselling and drought support services, delivered in a comprehensive way to those experiencing high levels of stress.

Conclusion
Significant economic, social and environmental changes have been impacting on rural and regional communities. Some of these communities need enhanced support in one or more of the five capitals outlined in this paper. There are however significant examples of the resilience, capacity and creativity of rural and regional Australians. The wellbeing of rural and regional Australia is our collective responsibility. At a time when we’re increasingly conscious as a nation of the population/environmental pressures facing our capital cities, it is in everyone’s interests to better support rural and regional communities. Most Australians would agree that an Australia without a thriving and vibrant rural and regional population would be a soul less place.

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Abstract
In this presentation I will present an overview of small rural schools in Newfoundland and Labrador, Canada’s most easterly province. The scale of schooling in Newfoundland is very small by most standards: average size of all schools is approximately 200 students; average size of rural schools is 174 students. Many rural schools are situated in remote and isolated places accessible only by boat, ferry or snowmobile in winter. I will consider the challenges these schools have to confront and also the innovations and strategies they employ to provide a quality education for rural children. Foremost among these strategies are multi-age pedagogy and distance education and web-based learning.

Introduction
It has been my privilege over the last fifteen years to meet and work with rural educators, researchers and scholars from all over the world. I have visited many small schools, many in quite remote and isolated places in my home province of Newfoundland and Labrador. I have had many conversations with many students, parents and community leaders. I have disciplined myself to listen and respect the local knowledge that has been shared. I say “disciplined” because too often university professors are more apt to talk rather than listen. I have come to realize we need to talk less and listen more.

These many experiences in rural places and rural schools have been a truly educational. That is important because, as we say in Newfoundland I am a born and bred “townie.” That means for most of my life I have lived and worked in an urban area; I have not had the experience of growing up in the country or in an “outport” as rural places are called in Newfoundland and Labrador.

Being a bit of an outsider has had its advantages. I come to rural issues, concerns and questions with some degree of objectivity. My vision and understanding is not blurred in any way by sentimentality or mythology. Making a living and life in rural Newfoundland and Labrador, historically, was a constant struggle with the elements of water, wind and land just to survive. To make a living from the fishery meant long hours of back breaking work most of which was performed with imminent danger never far away. To a large extent the good old days are something of a myth; older rural women will assure you of that.

Life in most small rural communities today is still a struggle in my part of the world. Those communities that remain dependent on the fishery are in fact at risk of ceasing to exist. Since 1992, there has been in place a moratorium on the cod fishery. The cod was initially Newfoundland’s reason d’etre for being. England established fishing plantations on the island in the 16th century and for nearly
four hundred years the word “fish” meant “cod” in Newfoundland. However, it appears the fishing stocks are almost totally depleted and there is not a lot of hope that they will come back.

In some rural communities the fishers have been able to turn their attention to alternative species such as shrimp and crab. They are experiencing some success with these ventures; but overall the situation is bleak. To emphasize the precariousness of the situation a forum with the provocative title Can Rural Newfoundland and Labrador be Saved was held at the Corner Brook Campus of Memorial University in May of this year. The organizer of the conference, Dr. Ivan Empke introduced the forum by noting:

Pick up any daily newspaper and, if you look carefully in the spaces between the major articles on life in the city, you can find the stories of rural areas. Many of them are stories of despair — loss of services, youth out-migration, economic collapse, environmental challenge, struggles in governance, a culture of poverty. Some are stories of an idyllic past that will not return, stories that drip of romanticism. But here and there are stories of courage, of conviction, of defiance even.

Reading between the lines, these stories highlight the fact that the crisis of rural communities is not simply an economic or structural crisis, but it is also a social and cultural crisis. They raise the question of why rural is worth saving — or even if it is worth saving at all.¹

I will hasten to add that my colleague in Corner Brook cares very much about rural places and he would answer quite definitively, as would I, that rural communities are worth saving.

For almost two months now I have been a visiting scholar at Charles Sturt University. It has been quite a wonderful, fascinating and again a truly educational experience. I have had many very informative conversations with my new colleagues at the School of Education. Under the guidance of Colin Boylan and Andrew Wallace I have had the opportunity to visit a number of small schools in New South Wales.

The journey to and from these schools have been filled with conversations about educational issues in our respective rural contexts. We have discovered we have much in common; yet there are some significant differences. I have discovered that small rural schools often have more in common with similar schools in other yet quite diverse places than they do with larger schools in their own immediate environment.
In my travels I have found that the issues and concerns of rural communities and rural educators are very much the same the world over. Government policies which often reflect an ignorance, an insensitivity or an indifference to rural sustainability and development appear to know no borders or boundaries.

I have also had the opportunity to visit with the folks who run the Multi-age Association of Queensland (MAAQ; http://www.maaq.com.au/) One of my primary research interests is multi-age education and at the invitation of Terry Ball, I spend a week on the Gold Coast visiting small schools and talking with educators. I also had the opportunity to visit with the President of MAAQ, Dr. Nita Lester who is a lecturer at the Mt. Gravatt Campus of Griffith University.

A fishing community in Newfoundland

In my brief time in Australia I have developed a deep affection for the place. The landscape has been quite stunning (despite the drought in NSW) and beautiful and the people have been both gracious and generous with their time and knowledge. I have not felt that I was in a foreign land; but rather had come to another home. The people of Australia, at least the ones I have met, are very much like Newfoundlanders – informal, welcoming, a great sense of humour, and quite accepting of visitors.
I suspect like Newfoundlanders, rural Australians have demonstrated courage, conviction and even defiance as they continue to insist that rural does indeed matter and is worth preserving. I wish to sincerely thank Charles Sturt University for providing me with the opportunity to add these understandings to my continuing education. I would be remiss if I did not thank Colin and Gail Boylan for looking after me my first two weeks here. They are kind and gracious people who made my transition to the “night shift” less difficult than it might have been.

In today’s presentation I would like to share with you some of the rural issues and concerns that rural educators and researchers have to grapple with in their struggle to provide a quality education for the children and youth attending schools in the remote and isolated communities of Newfoundland and Labrador. As I indicated above I am sure many of these issues will resonate with many of you in this audience who work in similar circumstances in Australia. Please understand with the time I have I can only scratch the surface of these topics; however, I would welcome the opportunity to pursue any of my remarks as the conference progresses.

Issue 1: Invisibility: Do we still have small schools?

About ten years ago, I developed a graduate course entitled Current Issues in Rural Education. In part, the creation of this course was an attempt on my part to give rural schools some degree of visibility within the Faculty of Education at Memorial University and the wider educational community.

Newfoundland and Labrador has always been and continues to be a province of small schools the majority of which are situated in rural communities. 65% of the province’s 300 schools are classified as rural; the average enrolment of these schools is 174 students. Approximately 25% of the schools have less than one hundred students; 43 schools have less than 50 students. Approximately 80 of these schools are what we call all-grade schools which means that they attempt to offer all subjects and courses from kindergarten to grade twelve.

Despite the significant number of such schools and communities, their existence is too often ignored by the wider educational community. In terms of my own Faculty, previous to the creation of Current Issues in Rural Education, students could complete undergraduate and graduate degrees without ever encountering a course dedicated to rural issues. The course remains an elective.

One such small school is Victoria Academy which is situated in the community of Gaultois. Gaultois (47°36’ N, 55°55’ W) is located on Long Island on the south coast of Newfoundland. It lies approximately 200 km south on Route 360, off the TCH, and is a short ferry trip (approx 20 Mins) from Hermitage, 3.1 nautical miles away.
Gaultois can best be described as isolated – as well as rural. The only means of access is by boat, or helicopter. It is so remote it shares a doctor and clergy with several other communities – Hermitage, Sandyville, Seal Cove and McCallum. The school has less than fifty students and six teachers.
Many new teachers begin their careers in small rural schools such as Gaultois. In these schools they most likely have to work with multi-grade and multi-level classes and assist students taking many of the high school courses via web based distance education. Yet again, they are not required to take any courses that prepare them for this challenging teaching situation. An elective course exists in multi-age education, but it is not a required course. There is nothing as well to prepare them for living and working in a rural culture. Students from the cities and towns of the province often find the “fish bowl” existence that is part and parcel of teaching in a remote and isolated school very difficult to adjust to. Many do not and leave their posting before the end of the year if not the term.

The provincial Department of Education is equally remiss in recognizing the existence and unique circumstances of small rural schools. Curriculum Guides are produced and directives and policies are issued as if all schools are large schools and are situated in urban areas. On occasion within such guides there may be a passing reference to smaller schools but most rural teachers report that such material is far from helpful. Most invisible of all are the smaller and more remote and isolated all-grade schools.

The one area that the Department of Education has shown some initiative is web-based distance education. Most of the high school curriculum is now available via the internet to the province’s rural schools. Later in this presentation, I will say a few more remarks about distance education and how it operates in Newfoundland and Labrador.

At the district level the situation is not that much better. Professional development activities are just one example that illustrates how small remote schools simply do not show up on the educational radars. Activities are too often planned without any due consideration as how teachers from the remote schools will be able to attend. Such teachers need extra travel time and compensation but seldom is it provided. Consequently, they cannot get to the planned activity.
The invisibility of small schools and their precarious existence on the margins of the educational system has a number of consequences that directly affect students. When teachers are not educated and prepared for the unique challenges of small and remote schools it is the students of those schools that ultimately suffer the consequences. The same is true if those same teachers are not receiving the professional development that urban based teachers are. Ultimately, I think it is a question of social justice: we are not being fair and just to the children who attend our smaller schools. Surely they deserve better.
Issue 2: Changing Demographics and Declining Enrolment

Declining enrolment is a very significant issue affecting the whole of the education system but with particularly sharp consequences for smaller schools. The public school system in Newfoundland reached its peak enrolment in the early 1970’s when there were approximately 160,000 students enrolled in schools. Today there are less than 70,000 students attending school. That is a decrease of 90,000 students.

In part this decrease has been caused by a radical change in our fertility rate. When Canada joined Newfoundland in 1949, the province had one of the highest fertility rates in the world. It was not unusual for families to have ten, twelve and fifteen children. Indeed no one in rural areas would remark unduly on a family of twenty. Today, Newfoundland and Labrador has one of the lowest fertility rates in the world, less than two. It is somewhere around 1.5.

This drop in student numbers has impacted the whole of the province but the schools most severely impacted have been the smaller rural schools. These smaller schools have experienced reductions in staff allocations and as a consequence a loss of curricular programs. The workload of those teachers remaining at the school is increased. It is becoming increasingly difficult for these schools to remain viable in the view of the educational authorities and they are increasingly targeted for closure and consolidation. This is a point I will revisit a little later in this paper.

A related issue confronting the rural areas of Newfoundland and Labrador is the changing demographic which in part is contributing to the decline in school enrolment but which has other consequences as well.

Ever since 1992 there has been a significant change in the demographic profile of many rural areas of the province. Who is leaving? Who is staying? Who is returning? These are three very important questions.

Those that are leaving tend to be younger, better educated, and have a skill set that they can use elsewhere. Those that are staying are also young but tend to be poorly educated (many would not have finished school), lack transferable skills and are dependent on seasonal work, unemployment insurance and social assistance. In former times they would have been absorbed into the fishery with their parents.
but that option is not there any more. It is the children of these young people who are making up the majority of a school’s enrolment in many places.

Those who are returning to live in rural communities are folks who are returning to where they were born and grew up after having retired from working somewhere on the mainland of Canada. Obviously these folks tend to be older. They do not have children and have little direct interest in the local school. Nor are they necessarily interested in taking an active role in community affairs.

This changing demographic has serious consequences for both the rural community and the local school. Not only is there a decline in the number of students attending school but the characteristics of those children who do attend reflect the changing demographics of the lowered socio-economic status of the community. The community is being deprived of many of its best and brightest young people who would in normal circumstances become the community leaders. Down the road the increasing numbers of retired folks are going to have consequences for health care budgets.

Issue 3: Small Schools Under Siege

Small schools have always had a rather precarious existence in Newfoundland and Labrador. Small schools are generally perceived as an unfortunate necessity dictated by the isolation and remoteness of many communities and the long distance bus rides that would be necessary if all small schools were to be closed. In the government’s view larger schools (at least 400 students) are to be preferred.

Consequently the educational authorities of Newfoundland and Labrador has pursued a relentless policy of closure and consolidation of small community schools for the last fifty years. The success of this policy can be seen in the reduction of the number of schools from about 1200 to the current 300. However, the intended goal of just having larger schools remains elusive. As I indicated above Newfoundland remains a province of small schools by most standards.

Historically there have been two major criticisms of small schools. Firstly, the necessity for smaller schools to combine grade levels (year group) has been perceived as a major flaw inherent in smaller schools. There is the view that such grouping practices are old fashioned, inefficient, and ineffective. Rural parents have been consistently told that their children cannot receive a good education in a school that has to combine grade levels. If they genuinely care about their children, they are told, they will agree to close their small community school and agree to have their children bussed to a larger school where they can enjoy the benefits of single grade classrooms.

It should be noted that there is never any credible research evidence presented to parents that clearly demonstrates the limitations of multi-graded classrooms; nor is there any evidence presented demonstrating the superiority of single graded classrooms. No evidence is presented in either case because none exists!

The second major criticism of small schools, historically, has been their inability to offer the same broad curriculum as can larger schools. Consequently, so goes the argument, students attending smaller schools do not have the same educational opportunities as do students attending larger schools.

This argument may have had some merit in the past. However, today, with the ever increasing use of distance education and web based programming available via the internet the size and location of a school is irrelevant as far as programming is concerned. Any student living anywhere can access any course or program she or he desires.

Nevertheless, the government has mounted a renewed campaign against small schools. They are determined to reform small schools out of existence. The only schools that are safe at the moment are those that are on islands and have no road connections. As soon as someone invents an amphibious bus their days too will be numbered!

Consequently, more and more students, including those of quite a young age are spending increasing amounts of time on school busses, riding longer and longer distances often over roads that can be quite dangerous especially in winter.
What are the consequences of students spending four hours or more each day on these schools buses? Do such rides have an impact on academic achievement? Do such rides affect students personal, social and family life? Does having to leave as soon as school ends limit the students involvement in the life of the school and participation in sports and other extra curricular activities?

Incredible we don’t really know the answers to these questions. Despite the fact that millions of children in North American ride the bus and hundreds of millions of dollars are spend very limited research has been conducted investigating bussing issues. One has to wonder why. Is that we just assume there are no harmful consequences? Of is it we don’t really want to know for fear that we may be doing untold harm to many rural children.

A final point needs to be made briefly. Closing a small community school doesn’t have consequences just for the students. In Newfoundland and Labrador, as elsewhere, the local school has meaning and purpose for the whole community. In my province the school is considered to be the heart and soul of the community and the loss of the school may mean the death of the community.

Issue 4: Teacher recruitment and retention

There is a debate currently in North America as to whether or not we are experiencing a teacher shortage and whether or not, if there is a shortage, if it is going to worsen in the foreseeable future. The causes of this shortage are most often linked to low salaries and increasingly to demanding and intolerable working conditions. In my part of the world there are indications that as many as 50% of those entering the profession leave teaching after three to five years. Each year there are more and more teachers taking early retirement and I have had many students return from their practicums in schools saying that many on the staff have told them they are crazy to be going into teaching at this time.

Smaller schools, especially those in isolated and remote places are finding it increasingly difficult to recruit teachers in areas such as science, math, and foreign languages. If there is a shortage, and I think there is, it is in these school subjects. Whereas in the past new graduates in these disciplines would go to a rural area to get some experience, they are now being hired directly in larger urban schools. This is creating something of crisis for the most isolated schools if they want to have these courses offered in the school.

As problematic as recruitment is, retention is even a more serious issue. Keeping new teachers in small and remote schools is increasingly difficult. This was always a problem as many new teachers have always seen small schools as stepping stones to positions in larger schools and or less isolated places. The teacher shortage further exacerbates this situation. Larger schools are recruiting the teachers they need out of the smaller schools. This serves the larger urban schools quite well as they are able to hire teachers who have had the chance to develop their teaching skills in the smaller schools. It does not serve the small school and its students well at all.

Small schools, especially those in remote areas have a difficult job recruiting teachers and an even more difficult job keeping them. Thus most small schools have a fairly high and consistent turn over rate regarding teachers. In such a situation it is difficult to develop programs and have any degree of consistency or continuity within the school. Again this does not serve the students well.

Issue 5: Web based distance education

A positive development in regard to remote and isolated schools has been the development and expansion of web-based distance education. The Center for Distance Learning and Innovation (CDLI) was created by the provincial Department of Education in 2000 specifically to address two particular issues related to small and remote schools. One is the difficulty they have in recruiting and retaining qualified teachers especially in disciplines such as science, math and foreign language. The other is the challenges small schools face in trying to meet mandated curriculum requirements for students attending the smallest schools.
Through the facilities and personal of CDLI Newfoundland students in remote and isolated schools can access all of the courses they need to fulfill graduation requirements. In addition they can also access an ever increasing number of elective courses in music, art and French. The creation of CDLI has great potential benefit to students attending the more remote schools in the island. I say potential because there are a number of issues that need to be resolved.

The CDLI model of distance education can provide rural students with access to more and a wider range of courses than might otherwise be available to them. But then, if it is just a matter of access, the same goal could be achieved with a greater use of mail order correspondence courses. A commitment to education equality and a quality education for all has to go well beyond the provision of access.
It remains an open question, therefore, whether the computer mediated, Internet dependent model of distance education will in fact equalize educational opportunities for rural students, particularly those attending the smallest and most remote schools. An equally significant unanswered question at this point is whether or not the increased reliance on distance education as an alternative mode of program delivery will improve the quality of education provided to rural children and raise levels of rural academic achievement.

Among the key issues in need of critical inquiry and public discourse are:

- Equality of Access
- The appropriateness of online distance education for all learners
- The educational equivalency of online and face to face instruction
- The effect of an increased reliance on distance education at the high school level on all-grade schools

I would like to say a few words about two of these issues: equality of access and the appropriateness of distance education for all learners.

Equality of Access

First of all, there is the question of equality of access to these new educational opportunities. Access to the Internet remains problematic in many rural areas of this province. It is most problematic for those
small and remote schools most in need of program enhancement. While access to course materials and resources may be provided via a CD ROM, access to teachers and other students cannot be thus provided. This may mean limited interaction and communication opportunities for many rural students taking online courses. This compromises the quality of the educational opportunity thus available; it calls into question to what extent educational opportunities have in fact been equalized.

Young students are quickly frustrated when the technology does work as intended. A very important aspect of the CDLI model is two way synchronous voice communication between teachers and students. When that is not available or is of poor quality and consistency students lose confidence in this mode of learning. The folks at CDLI are well aware of these technical problems and are constantly striving to improve the system.

Equality of access is not just a matter of communications infrastructure; it is also a matter of economics. Funding formulas for educational resources favour larger schools over smaller ones. Most rural schools are small, and all remote schools are very small. Rural schools (and rural districts), therefore, do not have the financial resources to spend on technology that larger urban schools do. Many rural schools are situated in those parts of the province experiencing the most challenging economic and social circumstances; they are also in those regions experiencing the greatest out-migration of people. They do not have the opportunities for fund raising and creating partnerships with businesses that schools in larger centres do.

If the responsibility for funding the technology, the machines, and the technicians required to support online distance education is downloaded to rural boards and small schools, then a dramatic digital divide will be created in this province. Again, this will greatly compromise the equality of access students will have in rural schools compared to their urban counterparts.

A third dimension of access equality is the issue of home access for students taking online distance education. Those students, who have access to computers and the Internet in their homes, will have a distinct advantage over those who cannot afford home access. This is the second and more serious dimension of the digital divide.

These privileged students will indeed enjoy the much touted “anytime, anywhere” advantage of online education. In those communities where connectivity is problematic, especially during peak times during the day, having home access might be considered a necessity. Many families in rural Newfoundland and Labrador have to deal with very challenging financial circumstances. They may not be able to afford to provide home access for their children. At this point in time the Government does not intend to fund home access for rural students.

As long as online distance education is an option for select students wishing to take advanced academic courses, perhaps this issue can be ignored. However, if as proposed by the Government distance education is to function as an alternative mode of program delivery for all schools and the only form of program delivery for certain essential courses for small rural schools, then, access issues become of paramount importance.

If we do not provide equality of access for rural students, rather than equalizing educational opportunities we may in fact be doing the very opposite, especially for those students who live remote places and/or in challenging economic circumstances. We will be making their educational and life chances worse, not better. At the same time we will be increasing educational opportunities for children who already enjoy many privileges.

The appropriateness of distance education for all learners

A second issue is the appropriateness of online distance education for all learners. The Government proposes that distance education be re-conceptualized from a supplementary program to being an alternative mode of program delivery for all students. A constant caution in the literature suggests that distance education is not appropriate for all learners. This is because all forms of distance education, including online learning, requires certain attributes and dispositions not possessed by all learners. This is evidenced in part by the 50% completion rate in distance education for adult learners.
Previous to 2002, distance learners in this province had been a select group of students chosen in large part for their maturity and their demonstrated capacity for independent and self-regulated study. For the most part, this group of learners have been those taking Advanced Placement courses. Although this latter group of students were selected especially for these courses, completion rates and the number of students writing and passing the AP exams were not as impressive as one might expect given the calibre of students involved.

In the new model all students in the more remote and isolated schools will be expected to take a significant portion of their high school program via the internet. Given the difficulties some of the advanced students have had functioning in a virtual learning environment, it is to be expected that the average and below average student will encounter difficulties making the adjustment. Providing adequate school based support for learners new to distance education is a shortcoming of this new system.

Experience has clearly demonstrated that young learners, even those with the necessary characteristics, need academic tutoring when taking distance education courses. The failure to make this a distinct component of the new model could put future generations of rural students at risk. The Government has on many occasions lamented the poor academic performance of rural students compared to their urban counterparts. Is imposing a more demanding mode of learning on rural students creating a level playing field? Is such a development likely to ameliorate the purported rural underachievement?

Although I have raised a number of questions about the province’s new model of online distance education, I remain convinced that such an approach has potential for enhancing the provision of education in small and remote rural schools. However, as always the devil is in the details. What’s needed to make the new vision an educational reality is more sensitivity and responsiveness on the part of the planners and designers to the actual pedagogical needs of those rural students who will be participating.

The system has to be designed for the students in question; they cannot be expected to “sink or swim” in a system that does not consider who they are and where they live. Furthermore, careful consideration has to be given to how any proposed change will affect the whole school and all students. Our commitment has to be to every student, not a select few.
Conclusion

In this presentation today I have shared with you some of the current issues and concerns that rural educators and rural citizens are dealing with in my home province of Newfoundland and Labrador. At best I have given you only a brief over view of these very complex problems. However, I hope I have given you some idea of rural Newfoundland and the way rural education functions there. Furthermore I hope some of what I have had to say resonates with you and you can make connections to your own situations and struggles. I would welcome the opportunity to discuss any of these issues with you during the conference or at a later date. Thank you for your kind attention.

McCallum, NL

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2 Newfoundland and Australia are just about 12 hours different in time. I have taken to saying I have started to work the night shift starting work at the end of my normal day at home and having supper when I would normally have breakfast.
Linking place and effective literacy teaching

Dr Pam Bartholomaeus
School of Education, Flinders University

Abstract

While we do not want students living in rural and remote locations to be labelled as deficit these students on average achieve lower academic credentials at the completion of their formal schooling and this needs to be changed. What are some important questions to be asked if educators are to ameliorate some of this differential in achievement? The role of place in the lives of people, how place needs to be recognized in the delivery of appropriate curriculum, and the subjectivities of rural students are some suggested starting points. The National Inquiry into Rural and Remote Education conducted by the Human Rights and Equal Opportunity Commission (2000) proposed five criteria for an evaluation framework, and two of these criteria – ‘acceptability’ and ‘adaptability’ will be used together with theories of literacy, colonization and place to explore curriculum and pedagogy appropriate for rural schools.

Introduction

The educational and literacy achievements of today’s rural students are important given the challenging futures facing most rural communities. Globalisation is making the marketing of products less certain; social change is reshaping rural communities and often reducing their size; and climate change may impact on the enterprises and increase the level of risk for businesses. Economic, social and climate change all require of rural people an ability to cope with change if their livelihoods and lifestyles are to remain viable and healthy. Community members who are literate, flexible and innovative thinkers are more likely to survive, and education is an important provider of opportunities for rural young people to develop these characteristics. The question is how well rural education is positioned to serve its students and communities well for this uncertain future.

Rural students’ achievements

School completion data for students being educated outside the metropolitan centres of Australia continues to be of concern. Table 1 shows that the differences between completion rates for students who have attended schools in provincial locations (cities in non-metropolitan locations), compared with metropolitan students, were between 4% lower in 1997 and lower 7% in 2004. Differences between students in remote areas and metropolitan areas were much greater. It needs to be noted that some of the difference in school completion rates is the result of movement of students to metropolitan schools, however these differences appear to justify some concern for the outcomes of education for rural students.

<table>
<thead>
<tr>
<th>Year</th>
<th>Metropolitan</th>
<th>Provincial</th>
<th>Remote</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>67</td>
<td>63</td>
<td>52</td>
<td>66</td>
</tr>
<tr>
<td>1998</td>
<td>69</td>
<td>65</td>
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<td>69</td>
</tr>
<tr>
<td>2004</td>
<td>70</td>
<td>63</td>
<td>54</td>
<td>68</td>
</tr>
</tbody>
</table>
A review of the South Australian Certificate of Education, the award most South Australian senior students achieve at the conclusion of their secondary schooling, was released in March 2006. In this document there is also concern expressed about the patterns of successful school completion:

…while participation rates for the most disadvantaged groups in the metropolitan area are only slightly higher than for the corresponding group in country areas, young people from the most advantaged groups in the metropolitan area participate in full-time education at much higher rates than their equivalents in the country. (*Success for All*, 2006, p. 36).

There are similar trends for non-metropolitan students in relation to literacy achievement. Here larger proportions of students attending schools in metropolitan achieve the Year 3, Year 5 and Year 7 benchmarks for reading and writing than is the case for non-metropolitan students. The differences in achievement are greater for students from very remote areas, with smaller differences for students closer to the metropolitan areas. These trends are shown in Table 2.

Table 2 Benchmark achievement by locality and age group, 2004 (%)

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Metropolitan</th>
<th>Provincial</th>
<th>Remote</th>
<th>Very Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3 reading</td>
<td>93.6 +/- 1.4</td>
<td>92.2 +/- 1.8</td>
<td>90.3 +/- 3.2</td>
<td>78.7 +/- 4.6</td>
</tr>
<tr>
<td>Year 3 writing</td>
<td>93.6 +/- 1.4</td>
<td>92.5 +/- 1.9</td>
<td>83.4 +/- 4.2</td>
<td>66.9 +/- 5.9</td>
</tr>
<tr>
<td>Year 5 reading</td>
<td>89.7 +/- 1.5</td>
<td>87.7 +/- 1.8</td>
<td>82.9 +/- 3.6</td>
<td>64.2 +/- 5.4</td>
</tr>
<tr>
<td>Year 5 writing</td>
<td>95.0 +/- 1.1</td>
<td>93.9 +/- 1.3</td>
<td>87.8 +/- 3.1</td>
<td>70.2 +/- 4.6</td>
</tr>
<tr>
<td>Year 7 reading</td>
<td>91.9 +/- 0.7</td>
<td>90.1 +/- 0.9</td>
<td>83.0 +/- 3.0</td>
<td>63.0 +/- 4.9</td>
</tr>
<tr>
<td>Year 7 writing</td>
<td>94.4 +/- 1.2</td>
<td>92.8 +/- 1.5</td>
<td>84.4 +/- 3.5</td>
<td>65.8 +/- 5.0</td>
</tr>
</tbody>
</table>

If we hold the view that there is a normal distribution of ability across the nation then the different levels of school completion and achievement of literacy benchmarks need to be addressed by rural schools. Changes may be achieved through pedagogy and curriculum innovations in schools, including different literacy pedagogies. Given the good work occurring in rural schools it is important that revealing questions that can lead to different practices are asked rather than allowing engagement with deficit views of any schools or groups of students.

**Considering literacy**

A key document in Queensland, *Literate Futures: Reading* (Anstey, 2002) includes the following Glossary entry:
**Literacy** The flexible and sustainable mastery of a repertoire of practices with the texts of traditional and new communications technologies via spoken language, print and multimedia. By ‘flexible’ we mean that students are able to adjust and modify the performance to better meet contextual demands and variable situations. By ‘sustainable’ we emphasise maintenance and achievement over time. ‘Mastery’ involves performance characterised by high achievement. ‘Repertoires’ involves sets of options for the complex performance of literacy practices. (*Literate Futures: Report*, p. 23, cited by Anstey 2002, p. 52)

That is, literacy is complex. Literacy is a socio-cultural practice, and is changing in nature as society and technology change. Another view of literacy is provided by Gee (1990, 1996). He defines being literate as having fluency in the communication practices and activities of other social groups. This ability enables the individual to participate in the making of meaning, sharing of ideas and behaviour patterns of a distinct social group outside that of their initial socialisation. Participation in and communication with other social groups includes being able to use appropriate ways of expressing opinions, behaviours, actions and values - which can be summarised as the ideology of the social group, discourse or learning area. Literacy is more than a set of skills and abilities, but rather it enables individuals to achieve their social and cultural goals through effective communication. Gee’s definition of literacy makes clear the learning required for higher levels of success in a learning area or other field of endeavour. He also makes it clear literacy is more than being able to read and write, and that it is inappropriate to discuss the literacy practices of individuals or their communities in deficit terms.

Lo Bianco and Freebody (1997) provide a summary of the types of demands and literacy practices required by the different industrial sectors:

**Primary producers** are currently under increasing pressure to use advanced technologies to plan their work and to predict how certain choices will affect the success of their efforts. They use these technologies to communicate directly with national and international market places to ensure they have up to date information to conduct their activities with respect to stocking, land usage, buying and selling. New collaborative ventures among primary producers and economic and agricultural advisers, often spanning nations and continents and involving both government and non-government agencies, are increasingly important and rely for their success on sophisticated literate practices.

**Secondary manufacturers** also confront new demands in their work. They increasingly require flexible workers able to participate in collaborative processes which micro-economic reform has made obligatory for competitive performance. These processes demand language and literacy skills sufficient to allow new learning and the application of new procedures to plant and equipment and occupational health and safety or for environmental compliance regimes.

**Tertiary and services sector** similarly have embraced new forms of communications and demand rapid service provision and the maximisation of human resources. Services and tourism are the fastest growing sectors of the economy, generating more employment than the traditional mainstays of Australian enterprise, but necessarily engaging with a more culturally and linguistically diverse population of potential and actual consumers and clients. Furthermore there is the internationalisation of the Australian secondary and tertiary education sectors with the emergence of the provision of English-medium education as a large and growing sources of revenue.
Quaternary industries trade information, deploy a wide range of literacy practices in the assembling, storage and timely transfer of clear and accessible information. The special registers of language demanded in these domains, which go well beyond the most obvious manifestations of jargon, require particular but structured and predictable writing genres. The use of these genres by quaternary workers demands both ‘on the job’ language acquisition skills as well as a high level of transferable skill-readiness based on general literacy functioning. (Lo Bianco & Freebody, 1997, pp. 3 & 4)

The fact each of these industry sectors is represented in rural communities highlights the range of literacy practices that can be required of rural people. Colonisation in literacy education occurs where power relations enable and silence social groups, and some social groups come to see themselves as less powerful and the aspects of communication are viewed as less valuable, worthy and rewarding in life (Brady and Hernandez, 1993). The marginalised in society are less likely to have their texts studied and valued, and their forms of understanding or views gained from texts are less likely to be given voice (Kelly, 1993). The opening quotation from William’s (2006) recounting of the strained relationship of his father with his family is an example of the colonisation that can occur as part of literacy education.

Quality and flexible education
Our students need to emerge from their education able to be innovative and flexible in their approach to the challenges they will meet. People in rural Australia have long been innovative – the stump jump plough is an historic example. The gadget competitions held in conjunction with field days and ‘gadget days’ are an indication that innovation continues – as a means of problem solving for individual farmers, and as a way of developing machinery where the large manufacturers have not recognised the needs of potential clients. Similarly innovation can occur in small businesses, and within sections of larger businesses, in response to needs or inefficiencies. Successful problem solving and innovation requires flexible and creative thinking by property owners, business owners and employees.

Often the interests of students, and the desire to be able work creatively and manage efficient business enterprises, are seen as incompatible with regular schools. Reasons for early school leaving, include: low motivation often due to poor connection with schooling and the content of schooling (Smith 2002, Gay, 2004); not seeing aspirations being catered for by schooling and as a result learning can be seen has having little direct connection to levels of success in life (Knobel, 1999); lower levels of success as a result of lower levels of literacy achievement (Delpit, 1988); and less willing to comply with expectations of schooling, in contrast with the willingness of young people from some social groups foregoing immediate rewards in return for greater rewards in the future (Teese et al., 1993). Students are less likely to remain within the confines of school while they experience dislocation from much of what they value in life, and see themselves and their values and priorities undervalued by teachers and the institutions of education.

Acceptability and Adaptability
The Human Rights and Equal Opportunity Commission’s National Inquiry into Rural and Remote Education (HREOC, 2000) proposed a framework consisting of five
criteria to assess curriculum for suitability for the needs of rural students. Two of those criteria focus on the curriculum enacted in the classroom – acceptability and adaptability. **Acceptability** is:

…the form and substance of education, including curricula and teaching methods, … acceptable (e.g. relevant, culturally appropriate and of good quality) to students, and in appropriate cases, parents’ (HREOC, 2000, p. 21)

Meeting this criterion contributes to:

- Overcoming barriers to education participation and success
- Enhancing content including culture and history as relevant to the local community
- Making the school a welcoming place, including increasing opportunities for local participation in decision making, teaching and support for students.

The requirements for a curriculum that is acceptable to local students will not be as clearly understood as is the case of Indigenous students, but given the particular language and literacy practices that are commonly part of life for various social groups in a rural community, deciding what is more acceptable to students attending a rural school is still important and worthwhile (HREOC, 2000, p. 75).

Another criterion from the framework relevant to students and their language and literacy learning is **adaptability**:

…that the education provided for each child needs to be geared to achieving the aim of developing his or her personality, talents and mental and physical abilities to their fullest potential (**Convention on the Rights of the Child** article 29.1(a)). This means that education needs to be individually tailored to the extent needed to promote the individual’s development as described.’ (HREOC, 2000, p. 22)

Here the emphasis is on responsiveness to the needs and learning styles of students, local conditions, parent and community expectations and the futures students aspire to. In rural schools this can include decisions about timetabling, content included in the curriculum of higher relevance to students, and provision of vocational education and training as appropriate (HREOC, 2000, p. 81).

**Literacy and the criteria of Acceptability and Adaptability**

 Culturally **acceptable** literacy education in rural schools needs to be based on recognition of the socio-cultural background of the students and to build on the primary discourses of their homes and social groups. Our rural students need to have the literacy practices they are already familiar with valued, and then to be supported to learn other literacy practices that will ensure success at school. These students often have had different life experiences and worldviews based on their rurality that shape what they readily understand and engage with in the classroom are able to adopt with relative ease (Thomson, 2002). This point is also made in a report on literacy learning and community literacy practices in rural and urban areas by Breen et al. (1994 a, b). They found that despite the considerable differences between literacy practices used in the homes and communities of students attending rural schools when compared with those of students from urban settings, there was little difference in the content or pedagogy of the schools in these two distinct locations. Not recognising and utilizing in the classroom the strengths and literacy experiences of students is to disadvantage them, yet this is one of the outcomes of the standardised curriculum, standardized testing, and use of teaching materials designed with urban students in mind.
The *adaptability* criterion highlights the need to change curriculum and pedagogy to support the learning needs of students. For literacy learning requirement can include appropriate implementation of explicit teaching where necessary. Importantly it also calls for recognition and valuing of students’ strengths as a basis for curriculum. This requirement echoes the call of Sher and Sher (1994) to recognise the complexity of rural education and that it should be bicultural. That is, equipping students for life in rural communities, in urban communities, or for a life involving movement between rural and urban communities. For Indigenous communities the adaptability criterion implies openness to development of ‘both ways’, or the ability to move easily both in and outside Indigenous society (Yunupingu, 1999).

**School and place**

Why should place influence curriculum? The *acceptability* criterion suggests that links between place and schooling are vital to ensure relevance of curriculum and students’ connections with local culture. Dewey highlighted the result for students of the disconnection between their school and the place in which it is located:

> From the standpoint of the child, the great waste in the school comes from his inability to utilize the experiences he gets outside the school in any complete and free way within the school itself; while, on the other hand, he is unable to apply in daily life what he is learning at school … So the school, being unable to utilize this everyday experience, sets painfully to work, on another tack and by a variety of means, to arouse in the child an interest in school studies. (Dewey cited in Smith, 2002)

Gruenwald (2003) suggests that students and their teachers are too often isolated from the places outside the classroom, with this isolation leading to a limiting of the experiences and perceptions of the students, and a lack of connection to and appreciation of the place in which they are located. Gruchow makes a similar point from his own personal experience:

Nothing in my education prepared me to believe, or encouraged me to expect, that there was any reason to be interested in my own place. If I had hoped to amount to anything, I understood, I had better take the first road east out of town as fast as I could. And, like so many of my classmates, I did. (Gruchow (1995) cited in Haas and Nachtigal, 1998, pp. 1 – 2.)

Such considerations are very important to rural communities that do not wish to lose their young people.

Kelly (1993) provides another motive for incorporating the local into schools and their curriculum. Her writing focuses on reasons for incorporating local literature into schools in the province of Newfoundland. Her home province is a later addition to Canada, and an area that is unique, but also is distant from the political center of the nation and therefore marginal economically, culturally and socially. She makes the following comments about curriculum in the schools of Newfoundland:

No course is organized around the political project of regional revitalisation despite current literacy problems, high numbers of dropouts, rampant unemployment and general social disaffection. Nowhere are the connections forged between culture, language, history and power as they pertain specifically to the lives of
Newfoundlanders. A revamping of an entire curriculum to fill this gap is unlikely; yet, it is imperative that Newfoundland schools begin to take responsibility for educating an informed and active citizenry whose understanding of the politics of place is as intense and energetic as its attachment to place. (Kelly 1993; p. 83)

Her suggestion is that a focus on place within the curriculum can lead to rural youth learning to value their local culture, history, and identity, and to better appreciate their heritage and who they themselves are.

Curriculum with a focus on the place in which the school is located, or which draws extensively from the culture and issues of the local community, is often termed ‘place-based education:

Place-based education seeks to engage both the parents of the students and the broader community into the educational program of the school. The relationship is regarded as a dynamic partnership with all participants working towards providing the best learning experiences for the students to ensure high levels of success both in the designated curriculum and also in becoming a valued community member who can make a contribution to society (Bryden and Boylan, 2004).

An encouraging example of the benefits of place-based education and of the adaptability criterion, where the school’s curriculum is strongly influenced by the culture and social practices of the local community, is Russian Mission School. Gay (2004) reports that the aim at this school, located in an isolated Alaskan village, is to have students proficient in survival and subsistence skills by early secondary school, and their community’s culture is kept alive in the process. Importantly, it is reported that these subsistence studies have kept students in school and in their local community, and benchmark literacy scores in the primary years, and results at the end of schooling, have all improved.

Place-based education offers a means of facilitating better student engagement with the curriculum, particularly for rural students, but also for other students for whom engagement with school is a problem. Engagement with texts and fields of knowledge linked with the community provide students with opportunities to build skills and abilities, and to learn to engage with content at deeper levels (Comber et al., 2001).

**Conclusion**

I have indicated that there continue to be concerns about the educational achievements of students attending rural schools. While the differences in the achievements of students from regional areas when compared with those of their metropolitan peers are not large, they become larger for students further from the centre. Yet it can be argued that it is important that all regional, rural and remote students gain high levels of achievement in their education, and achieving good levels of literacy are also very important. Place-based education offers answers to these needs.

I suggest that it is time another aspect of the Nation Inquiry into Rural and Remote education is fully implemented to assist teachers to explore the opportunities afforded by place-based education. Recommendation 9.2.b reads: The Commonwealth should establish a rural curriculum development fund to enable the development of curriculum components with local content and relevance in all country regions (HREOC, 2000, p. 82). It is important that this occur.
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Breen, Michael P. Louden, William, Barratt-Pugh, Caroline, Rivilland, Judith, Rohl, Mary, Rhydwen, Mari & Carr, Therese. (1994b) *Literacy in its Place: An Investigation of Literacy Practices in Urban and Rural Communities – The Case Studies*, Canberra, ACT: Language and Literacy Branch, Department of Employment, Education and Training,


**Appendix**

*Metropolitan zone*: The Metropolitan zone of the MCEETYA Classification of Geographical Location, agreed to by ministers in 2001, forms one of three broad zones for determining the geolocation of students: Metropolitan, Provincial and Remote.

The geographical classification of a Metropolitan zone includes the Mainland State Capital City regions (ABS Statistical Divisions) and major urban Statistical Districts with populations of 100,000 or more.

*Provincial zone*: The Provincial zone of the MCEETYA Classification of Geographical Location, agreed to by ministers in 2001, forms one of three broad zones for determining the geolocation of students: Metropolitan, Provincial and Remote.

The geographic classification of a Provincial zone uses a combination of population and the Accessibility/Remoteness Index of Australia (ARIA). This zone includes provincial city Statistical Districts with populations of less than 99,999, and regional areas with an ARIA average score equal or less than 5.92. Darwin is included in this zone.

*Remote Zone*: The Remote zone of the MCEETYA Classification of Geographical Location, agreed to by ministers in 2001, forms one of three broad zones for determining the geolocation of students: Metropolitan, Provincial and Remote.

The Remote zone follows the criteria adopted by the ABS for the definition of Remote and very Remote classes, and refers to areas with an average Accessibility/Remoteness Index of Australia (ARIA) score greater than 5.92. This takes into account accessibility to service areas by road.

*Very Remote*: The Very Remote zone of the MCEETYA Classification of Geographic Location, agreed to by ministers in 2001, provides a more detailed
reporting level of the Remote zone, for determining the geolocation of students. [probably want to put this at the end.
The Very Remote zone follows the criteria adopted by the ABS for the definition of Remote and Very Remote classes. The zone refers to areas with average Accessibility/Remoteness Index of Australia (ARIA) scores greater than 10.53. (MCEETYA, n.d.)
An Application of the Theory of Planned Behaviour in Predicting and Understanding Relocation Intentions of Regional Tertiary Students

Dr Dianne Boxall
Charles Sturt University

Abstract
There is an ongoing problem in regional communities in Australia to recruit and retain sufficient professional and skilled workers to meet the needs of existing residents and to provide the services and facilities to attract new ones. While skills that are lacking in these areas such as those in allied health, education, technical, and trades are offered as courses by regional tertiary institutions, many graduates move away after completion of their studies. Understanding the factors that influence tertiary students’ intentions to stay in the area to live and work may provide insights and ideas for addressing the skills shortages in regional Australia. To accomplish this, the intentions of final year students to live and work in the local area after completing their studies were investigated at the four tertiary institutions in Albury-Wodonga. Students (N = 224) from La Trobe University, Charles Sturt University, Wodonga Institute of TAFE, and Albury Riverina Institute of TAFE completed a theory of planned behaviour (TPB, Ajzen, 1991) questionnaire late in the final year of their tertiary courses. The results of a hierarchical regression showed that age was a significant predictor of intention. However, the effects of the TPB measures of attitudes, subjective norm and perceived behavioural control overshadowed the effects of having moved to the area to study in the prediction of intentions to stay. The measure of attitudes made the largest unique contribution in the regression equation. The findings indicate the potential benefits of promoting the local area as a place to live and work for tertiary students completing their courses in the region.

Recent years have seen a migration of professionals from regional areas to coastal and metropolitan areas of Australia. Miles, Marshall, Rolfe, and Noonan (2003) proposed that one of the biggest challenges for regional Australia is to attract and retain professional workers. They reported that professionals made up 20% of metropolitan labour force, compared to around 11% of the labour force in regional Australia in 2001. This reflects a similar pattern in other countries. For example, in an examination of regional differences in work-life practices in Canada, Duxbury and Higgins (2003) found that approximately 78% of professional workers lived in communities with a population of at least 100,000 with 23% of those in communities of 500,000 or greater.

The need to attract professional and other skilled workers to live and work in non-metropolitan communities is a recurring problem that creates a compounded problem in these areas. For example, services and facilities such as education, health, housing and infrastructure are necessary for existing residents, and shortages reduce the likelihood of attracting new residents to fill jobs in the area (O’Keefe, Boxall, Patullock, & Dwyer, 2004; Standing Committee on Regional Development (SCORD), 2004). Therefore governments at all levels in Australia have adopted a range of strategies to increase the number of teachers, doctors, and allied health professionals in regional areas. The government agencies have often promoted benefits such as jobs and career opportunities, lifestyle, flexible working arrangements, and support for new families (SCORD, 2004).
Albury-Wodonga serves as a specific example of a regional area that is experiencing a strong demand for the services supplied by professional and skilled workers. The twin cities of Albury-Wodonga straddle the Murray River that borders New South Wales and Victoria and are located on the major highway link between the capital cities of Melbourne and Sydney. Albury-Wodonga is the major provider of employment, education, facilities and services in a regional area that extends into Southern NSW and North-East Victoria. It is one of the largest inland population centres in Australia with over 90,000 people living within the Albury-Wodonga statistical district. While some country areas of Australia have undergone a recent period of economic decline, a number of regional centres such as Albury-Wodonga continue to grow and to attract new industry. Over the 10 years to 2003 this area experienced a sizeable population increase of 17.5% compared to an average of 4.3% in other regional Victorian towns (City to drive growth, 2004). This growth has placed increased pressure on local services and facilities, and many local businesses have struggled to meet the demand for a skill base to support the expanding economy. As well as the need to recruit and retain workers from professional groups, Albury-Wodonga is also facing a labour “crisis” for trades and skilled workers (Australian Industry Group, 2004).

In addition to ongoing strategies to attract professional and skilled workers to move to the region, the labour shortage could also be addressed by retaining graduates from local tertiary institutions to live and work in the area (Australian Industry Group, 2004; SCORD, 2004). Albury-Wodonga is a major provider of higher education and many students relocate to the area to study (Bowles & Duncombe, 2005; Boxall et al., 2004). Skills that are lacking in non-metropolitan areas such as those in allied health, education, technical, and trades are among the courses offered at the local campuses of Charles Sturt University, La Trobe University, Albury Riverina Institute of TAFE, and Wodonga Institute of TAFE, however many of the graduates leave the area after completion of their studies. This problem has also been identified in Tasmania, where Heathcote (2002) reported that accounting graduates tend to leave the regional areas and move to Sydney or Melbourne. Therefore understanding the factors that influence the relocation intentions of tertiary students after they complete their courses may provide very useful insights and ideas for promoting skills growth in regional and rural Australia.

Theory of Planned Behaviour

The conceptual framework for this study was based on Ajzen’s (1991) cognitive-behavioural theory of planned behaviour (TPB). Under this model, the combination of intention to perform the behaviour and actual control over the behaviour in question are proposed to result in people carrying out their intentions as the opportunity arises. The TPB has been used successfully to gain a better understanding of a range of behaviours as diverse as completing high school (Davis, Ajzen, Saunders, & Williams, 2002), blood donation (Giles, McClenahan, Cairns, & Mallet, 2004), physical activity (Jackson, Smith, & Conner, 2003) job search (Van Hooft, Born, Taris, Van der Flier, & Blonk, 2004), bus use among college students (Bamberg, Ajzen, & Schmidt, 2003) and hunting (Hrubes, Ajzen, & Daigle, 2001). The TPB has also been used to examine intentions to perform behaviour such as to stop smoking (Droomers, Schrijvers, & MacKenbach, 2004), lose weight (Schifter & Ajzen, 1985),
or to place people with disabilities into jobs (Hergenrather, Rhodes, McDaniel, & Brown, 2003).

Three direct measures are proposed to influence intention in the TPB model (Ajzen, 1991). These consist of attitudes towards the behaviour (favourable or unfavourable evaluations), subjective norms (perceived social pressures) and perceived behavioural control (perceived self-efficacy). In addition the TPB model includes indicators of the antecedents of attitudes, subjective norms and perceived behavioural control. These indirect measures are based on the expectancy value model in which Fishbein and Ajzen (1975) proposed that the combined product of the strength of the belief that a certain behaviour will produce an anticipated outcome, and the subjective evaluation of such an outcome, will determine people’s overall attitude towards the behaviour in question. The belief-based measures are proposed to illustrate the cognitive and affective foundations for the direct measure of attitudes, subjective norms and perceived behavioural control (Ajzen, 2002).

The relationship between these constructs is illustrated in Figure 1 in respect to the current study. Thus, under this model, more favourable attitudes towards the local area, greater encouragement from important others to stay in the area, and higher perceptions of personal control to do so, should lead directly to a stronger behavioural intention in tertiary students to live and work in the Albury-Wodonga area after completion of their studies. In addition, students’ belief systems about living and working in the area should comprise indirect measures that are related to the direct measures and to overall intention.

The general aim of the present study was to establish whether the TPB was an appropriate model to determine the intentions of final year tertiary students to live and work in the Albury-Wodonga region after completion of their studies. The specific objective was to understand the relationship between the underlying belief systems and the factors that predicted such intentions. To accomplish this, a survey of the intentions of final year students to live and work in this area after completing their studies was conducted at the four local tertiary institutions.
Figure 1. TPB model as applied to the behavioural intention of tertiary students to live and work in the Albury-Wodonga (AW) area after completion of their studies.

**Method**

**Participants**

A total of 224 students who were expecting to complete their current courses of study within the following 6 month period participated in the study. The sample group consisted of 80 male and 144 female students from La Trobe University ($N = 64,$ 28.6%), Charles Sturt University ($N = 52,$ 23.2%), Wodonga Institute of TAFE ($N = 57,$ 25.4%), and the Albury Riverina Institute of TAFE ($N = 51,$ 22.8%). The mean age of the participants was 26.67 years ($SD = 9.77$), however a one-way ANOVA revealed a main effect for age differences across institutions, $F(3, 220) = 11.49, p < .001$. A SNK post-hoc test showed that the participants from the Albury Riverina Institute of TAFE were older on average ($M = 32.80$, $SD = 11.53$) compared with students at the other three institutions of La Trobe University ($M = 23.33$, $SD = 6.86$), Charles Sturt University ($M = 24.50$, $SD = 5.40$), and Wodonga Institute of TAFE ($M = 26.93$, $SD = 11.43$). In total, 146 (65.2%) of the participants were single, 60 (26.8%) were married or had a partner, and 18 (8%) were separated, divorced or widowed. The majority ($N = 176$, 78.6%) did not have dependent children.
Approximately one-third of the total number of students \((N = 82, 36.6\%)\) moved to the Albury-Wodonga region in order to complete their tertiary studies. A chi-square test for goodness of fit revealed that the differences in frequency for those who had or had not moved according to institution were significantly different from expected values, \(\chi^2(3) = 40.26, p < .001\). The frequencies shown in Table 1 show that over half (57.3\%) of the students who participated in the study at Charles Sturt University had moved to the region to study followed by 48.4\% at La Trobe University. Approximately one-third of students (35.1\%) moved to study at the Wodonga Institute of TAFE, while nearly all participants (98\%) from the Albury Riverina Institute of TAFE were local residents.

### Table 1

*Frequency of Moving to Albury-Wodonga in order to Complete Studies by Tertiary Institution.*

<table>
<thead>
<tr>
<th>Move to area to study?</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>La Trobe University</td>
<td>33</td>
<td>51.6%</td>
</tr>
<tr>
<td>Charles Sturt University</td>
<td>22</td>
<td>42.3%</td>
</tr>
<tr>
<td>Wodonga Institute Of TAFE</td>
<td>37</td>
<td>64.9%</td>
</tr>
<tr>
<td>Albury Riverina Institute of TAFE</td>
<td>50</td>
<td>98%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>142</td>
<td>63.4%</td>
</tr>
</tbody>
</table>

Of the 82 students who moved to the region to study, 45 (54.9\%) came from a country town, 9 (11\%) from another regional centre, 24 (29.3\%) from a metropolitan city, and 4 (1.8\%) from another country.

**Materials and Procedure**

A questionnaire was developed for this study based on the TPB model proposed by Ajzen (1991; 2002). The first part consisted of general demographic information on gender, age, marital status, dependent children and course of study. Participants were also asked to indicate whether they moved to Albury-Wodonga in order to complete their tertiary studies, and, if so, where they had come from. This section also contained questions about the specific type and location of anticipated further studies or employment. Because the present paper is concerned with the general utility of the TPB in predicting students’ intentions to stay in the Albury-Wodonga region, these detailed responses are not addressed here.

The second part of the survey instrument contained 39 items based on the recommendations of Ajzen (2002) for the construction of a TPB questionnaire. All items were measured on a 7-point scale where high scores reflected stronger agreement. Some questions in each category were reverse-coded to control for response bias and items were presented in a non-systematic order on the questionnaire.

**Direct measures: Intentions, attitudes, subjective norms, and perceived behavioural control.**

Four items assessed intentions. Participants indicated the extent to which they expect to (disagree-agree), will try to (definitely true-definitely false, reverse scored), intend to (unlikely-likely), and might not (agree-disagree) live and work in this area.
after completion of their studies. These items demonstrated a good fit with an internal consistency of .91, as indicated by Cronbach’s alpha. Responses to the four items were averaged giving a measure of intention on a scale ranging from 1 to 7, where 7 indicated the strongest intention to stay in the area.

Five items assessed attitudes. Students were asked to complete the statement, Living and working in this area after completing my studies would be... The anchors for these items were: very bad-very-good, boring-exciting, wise-foolish (reverse scored), unpleasant-pleasant, very desirable-very undesirable (reverse scored). Cronbach’s alpha was .90 for these items which were averaged to give a direct measure of attitude.

Six items assessed subjective norms. The first item: My family would be disappointed if I did not live and work in this area after completing my studies, used a scale of very unlikely-very likely. This item was repeated substituting friends for family. The third item: It is expected of me that I live and work in this area after completing my studies, was rated from extremely likely to extremely unlikely (reverse scored). The next item contained an indication of the extent to which: The people in my life whose opinions I value (live in-do not live in) the area. The remaining two questions used the anchors of completely false-completely true to measure responses to: My family (friends) live in this area. The alpha coefficient for these items was .73 and the averaged score formed the direct measure of subjective norm.

Four items assessed perceived behavioural control. These were: For me to live and work in this area after completing my studies will be...very easy –very difficult (reverse scored); It is mostly up to me whether or not I live and work in this area after completing my studies...strongly disagree-strongly agree; How much control do you believe you have over living and working in this area after completing your studies?... no control-complete control; and If I wanted to I could live and work in this area after completing my studies...definitely true-definitely false (reverse scored). The internal consistency of the four items used to measure perceived behavioural control was found to be low at .41. This could not be improved substantially by removal of any item. Therefore the one item with the best correlation with intention (For me to live and work in this area after completing my studies will be very difficult/easy, r = .45) was used as a single indicator of perceived behavioural control.

Indirect measures: Behavioural, normative, and control beliefs.
Following the procedure recommended by Ajzen (1991; 2001) a small pilot study was conducted to determine students’ salient behaviour-related beliefs related to living and working in Albury-Wodonga after completion of their current course of study. Five students working on this topic as a group research project in their third-year psychology subject at La Trobe University discussed and conferred with each other and with one or two other students who would not be approached to participate in the final study, as to the most readily accessible factors relating to behavioural, normative and control beliefs about living and working in the local area after completion of their current course of study (see Ajzen, 2002 for instructions on TPB questionnaire design). The information from the pilot study was used to construct the indirect belief-based measures. Behavioural beliefs consisted of eight items, four of which measured the belief strength of items relating to the consequences of staying in the area (balance work and non-work activities; good career opportunities; be close
to family and friends; good access to social and recreational facilities). Four items measured the importance (outcome evaluation) of these consequences. The belief strength for each item was multiplied by the outcome evaluation and the products summed to give a belief-based estimate of attitude.

Normative beliefs consisted of six items. Three of these measured expectations of family, friends, and tertiary/work colleagues (belief strength) and three measured the motivation to comply with these referents. The summed product of the strength of each normative belief multiplied by the corresponding motivation to comply gave an overall, belief-based measure of subjective norm.

Control beliefs consisted of the subjective importance of three items (financial considerations; personal relationships; career development). These were then rated on whether they would make it more difficult or much easier to live and work in the area (perceived power). Armitage and Connor (2001) argued that perceived behavioural control is often used to reflect actual behavioural control. The summed product of the strength and power of the three control items yielded the belief-based estimate of perceived behavioural control.

The study received approval from the Human Ethics Committee at La Trobe University and approval and assistance in data collection was given by representatives of each the tertiary institutions. The questionnaires were distributed by a range of informal methods including information tables set up in canteens, libraries, outside main teaching areas and examination venues, and by arrangements to approach the target group of students during scheduled classes. An information statement was used to explain the purpose and procedures of the study and agreement to complete the questionnaire was taken as implied consent. All questionnaires were returned anonymously to the researchers, either by potage in replied paid envelope or by placement in survey collection boxes located at the recruitment sites.

Results
Prior to analysis the data were screened to check for accuracy of entry and missing data. Unexpected values were checked against the raw data and corrected accordingly. There was very little missing data (generally less than one or two per variable) and the missing values were scattered randomly through the data matrix. The mean scores from the available data for the particular variables were used to replace missing values in these cases.

Descriptive statistics and correlations among the demographic variables of gender (0 = male, 1 = female), age, and move to the area to study (0 = no, 1 = yes) the four direct measures of interest from the TPB are shown in Table 2. There are significant correlations between all variables with the exception of gender. The only significant gender correlation indicted that females demonstrated a weak positive relationship with scores on the subjective norm scale. Age was negatively related to moving to the area to study, but positively related to each of the TPB measures. Moving to the area to study had a negative relationship with each of the TPB constructs, particularly in respect to subjective norms. Thus, for the students who had moved to the area to study – predominantly university students (see Table 1) – the social pressure from important referent others such as family and friends was for them to not stay in the area to live
and work. From Table 2 it can also be seen that the mean intention scores fall at the mid-point of the 1 to 7 scale.

A one-way ANOVA performed on scores on the intention scale according to tertiary institution revealed a significant difference between groups, $F(3, 220) = 6.08$, $p = .001$. A SNK post-hoc test revealed that intentions to stay in the area were higher for students completing courses at Albury Riverina Institute of TAFE ($M = 5.22$, $SD = 1.59$) compared with students at the other three institutions of La Trobe University ($M = 3.77$, $SD = 1.86$), Charles Sturt University ($M = 3.98$, $SD = 2.18$), and Wodonga Institute of TAFE ($M = 4.21$, $SD = 1.99$). This is consistent with the group difference reported earlier in the methods section, which revealed that participants from the Albury Riverina Institute of TAFE were older on average and predominately local compared with the participant students from the other institutions. From Table 2 it can be seen that intention to stay is positively correlated with age and stronger in those students who did not move to the area for study purposes.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move to study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>4.83</td>
<td>1.40</td>
<td>.11</td>
<td></td>
<td>.39**</td>
<td>-.32**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>4.10</td>
<td>1.37</td>
<td>.17*</td>
<td>.24**</td>
<td>-.53**</td>
<td>.52*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Control</td>
<td>4.65</td>
<td>1.99</td>
<td>.00</td>
<td>.25**</td>
<td>-.24**</td>
<td>.41*</td>
<td>.26*</td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>4.26</td>
<td>1.98</td>
<td>.09</td>
<td>.47**</td>
<td>-.42**</td>
<td>.77*</td>
<td>.61*</td>
<td>.45*</td>
</tr>
</tbody>
</table>

*Note. Gender (0 = male, 1 = female); Move to study (0 = no, 1 = yes)
*p < .01, **p < .001

**Prediction of Intentions using TPB**

Hierarchical regression was used to examine whether the factors predicted under the TPB to influence students’ intentions to stay in the area after completing their course of study would add to the prediction of intentions over and above the effects of the demographic variables of age and having moved to the region to study, which were shown to have significant correlations with intention in Table 2. The effects of the direct measures of attitudes, subjective norms and perceived behavioural control were therefore tested after the effects of the variables of age and move to the region to study (0 = no; 1 = yes) had been partialled out. The results are summarised in Table 3.
Table 3
Summary of Hierarchical Regression Analysis for Variables Predicting Intention to Live and Work in the Albury-Wodonga Region (N = 224)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$sr^2$ (unique)</th>
<th>$R^2$ change</th>
<th>F change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.07**</td>
<td>0.37</td>
<td>.12</td>
<td>.31</td>
<td>50.97**</td>
</tr>
<tr>
<td>Move to region to study</td>
<td>-1.34**</td>
<td>-0.33</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.03**</td>
<td>0.16</td>
<td>.02</td>
<td>.39</td>
<td>93.53**</td>
</tr>
<tr>
<td>Move to region to study</td>
<td>-0.27</td>
<td>-0.07</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>0.73**</td>
<td>0.52</td>
<td>.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>0.35**</td>
<td>0.24</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Control</td>
<td>0.12*</td>
<td>0.12</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multiple $R = .84$
$R^2 = .70$

Note: *$p < .01$, **$p < .001$

At step 1, the demographic variables accounted for a significant proportion of the variance in intention scores, $R^2 = .31$, $F(2, 221) = 50.97$, $p < .001$. Age was a significant positive predictor of intention, while moving to the region to study was a significant predictor of reduced intention to stay. At step 2, with these variables already in the equation (i.e., partialled out), the direct measures of attitudes, subjective norm and perceived behavioural control added a significant, unique contribution of .39 to the prediction of intention, $F$ change(3, 218) = 93.53, $p < .001$. The overall equation accounted for a large proportion of variance in intentions, $R^2 = .70$, $F(5, 218) = 102.11$, $p < .001$. It is of interest to note that while age was still a significant predictor of intention in the final equation, the effect of moving to the region to study was no longer a significant. The attitude scale made the largest unique contribution of .16 to the prediction of intention.

Indirect Measures: Behavioural, Normative, and Control Beliefs

Ajzen (2002) proposed that an understanding of the cognitive and affective factors underlying attitudes, subjective norms and perceived behavioural control, provides practical information that could be very valuable in intervention strategies. In the present study these indirect measures provide knowledge of the most accessible beliefs students hold about living and working in the area after they complete their tertiary studies. Ajzen proposed that these belief measures should correlate with (not predict) the corresponding direct measures. A strong correlation with the direct measures indicates that the belief-related items have been appropriately identified and operationalised. The presentation of the data relating to the indirect measures follows the format used by Davis et al. (2002) in a study of high school completion.

There was a strong correlation of .67 ($p < .001$) between the summed product of the four behavioural beliefs and outcome evaluations with the direct measure of
attitude. Table 4 shows the scores on the strength of the attitude-related beliefs and the evaluation of each outcome.

Table 4
Means and Standard Deviations for Behavioural Belief Strength and Outcome Evaluation, and Correlation of Belief-Evaluation Product with Intention to Live and Work in the Albury-Wodonga Region after Completing Course of Study

<table>
<thead>
<tr>
<th>Belief strength</th>
<th>Outcome evaluation</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>(e)</td>
<td>b_x_e with intention</td>
</tr>
<tr>
<td>Outcome (Living and working in this area after I complete my studies will…)</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Allow me to balance work and non-work activities</td>
<td>4.14</td>
<td>2.00</td>
</tr>
<tr>
<td>Provide me with good career opportunities</td>
<td>4.51</td>
<td>1.78</td>
</tr>
<tr>
<td>Allow me to be close to my family and friends</td>
<td>4.67</td>
<td>2.14</td>
</tr>
<tr>
<td>Allow me to have good access to social and recreational facilities</td>
<td>4.87</td>
<td>1.61</td>
</tr>
</tbody>
</table>

Note: Behavioural belief strength and Outcome evaluation scored from 1 to 7. b_x_e = Behavioural belief strength x Outcome evaluation. *p < .01.

The mean scores in Table 4 show that students had moderately favourable beliefs that living and working in the Albury-Wodonga region would allow them to be close to their family and friends, to have good access to social and recreational activities, and provide them with good career opportunities. They valued all the measures quite positively. Table 4 also shows the product of belief strength and evaluation of each item with intention. Both career opportunities and being close to family and friends correlated quite strongly with intentions. To a lesser extent good access to social and recreational facilities was associated with intentions to stay in the area. Balancing work and non-work activities did not appear to be an important consideration for this group of students.

The data in Table 5 indicate the mean scores on perceived pressure from important others to stay in the area and students’ motivation to comply with these referent groups. The correlation between the summed product of the three normative beliefs and motivation to comply with the direct measure of normative belief was .55 (p < .001). The perception of social pressure from important others was rated as only moderately strong. In addition, it appears that students were not generally motivated to comply with these referents. However, the product of normative belief strength and motivation to comply were all significantly correlated with intentions. More specifically, the influence of students’ families showed the strongest relationship with intentions.
Table 5

Means and Standard Deviations for Normative Belief Strength and Motivation to Comply, and Correlation of Belief-Motivation Product with Intention to Live and Work in the Albury-Wodonga Region after Completing Course of Study

<table>
<thead>
<tr>
<th>Normative referent</th>
<th>Belief strength ($n$)</th>
<th>Motivation to comply ($m$)</th>
<th>Correlation $n,m_i$ with intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>My family</td>
<td>$M = 4.81$, $SD = 1.84$</td>
<td>$M = 3.67$, $SD = 1.62$</td>
<td>$n,m_i = 0.51^*$</td>
</tr>
<tr>
<td>My friends</td>
<td>$M = 4.55$, $SD = 1.75$</td>
<td>$M = 3.09$, $SD = 1.56$</td>
<td>$n,m_i = 0.41^*$</td>
</tr>
<tr>
<td>My tertiary/work colleagues</td>
<td>$M = 4.41$, $SD = 1.41$</td>
<td>$M = 3.71$, $SD = 1.84$</td>
<td>$n,m_i = 0.37^*$</td>
</tr>
</tbody>
</table>

Note: Normative belief strength and Motivation to comply scored from 1 to 7. $n,m_i = \text{Normative belief strength} \times \text{Motivation to comply.}$

* $p < 0.01.$

Data on the three control-related beliefs and the perceived power of these control items is presented in Table 6. The summed product of control beliefs by perceived power had a moderate correlation of $0.38$ ($p < 0.001$) with the direct measure of perceived behavioural control. The mean scores shown in Table 6 indicate that financial considerations and the need to develop one’s career were seen to be quite important by the students in this study. However, they perceived a little less power over these factors. All items were positively correlated with intentions, so it seems that personal relationships, financial considerations and the need to develop a career were all salient factors in students’ intentions to live and work in the local area.

Table 6

Means and Standard Deviations for Control Belief Strength and Perceived Power, and Correlation of Belief-Power Product with Intentions to Live and Work in the Albury-Wodonga Region after Completing Course of Study

<table>
<thead>
<tr>
<th>Control factor</th>
<th>Belief strength ($c$)</th>
<th>Perceived power ($p$)</th>
<th>Correlation $c,p_i$ with intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal relationships</td>
<td>$M = 4.41$, $SD = 2.07$</td>
<td>$M = 4.79$, $SD = 1.91$</td>
<td>$c,p_i = 0.36^*$</td>
</tr>
<tr>
<td>Financial considerations</td>
<td>$M = 5.56$, $SD = 1.54$</td>
<td>$M = 4.75$, $SD = 1.67$</td>
<td>$c,p_i = 0.37^*$</td>
</tr>
<tr>
<td>Need to develop career</td>
<td>$M = 5.55$, $SD = 1.53$</td>
<td>$M = 4.06$, $SD = 1.78$</td>
<td>$c,p_i = 0.44^*$</td>
</tr>
</tbody>
</table>

Note: Control belief strength and Perceived power scored from 1 to 7. $c,p_i = \text{Control belief strength} \times \text{Perceived power.}$

* $p < 0.01.$

Discussion

The goal of the study was to investigate the factors that influence students’ self-reported relocation intentions, specifically their intentions to live and work in the Albury-Wodonga region after completion of their tertiary course of study. The three major theoretical constructs from the TPB of attitudes, subjective norm, and perceived behavioural control were found to be very good predictors of students’ intentions to
live and work in this area over and above the effects of age and having moved to the area for study purposes.

In a meta-analysis of 185 TPB studies, Armitage and Connor (2001) reported that the TPB accounted for an average of 39% of the variance in intention. In the present study, the TPB added an additional explanation of 39% to the prediction of intentions over and above the variance of 31% explained by age and moving to the area for study purposes. In addition, the effect of having moved to the area was no longer significant once the TPB measures were added to the equation. The total explanation of 70% of the variance in students’ intentions to stay in the area to live and work is particularly encouraging in the theoretical understanding of these intentions. It is also has valuable practical implications for formulating interventions that might help to address skills shortages by retaining graduating students, encourage those who have left to return, and in attracting others to build careers in the area.

Attitudes were found to be the strongest predictor of graduating student’s intentions to stay in the area, making a unique contribution of 16% in the overall equation. The positive attitude-related beliefs identified in this study were being close to family and friends, good career opportunities, and access to social and recreational opportunities. While it could prove more difficult to influence the consideration of being close to family and friends for students coming to the area to study, the importance of this could be emphasised for local students considering moving away. The benefits of being close to family and friends could also be highlighted in efforts to attract those who have left to return to the area. This was illustrated in the study by Boxall et al. (2004) into the relocation motivations of 106 new residents to the Albury-Wodonga region. The most important incentive item for those in the 25 - 34 age group was having family and/or friends already in the area. This was coupled with the incentives of a new job, work opportunities for one’s spouse or partner, and time of life considerations for starting or raising a family. In this study 19 of the respondents (17.9%) indicated that they grew up, went to school or university, or had worked in the area before. Therefore it appears that maintaining links with graduates through systems such as alumni associations would facilitate continuing relationships. While the trend for new graduates to “spread their wings” might be difficult to address in the short term, the long term benefits of maintaining links with the area should be a priority consideration.

The significance of good career opportunities also provides a sound rationale for the development of intervention strategies aimed at addressing skills shortages. For example, in the study of new Albury-Wodonga residents (Boxall et al., 2004), job experience and/or career development was a significant relocation incentive for people in the 17-24 age group. The importance of building a career lends empirical support to initiatives to increase training, work experience, student visits, and the promotion of jobs in regional areas (SCORD, 2004). Specific efforts to promote professional training and career paths can be seen in programs such as social work that have been established in a number of non-metropolitan universities, which are “grounded in local, rural values and culture” (Alston, 2005, p. 278). Bowles and Duncombe (2005) suggest that this focus on better preparation for rural practice, in both educating local people and in training students relocating to the area, improves the chance of retaining skilled social work practitioners. In addition, links with educational institutions for postgraduate training and further professional
development are seen as important factors in aiding retention of skilled professionals (Lonnie & Cheers, 2004).

Access to social and recreational opportunities was the third important belief-related item for this group of students underlying their attitudes towards living and working locally. This is an area that has been well recognised by governments at all levels in promoting jobs away from the main urban centres. In addition, in advertising jobs in the Albury-Wodonga region, organisations often emphasise the benefits of the region as including the services of city living with the lifestyle opportunities of country life. In the study of incentives for moving to the Albury Wodonga region (Boxall et al., 2004) the social opportunity to meet new people was rated as important for those in the 17-24 age group. It would be of considerable value to conduct future research expanding the examination of attitudes in this context by including a more extensive range of accessible belief-related items that could further inform initiatives to increase the number of skilled workers in non-metropolitan areas.

The study also revealed differences in intentions between the four tertiary institutions, with participants from the Albury campus of the Riverina Institute of TAFE indication higher intentions to stay in the area. This group of students were older on average and drawn from the local area. This trend was consistent with the correlations between these variables and intentions. However, this relationship was further examined when these two demographic variables were included at the first step in the hierarchical regression that examined the effectiveness of the theory of planned behaviour in predicting students’ intentions. While age still contributed positively to the prediction of intentions when the TPB measures were included in the second step, the effects of moving for study purposes was no longer significant. This finding lends further support to the utility of the cognitive and affective factors identified by the TPB model in the prediction of relocation intentions of tertiary students.

The conclusions of this study are subject to some limitations. First, participant’s self-report of their future intentions may not actually translate into the actual behaviour of living and working in the area after completion of their studies. Students completed the survey during their final few months of study and a number of factors could change during and after that time. For instance, personal relationships could alter, final course results might not match career aspirations, or the job market might be different than anticipated. It would therefore be very valuable to repeat research on this topic using a longitudinal design that allows for measurement of actual behaviour. Second, while this study examined relocation intentions of tertiary students in the Albury-Wodonga region, the results might differ in other regional communities. Therefore further research will be needed to see if the results can be generalised to other area of Australia.

In conclusion, the present study demonstrated that the TPB can be successfully applied to the issue of retaining skilled graduates in regional areas. By focussing on the attitudes and beliefs associated with the decision made by tertiary students to remain in regional areas to live and work, a deeper understanding was gained of a valuable potential mechanism for helping to address the skilled labour shortages in regional Australia.
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Towards a Spatial “Self-Help” Map for Teaching and Living in a Rural Context

R John Halsey
Flinders University

Abstract
For many teachers, an appointment to a rural school is their first experience of living and working in a context where they are highly visible and are likely to be known of and known about by far more people than they know of and know about. Space for “making errors” and recovering from them without impairment to becoming an effective teacher, is very limited compared to teachers and other professionals who work in cities and can become largely anonymous once they leave their working contexts. The concept of a mental map is derived from my own experience as a teacher in a rural town and Soja’s (1996) challenge to think differently about space and spatiality. It focuses on three domains- personal, professional and public-and is presented as a way of supporting teachers to navigate and negotiate rural places which, contrary to some popular views, are very complex and challenging.

Introduction
Moving into a context that is different from the one you have grown up in and where you received your tertiary education, such as a small rural town, to become a teacher, usually presents many challenges for those involved. There is considerable literature on the preparation of teachers for rural and remote school contexts which emphasises the complexities (and as yet untapped options for doing better) of this task (Guenther and Weilbe, 1983; Nelson, 1983; Lake, 1985; Gibson, 1993; Yarrow et al, 1998; Sharplin, 2002; Boylan, 2003; Green and Reid, 2004). The literature also heavily underscores the need for specialised preparation of teachers for rural and remote schools, and essentially argues that the largely metro-centric models (Green and Reid, 2004) of teacher education are not “delivering the goods” as far as appropriately educating teachers for living and working in small and often relatively isolated rural populations.

The purpose of this paper is to move the focus of the preparation of teachers from the pre-service inputs and processes, towards starting the building of a mental model or form of “self-help map” for navigating and negotiating living, being and working in rural spaces and places, using my own beginning teacher in a small rural town story, plus an idea from Soja (1996). I want to emphasise a word and a phrase from the previous sentence. They are starting and own story. Starting because this article is presented to the reader as very much a first and incomplete engagement with the concept, and own story because I present it in some detail because it is the data for the theorising. I draw on it extensively, and want to acknowledge at the outset that it is idiosyncratic and not verifiable. But it is hoped that relating the story will provide points of connection for the reader and some sense of resonance, as well as dissonance, which together with other “own stories”, will build and improve the idea I explore in this paper.

Context
It is important that some explication of the context of this paper is presented because of the myths and diversity of views and definitions that are associated with “rural” and “rurality” in Australia and in other countries.
Typically, rural and remote communities are characterised by small and often low density populations. Frequently, their economic base is reliant on a limited range of enterprises which are dependent on particular soil types, land forms and climatic conditions. In terms of the primary determinants of relationship patterns, credibility is often attributed more to who says something rather than the evidence for what is said. Significant emphasis is also placed on informal networks for communicating information and “news” (Yarrow et al, 1998).

In Australia there are a number of terms that are commonly used to denote locations and associated characteristics that are considered to be other than metropolitan. These include country, regional, the bush, outback, and isolated. There are also terms of a more vernacular kind such as “the back of beyond” and “the sticks” that are used. Vernacular naming of non city locations also occurs in many other countries and especially those with very large land masses like the continent of Africa and the United States of America, or those which are smaller in spatial terms but have contrasting landforms such as Britain.

In addition, there is a long tradition of scholarly work on “rural” in the field of social philosophy as represented by reference to gemeinschaft and geschellschaft. Traditionally rural is associated with gemeinschaft because of its emphasis on individuals finding identity within the group and geschellschaft is associated more with modern emerging urban contexts. Hooper (2000) asserts that “traditional gemeinschaft society was seen as the place of moral and social values whereas geschellschaft was seen as the place where these values and morals had broken down” (p 1).

Essentially there are instrumental/quantitative definitions of rural and those of a more nuanced and quantitative kind. These have also been referred to as the geographical approach and the sociological approach (University of Ballarat, n.d.; Mulley 1999; Whitaker 1983; Hooper 2001). The former places emphasis on population size and distance from large centres where there is an extensive range of human services available. The latter, while recognising that population size and distance are contributing elements to what constitutes “rural” focus very significantly on the cultural and relational dimensions of places and people.

In summary, rural and rurality are often assigned meanings which are largely straight forward and non problematic. On the other hand, as shown by the references immediately prior to this, understandings and definitions of rural and rurality and other related terms like remote and isolated, are varied, often contested and culturally determined.

Spatial Map
As mentioned previously, the idea of developing a spatial mental map as a source of support for teachers came from reflecting on my own experiences as a beginning teacher in a rural town using work by Edward Soja (1996), which challenges individuals “to think differently about the meanings and significance of space and those related concepts that compose and comprise the inherent spatiality of human life (like) place, location, locality, landscape, environment, home, city, region, territory and geography” (p.1). As well, a very thought provoking article by Danaher, Danaher
and Moriarty (2003) that considers how highly mobile workers disturb and disrupt spaces usually occupied by locals or permanent residents, and also draws upon some of Soja’s work, has helped shape my thinking.

The spatial map is intended as a conceptual tool for teachers to help them locate, monitor and continuously adjust their relationship dynamics in a rural/remote context, so that they can optimise their effectiveness in terms of pedagogy, contribute towards building social capital, and gain a sense of personal satisfaction from living and working in a country location.

The issue of enhancing support for teachers in rural and remote locations continues to be particularly relevant for Australia where staffing country schools has been problematic since the introduction of free, secular and compulsory education in the mid nineteenth century (Commonwealth Schools Commission, 1988 & Human Rights and Equal Opportunity Commission, 2000a). It is also very relevant and topical in many developing countries which have large rural populations, comparatively under-developed infrastructure and a growing preference being expressed and actioned for living and working in large cities.

My story

stories reveal what it means in the chosen culture to tell one’s story and give an account of one’s career and work as a teacher

And

... it is also the case that (a sense of) place is created out of relationship

(Elbaz–Luwisch 2004, 387, 409)

In 1967 I was appointed as a teacher to a school in a rural community in South Australia with a population of approximately 1,000. I stayed there for six years. Nine years later after appointments in the state’s capital city area, I returned to the country as a principal of a school of 900 primary and secondary students in a community of around 5,000 for four years. While the experience of my first time in a country town is used as the basis for the spatial map concept, my second tenure in a rural posting which I do not write about here, reinforces for me, the value of having something to help navigate within small but complex contexts.

My appointment to a rural school was my first time of living and working in a small population centre. I was sent with literally a couple of brief pieces of advice from my departmental staffing officer - country towns are friendly places and, teachers are very important and need to fit in (Sharplin, 2002).

I was also given various documents to complete about housing requirements, furniture removal and the name of the newly appointed principal to contact so that “he knew I was coming” and so that I “could be told what I would be teaching”- note not who I would be teaching!

“Friendly” was the descriptor ascribed to my new “home” and “fit in and be a good teacher” was the expectation of me. Taken at face value in the mid-1960s when Australia was becoming increasingly embroiled in the Vietnam War, when baby boomers were pushing their population bulge through all of the main dimensions of
society – economic, political, social, and cultural – the descriptions and expectation seemed reasonable. What I had read of country Australia – some of the works by Henry Lawson, Allan Marshall’s I Can Jump Puddles, and stories in popular magazines like the Australian Post – tended to confirm the “friendly” for me and also the “fit in”. I had only one other reference point about country – a wealth of stories from my maternal grandfather who tried to “make a go of farming” not far from where I was now going to be a teacher.

While a long drive from the capital city in very hot conditions (the last week in January before the start of the new school year), the actual physical entry into the town upon arrival in the district, happened very quickly. The farming and natural environment became a regulated built environment in a very abrupt way. My first impression was of being in a “new place” where the small scale of the buildings and infrastructure – apart from the town’s grain silos – was in stark contrast to what I had left in the city about six hours before.

The physical entry was soon followed by a brief social-community entry event because enquiries had to be made about getting the key to the house we had been allocated and also finding the location of it. This apparently simple task was laden with exchange messages because it was the first time for me to identify myself as “a teacher” and a potential new member of the local community as well as for an established member of the local community, a storekeeper, to know of me and my impending presence in “his town”. I vividly recall a general welcome being made and a comment that, in retrospect, carried more significance than I ascribed to it when first made. “The last teachers in the house made a mess – I hope it will be fixed up and it does not happen again.” My response was along the lines of, thanks for the information and it won’t happen again (at that stage I had no details on what constituted “the mess”) and then signed for and took the key.

By evening, just a few hours after arriving, word had started to filter out that a new teacher had arrived in town. A teacher who had been at the school the previous year called in to welcome us and said that “he had heard we had made it” – meaning we had survived the journey and not decided to turn around and go back upon seeing the town, which had happened before. By the end of the following day, many publicly visible events had occurred to signal our arrival – a removal van arrived and our furniture was unloaded; lights were turned on in the house; and a car was in the driveway. Very importantly, several transactions “in the main street” had taken place because of the need to buy food, organise a post office box (no home delivery) and drive past the school to see where we would be teaching.

Arriving and the commencement of becoming situated in a place that contrasted greatly to my life experiences to that point, had all taken place within 24 hours.

It was part of teacher accommodation policy when I was first appointed to the country (actually I was sent because I was a bonded teacher i.e. someone who had agreed to teach anywhere in the state for four years in return for the cost of being trained and being paid a stipend) that floor coverings were not provided by the Education Department in every room of a house. We had purchased some linoleum to put in the other rooms. To complete the job, I needed to buy some nails to secure the beading
that held the covering in place. I went to the local hardware store to make the purchase.

Again in retrospect, the visit to the hardware store provided another very significant arena for information - impressions formation and exchanging that would later impact on me as a teacher in the town. The purchase of the nails passed off without any special attention to it but it was the other enquiries and conversation that I had with the store owner that proved to be far more substantial in terms of my entry into the town as a teacher. The background to the conversation follows briefly.

I had noted that heating in the house was by a small combustion stove. I therefore used the purchase of the nails to enquire if the store sold briquettes which at the time were a recently introduced fuel product used quite widely in the city. The store-owner lapsed into a broad grin, laughed and said that “he would probably not even sell a hundredweight of them in 10 years”. Accepting the answer and keen not to be a joke at his pleasure, I withdrew my line of inquiry. “No mate, what you do is see a farmer or a friend and get a load of stumps.” I thanked him for the information but having no friends in the town and not knowing any farmers, did not have a clear idea of how to progress matters.

The exchange was conducted in good humour even though I felt I was “holding on to the losing end of the stick”. However, it evidently provided a context for the hardware store owner to enquire about any football experience I may have had and whether I would play locally. I briefly described my experience, said it was not of a very high standard and, yes, I would probably be interested in playing locally. This provided an opening for the store owner to ask me to play for his team. Given that it was the town team, I said yes. It did not occur to me that there were probably other teams outside of the town who had players who resided in the town playing for them, or that teachers may have played for other teams, but both did.

From the visit to the hardware store to buy nails, a number of interactions took place that subsequently contributed quite substantially to the nature and character of my time in the town and school.

The key point of elaborating on the store event is that, while at one level, quite transitory and not of any apparent great moment, the consequences of the events started to take hold at an early formative time in “my stay” in the town and, because of the size of the community, were rapidly circulated via informal communication networks. Three consequences that are relevant to the building of the spatial mental map concept follow.

The first is that my enquiry about briquettes for heating led to me receiving feedback in the staffroom a few days later, to the effect that “the new teacher seems like a good bloke but he knows nothing at all about firewood.” I was happy about the “good bloke” and also happy to “bear the cost” of no knowledge about firewood. In rural communities it is often the case that there is knowledge that it is taken for granted one will know about, and if not, this is interpreted as a clear indication of you being an “outsider” or “a blow in”.

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The second consequence is linked to the first because it unfolded in a matter of days that the hardware store owner had two children who attended the local school, that he was a senior official in the town football club and, by marriage, was related to a range of mainly town-based families who were very sports-minded and very pro-town. On reflection, given his formal status as a business owner in the town, a parent and a club official, coming out of the exchange with a “tick for character” but a “cross for firewood knowledge” was, on balance, a good result. I know of situations where the early assessment of character/local knowledge duality has been in reverse order and, through informal networks and relationships, early labelling of a negative kind took hold and provided an additional factor to deal with while working towards becoming a recognised competent professional.

The third consequence for the development of the spatial map as a support for navigating and negotiating in small but relationship rich and complex rural contexts, is that saying yes to play for the town team quickly took on greater significance during the next few days as I met more teachers on the staff, the principal and started to become aware of the social structure of the district. It became apparent that there were very strong local district allegiances, which in addition to the early patterns of white settlement and the subsequent economic basis of each, were shaped and nurtured through sports teams – football (men), netball (women), cricket (men) and tennis (men and women). My assumption that male teachers at the school would play for the town team proved to be very wrong. Several of the male teachers, in addition to teaching, also drove school buses, which was common practice in the 1950s and 1960s, and therefore boarded on farms in the district so they could drive students to and from school each day. Those who played sport for an outlying district brought into a small staff environment from time to time, dynamics which revolved around the rituals and loyalties of belonging to an entity “other than the town”.

As a beginning teacher, the complexities of the situation I have briefly outlined in relation to me saying yes to playing for the town team were magnified by two other factors. The principal of the school - also newly appointed but with previous experience of living and teaching in a small country town - made it known that it was very important (he stopped short of using the term expected), that town-based teachers should play for the town team. Intentionally or not, I felt that this created some tension and introduced a sense of an inner and an outer group because “the boss had clearly shown his hand in terms of teams”.

Secondly, students at the school played sport for the town and district teams but more substantially because of the small numbers of players available, played with teachers as fellow team members. It is not necessary here to present a lengthy analysis of the consequences of this other than to emphasise that I experienced and observed radically different (and at times oppositional) attitudes and behaviours between the expectations of a sporting club and the expectations of the school. In the school context it was expected that students would respect teachers, use formal greetings and names when addressing a teacher, and would not be critical of school expectations or behaviour codes. In the sports team context, greetings became informal – first names and nicknames were expected – criticism and “controlled” aggression towards opponents was expected, and winning was the priority. As a young teacher with a strong sense of wanting to be a teacher, the dissonance between the two contexts – school and sporting teams with overlapping memberships – presented me with very
real issues about how to position myself so that I could be effective in both without compromising either.

**Towards the development of a spatial map**

When developing a blueprint for leadership, Caldwell (2000, p1) named areas “in which leaders should concentrate their efforts, domains”. The term is particularly apt for the development of a spatial map because the fundamental purpose of it is to provide a tool to help teachers to create “self generated support” by framing their thinking in particular areas.

There are three domains of and for identity forming and framing in the story I have outlined about my selection, appointment and initial introduction to the country town that became my place and space of work and living for six years, which form the basis of the spatial map.

The first domain is *the personal*. This refers to the teacher as a person, their history and experiences of life, their relationships with a partner (if applicable), family and friends, their beliefs and values, their material wealth and belongings.

The second domain is *the professional*. This domain comprises education and training, employment as a teacher, the role and expectations of being a teacher, behaviour patterns and standards associated with being a teacher including positions on various issues like war, drugs, religion and politics, and the ability to do the job of being a teacher.

The third domain is *the public*. This is the being in the community dimension of a teacher in a rural context. It is a very broad and mixed domain that includes things such as participating in a service club, attending a particular church, playing sport, shopping, and taking a stand on an issue that could become/is controversial like mining in a national park or land rights.

Being a teacher in a country location and particularly one with a small population is invariably an experience of being known of and about by more people than you know of and about. There are many message carriers and mediators about teachers and their behaviour. In other words, the places and spaces that teachers use, occupy and move through in small country locations are subject to frequent surveillance and, conversely, there is little anonymity afforded them. This complex situational context gives rise to a need to ensure that teachers have ways of maintaining, and if necessary, renewing their capacities to optimise their effectiveness in the light of perceptions of them formed in contexts other than teaching and schooling, as well as these.

The three domains described above - personal, professional and public - are not presented as the “complete picture of a teacher’s world”. However, from my experience they are potentially useful ways of grouping or clustering things which teachers in rural and remote places have to juggle, balance and weave or, more formally, manage, in order to survive and to progress their careers and their personal aspirations.

The domains are not presented for consideration in terms of size and scope dimensions though it is argued there is variability in terms of intensity and impact.
between them which typically occurs when contexts change. The professional domain can assume a high profile for a teacher because it embraces a significant amount of a teacher’s time. It is the domain that typically has the most impact on how a teacher comes to be known in a small population context, i.e. through what people think of them as a teacher first, and then as private person and so on. However, there may be exceptions to this such as when a teacher is a long-term resident of a small rural community and may have grown up in it. The personal attributes and dispositions of a teacher, in essence, therefore precede the professional presentation and from this there is a real sense in which the local context plays an important prior role in constructing the teacher.

The spatial map conceptualising “works” when a teacher consciously activates the three domains I have described above when they are in contexts where opinions of them are likely to be formed. In rural places these are many and varied and, in addition to the school, include shopping, attending a doctor’s clinic, playing sport, participating in a town festival or social event and visiting friends. It provides a tool for assessing and integrating what is being said and done as well as the other kinds of cues relating to the characteristics of the context and, most importantly, assigning priority to what domain or domains should be foregrounded in terms of any responses that are made which subsequently may impact on their ability to be an effective teacher.

A relevant illustration of what I am trying to describe would be a teacher who has tertiary qualifications in science, teaches the theory of evolution and attends a church which has some members who are known for their creationist beliefs. The teacher is asked to speak at a christian church meeting on their view of Intelligent Design and whether it should be included in the local school’s curriculum. Another illustration would be a teacher coming to a view that the viability of class sizes is jeopardising standards and is therefore inclined to propose that certain subjects are discontinued or offered by distance mode. A third is proposing that the school take a public stance on an issue that has gained some profile in the media and is growing as a focus of political activity when it is known that the parents who support the school have divergent views on it.

In each of the brief illustrations from the perspective of an individual teacher, how to position oneself to optimise the capacities required for continuing to be an effective teacher, is a critical matter. Experience shows that if this is impaired in a context where visibility is high and anonymity is low, it can be a particularly hard struggle to rebuild local credibility and confidences as a teacher. It is here that the spatial map can be useful for working through events and issues that have the potential to be formative in terms of how a teacher is considered and valued as well as how the individual considers and values themselves.

The spatial map can assist with assessing what priority is allocated to each of the domains in shaping a response or position in relation to an issue because it is dynamic and is intended to be used as an infinitely variable tool that expands, contracts, intersects or remains stable according to the demands of the contexts under consideration. Should the professional domain be the dominant one through which things are processed, or should the processing comprise a blending of all three which is expressed in ways that leave opportunities for other modifications to stances to be
made over time? The map provides a conceptual tool to assist teachers to weigh the arguments and the evidence being placed before them and then to “position” themselves.

Issues and events that I have briefly outlined above are complex and as such, will invariably elicit a range of views and positions. The teacher as a key person in a rural context needs to be aware of this but also needs a mechanism or a process for managing the competitive as well as the consensus generating aspects of the issues. Fundamentally the accent on the spatial is in terms of deciding what balance and blend of the domains is appropriate and, very importantly, what space - what reserve capacity - is needed to enable a teacher to continue to build their capabilities as a teacher and to maintain connections in and with the local community while also having some actual privacy entitlements.

Summary
Rural and remote contexts, while providing many unique and challenging opportunities for teachers both professionally and personally, are also inherently very complex. This is primarily because of small and thin density populations and a suite of characteristics that place significant value upon informal relationships and appreciation of local knowledge. For teachers, small communities can accentuate their visibility and lack of anonymity and, frequently the transient nature of their appointment. The contextual factors and the profile factors together require knowledgeable and skilful negotiating and navigating by teachers to ensure that they retain the capacities needed to be an effective constructor and manager of student learning.

The spatial map that has been sketched out in this article based upon personal experiences and ideas from Soja (1996), with its focus on framing, monitoring, managing interactions and locating oneself spatially so that there is “always room to move” in thinking and action, is a potentially useful form of self support for teachers living and working in small rural and remote places.

References


Evaluation of a pre-university program for senior secondary students making career choices: Implications for program design and university promotional activities

Lyn Hughes
Faculty of Arts, Humanities and Education
Central Queensland University

Beverley Moriarty
Faculty of Arts, Humanities and Education
Central Queensland University

Abstract
This research evaluated an innovative pre-university program designed to assist senior secondary students interested in early childhood decide on their career choices. Pre- and post-surveys completed by the 19 participants determined first the content and experiences to be included in the program and then the extent to which the program met participants’ needs and expectations. On campus lectures for 1 hour per week over 5 weeks were complemented by 2 practical sessions at relevant educational sites in weeks 2 and 4. The findings have implications for the design of these types of programs and for promotional activities of universities servicing rural and regional Australia.

Context
In the present political climate in Australia of economic rationalism, privatisation and deregulation, it has become increasingly important for universities to attract as many students as possible. This imperative directly aligns with the amount of funding that universities receive from the Australian government and the students themselves. With university funding dependent on students choosing tertiary education, and then completing their programs, it would seem important that prospective students have adequate information on which to base their life choices. Drop out rates are high in many institutions and this is a large expense to all concerned.

As James (2001) pointed out, the need for students to be adequately informed about relevant programs and how these programs prepare candidates for future career paths, is vitally important for both prospective students and universities. Well-informed students are more likely to apply themselves to their chosen programs and progress to their professions or post-graduate studies. Consequently, the universities are more likely to maintain their funding and cap high attrition rates.

While traditional methods of information dissemination have their place, pamphlets, university career days, and information evenings do not seem to be particularly relevant for students from rural and regional areas, where those students may be the first in their family to contemplate university (Rhoden & Feldtmann, 2002). It seems then that it may be time that universities re-think the way that they promote themselves and become more client centered in their approach to the dissemination of information.
The purpose of this study was to evaluate an innovative pre-university program designed to assist senior secondary students interested in early childhood to decide on their career choices. The design allowed for students to have direct impact on the content and structure of the program and also to make further suggestions for the design and implementation of future programs.

The desired outcome was for students to feel more confident in making informed decisions about whether this path was the one they wanted to pursue and one in which they felt capable of finding success and job satisfaction. There would also be additional benefits for universities. Potentially, more students would be drawn to attending university, with the hope that they support their local campus and, in addition, would be successful in their chosen university programs. This would also have positive impacts on attrition rates and nationally the cost benefits could be substantial.

A secondary consideration of becoming involved in developing a pre-university program was to showcase what was available at a small regional campus. This pre-university program could, in fact, amount to a good marketing tool for the University. It is becoming increasingly evident in many professions that once students move from regional areas to metropolitan universities, they are unlikely to return, thus leaving regional centres barren of many professional services (Cooper & Hatton, 2003).

Highlighting the faculties and facilities available should only enhance the reputation and standing of the university in a regional/rural centre where the local community is relatively naïve to the advances of universities within these centres. Conversely, by providing the appropriate standard of program in a supportive setting at a regional university one could anticipate stemming the drain of professionals away from regional/rural areas if these types of programs were successful and became more wide-spread.

The evaluation of the pre-university program focused on the extent to which participants perceived that the program met their needs and expectations and ways in which the program could be improved. The evaluation, therefore, had three main research questions:

1. In what ways and to what extent did participants in the program perceive that they became more informed about issues around early childhood and early childhood studies at university?
2. To what extent did the pre-university program help students identify personal/professional characteristics required of early childhood professionals in the field?
3. What suggestions did participants have for improving the program?

What the research says
One of the most seminal papers relating to the decision-making processes that prospective university students employ in making choices about future studies is a report reviewing and synthesising research undertaken in New Zealand and elsewhere. The review was commissioned by the New Zealand Ministry of Education in 2004, and completed by Linda Leach and Nick Zepke from the Massey University College of Education in 2005. The authors outlined their approach and claimed that their review was systematic. The processes and the limitations of the work are transparent.
While this is not the place to debate the efficacy of the processes used to select the 57 out of 90 identified studies for in depth analysis, several points are worth making before proceeding.

Summaries of each of the papers included in the review were provided in the report, enabling readers to make their own decisions regarding the findings as they were drawn from the literature. Selection was made on the basis that studies had a focus on student decision-making and were either empirical studies or reviews of literature featuring the four themes: decisions (as a process), factors influencing decisions, information available to prospective students and diversity of students making decisions. It is possible that future researchers will take exception to the criteria used to select or exclude studies and a debate may develop around the methodology as opposed to the substantive conclusions. In defence of the methodology and choice of studies, it is noted that Leach and Zepke included in their report a very useful matrix listing studies conducted in the USA, UK, Australia, New Zealand and other countries (Japan and Canada) relevant to each theme. Readers with some knowledge around the area may note the inclusion of key authors in the field. Australia, for example, includes Brennan and Marriott; James, Baldwin and McInnis; and Whiteley and Neil among others. An initial scan, therefore, suggests confidence that the authors have cited the work of leading researchers in the field.

Given the recency of this review and factors that provide some confidence in its execution, as well as the focus of the study reported in this paper, the remaining theoretical discussion will focus on relevant aspects of three themes identified by and followed through by Leach and Zepke (2005). The themes for the purposes of this paper are decision-making, factors influencing decision-making and information available to prospective students.

**Decision-making**

Three findings emerged in relation to decision-making from the Leach and Zepke (2005) review. These findings point to the complexity of decision-making, the existence of models of decision-making and the fact that students begin making their decisions about higher education studies well before they reach Year 11.

One of the points made in the review that supports the conclusion that decision-making is such a complex process, is the unexpected disparity in results among studies that might otherwise expect to deliver similar findings. The reviewers note, however, that the differences in the findings are accompanied by disparity in areas such as data-gathering instruments (notably not so much the techniques) and analysis. Even so, if the findings had been more complementary, despite the differences in methods, the complexity of the decision-making process may not have been as well appreciated.

Leach and Zepke’s review of the literature supports the proposition that the decision-making process can be represented in models whose logic can be sustained. In particular, a three-stage model for decision-making was identified through examination of the literature. Leach and Zepke tested the three stages against the four themes that they presented earlier in the report. They identified the three stages of decision-making as predisposition, search and choice. The elements of the second theme are factors that relate to decision-making, and include predisposition factors,
search factors and choice factors. The third theme, information, identifies information around predisposition, search and choice that inform decisions, while the fourth theme, diversity, looks at how variables related to diversity impact on predisposition, search and choice. The logic and relevance of this model to the analysis of the ways that senior secondary students make study and career choices is clear. For the purposes of this research, however, the main emphasis is on information and the ways that students gain information about further study and careers, particularly in relation to how universities communicate that information to prospective students.

Several points of interest emerged from the Leach and Zepke (2005) review in relation to the finding that the decision-making process starts very early. While the results of individual studies vary slightly in different contexts, Australian studies report that students begin to make choices about future career and subject interests at least as early as year 7. The review also notes that early decisions can sometimes be unstable. Given that the students in the present study were in year 11 and 12, those who had already made the decision to pursue a career in early childhood education were more likely to be interested in finding out more about their career choices and study options. For students whose choice of an early childhood career may not be the best one for them a pre-university program such as the present one may be helpful in addressing misconceptions that could have lead them into a career to which they were not suited.

Another major review, published just 2 years before the Leach and Zepke report, came out of the UK and was produced by Payne (2003) for the Department of Skills. Payne cited a dearth of longitudinal studies in the area as being the reason why conclusive evidence around decision-making processes used by 16 year olds was not available. Payne’s implications for research section of her report points to several reasons why this argument could be contested. For example, the argument that the findings from several large-scale cross-sectional studies are limited in value because they use self-completion surveys administered to whole classes of students is debatable. It could be argued in broad terms that large-scale cross-sectional studies can be just as informative as longitudinal research, subject to robustness of design, because they have the capability to identify patterns in the results that can be investigated further. Payne also pointed out that there have been many small-scale, qualitative studies in the area but maintained that their usefulness was also limited because they needed to be tested for generality. This argument is almost self-contradictory because the number of these studies makes their individual results, when combined, more substantial. The Leach and Zepke (2005) report for reasons explained earlier, could be considered more definitive.

Factors influencing decision-making
Leach and Zepke (2005), in their report of empirical studies and reviews of literature identified a number of factors influencing decision-making by prospective tertiary students. These were socio-economic status (SES), parents, academic performance, subject area interest, cost and financial support and schools. On balance, SES emerged the most influential. James (1999) pointed to the importance of making disadvantaged students aware of how relevant and beneficial higher education could be to their futures. James suggested a range of approaches be used to address the lower participation rates of rural and isolated students in higher education in Australia, noting that previous strategies had not been successful in redressing the imbalance.
His point that “the present gaps cannot be narrowed without a thorough reconceptualisation of the problem, renewed commitment, and fresh strategies” (p. 6) was taken into consideration in planning the pre-university program that is the subject of the present study.

Information available to prospective students
Family experiences of tertiary education were identified in the Leach and Zepke (2005) report as informing student decisions around career and study choices, as was information sharing between students, families, schools and tertiary institutions. The most effective information, however, is interpersonal, while large-scale campaigns across the media and internet have less influence on student decision-making. The importance of having reliable and relevant information on which to base career and study choices was highlighted by the conclusion that getting the choice wrong was a major contributing factor in non-completions for 974 UK students (Yorke, 2000).

Drawing on the findings and implications of Yorke’s study, the pre-university program evaluated in this paper aimed to help students clarify whether their choice of career in early childhood education was the right one for them and help students find out about the university program that would lead them to that career. The pre-university program, however, went further than Yorke suggested. Instead of just visiting the campus or finding out details from someone who had experienced the program, students who participated in the pre-university program had first-hand experience in on-campus classes designed especially for them, and combined this with planned visits to early childhood settings where they could interact with teachers on the job.

The next section of this paper provides an overview of the lectures and visits to early childhood sites that comprised the program. More detail about the first and final lectures is given in the methods section because it was during those sessions that the pre- and post-surveys were conducted.

Overview of the pre-university program
The program consisted of 5 x 1 hour lectures that were designed with the support of information gained from the pre-program survey completed by the participants at the first lecture. The students also visited 2 state pre-school centres where it was intended that they would gain valuable information from practitioners working in the field.

Lecture 1
The first lecture introduced the students to the lecturer and to each other and provided information about the faculty and the campus as part of the university. The students were taken on a tour of the campus. Information was also given about the teaching degree and career opportunities associated with the degree. Activities that enabled the students to connect their own experiences of learning with the content of the course were conducted. The students were introduced to the topic of what makes a good teacher, directed to readings that could be accessed during the week and given details about optional portfolio assessment. Handouts included the pre-survey form, description of the optional assessment item, instructions for activities and a reflection sheet that guided the last part of the discussions.
The students were organised into groups of 4 or 5 and were assigned a pre-school setting to visit and engage with the teachers and children. They were given some focus questions to help them in their observations. The lecturer prepared students by discussing with them the aims of the visits and the overall program offered at each site.

**Site visit 1**

During the pre-school visits, students were asked to go into a new educational setting and establish relationships with early childhood teachers. The teachers at the sites were very willing to share their skills and knowledge and allowed the students to make observations and participate.

**Lecture 2**

The second lecture followed on from the visits later in the same week. Group discussions focused on the observations and experiences associated with the visits to the early childhood settings. Students were encouraged to ask questions arising from the visits and the lecturer also addressed issues that came from responses to the pre-program survey.

Other parts of the second lecture looked at the role of the early childhood professional and the 5 key components of the early childhood curriculum. The early childhood educator’s role and the place of play in the curriculum were emphasised, partly through the use of a video on play.

**Lecture 3**

The 5 key components of the early childhood curriculum were explored further by identifying the components in a video relating to cheche and kindergartens. Students considered the concept of flexible learning environments and then the types of learning environments that worked for them, prior to looking at the importance of the learning environment for young children. The students were prepared for their second site visit.

**Site visit 2**

The students went to an early childhood centre for this visit. They were again encouraged to make observations and participate in the activities that were occurring at the time.

**Lecture 4**

The students reflected in groups on their visit to the early childhood centre and raised questions and issues that were then discussed with the whole group. The purpose of the lecture was to increase students’ understanding of early childhood education and studies in early childhood at the university and to dispel some misconceptions in students’ understanding. Video footage of teachers talking with parents was used to
emphasise the importance of partnerships and the role of communication, feedback, respect, relationships and leadership in partnerships. The message that early childhood teaching requires more than just a love of children was given and the role of parents, carers, school administrative staff and the wider community was discussed.

Lecture 5

The purpose of the final lecture was to recall and review the learning experiences covered during the previous lectures and site visits. The students were guided to complete activities that reconstructed what they had done over the previous weeks and this formed the basis for their responses to the post-program survey.

Methods

Nineteen year 11 and 12 students enrolled at three local high schools were invited to participate in the pre-university program because of their interest in early childhood studies. At the first of the 5, one-hour weekly lectures, the participants, who were all female, completed a survey intended to determine the content and experiences to be included in the 4 lectures and two visits to early childhood settings that constituted the remainder of the program. The aims of the survey were first to ascertain participants’ prior knowledge around early childhood and early childhood settings, second to identify the reasons why participants were interested in an early childhood career and third, to determine participants’ expectations of the program. The expectations related particularly to whether participants wanted to find out about early childhood as a study option and career choice or whether they wanted to find out about university study more generally.

The post-program survey was completed by students in the final lecture and integrated into the activities undertaken at that session. Data from this survey was the source of information for answering the research questions.

Pre-program survey

Individually written responses to 5 open-ended questions provided the data for the pre-program survey. Students were asked what they knew about early childhood education, what educational settings were regarded as early childhood, why they chose to participate in the pre-university program, why they wanted to be early childhood educators, why they thought that they would be good at the job and what they wanted to learn from the program. The responses were collated and the information used to inform the content of the remainder of the lectures.

The responses to the first part of the pre-program survey indicated that misconceptions around early childhood and early childhood settings were common and that there was a need to clarify some basic issues. Only 10 respondents knew, for example, that early childhood teaching involved children from 0 to 8 years and none was able to state correctly the full range of settings considered to be early childhood.

Seventeen respondents cited liking or loving young children as a reason for being interested in an early childhood career or for thinking that they would make a good teacher, while 5 indicated that their prior experiences would dispose them to doing the job well. Only 6 respondents cited other personal qualities in their responses. There
was a clear need for students to have a better understanding of the qualities required for early childhood educators.

Most respondents wanted to find out about early childhood studies or about both early childhood studies and university study more generally. Just one respondent was interested only in finding out about university overall. This is not surprising, given that the students were invited to participate in the program because they had expressed an interest in studying early childhood at university. While the program needed to address issues around early childhood studies and university study more generally, the main emphasis for such a short program needed to be in the early childhood area.

**Post-program survey**

The first purpose of the post-program survey was to determine the ways and extent to which participants perceived that they became more informed about issues around early childhood and early childhood studies at university. The second purpose of the post-program survey was to determine the extent to which the pre-university program helped participants to identify personal/professional characteristics required of early childhood professionals in the field. The third purpose of the survey was to find out from participants how they thought that the program could be improved.

In order for participants to be able to indicate what they had learned and to what extent they had become more informed through their participation in the pre-university program, they needed to be able to recall their experiences in the lectures and site visits. The students, working in randomised groups, collectively recalled and recorded their experiences and the concepts that they had explored in the lectures, site visits and optional portfolio assessment. In this way, the researcher collecting the data was able to be one step removed from the process, as it was important for the students to be presenting their own perceptions.

The second part of the data collection in the final lecture involved the participants individually ranking the lecture, site and assessment activities on a 3-point scale (very beneficial, beneficial or least beneficial) in terms of helping them gain knowledge around early childhood education issues and early childhood as a career option. The participants then provided individually written responses to the evaluation items.

**Results**

The first two research questions related to the effectiveness of the pre-university program as perceived by the participants, particularly in relation to the ways in which and the extent to which the program made them more informed about issues around early childhood and early childhood studies at the university. The third research question focused on ways in which the participants thought that the program could be improved.

The results were analysed according to the different parts of the pre-university program, as a combined total analysis could obscure any variation regarding effectiveness. Some of the students who participated in the first four lectures and the two site visits were unable to attend the final lecture because of other school-related commitments. The 12 participants who attended the final lecture took part in the evaluation.
The responses to the question asking participants about the extent to which the program answered their questions about early childhood and the role of the early childhood educator, clearly indicate that the program was successful in that regard, although the lectures and site visits were far more effective than the optional portfolio assessment. Nine of the 12 participants who responded to the survey rated the lectures as very beneficial and 2 respondents rated the lectures as beneficial. All respondents rated the site visits as being very beneficial for clarifying their knowledge. Only 3 rated the optional portfolio assessment as very beneficial, 6 rated it as beneficial, 2 as least beneficial and 1 respondent to the survey recorded a nil response for the portfolio work.

The respondents felt that they would have benefited by spending more time pursuing their early childhood interest and finding out more information about the university, its programs and life at university. Time constraints meant that discussion around these points was limited in the program. Conversely, the site visits were considered to have been very informative with regard to career choices and, in particular, gave them a better understanding of young children. While the program could have been more informative about the details of university study it was, however, very beneficial in helping the students to clarify and their career goals, with future study options tied to those goals.

The suggestions for improving the program came as a logical extension to the responses of the earlier questions. The timing of the program in the academic year was mentioned as a constraint. As students were so busy with other assessments at school, only a minority found the time to complete the optional portfolio assessment, even though most recognised the value of that type of assessment. There was general agreement that the program would be better placed earlier in the year and the suggestion was made that the portfolio work would then have been more manageable. Students would have liked the portfolio work to count towards assessment at school, as they had seen this occur in pre-university courses in other discipline areas. One student even commented that she found the portfolio work more interesting than the assessment for other subjects at school.

Overall, it was clear that, while the students were able to suggest improvements for the pre-university program, the program was very worthwhile in terms of clarifying their understanding about issues surrounding early childhood and even attending to some misconceptions or narrow appreciation of the field. Previously, students had focused on the role of the early childhood educator in dealing with young children when, in fact, this is only part of the work of a person working in the field. Observations of teachers at work and follow up discussion and reflection at the lectures highlighted the importance of multiple partnerships in the education of young children.

Conclusion and implications
The findings of this study indicate that pre-university programs such as the one that was the subject of this study have the potential to be of considerable benefit to participants in terms of clarifying their career goals and future study aspirations. Australian universities, particularly those in regional centres, might benefit by approaching recruitment and retention of students proactively and supporting this type of program delivery both financially and in kind. As Yorke (2000) noted,
inappropriate program choice accounts for a large proportion of degree non-completions. This pre-university program provided an opportunity to promote university studies in early childhood education and the campus, while also highlighting the commitment required of potential students. As a result of their participation in the program, students were able to make decisions that were more likely to lead to longstanding and rewarding involvement with the university and their potential careers.

It is also known that regional students who accept places in universities in capital cities are likely not to return to contribute professionally to the region from which they came. Completion rates and retention could possibly also be improved if all faculties ran pre-university programs that are innovative and responsive to the needs of students who require clarification about their career and study options. James’ (2001) identification of elements that benefit the promotion of university programs included a strong educative component and an authentic representation of the roles and responsibilities of all stakeholders. These components are evident in this particular pre-university program. Clearly, then, the findings of studies such as this one have implications for prospective students as well as for the sustainability of regional Australia and the universities in those regions.

According to James (2000), the physical appearance of the campus buildings and grounds are also important to many university applicants, as it is perhaps the one impression that they gain by visits to campus. One of the benefits of delivering the pre-university program that was the subject of this study, was that participants were able to appreciate first-hand the value of a well-equipped local campus. The positive impact on the economy of the regional city, the sustainability of a small regional campus and the quality of life for a student able to study and work while staying at home should not be underestimated but is dependent on potential students knowing what is available locally.

Since the completion of this study it has recently been found that, of the 19 participants in the program, 9 went on to enroll at the local campus. It is pleasing to note that 4 of these students completed a Bachelor of Learning Management (Early Childhood) and 4 completed a Bachelor of Learning Management (Primary). All 8 have been employed subsequently in their chosen field. These figures not only indicate that the program was of benefit to these students but to the local regional campus and the local community where, it is hoped, these former students will continue to make a professional contribution.

REFERENCES


Multilevel Analysis and its implications for Rural Education Research

Quynh Lê and Rosa McManamey
University Department of Rural Health
University of Tasmania, Launceston

Abstract
Multilevel analysis has been used in social epidemiology research. From the social epidemiology perspective, individual characteristics are not sufficient to explain the distribution of health problems in the population. Thus, statistical methods that allow including several levels of determinants in a single model are used. Primarily social epidemiology researchers use multilevel analysis to conceptualise and analyse associations at multiple levels, e.g. employ individual and area-based data in relation to a specified outcome. It entails the use of variance components models to partition the variance at multiple levels, and to examine the contribution of factors measured at these different levels to the overall variation in the outcome. Multilevel methods extend beyond the study of individual epidemiological factors by incorporating simultaneously different levels of variables (e.g. family, neighbourhood, community) that influence the state of health of a certain population. This paper discusses how multilevel analysis is used as a research tool in social epidemiology research and examines how it can be used in rural education research on community and diversity.

Keywords: multilevel analysis, rural education, social epidemiology, community

Introduction
Research data, including observational data collected in the human and biological sciences, have a hierarchical or clustered structure. For example, people do not live entirely on their own, but rather embedded in social network/units. Therefore, we may think about the individuals as one level and their network/organisation as a next level. Many designed experiments also create data hierarchies, for example clinical trials carried out in several randomly chosen centres or groups of individuals (Goldstein, 1995, Plewis, 1998, Ludwig-Mayerhofer, 2000).

Such collected data involve group effects on individuals which may be assessed invalidly by traditional statistical techniques. That is, when grouping is present (e.g. students in schools), observations within a group are often more similar than would be predicted on a pooled-data basis as individual samples are correlated or clustered. Ignoring this autocorrelation and clustering results in increased risks of finding differences and relationships where none exist (Garson, 2001, Anderson, 2004).

Multilevel analysis has recently been used as a useful analytical technique in several fields, including public health, social epidemiology and education (Diez-Roux, 2003). The term multilevel (or hierarchical modelling) refers to the level of analysis approach which usually consists of individuals (at a lower-level) who are nested within spatial units (at higher level). Therefore, multilevel analysis allows the simultaneous examination of the effects of group-level and individual-level variables on individual outcomes (Diez-Roux, 2003, Anderson, 2004).

The following discussion will discuss the rationale for using multilevel analysis approach. What contribution does it make to research methodology especially in Social Epidemiology? In what ways does it differ from traditional statistical approaches? In what ways does multilevel analysis contribute to rural education research? What are some implications for education?

Multilevel analysis objectives
Multilevel analysis is a powerful tool which is becoming widely used in population research, particularly dealing with various interactive layers or levels among
variables. Its three useful functions which can be seen as drivers for multilevel analysis are disentangling the different sources of variation, describing contextual heterogeneity, and characterising and explaining the contextual variation.

1. **Disentangling the different sources of variation** in the outcome/response, e.g. Evidence for variations in poor health between different contexts is due to what can be described as contextual area or ecological effects. Variations between places may be compositional, i.e. certain types of people who are more likely to be in poor health due to their individual characteristics happening to be clustered in certain places. The issue is not whether variations between different places exist, but **what is the primary source of these variations**.

2. **Describing contextual heterogeneity**: modelling the predictive effect of cluster-level variables on individual outcomes, e.g. It may not matter for high-social class individuals in which neighbourhoods they live but it matters a great deal for the low social-class, resulting in large between-neighbourhood variations (different amount). Neighbourhoods that are high for one group are low for the other and vice versa (differential ordering).

3. **Characterising and explaining the contextual variation**: modelling the interaction between cluster-level and individual-level variables, e.g. the contextual effect of poverty can be the same for both high and low social classes. The contextual effect of poverty may be different for different groups (Anderson, 2004).

**Multilevel typology**
As briefly mentioned previously in this paper, multilevel analysis is useful in describing the relationship among variables at different interlocking levels. According to (Anderson, 2004, Subramanian, 2005), the multilevel data structures include the following:

Repeated cross-sectional design

![Diagram of multilevel data structure](image)

Sources: Multilevel statistics methods: concept and applications (Subramanian, 2005), p.31

In this data structure, level-3 is the area, level-2 is the year and level-1 is the individual. Level-2 represents repeated measurements on the school. For example, area-based differences in mortality over time when taking into account the changing composition of these areas.
Repeated measure or panel design

![Diagram of panel design]

Sources: Multilevel statistics methods: concept and applications (Subramanian, 2005), p.32

In this diagram, level-3 is area, level-2 is the individual and level-1 is time. Individuals are repeatedly measured (same individuals). For example, growth curve modelling of individual behaviours within a contextual setting of neighbourhood.

Multivariate multilevel structures

![Diagram of multivariate responses]

Sources: Multilevel statistics methods: concept and applications (Subramanian, 2005), p.33

This structure includes groups of response variables (level-1) nested within individuals (level-2) nested within neighbourhoods (level-3). For example: Is the gender difference for the different measures? Are neighbourhoods that are high for one outcome, high (or low) for the others, accounting for ‘composition’?

Cross-classified structures

![Diagram of cross-classified structure]

Sources: Multilevel statistics methods: concept and applications (Subramanian, 2005), p.35

In this structure, individuals at level-1 in Workplaces at level-2 AND Neighbourhoods at level-2; workplaces and neighbourhoods are not nested but CROSSED. Individuals are seen as occupying more than one set of contexts.
Multiple membership structures

For example, pupils nested within primary school-teachers. Some pupils are taught by more than one teacher. Structure includes a ‘weight’ based upon the proportion of time the pupil spent with the teacher.

Rationale for multilevel analysis approach

Social sciences are primarily interested in the interactions between attributes of groups and attributes of individuals. It is based on the view that individuals are influenced by the social contexts (Blalock, 1984, DiPrete and Forristal, 1994, Hox and Kreft, 1994). Researchers can use different types of theories to explain the occurrence of a given phenomenon depending on the questions being investigated (Coleman, 1991, DiPrete and Forristal, 1994, Diez-Roux, 2000). In most cases, the outcome at one level is explained by independent variables that apply to the same level or by variables defined at a lower level (e.g. variation in diseases rates across groups are explained in terms of the characteristics of individuals composing the groups). The outcome at one level is also explained as a function of variables defined at a higher level (e.g. the individual-level outcome is explained as a function of the attributes of the group to which individuals belong). Multilevel analysis is used to explain the variation not only in the dependent variable at one level as a function of variables defined at various levels but also interactions within and between levels (Diez-Roux, 2000).

Multilevel modelling is useful to reveal variation among units of analysis in different groups which comprise the levels. Multilevel modelling may be a preferred method when data are thinly scattering or have a nested (usually hierarchical) structure (Garson, 2001).

In summary, as Anderson defined, multilevel methods are pertinent when:

- The observations that are being analysed are correlated;
- The causal processes are thought to operate at more than one level; and/or
- The research is concerned especially with describing the variability and heterogeneity in the population, rather than average values.

Anderson (2004, p. 602)

Issues with multilevel analysis

With the advances in statistical research, the potential for using multilevel methods for health and social behavioural research has grown (Diez-Roux, 1998, Duncan et al., 1998, Anderson, 2004). However, there are issues needing to be considered when developing and interpreting multilevel application.

1. It is important to clearly identify and conceptualize the choice of higher levels (e.g. region, neighbourhoods) in a multilevel analysis as multilevel models demands more mental effort to understand and build. There are many
situations in which the complexity of a full multilevel analysis is not needed. For example, the data may exhibit results so obvious that any complex approach is pointless, such as in the classic studies of large effects (smoking and lung cancer, estrogens and endometrial cancer etc.)(Greenland, 2000, Anderson, 2004).

2. Establishing the relative importance of context and composition is more apparent than the procedure to distinguish the relative importance of context and compositional factors, and necessary caution must be exercised while conceptualizing and interpreting the compositional and contextual sources of variation (Anderson, 2004).

3. It is important that the sample of neighbourhoods belongs to a well-defined population of neighbourhoods such that the samples share exchangeable properties that are essential for robust inferences (Anderson, 2004).

4. Adequate sample size for all levels of analysis is important. For example, when only first-stage parameters are of interest and the data set is so large that all first-stage standard errors are small, variance reduction is not necessary. In contrast, if the data set is so small that only a few free parameters can be used in the first-level model, a full multilevel approach (with its attendant flexibility and robustness) is not applicable (Greenland, 2000).

5. The power of multilevel models to make causal inferences is limited as we hardly know enough about the process that determines exposure or the degree that our model is approximately valid. The best way to handle this is to explicate the model underlying our analysis so that the model assumptions can be critically evaluated. However, multilevel modelling does not necessarily involve stronger assumptions than ordinary modelling, and in fact it provides an opportunity to use weaker assumptions than in ordinary single-level analyses. Innovative strategies may be required to convincingly demonstrate causal effects of neighbourhoods (Greenland, 1990, Greenland, 1998, Anderson, 2004).

Multilevel analysis and traditional approaches to multilevel problems

In analysing data corresponding to multilevel problems (e.g. data corresponding to individuals nested within groups), we have many options. One traditional approach to multilevel problems is to aggregate data to a group/higher level (e.g. student performance scores are averaged to the school level and schools are used as the unit of analysis). This approach focuses the potential importance of group-level attributes in influencing individual-level outcome. An alternative is to disaggregate data to the base level (e.g. each student is assigned various school-level variables such as funding level per student, and all students in a given school have the same value on these contextual variables, and students are used as the unit of analysis). Ordinary OLS regression or another traditional technique is then performed on the unit of analysis chosen. This approach focuses exclusively on inter-individual variation and on individual-level attributes. Therefore, it has the risks of ignoring the effects of group-level attributes in individual-level outcomes (Goldstein, 1995, Diez-Roux, 2000, Garson, 2001).

Multilevel analysis, in contrast, allows simultaneous examination of the effects of group-level and individual level predictors (Diez-Roux, 2000). Groups or contexts are not treated as unrelated, but are seen as coming from a larger population of groups (Duncan et al., 1998). Both inter-individual and inter-group variation can be examined (as well as the contributions of individual-level and group-level variables to these
variations (Snijders and Bosker, 1994). Therefore, multilevel analysis allows researchers to deal with the micro-level of individuals and the macro-level of groups and contexts simultaneously (Diez-Roux, 2000).

**Multilevel analysis in social epidemiology research**

Social epidemiology is defined as the branch of epidemiology that studies the social distribution and social determinants of states of health. Its objective is to identify socio-environmental exposures which may be related to a broad range of physical and mental health outcomes (Berman and Kawachi, 2000). Syme (2000, p. ix) argues that social epidemiology deals with two essential aspects: (a) family, neighbourhood, community, and social group and (b) risks factors and diseases. If one accepts that individuals are embedded in societies and populations, one can postulate that the health of individuals is embedded in population health.

Unlike other sub-disciplines of epidemiology which are devoted to the investigation of specific diseases (e.g. cancer, cardiovascular), social epidemiology focuses on specific phenomena such as socioeconomic stratification, social networks and support, discrimination, work demand, and control rather than on specific disease outcomes. In other words social epidemiology is the scientific study of how social interactions, such as social norms, laws, institutions, social conditions and strategic behaviour, affect the health of populations (Berman and Kawachi, 2000, PAHO, 2002).

Social epidemiology focuses on the identification of potential health factors like social support or occupational qualifications and of health risks like stress, risk behaviour, social isolation etc. It provides the quantitative measurement of these risks and potentials on well-being, life quality, disease and mortality (University of Bielefeld, 2005). Therefore, it has broadened the objectives of traditional epidemiology and makes a strong contribution to the study of population health, which now includes the following:

- To determine the rates of specific disorders so that society can properly analyse the parameters of a problem and establish an effective public policy regarding it.
- To understand further the many factors that influence proper functioning in our society and culture.
- To understand more fully how our society and culture function, giving us normative information about the presence and absence of certain problems. The range of issues examined can be health, mental health, opinions, occupation, habits, and personal characteristics (Keane, 1990).

Research in social epidemiology examines how features of social and institutional context (e.g. a neighbourhood’s economy, demographics, social cohesion, political organisation, and employment patterns), rather than individual characteristics or health behaviours, influence a person’s risk for disease and poor health (Eckenwiler, 2002).

Multilevel models have also been used increasingly in the investigation of the social determinants of health. Social epidemiology recognises that individual characteristics are not sufficient to explain the distribution of health problems in the population. As a result, it relies on statistical methods that allow including several levels of determinants in a single model which are called multilevel methods. These methods are important health analysis tools as they extend beyond the study of individual epidemiological factors by incorporating simultaneously different levels of variables (e.g. family, neighbourhood, and community) that influence the state of health (Krieger, 2001a, Krieger, 2001b).
Within this field of research, multilevel models have been applied in the investigations of the effects of neighbourhood social environment on health outcomes. A key issue in investigating neighbourhood effects on health is separating out the effects of neighbourhood characteristics (context) from the effects of individual-level attributes that persons living in certain types of areas may share (composition). Because neighbourhoods can be thought of as groups with individuals nested within them, multilevel models have been used to examine how neighbourhood factors, individual-level factors, and their interactions influence health (Diez-Roux, 2000, Anderson, 2004).

Using multilevel analysis in the investigation of neighbourhood effects allows (1)-simultaneous examination of between-neighbourhood and within-neighbourhood variability in outcomes and the degree to which between neighbourhood variability is accounted for by neighbourhood-level and individual-level variables; (2) estimation of associations of neighbourhood characteristics with individual-level outcomes after adjustment for individual-level confounders. For example, neighbourhood characteristics such as deprivation or other indicators of socioeconomic context have been found to be associated with adverse health outcomes after accounting for individual-level indicators of social class (Humfreys and Carr-Hill, 1991, Duncan et al., 1998, Yen and Kaplan, 1999, Diez-Roux, 2000).

Multilevel analysis in rural education

UNESCO encourages all countries to combine national with local power in the service of rural people. For decades to come 60 % of the world’s population will be found in rural areas. Humankind depends on them and they depend on education (Daniel, 2003).

Multi level analysis allows the expansion of factors and issues addressing rural education to be placed in and contribute to a broader field of understanding (seen in a total population context) (Young, 1998, Bynner and Joshi, 2002). It allows comparative and longitudinal analysis often used in developmental program evaluation (World Bank, 1995, Powell et al., 1998, Newman et al., 2002). This is seen in examples such as the exploration of health and cultural factors associated with enrolment in basic education in rural Ghana (Fentiman et al., 2001) where the comparison is made between health and development of both enrolled and non-enrolled children. Differences appeared between the two groups such as non enrolled students were shorter and more stunted than enrolled. Health problems present overall more extensively in non enrolled students. Enrolment appeared affected by how socio-economic indicators, livelihood and kinship constraints related particularly to the health of adolescent boys.

While multi-level analysis addressing rural education issues contributes to the broader research context, a valuable outcome of its use as a whole population tool is its relevance informing policy making. One example is a study in the United States determining the effects of school location on learning in maths and science in these subject areas (Reeves, 2005). Adopting an organizational assessment approach, growth models were used to estimate achievement trends. Two important sources of invalidity in growth models were also used: regression artifacts and spuriousness. Reeves, (2005) felt failure to account for these sources of invalidity may lead to erroneous policy conclusions. The results of these analyses do not support the common contention that there is a rural achievement gap in math and science. The recommendations from the study were that if policymakers wished to enhance math
learning, they would accomplish this more effectively by interventions and programs that increase the motivation and opportunity to learn among low-income students, regardless of school location. Most significantly the study identified that because current U.S. education policy is focused on documenting “adequate yearly progress” in schools, growth modelling is likely to become the preferred methodology of policy researchers (Reeves, 2005).

Probing the increase or decrease of equality and opportunity in education in both urban and rural areas of Great Britain, Bynner and Joshi (2002) carried out a longitudinal multi-level analysis. Using two birth cohort studies started in 1970 and 1958 respectively, the co-researchers examined the evidence in relation to two outcomes, probability of leaving school at 16 and highest qualification achieved. Multi-variate analysis (logistic and OLS regression) was used to model the relationships of these educational outcomes to family social class, taking account of a wide range of early life variables, including living in an urban as opposed to rural location. Longitudinally the rural-urban effects on educational achievement were noted as modest and further appeared to be reducing. Where urban- rural effects were detectable, males in rural areas both fared worse educationally and were more likely than elsewhere to leave school at 16. Females in rural areas were less likely to leave school than urban females, especially in the 1958 cohort. This effect became smaller and statistically insignificant over time reflecting on rural employment opportunities for males in the earlier cohort group. Levels of qualifications achieved were enhanced for both males and females in rural areas in the later cohort group. Bynner and Joshi (2002) concluded that the impact of social class on educational achievement has not changed across the 12 years covered by the two studies, a result that applies in both rural and urban areas of Britain.

Focusing specifically on rural high schools in Western Australia in order to identify effective characteristics particularly influencing science and mathematic achievement, Young (2000) demonstrated that most variability in student achievement is at the student and classroom level with negligible effects at the school level. The multi-level longitudinal approach measuring student growth over time in science and mathematics was noted as the new standard in educational effectiveness studies (Hill and Rowe, 1998; and Simmons et al., 1997 cited in Young, 2000). In a current context findings from Young (2000) identifying effective characteristics at the student and classroom level support strategies developed by the World Bank Rural Education Program 2003-2009 to bring Romania’s 1500 rural schools ‘up to civilized standards’ (World Bank, 2006). Evaluations have shown that while it is still in dire need, it’s not so much the physical infrastructure, as the up-skilling of teachers that appears the critical factor in maintaining students. The lack of best educated teachers in rural areas in Romania has led to the implementation of a mentoring scheme. Teams of educators have been sent to pilot counties ‘inviting teachers to reflect on their particular styles’ developing student participation and effective classroom practice (World Bank, 2006).

By considering the application and outcomes of multilevel analysis in rural education research, it appears that all three objectives outlined in the introduction (disentangling the different sources of variation, describing contextual heterogeneity and characterising and explaining contextual variation) provide a methodology tool
enabling a most powerful means of assessing and progressing rural education research in both practice and policy.

**Implications for rural education research**

Multilevel modelling education researchers in the Faculty of Education of Bristol University (Centre-for-Multilevel-Modelling, 1982-2006) gave the following examples to illustrate the power of multilevel modelling in the following example:

A well known and influential study of primary (elementary) school children carried out in the 1970's (Bennett, 1976) claimed that children exposed to so called 'formal' styles of teaching reading exhibited more progress than those who were not. The data were analysed using traditional multiple regression techniques which recognised only the individual children as the units of analysis and ignored their groupings within teachers and into classes. The results were statistically significant. Subsequently, Aitkin et al. (1981) demonstrated that when the analysis accounted properly for the grouping of children into classes, the significant differences disappeared and the 'formally' taught children could not be shown to differ from the others.

Multilevel Modelling or Analysis has been used in population research and it has attracts attention in other research areas such as population health and education. As opposed to traditional correlation research, Multilevel Analysis deals with different levels and their influences. People are social beings who are embedded in a social network with different relationships. Thus individuals are seen as one (the lowest) level and their network is a next (higher) level.

According to Ludwig-Mayerhofer (2000), opportunities structure the behaviour of individuals, and as many people select their opportunities by local proximity, the region in which a person lives may enhance or restrict his or her opportunity. For instance, if a person lives in a region with high unemployment, this may influence his or her behaviour about acceptable wage levels when looking for a new job.

Many data structures are not purely hierarchical but contain cross-classifications of higher level units and multiple membership patterns. In rural education research, students (lower level) in remote or rural areas are subject to common external influences at a higher level such as teachers they are exposed to, their peer groups, family, schools, communities in which schools are located etc. Thus with the use of multilevel analysis, it shows direct effects of variables on each other within a level and also cross-level interactions among variables at different levels.

A number of software packages have been developed and they can be used in various areas of social research, including rural education research. The most popular ones are MLwin, LISREL, SAS, SPSS, HLM, and MPlus (Garson, 2001).

**Conclusion**

The discussion in this paper starts with an introductory description of multilevel analysis or modelling which has become widely used in population research. This research tool provides researchers with techniques to handle data at various levels in an interactive way. Its most potential/evident characteristic in rural education research is its contribution to the development and implementation of policy. Education researchers have started to appreciate the powerful role of multilevel analysis in
education research. However, it is important to take note of what Plewis has advised us:

Multilevel modelling techniques offer quantitative social researchers the opportunity not only to analyze their data in a technically more appropriate way than traditional single-level methods do, but also to extend the kinds of questions they can ask of their data, and hence the opportunity to model contextual richness and complexity. But like all statistical techniques, they cannot replace social theory, interpretation is usually more of a challenge than computation, and they must be used with due attention paid to their assumptions (Plewis, 1998).

References


Beyond the Line and Closer to the Edge

Colin Boylan and Ted Munsch
Charles Sturt University and Alaska Pacific University
Wagga Wagga and Anchorage

Abstract
In rural Alaska and New South Wales, there are schools located in remote places. The geographical and climatic extremes in both places coupled with continuing difficulty to recruit and retain teachers in these rural schools places challenges on school system staffing operations. In both Alaskan and New South Wales contexts, partnership programs between educational employer organisations and the respective participating Department of Education at Alaska Pacific University (APU) and the School of Education at Charles Sturt University (CSU) have established a one-week remote rural teaching experience (APU’s Remote Rural Practicum Experience and CSU’s Beyond the Line program) for their pre-service teachers. In this paper, similarities and differences between the students’ rural experiences during and following their participation will be discussed. In particular, the impact of these remote experiences on the students’ views about rural teaching and seeking rural appointments will be reported.

Introduction
In folklore about rural places, one recurring notion that is often raised in discussions about rural and remote locations is that there are identified places beyond which ‘civilisation’ ends and where vast empty spaces abound. In the New South Wales context, the descriptive phrases or sayings ‘Back of Bourke’ and ‘Beyond the black stump’ are two such expressions. Each phrase conjures up ideas of remoteness of place beyond which the landscape is characterised as flat, dry, unpopulated, harsh climatic conditions and where there are no social, health, recreational services available. In Alaska, the truly remote villages can be reached only by air or water (an over ice when the rivers freeze in the winter). More than once, after having travelled by light plane for what seemed to be hours and then being greeted at the hangarless airstrip by a snow machine or four-wheeler, people have characterised the remoteness they experienced by saying, “though we weren’t at the end of the earth, I’m pretty sure we could see it from there!”

Collectively these folkloric perceptions about rural and remote places are incorrect. There are people living in these remote places, there are villages and towns, there is a range of service provisions accessible and there is immense beauty in the remote geographic landscapes. One of the essential service provisions in these places is education. Schools have been a continuing part of these rural communities. These rural schools are one of the focal community points that help define and shape the local cultural and social landscape. Yet, the one on-going and key challenge for educational authorities is how to staff these rural and remote schools with teachers who wish to be ‘out there,

Currently in New South Wales and Alaska, there are staffing shortages that are most evident in these ‘hard-to-staff’ rural and remote places. For example in Alaska approximately 250 pre-service teachers graduate each year while collectively, Alaskan school districts need about 1100 teachers to replace teachers who retire or leave the Alaskan system. Like the Alaskan education system, the New South Wales
education system is currently experiencing similar staffing shortages, especially for its rural, remote and hard-to-staff schools. Alaska is geographically the largest state yet is one of the more sparsely populated states. Alaska's population was approximately 649,000 people in 2004 with Anchorage's population being estimated at 271,000 (http://quickfacts.census.gov/qfd/states/02000.html accessed 6/27/2005). Rural Alaskan villages are classified as either on the road system or “bush” communities, reachable by boat or plane (or snow machine in the winter months). New South Wales population is over six million of which about three quarters live on the eastern seaboard. The western, inland region of New South Wales is sparsely populated.

Many authors including Roberts (2005), Munsch and Boylan (2005), Yarrow, Herschell and Millwater (1999), Boylan, Squires and Smith (1994), Murphy and Cross (1990) have focused our attention on the specialised needs for rural service and on the specific pre-service preparation requirements necessary to address rural teaching challenges. Munsch and Boylan (2005) have described the impact of a remote rural practice teaching experience on pre-service students understanding of the challenges facing teachers living and working in remote Alaskan communities. Boylan and Hemmings (1992) reported that a period of practice teaching in rural and isolated schools in New South Wales had a significant effect on changing pre-service teacher’s views on seeking and/or accepting a rural appointment. Yarrow, Ballantyre, Hansford, Herschell and Millwater (1998) in Queensland have reported similar findings. For some students it is acknowledged that there is a financial, familial, or employment related reason that precludes their participation in these rural practice teaching experiences.

System level responses
In response to these staffing challenges for remote schools in both Alaska and New South Wales education systems, employer authorities have developed programs in partnership with their state based universities that seek to raise awareness of rural teaching as a career option. These programs involved bringing pre-service teacher education students to schools in these remote places for a range of educational, social and cultural experiences. In Alaska, the program is known as the Remote Rural Practicum Program while in New South Wales in is known as the Beyond the Line Program. Each program is described in the following sections.

Rural Pre-service Teacher Education
For 10 years, staff of the Education Department at Alaska Pacific University sought opportunities to place pre-service teachers in rural settings to experience the challenges faced by teachers in those schools. Because all on-campus students in the undergraduate Bachelor of Arts Teacher Preparation Program (TPP) and the Master of Arts in Teaching program (MAT) reside in Anchorage during their educational pursuits, a priority for the practicum program has been to provide an opportunity to experience first hand teaching and living in a rural village. In recognition of these acute recruiting needs, Alaska Pacific University, which is located in Anchorage, has responded by developing an innovative program that includes on-campus studies about rural and remote teaching and multicultural issues, and complements this course with a practicum experience in remote rural Alaskan school districts for its pre-service elementary/middle teacher education students. Additionally, Alaska Pacific University has been able to secure additional funding for the remote practicum and
thus minimize those financial hardship issues raised by Yarrow, Ballantyre, Hansford, Herschell and Millwater (1998).

This practicum experience is called the Remote Rural Practicum program.

**The Remote Rural Practicum Program**

As part of the pre-service elementary program at Alaska Pacific University, students enrolled in the MAT program and enrolled in the BA TTP program are offered the opportunity to participate in the remote rural practicum program.

The goals and objectives of the Remote Rural Practicum program are to:

- experience teaching and learning in a rural Alaskan school;
- experience rural community living and activities;
- prepare and teach a unit of instruction in a K-8 classroom in collaboration with the host teacher’s assistance; and,
- prepare and facilitate a community event to showcase student learning.

One of the implicit goals of the Remote Rural Practicum program is designed to encourage pre-service teachers to consider applying for a rural Alaskan teaching appointment.

The Remote Rural Practicum program consists of five or six days duration during which the pre-service student is placed in one rural Alaskan village school. In this report, pre-service teachers were placed at each of three participating schools for a five-day period. The three participating schools were K-12 schools with student populations ranging from 220 in Togiak to 142 in Manokotak. Additionally a faculty member from the university accompanied each group of pre-service teachers to their assigned school.

**The Beyond the Line Program**

Unlike the Remote Rural Practicum program which originated within the Alaska Pacific University, the Beyond the Line program in New South Wales was an initiative of the Rural and Distance Education directorate of the New South Wales Department of Education and Training. The Beyond the Line program commenced in 1997 and involved just one of the 11 universities within New South Wales. Over the intervening years the partnership between the NSW Department of Education and Training has grown to include all 11 universities in NSW and the ACT that offer pre-service teacher education courses.

Nationally, the response to this country school staffing problem has seen the initiation of a number of other visitation programs to take pre-service students to country locales and experience rural teaching and country lifestyle conditions by a number of state education systems. For example, the Western Australian Department of Education has implemented a partnership program with the Western Australian Chamber of Mines where pre-service students are provided with an teaching and rural lifestyle experience in mining communities and their schools in rural Western Australia (Lincoln, 2001). Similarly, Baker (2000) described a partnership program between the South Australian Department of Education, Training and Employment
and Flinders University in which final year pre-service students travelled to the Anangu Lands in North West South Australia where they spent 11 days teaching and living in seven remote communities. The New South Wales Department of Education and Training has also initiated a similar program to those described in South Australia and Western Australia. Boylan and Wallace (2001) provide a full discussion of the impact of these country school visitation programs on a group of 12 secondary students.

The purpose of Beyond the Line

The *Beyond the Line* program has operated in the five remotest school districts in New South Wales (Moree, Dubbo, Broken Hill, Deniliquin and Griffith school districts).

The main aim of the *Beyond the Line* program as presented to students is:

“To provide a unique experience offering you new opportunities and broadening your career knowledge of rural areas in New South Wales.”

(NSW DET, 2001)

The benefits for the participating students included:

- Provide opportunities for students to informally meet with teachers in remote areas, and to look at the realities of living and teaching in these areas;
- Offering students from the city and large regional centres a hands-on introduction to country schools;
- First hand opportunity to talk to rural based teachers about country life;
- Provide opportunities to establish and build networks with teachers working within specific fields of expertise;
- Prepare students for the future by broadening their career prospects; and
- Enhance the student’s skill level to respond to the challenge of providing a broad range of educational choices in a culturally rich society. (NSWDET, 2001)

Usually the *Beyond the Line* program was conducted over a five-day period in one or two of the remote rural school districts. CSU pre-service students spend time with teachers and pupils in both secondary and primary schools. Often the rural primary schools were feeder schools to the secondary schools. The New South Wales Department of Education and Training organised host teachers to billet the students while in each location. CSU has participated in the program since 2000. The program has used schools in the Dubbo, Broken Hill and Deniliquin school districts over this period of time.
Comparing *Beyond the Line* with the *Remote Rural Practicum* program

The aims and goals of each program are quite similar – both programs seek to recruit first year graduate teachers to these remote rural places. Both programs involve considerable travel from the university location to the remote schools. Both programs are five or six days in duration. Both programs have the pre-service students living, socialising and teaching working with local teachers. In both programs, primary (elementary) and secondary (middle school) pre-service students are eligible to participate. The major difference between each program is that participating students in the *Remote Rural Practicum* program stay at the one school for the whole five or six day period while the participating students in the *Beyond the Line* program visit four or five schools over this period of time with their longest single stay being two days in one school within Broken Hill.

The Participants and Setting

During April 2005, 14 pre-service teachers from Alaska Pacific University travelled to three schools located in the Southwest Region School District for the *Remote Rural Practicum* program while in October 2004, 26 pre-service teachers from Charles Sturt University participated in the *Beyond the Line* program. In both rural settings, these pre-service teachers lived in the schools or in teacher housing facilities during their five or six day stay.

Self-report questionnaires were administered to each group before and immediately after their participation in the *Beyond the Line / Remote Rural Practicum* program. Student biographical details as well as information about why the students chose to participate in the *Remote Rural Practicum* and the *Beyond the Line* program and their perceptions about rural teaching were gathered. This paper reports the responses to comparable open-ended questions included in both groups’ questionnaires. Their responses were comparatively analyzed with categorical descriptors generated to identify emergent patterns in the pre-service teachers’ responses.

Findings

Biographical information on each group of students is presented in Table 1 below. This is followed by the reasons reported for participating in the rural practicum program (Table 2).
Table 1: APU and CSU Students’ Biographical information

<table>
<thead>
<tr>
<th>Biographical information</th>
<th>Response</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Did you grow up in a rural or remote place?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• APU</td>
<td>11</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>• CSU</td>
<td>8</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Have you lived in rural areas before the university?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• APU</td>
<td>8</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>• CSU</td>
<td>7</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Have you completed a rural or remote practicum?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• APU</td>
<td>12</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>• CSU</td>
<td>4</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• APU</td>
<td>3</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>• CSU</td>
<td>6</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

From Table 1, two significant biographical differences are evident. Firstly, CSU students are much more likely to come from rural area prior to starting their university studies and secondly, they are also much more likely to have already completed a rural practicum experience than their APU students counterparts. This finding needs to be related to the place in which each university is located. CSU is located in Wagga Wagga a rural provincial city of 55,000 around which is a regional population of 250,000 people with over 60% of its pre-service students being drawn from within its regional location. In contrast, APU is located in Anchorage the largest city in Alaska and around which there is a very small regional population.

The following open-ended question was asked to both groups of students: ‘Why did you participate in the Beyond the Line / Remote Rural Practicum program?’ Their responses are shown in Table 2. From the APU students, 23 responses were categorised by the authors to reflect general themes while 39 responses were provided by the CSU students and were categorised in the same manner by the authors.
Table 2: Students’ Reasons for Participation

<table>
<thead>
<tr>
<th>Reasons provided</th>
<th>Response frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Alaska Pacific University (n=23)</em></td>
<td></td>
</tr>
<tr>
<td>Gaining teaching experiences in rural Native schools</td>
<td>11</td>
</tr>
<tr>
<td>Course requirement</td>
<td>7</td>
</tr>
<tr>
<td>Travel costs met</td>
<td>2</td>
</tr>
<tr>
<td>Social interaction</td>
<td>1</td>
</tr>
<tr>
<td>Enjoy rural lifestyle</td>
<td>1</td>
</tr>
<tr>
<td>Feedback from past students</td>
<td>1</td>
</tr>
<tr>
<td><em>Charles Sturt University (n=39)</em></td>
<td></td>
</tr>
<tr>
<td>Learn about rural living and communities</td>
<td>17</td>
</tr>
<tr>
<td>Learn about rural teaching and the schools</td>
<td>11</td>
</tr>
<tr>
<td>Social interaction</td>
<td>4</td>
</tr>
<tr>
<td>Feedback from past students</td>
<td>2</td>
</tr>
<tr>
<td>Employment opportunity</td>
<td>1</td>
</tr>
<tr>
<td>Travel costs met</td>
<td></td>
</tr>
</tbody>
</table>

For both groups of students, their main reason for participation centred around gaining additional information about and experiencing remote rural lifestyles, the nature of remote communities, and learning more about rural schools, their facilities and their resources e.g. ‘It will be very important for a pre-service teacher to experience rural life since some of the students we will be teaching will be from rural Alaska’ (APU Female, MAT); ‘to see what the schools and communities are like in such a remote area’ (CSU Female, Primary)

Table 3 below shows how the responses made by pre-service teachers prior to and following the experience to the question: ‘What do you consider to be the major problems facing classroom teachers in rural areas?’ compare. The first frequency reported is for the pre experience questionnaire while the second represents post experience responses.


Table 3: Major problems facing teachers in rural schools

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>APU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre</td>
</tr>
<tr>
<td>Teaching related problems</td>
<td>Lack of supplies/resources</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Student motivation and attendance</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lack of teacher networks and professional development</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Parent/teacher/student relationship building</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Multi age programming / Assessment</td>
<td>0</td>
</tr>
<tr>
<td>Adjustment to rural life</td>
<td>Isolation from family and friends</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Racial/cultural biases</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Boredom / loneliness</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Lack of facilities (Shops Housing)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Partner/ spouse employment</td>
<td>0</td>
</tr>
<tr>
<td>Community related problems</td>
<td>Community support (especially elders)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Substance abuse</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Rural peoples’ attitudes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No privacy</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Poverty, poor home life for students</td>
<td>0</td>
</tr>
</tbody>
</table>

From Table 3 it is clear that teaching in a remote rural place that is ‘out there’ holds a number of challenges for the pre-service students. Their major concern focused on how these students would adjust to the isolation from family, friends and their support networks that they had established during their university studies, e.g. ‘No family support – up to 15hrs away from home’ (CSU student). The second most important issue focussed on teaching related problems around issues of locating appropriate resources to ensure that their teaching was effective, e.g., ‘The teachers may not have many resources or exchanges of ideas for new lessons. It’s a small very place no privacy. Relationships are very important because students and families are in contact with you or your neighbour. Limited outside resources.’ (APU Female, MAT) and ‘Resources/materials (expensive to ship books and so on). As a non-native teacher I would be concerned about connections with students, parents and community. Being far away from friends and family.’ (APU Female, TPP).

For the APU students, there has been a shift in the students’ views about teaching related problems from a focus on physical resources to interpersonal relationships with parents, community and students. Several respondents recognized the importance of the family and community conditions in terms of success in the
classroom. Two mentioned a lack of support from administrators, often in connection with behavior and discipline problems. One female (MAT) summed up her concerns that reflect several categories in Table 3: ‘Respect from some students; getting certain supplies; having a wide range of levels in one class; and behavior.’ Isolation concerns did not change when comparing pre and post experience responses.

For the CSU students, their experience increased their awareness of the physical resourcing issues in remote schools along with the long distances required to travel to access services, recreational activities and their isolation from their family and support networks. For these students their participation has moved them beyond their known comfort zones and taken them closer to the edge and in some cases beyond the line that they have constructed of places where they are prepared to teach.

In the post experience questionnaire, all students were asked: "What were the highlights of the Beyond the Line / Rural Practicum Experience?" 25 responses were provided by the APU students and 41 responses were provided by the CSU students. These were categorised and are reported in Table 4 below.

Table 4: Highlights of the rural experience

<table>
<thead>
<tr>
<th>Highlights of the practicum experience</th>
<th>APU</th>
<th>CSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interacting with the students</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Community and its members</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Teaching in classrooms</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Accommodating hosts</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Community event</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Interacting with rural teachers</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Experiencing cultural differences</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Developed closer peer group friendships</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

For 11 APU pre-service teachers, teaching and working with students in classrooms highlighted the experience. Several commented that living in a village for a week and being able to interact with community members were the highlights. A female MAT candidate reported: “I stayed with two wonderful teachers. WARM (sic), welcoming and terrific teachers in every way. I also connected with the children, two local women, and their families, and some elders.” Another comment reflects the value of being in the village: “Getting to know real people at a real rural school, instead of reading about the school in a handout.” (APU Male MAT)

For the CSU students, the opportunity to talk with practising teachers in these remote places about their school, their students, the adjustment challenges in living in a remote place and their community as well as having the opportunity to explore what
each remote community was like were key outcomes from their participation. Responses include: ‘Talking to teachers who are teaching in remote rural areas after coming from non-remote areas’ (CSU Female Primary); ‘Talking to teachers one on one’ Learning about the dynamics of rural areas/schools as well as communities.’ (CSU Female Primary); and ‘Enjoyed visiting the towns that I had never been to before and experiencing their atmosphere.’ (CSU Male Secondary).

The following table (Table 5) shows the frequency of responses to three statements using a Likert scale of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. These likert categories were collapsed into three categories Affirmative, Undecided and Negative due to the small number of responses in each original category. When perusing the results holistically, it appears that the aims and goals of the remote experience were realised and that participants gained insights into and hold positive attitudes towards rural schools, students and teaching in those schools. For the majority of students they reported that their participation in the Beyond the Line / Remote Rural Practicum programs was beneficial and that they would recommend the program to other students at their respective university.

Table 5: Perceptions about the Program

<table>
<thead>
<tr>
<th>Statement</th>
<th>University</th>
<th>Affirmative</th>
<th>Undecided</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed the Beyond the Line / Remote Rural Practicum Experience</td>
<td>APU</td>
<td>11</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CSU</td>
<td>26</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I look forward to working in rural communities</td>
<td>APU</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSU</td>
<td>24</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>I would recommend that all students be part of the Beyond the Line / Rural</td>
<td>APU</td>
<td>11</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Practicum Experience</td>
<td>CSU</td>
<td>24</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Both APU and CSU students confirmed the value of the program by their positive response to each of these three questions in Table 5. These students were also asked to provide supportive reasons for their response to the third question in Table 5. Their affirmations included: ‘Great to see how it is out there far from where we live’; ‘You find out so much more than what can be told / researched.’; and ‘Until you actually come and see, you really don’t understand.’

The final open-ended question sought the students’ responses to: Would you be prepared to seek/accept a rural appointment next year? 24 CSU students responded ‘YES’ to this question with one student responding ‘Yes and No depending on the location’ and one student did not answer this question. Affirmative responses focused on a preference for rural service, e.g. ‘I had planned to (CSU Female Secondary); ‘I am from a rural area and would prefer to stay in the country’ (CSU Male Secondary); and ‘because I’m a farm girl, I want to live life in the country’ (CSU Female Primary).
For the APU students, their responses to this question about where they intended to seek a teaching appointment upon graduation revealed that 2 students were definitely seeking a rural appointment, 10 students were seeking an urban (Anchorage) based appointment, one was unsure of where they would seek an appointment and one was planning to seek employment outside the state of Alaska.

**Conclusion**

Through an intensive five or six day remote rural teaching experience, pre-service teachers are provided with the opportunity to gain first hand knowledge and understandings about remote places that are beyond their usual range of life and practice teaching experiences.

Pre-service teachers who completed the *Beyond the Line / Remote Rural Practicum* experience indicated that they do have a better understanding of and empathy towards rural teaching, rural students and rural communities. For the APU students, having the opportunity to be ‘in charge’ of creating, delivering and assessing lessons prior to their student teaching endeavor, rural practicum participants develop a sense of accomplishment and feel better prepared for the experiences that are to follow. Their self-efficacy for teaching may be improved after having endured the remoteness of an Alaskan village and having successfully interacted with total strangers to become an integral part of their community for a short time. For the CSU students, the opportunity to teach in a number of different remote schools over the week plus talking with the local teachers and community members have increased their understanding about remote schools, their communities and the range of facilities that they have.

The remote teaching experience moved the students beyond their personally constructed line of acceptable school placements and situated them in places where they were closer to edge of remote educational provision. This experience personally challenged many students but through their first hand experiences in the remote places, they found that they have a deeper and more complete understanding of teaching and living in remote rural places and have developed a realistic appreciation of how close to the edge they are prepared to go in their teaching careers.

However, a 5-6 day intense immersion experience can benefit rural schools, rural communities, rural teachers and pre-service teachers in several ways as we have identified in this paper, but we argue that this experience needs to be complimented by on-campus studies about rural education in a sustained way to fully prepare the graduate teacher for teaching in remote and rural schools. The nature of such courses was analysed and presented by Boylan (2005) at the 2005 National SPERA Conference.

**References**


AN EARLY GLIMPSE OF UNIVERSITY AND HEALTH CAREERS FOR REGIONAL YEAR 10 STUDENTS

Joy Penman, Bronwyn Ellis, Frances White
(Centre for Regional Engagement, University of South Australia, Whyalla)
Gary Misan (Spencer Gulf Rural Health School)

ABSTRACT
A three-day academic experience at a regional university campus provided a group of local Year 10 students with a taste of university life and an insight into health professions career options. The program was co-sponsored by the Spencer Gulf Rural Health School and Nursing and Rural Health at the University of South Australia’s Centre for Regional Engagement, Whyalla, and also involved other campus staff and health professionals from the community. It aimed to demystify university education by providing opportunities for students to experience university learning contexts under the direction of experienced academics. Students were also provided with information about health careers, entry pathways and support opportunities. The overall program was positively regarded by the participants and organisers. Fourteen of the sixteen students involved completed the program and in an evaluation survey provided feedback useful for designing future programs. The majority found it a pleasant learning experience and felt positive about future university studies, as well as gaining a better understanding of health, health services and health professionals. Suggestions for improvement related to timing, possible additional activities, and an increase in hands-on activities. Recommendations for future school-university initiatives are included.

INTRODUCTION
In mid 2004 the Whyalla Campus and the Spencer Gulf Rural Health School (SGRHS) (located at Whyalla and involving both University of South Australia and University of Adelaide inputs) instituted small project grants for innovative developments in the areas of scholarship, research or community service, with the stipulation that successful applications had to involve collaboration of Campus and SGRHS staff. A proposal for a Year 10 university experience program was funded. It was felt that making contact with secondary students needed to happen earlier than the final school years so that they could make more informed subject choices for their South Australian Certificate of Education years and consider university as a real option afterwards. The proposed program aimed to: give Year 10 students an opportunity to engage in interesting learning activities at the Campus, becoming familiar with the facilities and staff; stimulate their interest in learning more about the programs being offered by the University, especially locally; create an understanding of the significance of rural health and the role of rural health professionals; and assist them to consider the range of career opportunities available in rural health care. It would also develop and build relationships with secondary schools.

Such initiatives are important because of the critical shortage of health professionals in rural areas. Numerous studies have discussed the issues associated with difficulties in recruiting and retaining health professionals in rural and remote areas (e.g. Conley 1997; Handley 1999). Contributing factors include isolation, particularly professional isolation and consequent lack of support, and lesser opportunities for professional development (Cramer, 1994; Jones & Blue, 1998). While some strategies have been put in place to address these issues – such as the National Rural Health Strategy (National Rural Health Alliance, 1996) and the Department of Health and Ageing’s Continuing Professional Education Scheme for Rural and Remote Nurses, its
provision of scholarships for undergraduate rural students (Royal College of Nursing Australia, 2006); also various university and government Rural Allied Health Scholarships – more remains to be done. Providing supported rural placements for metropolitan-based students can help attract future professionals, but initiatives that encourage young people already living in non-metropolitan areas to consider taking up careers in health can also play a part in alleviating personnel shortages. Such recruits will be enabled to stay in or return to their home communities or similar situations and help to meet community needs.

Over the years, the Campus has been involved in various school outreach initiatives, sometimes instigated by the schools themselves: for example, visits by primary school children to nursing science laboratories, study skills sessions for Year 12 students from two other towns some years ago, school groups visiting the Campus on the annual Open Day and at other times, visits to high schools by nurses and lecturers, career expositions and talks. A successful Siemens Science Experience was run at the Campus in the past. However, such initiatives have been of a limited nature, with the emphasis often being on information and program marketing directed at senior students about to make choices about their tertiary applications.

Secondary students in regional areas are often less likely than metropolitan students to see university as the normal pathway for them to follow once their schooldays are over. After surveying literature relating to this issue and other issues stemming from it, the paper outlines a program designed to increase such students’ awareness of possible university study and the careers it can open up for them, discusses an evaluation of the first offering of the program and makes recommendations for future similar initiatives. The findings will be of interest and use to careers advisers and school counsellors.

SECONDARY STUDENTS AND UNIVERSITY ASPIRATIONS

Rural under-representation
Back in 1989, the then Commonwealth Department of Employment, Education and Training issued its *A fair chance for all* draft discussion paper, identifying a number of groups that were under-represented in higher education; one such group was people from rural and isolated areas. The 2000 *National Inquiry into Rural and Remote Education* (HREOC, 2000) also identified issues relating to availability and access to quality education, and found that country students were less likely to complete their schooling than metropolitan students. A submission to the Crossroads Review of Higher Education refers to the continuing rural disadvantage with regard to higher education participation (Callaghan, 2002). Added to this are other debates relating to regional youth out-migration (Gabriel, 2000). What has been done to address the under-representation of rural students in higher education? Scholarships targeting rural students have helped overcome financial barriers, weightings have been added to tertiary entrance scores to compensate for various forms of educational disadvantage experienced by non-metropolitan students, and universities have put supports in place to assist students needing to move to other locations for study. However, these will only be effective if potential tertiary students see this as a pathway for them.
Careers advice
A study ascertaining school students’ disposition to health care careers by Hemsley-Brown and Foskett (1999) identified that students in late primary school are making career decisions based on their perception of the career rather than facts about the career. It would seem that lack of exposure to health professionals for many rural students could result in their not having the correct perception of what the career in health care entails. These authors found that by the time students reached Years 11 and 12 they had set ideas of the careers they were not going to pursue after their secondary schooling, although some fluidity was still present. The choice of entering into a health profession seems to be closely aligned to the cultural influences of the rural community itself, where ‘structural barriers were underpinned by cultural assumptions about gender, occupational roles in rural communities and professed lack of academic ability’ (Durey, McNamara & Larson, 2003, p. 147). Career advisers in one study (Alexander & Fraser, 2001) believed that students were leaving their career choice until too late in their schooling, and another survey (Fraser, Alexander, Simpkins & Temperley, 2003) found that career advisers often do not target students for health careers until it is too late. This results in many students finding that they are studying inappropriate subjects that do not permit them a university entrance score, and this presents further obstacles to their career aspirations.

Increasing prospective applicants’ knowledge of health careers within rural Australia has been considered essential in order to increase school students’ understanding of the diverse nature of the work involved in health professions. Doing this at an earlier stage would ensure that students are making more informed choices about their future career options. Earlier career advice, prior to work experience, would go some way to achieving this; students can then make a more informed decision concerning their work experiences and possibly get more out of them. Work experience is valuable in that it provides access to health professionals and, if there is a strong partnership between the local health agency and the university, it also provides access to university lecturers and campus. This contact is a strong motivator for rural students who have not had a strong culture of study beyond compulsory schooling within their home and community environment. Early career advice also has the potential to challenge existing and often traditional attitudes and assumptions about careers in health and university study (Muldoon & Reilly, 2003; Alexander & Fraser, 2001; Hemsley-Brown & Foskett, 1999), and this has the potential to bring down the barriers to perceptions regarding health careers as being traditionally gendered. Secondary students should be able to build their store of careers information as they progress through school, assisted from multiple sources, teachers, professionals, university staff, as well as a variety of publications (Hughes, 2005).

PREPARING TO GIVE YEAR 10 STUDENTS A UNIVERSITY EXPERIENCE

Planning
A working group consisting of six Campus (four, including an adjunct) and Spencer Gulf Rural Health School staff (two) planned the program and presented the idea to schools. The Marketing Officer and administrative staff also had some involvement. It was decided to pilot the program with local schools, with the intention of later offering it to more isolated students. The decision was made for this first program to focus on health studies, involving staff mainly from those areas.
Selection and Recruitment of Participants

Introductory letters to the three Whyalla secondary schools having Year 10 students outlined the aims of the program. Letters introducing the program were distributed to the counsellors and contact persons (e.g. the Year 10 coordinator), giving information about the purpose of the program, the benefits to be derived from it, and participants’ actual involvement. It was planned to have 20 high school students participate in the university experience program. It was left up to the schools to select the students to take part, the criteria being that they were currently in Year 10 and that they consented to participate in the three-day program. These schools disseminated information concerning the initiative to their Year 10 students. Those interested in participating were provided with further details about program content, timing and venues.

THE THREE-DAY PROGRAM

The program occupied a Tuesday, Wednesday and Thursday of the July school holidays. This was also during the university break, thus allowing staff to concentrate on these students without normal class demands. As well as activities designed to present the realities of working in groups (not necessarily of their choosing, as students from different schools were spread among the groups), to increase their scientific literacy, to learn about health career possibilities in the region and to investigate health issues, the program included a half-day excursion to Port Augusta (45 minutes away by road) to visit health facilities and meet health professionals there, and also optional evening social activities. Nursing segments were very practical, with hands-on activities including cardio-pulmonary resuscitation (CPR) and basic life support, and staining slides to show the presence of microbes. Medical jargon was clarified for the students. The aim was to make science more understandable and user-friendly. Each group researched and presented on hypertension, diabetes, myocardial infarction, or cardiovascular accident. Guidance was given on assessing the validity and correctness of information obtained from the Internet. An outline of the program is given in Appendix 1. It was presented by the University Experience project team, and also drew on the expertise of health professionals from the community.

Other school holiday priorities discouraged some potential recruits, but 16 students participated. Of these, 14 completed the three days. Two students did not complete the three-day program for personal reasons, one not returning after the first day and the other staying for two of the three days. An evaluation was conducted to determine the impact of the three-day program on students’ ideas about university and health careers.

EVALUATING THE PROGRAM

The intention was to survey the participants concerning personal data, beliefs and attitudes toward tertiary studies, and capture their perceptions of the university experience program and their experience and satisfaction or dissatisfaction with it, so as to provide the organisers with data useful for improving future programs.

A qualitative-interpretative approach to research was used to gain access to students’ beliefs and attitudes about tertiary studies, their self-disclosed reasons for pursuing
tertiary education, and the participants’ perceptions of the program. The survey also provided a description of their socio-demographic profile.

The data collection instrument for this purpose was a 30-item questionnaire (see Appendix 2) developed by the program team, and including both open-ended and closed questions. It was administered on the last day of the program, before the closing session at which certificates of participation were awarded. The students were given a brief information statement beforehand, explaining the purpose of the evaluation and assuring them that participation in the survey was voluntary and confidential. Completing the questionnaire was taken as consenting to participate in the study. The questionnaire used the University’s TellUs2 online survey facility and was completed by the participants anonymously on pool computers (thereby also giving the secondary students another type of university experience). Permission to use the data submitted by the students was obtained from the principals of the three high schools participating. Steps were undertaken to ensure that the evaluation of the program met the requirements of the university’s Human Research Ethics Committee.

Data analysis included both mechanical and interpretative phases as suggested by Minichiello et al. (1995). The mechanical phase consisted of physically sorting the data into files and tables providing easy access to sections. This was assisted by the TellUs2 system, which automatically collated the quantitative data as column graphs and produced a printout of all the comments for the open-ended questions. The interpretative phase comprised coding and analysing the organised data.

RESULTS OF THE EVALUATION

Demographics
All 14 students who completed the program participated in the evaluation: 11 females and 3 males. All participants were born in the years 1989 or 1990. No-one identified as Indigenous. All had lived for more than 10 years in rural Australia (i.e. outside a capital city), and in fact all had lived in Whyalla for more than 10 years. Five students were enrolled at Government schools (2 at one and 3 at another), and 9 at a Catholic school.

In the event that they did not pursue university studies, the majority (13) were interested in obtaining a TAFE qualification. The highest level of education reached by the mother was tertiary study according to 6 students (5 at university), Year 12 (4), Year 11 (2) and Year 10 (1), while one did not know the level. The highest level of education reached by the father was also tertiary according to 6 students (5 at university), Year 12 (3), Year 10 (1), while 4 did not know. There were family members who had completed TAFE or similar qualifications, namely the mother (6), father (3), sister (1) and brother (3). The members of the family that had completed university qualifications included mother (4), father (4), grandparents (2) and sister (1). There were 3 students who revealed that no-one in the family had completed a university qualification. There were at present family members attending university and these were a brother (1), sisters (2) and mother (1). When asked about whether they would be the first person in their family to go to university, 6 said that they would, 7 would not, and one did not reply.
The program
Perceptions about the program were positive and encouraging. All students ‘agreed’ (5) or ‘strongly agreed’ (9) that the academic visit was a pleasant learning experience. Most agreed (6 strongly) that there were many learning opportunities in the visit. All found the staff members to be very willing and available to assist their learning (13 agreeing strongly). The academic experience gave them a better understanding of what universities were all about (5 agreed, 9 agreed strongly). All participants also reported that they had learned useful skills during the visit (6 agreed, 8 agreed strongly). In addition, the participants thought that the activities were well organised (7 agreed, 7 agreed strongly). Most agreed (10) that there had been sufficient time to get to know other students and university staff, while 2 agreed strongly. As a result of their experience, all felt positive about university studies (7 agreed, 7 agreed strongly) and might consider pursuing them (3 agreed, 11 agreed strongly). Also, as a consequence of this experience, participants reported that they had a better understanding of health, health services and health professionals (4 agreed, 10 agreed strongly). The majority (13 out of 14) would recommend the program to other students, believing that it would benefit them (9 agreed strongly).

The item soliciting suggestions for improvement drew varied responses. Some (3) found the day to be long and suggested shortening it, while 2 students wanted to extend the program to a week. Fewer speeches and more hands-on activities were also suggested. One student recommended involving more students while another recommended the use of the local hospital and nursing home at Whyalla. A few did not appreciate the making a tablet session, as they did not get an opportunity to do this themselves.

Overall, the program was shown by the evaluation feedback and gratifying comments to have been very successful. The students considered the best things about the three days to be: practical activities (9 comments), recreational activities (6), meeting new people (4), food and free materials (4), meeting health professionals and learning about their professions (3), and learning about the university and the hospital (3). Also mentioned by individual students were: doing the presentations, having fun, and learning about health in Australia.

Pursuing further studies
When asked to list three careers that they might like to take up after leaving school, the following responses were given: midwife/nurse (6), medicine (4), lawyer (4), primary or secondary teacher (4), physiotherapy (3), pharmacist (2), speech pathology/occupational therapy (2), psychologist (2), marine biologist (2), orthodontist (1), dental technician (1), police (1), interior design (1), sports scientist (1), forensic investigator (1), play coordinator (1), diver (1), restaurant owner/manager (1), electrician (1), and fireman (1).

The factors that would facilitate students’ going to university were many and varied. The influence of friends was one of the more popular reasons (4). The other reasons put forward included proximity to family (3), tertiary education ranking (2), HECS fees (1), accommodation (1), getting a job (1), facilities at the university (1), programs offered (1), and information in the post (1). One participant did not respond to this item.
A number of factors would deter these high school students from going to university, but the most significant factor was finances, mentioned by 8 participants. Second to cost was leaving family and friends, having no friends at university or not knowing anyone (5). In addition, there were concerns about accommodation (2) and achieving the tertiary education ranking needed for university (2).

DISCUSSION AND RECOMMENDATIONS

Limitations of the research are that generalisations are confined to the 14 participants in the survey. This being a pilot study, the sample size was understandably small. Moreover, the fact that these students lived near to a university campus meant that they had potential advantages not enjoyed by more distant students (Western, McMillan & Durrington, 1998), and also that less orientation was needed – for students living in distant areas, an introduction to the city and its environs would need to be included.

The fact that the program was conducted during students’ holidays meant that they needed to be self-motivated and committed to attend. This also no doubt meant that the group was more cooperative and interested than a random group of Year 10 students! The predominance of students from one school was possibly explained by the influence of one student in particular who had family connections with the university and encouraged her classmates to take part. The fact that students could take part without travelling elsewhere had the advantage for them of linking learning to place (Shelton, 2003).

The importance of the program in the eyes of the Campus was signalled to the students by the presence and involvement of the Campus Dean/Director: Regional Engagement during the opening and closing. In addition the Team Leader of the Nursing and Rural Health staff and a representative of the Whyalla Mayor were also involved, telling students they may very well be the future professionals. The involvement of other staff in various segments also indicated the focus being given to the program.

All of the students involved had lived in Whyalla for over half their lives and so had some familiarity with the existence of the university campus; they were equally aware of TAFE possibilities and some were interested in pursuing those. More girls than boys attended and this is consistent with current higher education trends.

As well as the formal evaluation data, other information came from observation and students’ spontaneous comments: one did not wish for the program to come to an end, and wondered what he would do the next day! The same student later asked one of the team when there would be another program – unfortunately for him, further programs would be likely to cater to a different group of schools. Later anecdotal reports emphasised just how much individual students felt that they had learned in just a few days. It appeared that new, cross-school, friendships were formed, and networking opportunities developed. One parent commented to another university staff member how pleased they were with the initiative, and one school counsellor wrote letter of appreciation. (The schools have a CD-ROM record of the presentations by the students and the awarding of their certificates of participation.)
With regard to the program itself, it was obvious that the activities with plenty of hands-on involvement were most enjoyable, such as the group activities in the nursing segments. The off-campus activities – movie and bowling in the evenings and the field trip to Port Augusta – were very popular and helped students and staff involved to get to know one another better, as well as the planned learning aspects. In providing such a university experience, a balance needs to be reached between giving students a realistic impression of university studies and the careers they can lead to on the one hand, and on the other giving them an enjoyable experience that will increase their motivation to consider university in the future.

Exactly how did the program benefit the students? There were a number of ways the program impacted on the students. It provided a non-threatening environment for learning, with much support and encouragement, giving secondary students an opportunity to participate in university activities/studies. It provided a bridge to the university for the students so that misconceptions could be corrected and it stimulated their interest in university programs (‘You convinced me about nursing’ as a back-up choice, said one), spurring them on to aim for tertiary education. It boosted the participants’ scientific and technological literacy. It got them to consider career opportunities available in rural health care and so potentially influenced what they wanted to do after high school. It helped create understanding of the significance of rural health and role of health professionals. It encouraged them to maintain the university links while still at school by using the library membership they had been given.

Strategies to enhance uptake of students to university need further development. As money has been mentioned by many of the participants as a perceived difficulty in the way of future university studies, ways of addressing this, or at least the perception, need to be considered. Pushing for further scholarship assistance for non-metropolitan students is a possibility, but also students need to be fully informed of what assistance is already available. Financial concerns are added to by the fact that many of the possible future careers the students listed depend on study programs not currently available in Whyalla. However, raising awareness of possibilities is valuable in itself, and some had their prior options expanded. The issues of financial situation, social sacrifices and limited program availability in the local area indicate that tertiary offerings need continual re-examination. There has been some investigation of the feasibility of introducing teacher education and other programs; such developments would be appreciated by many families and increase the likelihood of university studies for many local students.

Consideration needs to be given to alternative time-frames for the program, in line with students’ suggestions and also with staff endurance levels! With a group of local Whyalla students it is feasible to spread the program over more, shorter days; however, with students from distant schools, as originally envisaged, accommodation expenses would probably dictate confining the program to the three days. Other programs run in other places targeting Year 10 can provide ideas, for example the health careers camps run by the University of Tasmania’s University Department of Rural Health (Camping out ..., 2005), and programs for different year levels have aspects that could be considered for implementation, for example sessions spread over several weeks as in a Queensland initiative (Hughes, 2005, and personal communication, 6 April 2006). Suggestions have been made for targeting potential
mature age students as well as current school students, and possibly including parents. Targeting a program to Aboriginal secondary students has also been considered for the future. Future developments in such programs would be assisted by funding allocations built in to the Campus’s annual budget.

CONCLUSION

For the university and schools the university experience for Year 10 students helped to build pathways and partnerships with school personnel and health professionals, easing the way to further collaborations. Such cooperation is a valuable tool in enhancing young students’ knowledge of their future study and career options. Programs of this type also enable university staff to be more aware of the knowledge and skills that students of this level possess. The evaluation showed that the immediate objectives of the program had been met; following up these students after they have left school to determine which ones have actually entered upon health career pathways would be an interesting exercise. The evaluation provided those involved in the organisation of the program with an insight into ways to improve future offerings of similar programs targeting secondary students.

REFERENCES


ACKNOWLEDGEMENTS

We thank the students who participated, their schools for encouraging them to take part, and the outside speakers and organisations that contributed to the program. We are grateful to the Whyalla Campus and the Spencer Gulf Rural Health School for providing the funds to make possible this experience of university for regional secondary students.
APPENDIX 1: THE PROGRAM

Tuesday 12 July 2005

9.00 a.m.  Registration and Welcome
9.15 a.m.  Getting to know the group; Group dynamics
9.45 a.m.  Health perspectives, Determinants, Health care system, Health professionals
10.15 a.m. Morning tea
10.45 a.m. Lecture/Demonstrations – What nurses do …
11.15 a.m. Practical Laboratory Sessions: Glow germ test, height and weight, BMI, vital signs
12 noon  Lunch-time barbecue
1.00 p.m.  (15 minute segments) Meet a scientist or staff member: pharmacist, podiatrist, dietician, occupational therapist, speech pathologist, etc.
3.00 p.m.  Afternoon tea
3.30–5.00 p.m. Tour of the university and SGRHS
            Meet with continuing students
            Library Visit

7.00–9.00 p.m.  Bowling (Whyalla Tenpin Bowl, 103 Essington Lewis Avenue)

Wednesday 13 July 2005

9.00 a.m.  Dividing into small groups; getting topics for presentations
9.30 a.m.  Activities in groups:
            1) Microbiology: staining micro-organisms; water analysis
            2) Chemistry: Let’s make a tablet
            3) Web-based research
            4) Nursing: BSL, slings, vitalograph readings, CPR
10.15 a.m. Morning tea
10.45 a.m. Activities in groups (as above, but each group moving to a different topic)
11.30 a.m. Understanding medical and biological jargon
12 noon  Lunch time barbecue
1.00 p.m.  Activities in groups (as above, but each group moving to a different topic)
1.45 p.m.  Activities in groups (as above, but each group moving to a different topic)
2.30 p.m.  Afternoon tea
3.00–5.00 p.m. Groups meet to discuss topic, do research, plan presentation, divide work

7.30–10 p.m.  Movie at Whyalla Twin Cinemas

Thursday 14 July 2005

9.00 a.m.  Travel to Port Augusta
10.00 a.m. In two groups visit sites by rotation: Pika Wiya Learning Centre,
Pika Wiya Health Centre [Indigenous health centre], Port Augusta Hospital

12 noon       Packed lunch (provided)
1.00 p.m.     Travel back to Whyalla
2.00 p.m.     Student presentations (students to present their topics)
2.30 p.m.     Afternoon tea
3.30–5.00 p.m. Summary and debrief; evaluation – highlights, awarding of certificates
APPENDIX 2: THE QUESTIONNAIRE

To save space, the actual electronic questionnaire format has not been reproduced here, with its response buttons, drop-down responses etc. However, the content is as on the web-based survey form, with indications of the type of responses available.

Evaluation of University Experience at Whyalla Campus
Revised 12 July 2005

Welcome to the University of SA Survey Form. This survey hopes to capture some information about you, your aspirations and experiences over the last few days as part of the Year 10 University Experience Program. There are 30 questions. All responses are anonymous (i.e. we don't know who you are when we see the results). Completing the survey is voluntary (i.e. you don't have to do it) and you don't have to answer every question. Of course we would like you to complete the survey if possible so we can plan better for students who follow you next time. The survey should take about 10 minutes and there is no need to rush. When you have finished and are happy with your responses then press the Submit button to save your answers.

Thank you for your time.

About you
1. What is your gender? (Female, Male)
2. When were you born? (Select from drop-down box of years.)
3. (Optional question) Do you identify yourself as of Aboriginal or Torres Strait Islander descent? (Yes, No)
4. How long have you lived in rural Australia (i.e. outside of a capital city)? (Select from drop-down box: less than 3 years, 3-6 years, more than 6 but less than 10 years, more than 10 years)
5. How long have you lived in Whyalla? (Similar possible responses as for Q4)
6. Which school do you go to? (Button for each school)
7. If you go to University when you finish high school, would you be the first person in your family to do so? (Yes, No)
8. If you don't plan to go to University would you be interested in obtaining a TAFE qualification? (Yes, No)
9. What is the highest level of education reached by your mother? (Select from drop-down box: Year 10, Year 11, Year 12, TAFE Certificate or Diploma, University, I don’t know)
10. What is the highest level of education reached by your father? (Similar possible responses as for Q9)
11. Which members of your family have completed a TAFE or similar qualification? (Multiple answers can be selected by holding Ctrl key down: 10 choices – siblings, parents, grandparents)
12. Which members of your family have completed a University qualification? (Similar possible responses as for Q11)
13. Which member (if any) of your family is currently attending University? (Similar possible responses as for Q12)
About your learning
(Questions 14-22 and 25-26 had Strongly disagree, Disagree, Neutral, Agree, Strongly agree as possible answers.)
14. Overall, the academic visit was a pleasant learning experience.
15. There were many learning opportunities for me in this visit.
16. The staff members were very willing and available to assist my learning.
17. This academic experience gave me better understanding of what universities were all about.
18. I learnt some useful skills during this visit.
19. The activities were well organised.
20. There was sufficient time to get to know other students and university staff.
21. As a result of my experience, I feel positive about university studies.
22. As a result of my experience, I might consider pursuing university studies.
(The open-ended Questions 23-24 and 27-30 were followed by a box in which text could be typed.)
23. What factors would make it easy for you to go to University? (e.g. if I could go to Uni in Whyalla)
24. What factors would prevent or make it difficult for you to go to University? (e.g. leaving family and friends, accommodation costs)
25. As a result of my experience, I have a better understanding of health, health services and health professionals.
26. The university experience would benefit other high school students.
27. The best things about the three days were:
28. Something that I think would improve future visits is:
29. List 3 careers that you might like to 'be' / 'do' after you leave school (e.g. nurse, fireman, astronaut, AFL footballer, web developer).
30. Additional comments ...

Thank you for your participation! All the best with the rest of your high school studies and your future careers.
From The University Experience Project Team (Nursing and Rural Health, Whyalla, in partnership with the Spencer Gulf Rural Health School)
Whyalla-Worcester connection:
The value of short-term rural clinical placements

Joy Penman
University of South Australia, Whyalla Campus, Australia

Valerie Gorton, Katy Darby and Karl Jones
University of Worcester, Worcestershire, England

Abstract:
The University of South Australia includes in its programs various opportunities for students to study abroad, as well as enco uraging in-coming short-term exchange and full-program international students. In 2005, Nursing and Rural Health of the University's Whyalla regional campus welcomed two graduating students of the University of Worcester for a two-week rural clinical placement. This paper will discuss the benefits of short-term international rural clinical experience, which include: cultural understandings; understanding of health nursing concepts; personal and professional growth; and development of graduate qualities in students.

Background
In a recent study of 332 undergraduate students from 10 of the leading Asian markets for higher education, it was found that Australia is the favourite destination of foreign students, overtaking the United States and Britain (Cohen, 2005). The reasons for this shift in preference were varied, including relative affordability, Australia’s aggressive recruitment, and positive experiences of student life in Australia.
At the University of South Australia, the International Student Exchange Program allows its students international experience through completing part of a degree overseas; at the same time it allows international students academic experience at the University (UniSA International Students, nd). The University has arranged exchange destinations with more than 60 institutions in over 30 countries. The international relations team is in charge of sustaining strategic agreements with foreign institutions including the University of Worcester in England.

Study exchanges have proven to be beneficial for students. Overseas exchanges are favoured highly by many employers (UniSA International Students, nd). Lewis and Neisembaum (2005) report on benefits, which may include acquisition of a foreign language, improving knowledge of the host culture, and transforming worldviews. The transforming power of international experience occurs when students question their beliefs, gather data, and use these to analyse their roles in a globalised society.

International students enjoy their stay at the University of South Australia campuses (UniSA International Students, nd). Feedback from the students has been complimentary; however, the majority of the testimonials are all about Adelaide experiences. This paper discusses the value of a short-term rural clinical placement provided by the Whyalla campus, one of two regional centres of the University, in conjunction with local health facilities.

How a new international link was formed
During a lifelong learning conference, held in Queensland in 2004, the International Coordinator of the Institute of Health and Social Care at the University of Worcester presented a paper on their experience in facilitating overseas study through individual student learning contracts (Gorton, 2004). During this conference, a Whyalla campus
nursing lecturer and the coordinator discussed student exchanges between the two Universities and the expansion of the Adelaide placement to include rural experience. The Whyalla campus, where Nursing and Rural Health is located, is a ‘progressive regionally based centre providing quality education and consultancy services for students, community groups and industry partners across Australia’ (UniSA Programs and Courses, nd). The Institute, on the other hand, provides pre-qualification education in nursing and midwifery, as well as a range of undergraduate and post graduate degree courses in health and social care (University of Worcester, nd). It provides elective placement experiences for students, including the opportunity to undertake these, with or without theoretical input, overseas.

The Worcester students were offered the rural and Aboriginal health option. The lecturer gave the coordinator a confident recommendation on the region and what it could offer. After emails, calls and discussions, a customised program that would provide Worcester students with an opportunity to complete their practicum at Whyalla was finalised. In October 2005, the campus welcomed the first cohort of students from Worcester for their two-week rural placement (which followed a five-week placement at the Royal Adelaide Hospital in Adelaide).

The rural clinical placement program
The main aim of this study abroad rural clinical placement was to provide students with an understanding of the following: nursing education in Australia, varied roles of nurses, Australian health care delivery system, and health promotion in rural Australia. The other aims were to practise nursing skills, work closely with health professionals, become familiar with the host culture and cultural influences on health. For the Universities, the aims were to foster good relations between the two and to find out what both had to offer and how both could benefit from study exchanges. The objectives submitted by the two students guided the design of the program.

Following their arrival, they were given a brief tour of the city and helped to settle at the student village. The students met the staff and toured the University campus the next day. They spent the rest of the day learning about the University, the nursing program, rural and remote nursing, Indigenous health, and other topics of interest. The students spent two days at the community health centre, two days at an aged care facility and another three-day clinical placement was arranged at the Whyalla hospital. A visit to the Port Augusta hospital, Aboriginal Health Centre and Unique Centre of Learning at Pika Wiya at Port Augusta was also undertaken.

In addition, the students presented talks on nurse education and practice in England. In the weekend was a trip to Cowell, a small town 110 kilometres from Whyalla. The highlight of this trip was visiting a six-bed hospital and aged care facility and doing more hands-on nursing. The visitors gained a broader idea of the lives of the people living in Cowell by visiting a wheat and oyster farm – the aquaculture tour was interesting, but hunting for jade nearby was more appealing. Interspersed in the two-week schedule were social gatherings as well.

Post-clinical placement evaluation
An evaluation was conducted at the end of the placement. A 22-item survey instrument, consisting of open-ended and closed questions, was used. The first part of the questionnaire consisted of 12 statements where the student was to respond using a
Likert scale from 1 to 5, 1 meaning ‘strongly agree’, 5 meaning ‘strongly disagree’. The students were asked about the general ambiance of the venues, the staff members, meeting of objectives, orientation to and preparedness for placement, confidence levels, and overall benefit for other students. The second part of the evaluation explored perceptions relating to the adequacy of learning opportunities, positive and negative experiences, and ways by which the activity could be improved. The qualitative data gathered from the survey were collated and subjected to content analysis. Participation in the evaluation was voluntary.

Results of the evaluation
Both students participated in the survey and gave very positive feedback regarding their experiences. The students ‘agreed’ to ‘strongly agreed’ on the majority of the criteria set. The clinical placement was a pleasant learning experience. Students’ objectives were met satisfactorily. The placement assisted learning, enhanced clinical skills, and was supportive of professional growth. The students found the venues to be rich in learning opportunities. Adequate orientation was provided and staff were available and willing to assist students. They felt that a similar experience would benefit other students. As a result of this experience, they felt confident about working in rural areas. One student felt unsure about placement preparation and both students were uncertain whether the venues were expecting them.

There were many positive experiences reported, one of which was achieving learning objectives initially outlined. The friendly and knowledgeable staff the students worked with was another positive. Learning about how health professionals overcame the challenge of rurality, remoteness, and isolation was a unique learning opportunity. The visit to Port Augusta was an ‘eye-opener’. There were many benefits in participating in the program and these were very similar to the positive experiences mentioned. There were also negative experiences such as lack of transport and Internet access.

This placement had a positive impact on the relationship between the two institutions as it marked the beginning of more exchanges, building on this successful placement. Suggestions for improving the placement were spending more time at Port Augusta, as this was found to be extremely educational, and the future inclusion of the Royal Flying Doctor Service. One participant suggested also requesting financial assistance from their University to help support students’ study in Australia.

Discussion
Clinical placements are a significant component of the nursing program because these provide experiential learning situations, which are integral to the study of nursing. Contemporary nursing programs include a range of clinical courses providing for students occasions to put theory into practice. The benefits of clinical placements can be further extended by locating them in health settings abroad where students have prospects of learning at first hand about people and communities, become immersed in different cultures and languages, and can be transformed by health challenges and realities. Scott and Faugler (2005) report on the lessons learnt on study tours by nurse leaders who travelled to Europe. They conclude that there is much to learn from the health care systems of other countries. In partnering with colleagues abroad, ideas are exchanged and alternatives are explored. These Worcester students had a similar
experience as they exchanged opinions and observations with staff working in various rural clinical venues, such as in the area of maintaining quality of care.

Rural nursing is crucial in health care delivery. Rural communities offer unique opportunities for independent nursing practice and community participation in health. The limitations in rural areas provide the drive for student learning (Van Hofwegen, Kirkham, and Harwood, 2005). ‘I think it’s interesting how nurses in rural communities have to wear so many different hats in the course of their day to day jobs,’ commented one student. ‘Visiting rural Australia has been great. I like rural communities. Worcester is a smaller town so I did find a few similarities which is part of the reason why I wanted to include a rural experience as part of my overall study abroad practicum’ (Dewar, 2005, p. 2). These students desired something different, a real experience of what it was like to be a country nurse in Australia.

The clinicians supervising the students were highly satisfied with their performance. The majority noted how the students adjusted easily, worked efficiently, and applied themselves during their shifts. They found the students to be caring, friendly, confident, and respectful of cultural differences. Undertaking clinical experience in Australia proved to be advantageous for the students in terms of enhancing their cultural understandings, professional knowledge, nursing skills, networks, intellectual stimulation, and self-knowledge. These benefits are discussed below.

Cultural understandings
Cultural experience was one of the reasons why the students applied for this international experience. The unique experience afforded by Australia such as the ‘incredible amount of space and distance between towns and cities’ was mentioned (Dewar, 2005, p. 1). Both commented on the ‘country friendliness’ and ‘laid back lifestyle’. ‘It’s quite a bit different than back in England, people have been genuine, helpful and friendly. … When we first arrived and got off the coach, we were picked up and driven to the Whyalla Campus student accommodation, on a Saturday yet!’, explained one participant. The students appreciated acquaintances willing to give them lifts to and from work. The sojourners gained many new friendships.

The visit to Port Augusta was both informative and beneficial as students gained an appreciation of primary health care practise delivered at the health centre and the Aboriginal nurse education and training conducted at the Unique Centre of Learning at Pika Wiya. Students gained some understanding and insight of the many needs of Aboriginal people including health needs which urgently need attention considering the dismal health status of the majority of Aboriginal people. The students had a glimpse of Aboriginal culture, customs and traditions, as well as the dynamics in Aboriginal communities. They were given an opportunity to explore how a culturally sensitive health care might be provided for Aboriginal people. The students learned about community subsystems that support Indigenous people and were able to make comparisons with the subsystems available in their country to support disadvantaged groups in society.

Cultural awareness is important for nurses in order to expand their understanding of clients’ cultures and values. The cultural component develops cross-cultural awareness and cultural sensitivity in students. The students profited not only an
understanding of Australian culture but also learned about themselves and their ability to work in different environments (Penman and Ellis, 2004).

**Understanding of health nursing concepts**
The clinical learning activities were useful and challenging. The learning that transpired included expanding the students’ nursing experience in community nursing, enhancing interpersonal and communication skills, consolidating nursing skills, and acknowledging the difference in cultural practices of individuals and groups. Students were able to compare and contrast the Australian health care system with the British system, identify the socio-economic factors that influence health care provision in Australia, and develop some understanding of how nursing has developed to accommodate these factors, especially in relation to health promotion, Aboriginal health, problems of accessibility and equity of health care, and policy development. In addition, the students explored health conditions and treatments used in the area.

**Personal and professional growth**
The rural clinical placement provided an avenue for personal and professional growth. The students were able to manage themselves effectively while on placement, recognising their abilities and limitations. They practised nursing in accordance with the ethical and legal framework that ensured the primacy of clients (Nursing and Midwifery Council, 2004). There were occasions to demonstrate respect, confidentiality, and fair and safe practice. The areas particularly supportive of professional gains included: health promotion, diabetes management, and mental health. The students profited from the sharing of knowledge, skills, and current practice. Students’ workplace readiness was assisted.

Schon (1987) describes a process where uncertain practice situations are reconstructed and new understandings tested as reflective practice. It involves thinking about one’s practice, deliberating on its appropriateness, and evaluating its effectiveness (Armstrong and Conrad, 1994). The students were challenged to think critically about their practice. Their reflection allowed re-thinking of experiences, to learn from them so as to cope with similar situations in the future (Hoban, 2002).

**Expanded networks**
Very close to professional growth is the opportunity to develop networks. In preparing the program, the lecturer liaised closely with rural health care facilities to provide appropriate clinical supervision. The collaborative partnerships between student and clinician and between student and academic were valuable for student support, knowledge transfer and problem solving (LeGris and Cote, 1997). Successful clinical placements depend upon effective supervision (van Ooijen, 2000).

The placement gave the students and academics the chance to engage in collaborative research, academic writing and presentation. This paper and conference presentation is a direct result of the networking that materialised from the program. Also, networking allows institutions to complement each other, draw on each other’s strengths, and advance each other’s interests (Digby, Garton, and Murdick, 1993). In sharing a vision, resources, and expertise, both institutions create a supportive environment that impacts positively on the learning outcomes of their students.
Developing graduate qualities

Several graduate qualities were believed to have been developed during this time. Communication skills were sharpened through professional conversations and presentations to co-students and health professionals. This contributed also to the development of lifelong learning and to further increase their knowledge of nursing. Overseas placement promoted collaborative skills and provided students with an international perspective of their profession (University of South Australia, 2001). In forming new associations, previously taken for granted understandings of the world of practice are suspended, raising questions about how things are, initiating conversation and debate about practice and how practice may be further improved (Sachs, 1999).

Conclusion

This paper has described an international student placement of nursing students from the University of Worcester and has presented the findings of an evaluation of their clinical experiences. The findings, constrained by small sample size, must be viewed as preliminary results pending further exchanges. Nevertheless, our evaluation shows that a placement of this type is meritorious. Future programs would consider the recommendations, including ensuring that all relevant staff at the venues expected the students, providing clinicians with details of learning objectives, and attending to logistical difficulties.

The placement opened up more opportunities for engagement. The students expressed their desire to come back to Australia either for leisure, study, and/or work. Another six Worcester students have recently requested a placement at Whyalla as a direct result of the influence of the students, who are wanting to get involved with the Australian delegation that will be undertaking a reciprocal visit this year. The International Coordinator of the University of Worcester plans to visit Whyalla to meet personally with participating health agencies.

The rural clinical placement provided rich and meaningful learning experiences for all involved. It presented students with a different view of the profession and role of nurses. The linkage between the universities was vital for academic and cultural understandings. The outcomes suggested that the students benefited from this academic experience, while the staff involved profited by gaining insight into study-abroad experiences and how to best meet the goals of participating universities.

References


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What role for social capital? – Establishing a Warrnambool community education program for disengaged students

Linda Thies, PhD Student,
Faculty of Education, Deakin University

Abstract
Although social capital is frequently understood differently, there is general agreement that it is a resource based on social relationships, characterized by norms of trust and reciprocity. This paper will outline a study which explores the potential of social capital both from the perspective of the formulation of education policy by networks, and for the evaluation of a specific vocational education and training program. The case study is a Community Victorian Certificate of Applied Learning (VCAL) program being established for students from Warrnambool and the surrounding region, with support from the Local Learning and Employment Network, schools and a range of different agencies from within the community. A community reference group is responsible for the planning and development of the program, and it is anticipated that the evaluation of the program will further inform policy at the wider post compulsory education level. Completion of school and transition from school to work is more difficult for students in rural and regional areas than it is for their urban counterparts. This program targets ‘disengaged students’ who have been out of school for a period of time, and have had a fragmented past education. The program aims to re-engage these students through a case management approach to their learning, and to facilitate achievement of VCAL learning outcomes through greater involvement in community and community projects.

Introduction
In a reaction against top down decision making, there has been movement towards support for participatory and community-based approaches in policymaking. In Australia this movement has been enacted in policy areas such as heath, education and community building. Often described as a joined-up government approach, this refers to policy which allows for input from participants and from a wide range of different stakeholders. It has been suggested that this approach has many benefits including being more cost effective and increasing the likelihood that positive outcomes are sustainable. As Falk (2003, p.5) states “…the building of links, trust and the resulting social cohesion between these groups adds the dimension of sustainability to the list of potential benefits of an engaged policy approach.” In Victoria, a number of initiatives in education have focused on the work of networks and their role in community development and capacity building. These approaches can also be described as relying heavily on the principles of social capital, including building and using networks, and the development of social trust.

Smyth (2003) contends that for education institutions to be successful they must develop trusting relationships between school systems, teachers, parents and students. I would argue that the community also has a key role to play, and that social capital can be used to provide a critical perspective on both policy and practice in education.

What is social capital?
The term ‘social capital’, first documented in 1916 was used to refer to the importance of community involvement in the success of the education system in rural West Virginia (Hanifan, 1916). However, it was not until the second half of the 1900’s that the term re-emerged being used in different social, educational and economic contexts (Jacobs, 1961; Schlicht, 1984; Bourdieu, 1986; Coleman, 1987). More recently the
work of Robert Putnam (1995, 2000) focusing on political participation and civic responsibility has ensured that the notion of social capital is included in the discourse of different disciplines, and in policy documents of international agencies and governments. Over the past decade, researchers in a number of different fields have shared the belief that a better understanding of social networks will assist in finding answers in sociology, political science, economics and education.

One of the key differences between theoretical constructs of social capital is the emphasis placed on the individual or collective benefits contingent on social capital. Both Bourdieu (1986) and Coleman (1987) saw social capital as benefiting the individual, although Bourdieu saw the benefit as increased economic capital and Coleman as the securing of human capital. However, Putnam (1993, 2000) a more recent entry into the social capital debate, contended that while social capital can benefit the individual in a wide range of areas such as career advancement or companionship, it also has ‘externalities’ that affect the wider community. That is, it serves to provide both a private and a public good. Putnam defined social capital as “trust, norms and networks that facilitate cooperation for mutual benefit” (1993, p.167). Social capital is not the cooperative action itself, but rather the social norms which reside in the networks that facilitate solutions through collective action. So while the conceptual definitions discussed here use different terminology there does appear to be common understanding of social capital, albeit the focus of application of the theory is very different.

It would seem that there is a degree of general agreement on a definition of social capital as being a resource based on social relationships among people. Even the lyrics of a song from the 1950’s provide popular support for this definition. “Although you haven’t got a penny…if you have friends and neighbors you’re the richest man in town.” Other definitions which place emphasis on collective benefit include social capital consisting of the “norms and networks that enable people to act collectively” (Woolcock and Narayan, 2000, p. 226) and as “the product of social interactions with the potential to contribute to the social, civic, or economic well-being of a community-of-common-purpose (Falk & Kilpatrick, 2000, p. 103), or to attain goals which otherwise could not be attained (Kilpatrick, Field and Falk, 2003, p.417). Stone and Hughes (2000, p.20) claimed that “social capital can be understood quite simply as networks of social relations characterised by norms of trust and reciprocity.” They suggested that this definition implies that social capital, in theory, can be seen as promising something for everyone, and their definition will be the one that is accepted when using the term throughout this paper. As has been outlined, there has been progress towards a common understanding of what constitutes social capital. However, it would appear that this common understanding can become somewhat ‘blurred’ when considering measurement of social capital.

Measurement of Social Capital
The social capital literature recognizes the complexities involved in developing a measurement framework for social capital and a focus on this topic suggests that such a measurement may help provide a better understanding of communities and wider society. (Winter, 2000; Stone, 2001; Kilpatrick et al, 2003; Trewin, 2005) If social capital is to fulfill this promise, and, as has been suggested, contribute positively to policy in a range of different disciplines, it needs to be seen as having some practical and concrete consequences. An understanding of how to measure social capital,
recognition of the value of such a measurement and use of the data to inform policy development would provide confirmation of the potential of social capital theory.

Stone and Hughes (2000) however do present a measurement framework which they contend is based on a sound understanding of social capital theory. They draw attention to four key considerations which they suggest can be used to interrogate social capital research. The first is that social capital measurement needs to be theoretically informed; second that social capital should be considered as a collective resource; third social capital must be recognised as multi dimensional and finally it needs to be understood that social capital will vary by network type (Stone and Hughes 2000, p. 23). The framework they put forward presents key dimensions of social capital, which are in measurable terms. These include informal and formal networks and the quality of social relations based on an analysis of the norms of trust and reciprocity. They acknowledge that the norms of trust and reciprocity, or at least the way these norms are manifest, will vary significantly across networks. This would indicate that measures of social capital are not generic and must reflect the nature of specific networks. That is, although measuring the same norms the measurement is contingent on the network type. So, while methods used to measure social capital are still being debated, research suggests that such measurement could assist in the development of education policy (Hughes, Bellamy and Black, 2000; Field, 2005).

Field (2005) in providing an analysis of the Northern Island Life and Time Survey (NILTS) of 2001 links a measurement of positive attitudes towards civic engagement with lifelong learning. He points to a complex but clear association between social capital and life long learning, particularly at the attitudinal level, and suggests there is a need to further explore how one may cause the other or whether or not they are both products of other variables. This paper outlines a study which will explore the importance of social capital theory in education policy and program development. The study uses qualitative data on networks and measurements of social trust, to critique the work of networks and a community education program at the post compulsory education level. The program is a pilot project being offered to disengaged and/or early school leaving students, in South West (SW) Victoria.

Post Compulsory Education in Victoria
Over the last decade and a half there have been a number of policy changes and innovations in post compulsory education in Victoria aimed at increasing the educational qualifications and workplace skills of young people. The most recent major review, the Ministerial Review of Post Education and Training Pathways in Victoria (Department of Education Employment and Training, 2000) highlighted the need for change, and prompted some major reforms. The Report (known as the Kirby Report) reiterated the importance of post compulsory education as a foundation of general education, and a building block for lifelong learning.

The Ministerial Review (2000) highlighted the need for improved education and training pathways for young people, through collaborative and regional approaches to planning and delivery of programs. It was anticipated that a local cooperative approach would also result in benefits such as community strengthening and renewal, minimization of duplication and competition and the sharing of responsibility with industry for post compulsory education and training. One recommendation was:
• “that a statewide pattern of local planning networks consisting of relevant education and training providers, industry and other agencies should be developed and nurtured.”

In response, 31 Local Learning and Employment Networks (LLENS) were established in different regions of Victoria in order to bring together schools, TAFES, universities, industry, local government and other providers. Through the establishment of the LLENS the State Government sought to use networks and partnerships to improve service delivery and policymaking.

‘Disengaged Students’ in Rural and Regional Victoria

The Ministerial Review (2000) and research findings (Teese & Polesel, 2003) highlight the complexities which exist around the provision of post compulsory education and training. There has also been some urging of caution against focusing only on improved school retention. Teese (2000, p.49) questioned the feasibility and desirability of keeping 80% or 90% of this age group at school. He emphasised the need for policymakers to examine the extent and value of participation on the part of different social groups. Retention of students should not be seen as an end in itself, but rather the reform agenda needs to address student achievement (Teese and Polesel, 2003). Although the review processes have resulted in innovation and change within the post compulsory education system, the challenge to mass secondary education is still the provision of a genuinely inclusive curriculum, which allows young people to experience a sense of achievement.

The major argument put forward by Teese and Polesel (2003) is that despite some improvement in post compulsory education, the system in Australia is not democratic, being based on entrenched social inequity. Education and achievement at school can be linked to both positive economic outcomes and to economic marginalization, as while school achievement can provide access to jobs, careers and further education for some students, for others it is not an effective pathway to employment. Students with the lowest marks are most likely to leave school early, and their confidence in the job market is frequently misplaced. This has been born out in rural areas and small towns in SW Victoria, where students leave school with the misplaced idea that they will gain employment. Conversely in such areas where the labour market is weak students may reluctantly remain within the school system, where social disadvantage will be further accumulated as they become the ‘reluctant stayers.’

Young peoples’ capacity to integrate socially is greatly dependent on the quality of their educational experiences. The sense of achievement that they gain through learning allows them to take their place in civil society and in the wider community. In secondary school their sense of achievement is closely linked to their academic results. “School achievement has become the dominant, indeed near-exclusive source of social integration for young people – whether they finish school, what subjects they take, what marks they get…” Some students never experience this sense of achievement. There is a large but somewhat invisible group of young people in Warrnambool and the surrounding region who are not attending school or attending irregularly, but who still appear as being enrolled in the school system. Again, a number leave school as early as year 9, with no likelihood of ever going on to further education or to employment. Often however these young people become aware of ‘their missed opportunity’, and seek re-entry into second chance education. The program outlined here seeks to provide this opportunity, and to support them as they
seek to establish an educational identity while often being confronted with restrictions and constraints in their personal lives.

**A Case Study – Warrnambool Community VCAL**

The Kirby Report resulted in the establishment of LLENs in Victoria and the introduction of a new post compulsory education qualification, the Victoria Certificate of Applied Learning (VCAL). VCAL has been described as the ‘hands on’ option for year 11 and 12 students.” Students study at one of three levels – foundation, intermediate or senior. It includes practical work related experiences and the development of literacy, numeracy and personal skills. In 2005, the South West Local Learning and Employment Network (SWLLEN), while continuing to support the development of VCAL in school settings, also sought to coordinate the development of an alternative VCAL program. The aim of this program was to encourage young people, who may have previously withdrawn from mainstream education, to develop generic attributes to enhance their employability and citizenship skills. In the last two years, pilot projects in other regions of Victoria had resulted in the establishment of Community VCAL programs, which although planned and developed in response to regional needs, have some features in common (Appendix 1). Development of the program in the SW has relied heavily on collaboration between schools, the TAFE College, community, business, local government, Deakin University and the SWLLEN. A key component of the Warrnambool Community VCAL is the personal development strand, which involves working as part of a team on a community project. (Appendix 2) This program development is an example of the mission of the LLENs: developing networks that are willing to work collaboratively to foster and enhance student learning and alternative employment pathways and to promote capacity building.

**The Research Project**

The research project addresses ‘how community networks and social capital can impact on policy around engagement or disengagement of students at the post compulsory education level’. The research will explore the concept of social capital, and its capacity to inform policy development in education, and is based on a case study – the establishment and development of a Community VCAL Program by a network supported by the SWLLEN. I am using a participatory methodology as I am part of the Reference Group undertaking to plan, implement and evaluate the Program. This Reference Group provides an example of a learning network acting as a policy mechanism through the development of a program for ‘at risk’ young people. The case study will be instrumental in that it will provide insights into the role of networks and of social capital in policy development around a community education program.

The methodology includes reflective observation on the process of establishing networks and governance, the role of community and education institutions in developing and contributing to the Program, the evaluation process and policy development. It is complemented by semi structured interviews with members of the Reference Group, individuals who contribute to the wider service network, mentors and students involved in the program. It will also be informed by a questionnaire aimed at measuring social capital, data from Youth Forums conducted by SWLLEN, and a number of focus groups that I will conduct with the Community VCAL students in order to focus on the interaction between students.
The Case Report will highlight

- the advantages and disadvantages of program and policy development by networks.
- balance of different networks (internal, external)
- governance issues
- the strengths and weaknesses of a mentoring program
- issues of power and conflict resolution
- techniques to promote collaboration
- development of a ‘shared vision’
- challenges and successes of working in partnerships
- key features of successful re-engagement programs
- program management and evaluation
- a suggested ‘model’ for a community based VCAL in SW Victoria

Discussion of the Project
At this stage of the research project, I can only present tentative observations on the data which has been collected to date. Nevertheless, these observations may help to inform the direction of the study and the further development of Warrnambool Community VCAL.

The Youth Forums
The youth forums conducted in 2005 were aimed at identifying how young people view students ‘at risk’ of leaving school and what steps the community can take to ensure young people remain in touch with an education provider. The forums were conducted using a variety of activities to engage the students in exploring their ideas about what ‘at risk’ means, what makes people want to remain in school and what factors lead to them disconnecting from school. Educational providers were asked to nominate students who were likely to have some experience and knowledge of the struggle that some students face in staying at school. The forums were held in three different regions in the SW (Warrnambool/Moyne, Colac and region and Corangamite), with a student group from TAFE and with a group of koori students. (Youth Forums Report, SWLLEN, 2005)

The discussion around why students leave school suggested that students from Warrnambool/Moyne had a more negative view of early school leavers than their peers in other regions. Their comments included stereotypes such as “ADD kids who achieve low” “Trouble makers and low achievers”, and ‘dumb’ and ‘derro’ kids. Comments from the Colac region were more positive, including “When you’re old enough to get a job or apprenticeship” and “Hands on types of people who want apprenticeships”, suggesting that early school leaving is more acceptable in smaller towns and more remote regions. There was general consensus that family, parent, teachers, friends and school counsellors were most likely to help students stay at school. Of some concern were comments from a small number of students who said there was no-one who could help, and that no students mentioned community agencies in response to this question. The students’ comments were also used to identify ‘at risk’ factors, which included – irregular attendance, being bullied, financial difficulty, lack of transport, behaviour problems, low self esteem, not part of a friendship group, teacher/student confrontation and not achieving academically.
The major outcome of the forums has been the drawing up of a draft ‘Youth Protocol Model’ with the aim of linking students with community agencies and education/training providers.

*The Warrnambool Community VCAL Reference Group*

The experiences of this reference group have already begun to highlight the positives and the challenges of working in partnerships and of regional participatory decision making. The recent Report into the LLENs in Victoria (Robinson and Keating, 2005) recommended more qualitative data to evaluate the work being done, and this call is supported by the Executive Officer (EO) of the SWLLEN. She described the work of the Reference Groups as follows.

> What the reference group has brought to this committee just can’t be understated.
> It’s the expertise they bring and the different eyes. You look at Sally Kay
> She’s got all that delivery stuff behind her – the process and if you like the ethics
> she’s brought into it. Bob Peterson has brought the school’s perspective and Ray
> has been invaluable because he’s had the experience of building VCAL.
> Leigh has provided the Department contribution ...having that level of expertise
> and putting them in the same room. But it’s the collective that will help it move on.
> (Thomas, 2006)

The work of the Reference Group has also highlighted that while working in partnerships allows for the sharing of expertise, there may be a number of negative outcomes, because partnerships are loosely formed. While there are terms of reference for such groups, these generally do not include the ethics of working together. “I don’t think the LLEN enter into any partnerships without a reason, but I think there are some people who enter into partnerships wholly and solely because they want to get something out of it for themselves” (Thomas, 2006). For example, part of the development of Community VCAL included a Community VCAL breakfast, which was an ‘open’ invitation event. One of the group training company representatives attended and decided that they could also mount a Community VCAL Program, and without any consultation or consideration of the work that had already been done by the Reference Group they began to ‘market’ another Community VCAL program. As the SWLLEN EO observed this behaviour runs counter to the philosophy which underpins the work of the LLEN.

*Warrnambool Community VCAL*

All students who have commenced in Community VCAL have been out of school for at least six months. There are 23 enrolments with 17 students attending regularly. A number of these students have had a disrupted education, and a small number left school as early as year 7. In responding to questions about their experiences of school the reasons given for early school leaving were many and varied, and there often seemed to be a series overlapping negative experiences that led to school withdrawal. In general these young people described experiences where they had not established a relationship with any specific teacher and frequently had negative interactions with other students. They also often expressed the view that they found certain subjects,
frequently English, especially difficult. The initial student interviews provided an insight into the positive perception that students have of working in Community VCAL, and how they perceive ‘their community’. Table 1 provides a summary of positive comments regarding Community VCAL.

<table>
<thead>
<tr>
<th>Size of group</th>
<th>Small class - you get more help. Only a couple of teachers. Don’t have to get to know all the teachers or get used to different teaching styles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual needs</td>
<td>They cater for your needs really and that’s what Meg does – she works very hard. The course works around you - me.</td>
</tr>
<tr>
<td>Nature of course</td>
<td>That’s what we’re working on here in this course. I can learn to rap while I learn literacy and numeracy. It’s two birds with one stone. It’s good. They started me on a level I can understand. I’m just starting to get back into it I reckon it’s grous. So much better than school.</td>
</tr>
<tr>
<td>Student group</td>
<td>It more relaxing. Everyone here’s different. No-ones the same. It’s good. No ones sits there like school. At school there was the whole popularity thing and all that – she’s not good enough to hang around with. Everyone’s the same. No-one treats each other differently. I know a fair few kids. I haven’t been teased or picked on or anything like that. Not being teased feels so good. It’s a good feeling not to be teased or mocked. Yeh, cos I know them... They’re not mean. They’re nice. Everyone here works together pretty well. Everyone tries. Tries to help and understand.</td>
</tr>
<tr>
<td>Teachers</td>
<td>I like Rob. I like sitting down and having a good talk with him about history. It’s good - lots of reasons why it’s good...teachers are alright too. They understand you and know how to speak to you and how to teach you something if you don’t know how to do it. Go about it in the right way.</td>
</tr>
<tr>
<td>Skill development</td>
<td>Yeh but I’ve got to pick up on my English skills for child care cos you have to read books and things to them. You have to be able to read. I want to have something behind me. I want to have a few qualifications.</td>
</tr>
</tbody>
</table>

One of the major objectives of the program is to have student participate in their community and to increase their networks. This is being achieved through different
initiatives, including community projects, ‘matching’ students with Deakin University Teacher Education students for literacy support, a mentor program and ‘friends of the program’. The VCAL students’ perception of their community – how they see their community – ranged from a very narrow view expressed in such comments as “No-one really. Oh I suppose my friends” and “The mates I live with” to a focus on the city of Warrnambool. The majority of students nominated friends or family, although three students saw Warrnambool as being their community. The Koori students were more definite in their answers identifying closely with the Koori community. For example, comments such as ‘They’re my people – Aboriginals in the Koori community.” One student expressed the view that the “Community VCAL students could become their own little community.” As community engagement is a major aim an understanding of students’ current networks, and any changes to their perception of community will be a key component of this study.

Conclusion
The research study, which has been outlined, will focus on partnerships within a community network aiming to work collaboratively to develop a Community VCAL Program. Thus, it will document and describe the work of the SWLLEN in using networks to plan, implement and evaluate the program. As this is a pilot project the research will assist in the development of policy, protocols and procedures which support a model for the delivery of flexible learning and community engagement. Alternatively the research will also include the impact of social capital on individual young people who participate in the program. It can be argued that while many students within our education system may have an opportunity to foster social capital, many may not. Students as they move through adolescence frequently expand and change their social networks. Within these networks they are exposed to the norms and values of their social group, and also to the wider social culture of school and community. However, many students do not participate within social networks either at school or in their wider community life, and thus may have limited access to the resource of social capital. Again, while many students may be involved in specific types of networks these may not be ones which assist them with skills development, problem solving or pathways to further learning or training opportunities. Community VCAL may be one way of increasing social capital for disengaged students. The aim of the research project, which has been outlined, is to record this process, how it might occur, and most importantly whether of not it should be a key consideration for any re-engagement in education programs.

References


**APPENDICES**

**APPENDIX 1 – Community VCAL: Some Considerations**

Community collaboration has the capacity to develop a unique local solution, accommodating local needs and optimising local resources and conditions

1. **Definition of Community VCAL**
   - VCAL programs conducted through partnerships between one or more community agencies and a school
   - Delivery is conducted outside a school setting in a youth friendly environment
   - Students are enrolled in a school prior to February census
   - Students often at risk and/or early school leavers
   - Locally developed models for local needs essential
   - LLEN facilitation valuable

2. **Memorandum of Understanding/Managing Risk**
   - Essential to establish clearly defined roles, responsibilities expectations and funding arrangements
   - Possible use a revised version of the current ACE/school MOU
   - School should have a process to include the setting within its risk management
Usually condition of enrolment is that young person has been engaged in a school or other provider with the past 6 months (to stop dumping from schools)

3. Managed Pathways
   Pathways focused ie transition is the main focus – not necessarily completion of VCAL within a set time
   Need well defined entry processes and criteria
   Often aiming at re-engagement with learning, maybe back to an educational agency
   Often case management approach required

4. Funding
   Generally from the school SSRP allocation for each student
   Additional support often provided by school and/or agencies eg accommodation
   Consideration is needed for VCAL program coordination
   Consideration needs to be made for post-February census enrolment

5. Delivery
   Through use or adaptation of existing community agency programs, mapped to VCAL unit outcomes in an integrated manner.
   May also include Further Education units from CGEA, Transition Ed etc.

6. Coordination
   There must be an identified and resourced coordination position and role defined
   Should not be the VCAL Coordinator of the enrolling school
   Appropriately skilled staff needed, who have understanding of VCAL unit outcomes and integrated approaches to delivery

7. The Program
   Victorian Certificate of Applied Learning (VCAL)
   Given recognition through accredited units for programs and activities conducted at community organization

8. History
   There are several successful and a couple of not-so successful programs that are worth a visit (20 state-wide)
   LLEN EOs have been intimately involved in many of them.

APPENDIX 2 – WORKING COMMUNITY PROGRAM

Working Community is a community-focused school program, targeted at young people aged 15-17 (years 10-12). The structured applied learning program involves young people working in teams, designing and managing their own community projects.

The Program aims to help students to:

- develop a range of work and personal skills
- develop confidence and self-esteem
• develop a sense of social responsibility
• understand the world of work
• become simultaneously independent and supportive of team members

It involves a partnerships initiative that includes schools, community organizations and employers in supporting young people to help each other and to develop their community.

The Program outlines five phases of experiential and applied learning.

1. Induction
Workshops which introduce students to the concept and aims of the program.
Introduction to the course and its relevance to VCAL
Development of a contract for participation in the program

2. Community Visits
In teams of three or four students organise visits to one or two local community agencies
Students present to the class and information is compiled into a class directory

3. Skills Workshops
Students attend camp
Activities encourage development of teamwork, leaderships and communication skills
Introduction to community projects

4. Young Person Led Community Projects
Working as member of a team
Teams to design and manage project

5. Presentations and Celebration
Presentation and feedback from community members
Presentation and celebration of achievements

The Program enables young people to progress from dependence to interdependence by developing the skill of teamwork, leadership and communication. A Working Community manual for schools audits the program against VCAL Personal Development and Work Related Skills.
Place, schools and communities: new beginnings in rural NSW

Andrew Wallace and Colin Boylan
School of Education
Charles Sturt University

Abstract
This paper explores the findings of a number of studies of rural schools. It is concerned with the ways in which schools successfully work with their communities. It looks briefly at the changing nature of rural communities and the emerging responsibilities of schools. Finally, it provides insights into successful programs in rural NSW which have met new challenges through effective leadership and quality teaching.

1. Introduction

The recent release of the report (Mission Australia, 2006) reminds readers of the character and the changing nature of rural Australia:

*Rural and regional communities across Australia have experienced unmatched social, economic and environmental change over a sustained period of time. Many have shown extraordinary resilience and a capacity to respond to these changes with flexibility, creativity and innovation. But many still lack the necessary resources or ‘capitals’ with which to develop sustainable positive change. ” (Mission Australia, 2006, p.2)*

This paper explores the impacts of this unprecedented change in the nature of the Australian rural landscape, and considers the impact on rural schools within this changing context. It does so by discussing a number of rural primary and secondary schools in the Riverina Region (see Map 1 below) who have worked within such environments, and suggests that the nature of school-community interactions need to be reconsidered to ensure that educational outcomes are met and the nature of rurality is reconceptualised in new and appropriate ways. The study is based upon case studies prepared as part of research conducted under an ARC project (RTEP). This project explored education in rural New South Wales in a partnership between Charles Sturt University, the University of New England and the NSW Department of Education and Training.
The rural schools within the Riverina Region of NSW were selected because of outstanding school – community educational programs and practices. The schools that are the focus of this paper are listed below. The identity of each school has been changed to maintain unanimity.

- **Valley PS**: two teacher K-6 primary school located in a community of 90 people, the majority of whom are indigenous. The school has an enrolment of 32 students;
- **Dryland CS**: a K-12 central school located in a small rural community of 350 people;
- **Broadacre**: a town with three schools, these being Broadacre HS; Broadacre PS; and West Broadacre PS. The Broadacre town has a population of 4500 people;
- **Riverton HS**: a 7-12 high school of 600 students situated in a town of 2500 located on one of the main rivers running through the Riverina region;
- **Channel PS**: a K-6 primary school located in a community of 3000 people, which has strong historical links to the irrigation industry as well as a significant aboriginal population within the school and community.

2. **Place - space and contexts**

The model shown below provides a framework within which this paper has been prepared. The model proposes that the rural landscape is best explored within notions of place, where the unique nature of each rural context is explored in terms of the local factors which find reflection within the life of the community and school.
Figure 1: Place, School and Community

Such notions of place are reflective of current thinking in the academic literature (e.g. Boden and Molotch, 1994; Adams, 1995; Graham and Healey, 1998; Graham, 1998; Armstrong, 2000; Fisher and Hout, 2003). These writings report on the impact of place upon the social, political and economic structures of communities. These authors provide a sound basis upon which to construct new understandings of education, rurality and the impact of geography upon the characteristics and nature of rural communities.

3. Rural Community

Definitions of community are complex. In the broadest possible terms, two types of community are identified in the literature, communities of place and communities of interest (Cocklin and Dibden, 2005; Black, 2005). The literature suggests that although the term community originally referred to groups of people sharing a common geographical location or place, it has more recently been used to include those groups of people who may share a common interest even though they may be scattered across wide geographic space. A prime example of the latter may be a group of people who may never meet each other but share some common interest and communicate through a dedicated ‘chat room’ on the internet.

In the case of the rural community, as indicated by the model above, rural communities maintain an identity related to place as well as shared interests. It is thus suggested (for example Bell and Newby, 1975; Wilkinson, 1986; Wolstenholme, 1995) that there are three factors necessary for community to occur. Firstly, there needs to be a locality (real or virtual) where particular needs are met, secondly, there must be social interaction and the structures to enable this to be maintained, and thirdly, there must be common ties or interests.

A small rural location has relatively clearly defined geographical boundaries, all locals share to some degree in local problems or benefits, and social interaction is almost impossible to avoid. The term community thus defined seems to be a very...
appropriate descriptor linking places and senses of common purpose in relation to these three factors.

4. The nature of rural communities

The complex nature of rural communities also needs to be explored. In 1887 Ferdinand Tonnies suggested that the large urban community and the smaller rural community possess fundamentally different characteristics. The social networks and the general culture of the smaller and more geographically isolated groups could be likened to that of a family or a clan, and to which he applied the German word *Gemeinschaft*. By contrast, he suggested, relationships in the larger, denser and more commercially concentrated urban communities were based largely on an impersonal, contractual basis, and to which he attached the term *Gesellschaft*. By identifying these two extremes of social structure and function Tonnies, perhaps inadvertently, created a conceptual dichotomy; two ‘ideal types’ as Weber would have expressed it (see Coser, 1977; Gerth and Mills 1946; Elwell 2005; Robertson 1983 p. 165). Though this conceptualisation may be a useful heuristic tool, it is somewhat simplistic. It has been claimed that the concept of a rural-urban continuum comes closer to the truth; that is to say, if we conceptually place rural (or country) at one end of a line and urban (or city) at the other end, then points along that line can represent the degree to which any particular community displays characteristics of either extreme, or as Wuthnow (1993, p.14) expressed it [the continuum concept] ‘functions in our thinking to anchor the ends of a continuum … to provide a wide conceptual space in between’.

In spite of a narrowing of the gap between country and city attitudes resulting from such things as improved transportation and other communications such as television and the internet, life not only is different in the country, but is perceived differently as well. There are many terms that capture this perceived difference, conveying various nuances and shades of meaning including the rural idyll, country-mindedness, rural-mindedness, rural ideology or even agrarianism. Gray and Lawrence (2001, p. 73) expand upon these notions in their observation that *Agrarianism is a belief that*
farming is an ennobling vocation which commands respect, not just for the necessities of life which it provides, but because it involves hard work, perseverance and family life.

These views of rurality are at the heart of thinking in many of the schools explored in this paper. Members from four school communities in this paper spoke of the special relationships between the school and a rural constituency. One of the case studies (Riverton) traced a changing view within the school of the links it enjoyed with its’ community as employment shifted from agriculture to include agricultural manufacturing (processing/value-adding) which provided employment for early leavers from the school and impacted upon the idyllic academic attitudes within the school. This case-study also noted the development of high prestige agriculture (viticulture in particular), which changed impressions of agriculture within the community. At another level, conversations with executive and staff in each of these schools were concerned with the nature of country kids, as a style of student quite apart from their city counterparts. They spoke of the close relationships established between staff and students in an environment where students were viewed with a sense of value which emanates from their rural origin.

5. The evolving nature of rural communities

Rural communities have seen recent structural and environmental changes but still rely heavily upon agriculture, particularly in small communities, where diversification into alternative secondary and tertiary industry is at best problematic. These communities have seen major economic and demographic change as a result.

At the same time it needs to be stated that the larger regional service centres have in some ways benefited from the problems in the smaller ones. As services are withdrawn from smaller towns, people are forced to travel to the larger centres to satisfy their needs, be they financial, medical, educational or social. It is important to observe that there has been a strong and inverse relationship between the occurrence of decline, and the size of the community (Wallace, Boylan, Mitchell and Streckfuss, 2005). As a result the smaller town is more likely to suffer decline and social dislocation.

These demographic changes reflect a wider range of factors affecting rural New South Wales. The last twenty years have been punctuated by a series of changes which have impacted upon rural communities, and smaller towns in particular. These relate to the reliance upon agriculture, and on changing economic and political trends. Pollard (2002, pp. 13-16) provides a useful summary of these trends:

- By the mid 1990s Australian agriculture contributed only around 3% to GDP. Australia no longer rides on the sheep's back;
- The median age for all persons employed in agriculture was 44 years, substantially higher than 38 years for all persons employed in all industries;
- The upward movement in the median age of farmers reflects fewer young people entering agriculture to take the place of ageing workers;
- Farms have become larger, and there is a corresponding decline in the importance of small farm operators within the sector (the number of farms has decreased from around 200 000 in 1961 to 110 000 in 2001 (Hooper et al, 2002);
In smaller settlements the exodus is very much dominated by young people. Further, country towns rely on people such as bank managers, school teachers, clergy or health workers to contribute their skills and expertise to the welfare of the wider local community. However, as government and other services are withdrawn from these areas, so too are the staff members. The resultant depletion of local stocks of human capital has had a debilitating effect on the smaller rural community;

The adoption of new technology is now more important than ever as farmers try to maintain levels of profitability in the face of rising costs, worsening terms of trade, and restrictions on land use and farming practices imposed by governments and the economy, particularly as society becomes more aware of the need to develop sustainable farming practices;

In addition, high levels of welfare dependence also constrain some communities. As an example, two of the case-study schools reported on in this paper (Valley and Channel schools) document these trends amongst the Aboriginal community in particular, while in another case-study community (Broadacre), it was noted that changing patterns of settlement in the established parts of the township involved a changing demographic involving higher rates of welfare dependency;

Farmers have recently experienced times of extreme hardship, brought about by an unreliable climate and volatile market forces. Currently, with Australia's high exposure to international markets, and a domestic environment in which farmers are expected to operate without government assistance, many farmers are experiencing financial pressure to restructure their operations. Alston and Kent (2004) have documented the crippling social effects of the drought:

The significant social impacts occurring as a result of the drought include serious erosion of income for farms and small businesses, increasing rural poverty, increased workloads (both on-farm and off), the need to seek alternative income, health (including mental health) and welfare issue, problematic service access, overload on service providers, declining educational access and particular issues for women and men on farms, business operators, the aged, young people and children (p. xiii).
• A growing environmental movement has also impacted upon rural communities, with concerns in New South Wales around salinity, bio-diversity and habitat loss, tilling practices and the loss of topsoil, and a growing debate around GMOs (Tonts, 2005; Share, Lawrence and Gray, 2000); and,
• The general loss of social, human and natural capital as a result of globalisation.

The impact of these changes should not be understated. Cocklin and Alston (2003, p. 1) provide a concise summary of the current concerns for Australian rural communities:

Many factors have contributed to this pattern of social and economic decline across the country. Falling commodity prices, cost-price squeezes, metropolitan-centred social and economic policies, extreme weather patterns, alternating periods of flood and drought, population migration, and changes in patterns of ownership of rural economic enterprises each contribute to a potent mix of forces.

Within rural communities a number of other issues warrant attention. These partially reflect the issues just raised, and concern the dynamics and structures of rural communities themselves. These are discussed briefly below under five headings:

5.1 Egalitarianism or stratification?

Most country people are proud of the egalitarianism of their community, that everyone is treated on equal terms and all are welcomed into ‘one happy, harmonious family’ to use Dempsey’s (1979, p. 3) expression. That this is not true for everyone is obvious to newcomers who view with an unbiased eye, or to those locals who have been disadvantaged in some way by a local social stratification system. But the myth will be staunchly defended by a large majority of the local population (see Dempsey, 1990 pp. 49-89 for examples). Beginning and transferring teachers face this dilemma. New staff, especially beginning teachers, find rural communities to be less than friendly unless they find an entrée through either the pub or the football team.

5.2 Social networks

Another significant difference between country-community and city living is that whilst people in both situations develop complex social networks centred on, say, propinquity, interest or professional involvement, in rural communities there is an increased level of overlap between them. These form ‘dense’ networks. For example, the local school principals reported on interaction with several groups of people, including the P and C meeting, and other social gatherings including sporting clubs, Rotary, church, and others gatherings including the local pub or club.

Community cohesion results. All local organisations perform the function, in varying degrees, of breaking down social isolation and facilitating social connectedness and, for reasons mentioned above, the effect is magnified in the smaller rural communities. Sporting clubs, community action groups, interest groups, schools and churches, for example, all contribute in some way to social networks.
Schools form an important part in such networks. The case-study at Broadacre in particular traced the social networks of the community, and suggested that the success of the High School is closely linked to the extent to which the activities and personnel of the school are woven into the tapestry of the whole community through sport and community events. These networks involved staff within the school, many of whom had returned to their community after time away. Evidence was also found in another case-study school of the development of complex and very supportive networks to support literacy programs (Dryland). In this case-study, a number of community members with no direct link to students at the school were involved in the regular support of the literacy program. The metaphor of a tapestry does describe the nature of the relationships between members of smaller rural communities.

5.3 Gender issues

Gender interactions is also problematic in rural communities in New South Wales, and received wide attention in the literature. Alston (2005, p. 155) makes the claim that ‘Hegemonic masculinity dominates rural communities. Gender negotiations in rural areas occur … against a backdrop of gender order that subordinates women.’ She backs up this claim by citing many rural practices such as the patrilineal inheritance of land and the power and prestige that goes with ownership and control of the resources of agriculture; of male dominance of such organisations as local government, the pubs and livestock saleyards, and even in institutions such as the law and religion; and of the grossly disproportionate amounts spent in country towns on sporting facilities for the males such as football fields. The perpetuation of this ‘hegemonic masculinity’, she claims, usually goes unchallenged because as Bourdieu (2001) suggests, it is habitus, that is, accepted as part of the deeply entrenched and rarely challenged cultural value system.

In the case-study at Riverton High the wider literature (e.g. Kronemann, 2003) points to the lower secondary school retention rates for boys than girls across rural New South Wales. The Riverton case-study points to the link between these findings and community expectations of their students which follow these stereotypes. In Riverton, programs were changed to more appropriately target VET offerings and a curriculum focus perceived as appropriate for boys.

5.4 Aspirations in small rural communities

Grey (1991, p. 153) observed that parents in rural areas display some level of ambivalence when it comes to where they hope their mature children will eventually live, and writes while [country people] want to retain the country lifestyle and its valued attributes for their children, they know that city education and careers offer potential for a relatively high income, which appears increasingly unlikely on the farm.
5.5 The Indigenous view

Rural communities contain significant numbers of Indigenous Australians. These communities are an essential ingredient in conversations on the development of school systems which effectively serve rural communities.

However, it should also be noted that some of the case studies reflect the views of monocultural schools. Schools such as Broadacre High and Riverton High are located within communities which are under-represented by other cultural groups. It should be noted that staff in these schools spoke of the ease with which they were able to focus on the needs of a less diverse community, and of the danger of seeing other communities in the simplistic terms possible within these case studies. Other case studies pointed to the complexity of community relationships where diverse cultural groups were found within the community e.g. Channel Public School. This paper will return to these issues under a broader discussion of school-community relationships.

6. Integrating the rural school and its’ community

The relationships between schools and communities clearly go beyond any sense of client and service-provider in many rural communities. As suggested by the model, schools sit within communities, and thus reflect the nature of these communities. The complexity of these relationships is widely represented in the literature, and much has been written within the Australian contemporary rural context (e.g. Johns, Kilpatrick, Falk and Mulford, 2000; Wilkie and Newell, 2000; Nachtigal, 1994; Hatton, 1994). This literature goes beyond pedagogy to explore the links between the classroom and the community, and the complexity of the relationship between the community and the school. It takes as a starting point the views seen by the school as it looks over the school gate as well as the broader views seen from the community perspective.

The literature reveals that there are often unintended consequences, or by-products of the core educational function. To quote Johns et al (2000 p.2) ‘Rural schools, as a tangible and symbolic focal point for the community, play an important role in the educational, economic and social development of their communities’. Sutcliffe (2001 p.24) expresses a similar point of view when he states ‘The school, particularly in rural communities, is often the strongest (and perhaps only remaining) community institution. It is a gathering point, a centre symbolising community and a resource that
can unite the community’. This point is made, particularly in smaller communities such as Valley and Dryland, where the school is one of a very small number of shared community resources. The school can also provide a central social focal point for the community, as was reported in both these case studies.

The notion that schools perform an important function beyond that of educating children has long been acknowledged by many writers (e.g. Walker 1974; Sher, 1977), but in the past decade or so it has become the focus of renewed interest. In the light of the rural recession and the resultant decline in smaller rural communities already discussed, many people have become aware of the potential for rural schools to be a vehicle for small community sustainability, or even renewal. This is an interesting concept, extending the boundaries of the educational discourse in a new direction. And indeed for those who like to operate in a world of neatly delineated paradigms, this concept may present something of a challenge. It is a challenge because, at its heart, it asks something more of teachers, principals, educational leaders and associated support bodies such as Parents and Citizens groups. In addition to their primary role focussing on ‘education’, as narrowly defined, it expects them to become community builders, facilitators of social renewal or generators of social capital. Miller (1995 p.1) articulates this view when he says Many rural advocates believe a promising direction for the revitalisation and survival of communities lies in creating and sustaining collaborative partnerships with schools.

In spite of the renewed contemporary interest in school-community relationships, those with any experience of smaller communities are already well aware of the central role that schools play, and have done for generations. Johns et al (2000 p. 3) comment that Rural schools are often the social and cultural focal point for the community.

In the light of such considerations, a number of issues emerged around the relationship between the school and community. These are discussed under three subheadings drawn from the themes which emerge from an exploration of the literature.

6.1 Size of school, size of community

Earlier in this paper it was observed that the burden of the rural recession has been borne disproportionately by the smaller rural communities, and that, in general terms, the smaller the community the greater has been the damage to the social fabric of the local community. It has also been shown that in the less populous settlements the local school, as one of the last remaining institutions, has increasingly become a point of reference, a community focal point. This being the case, therefore, the local school takes on an expanded role. Officially or unofficially the country school’s charter appears to extend well beyond its basic pedagogical role.

But with a declining town population, and in many cases a consequent decrease in school population, it would appear to follow that the stature of the local school would be caught up in this ‘spiral of decline’ as Cocklin and Alston (2003, p. 2) express it.
Yet there is some evidence to show that the reverse is rather the case. Johns et al (2000 p.18) in one of their research projects reported:

A number of respondents who had lived and worked in larger regional towns believed that the smaller schools and communities, such as this one with a population of approximately 2500 people, were more cohesive and therefore had stronger school-community partnerships.

And Sutcliffe (2001 p.25) reinforces this view:

…itural schools have benefits. In fact the movement in the United States is to look at the benefits of small schools in rural areas and to duplicate them in larger schools. In New York, Chicago and Philadelphia many Districts are looking at how they can make their schools smaller in order to capitalise on the more intimate learning communities.

It would appear then that the conventional wisdom that ‘bigger is better’ is not necessarily the case with small-town schools. But of course the wider benefits that flow from, and to, the small-town school do not ‘just happen’; the process must be driven by dedicated and motivated people from both school and community.

The case studies of Riverina schools found evidence of a fighting spirit amongst small communities, particularly if their school was under threat of closure. There was also a sense that the community needed to lift their levels of support to provided equal opportunities for their students and these views found overt expression in the interactions between school and community.

6.2 School as community centre

The theme of extra curricula school community involvement continues. It concerns sectors of the community not normally included in school activities through their use of school resources such as buildings, technology, library, sports fields or the expertise possessed by the teaching staff. These activities may include such things as lifelong learning, day care, use of sporting facilities by non-school groups, cultural activities such as music or drama and a great many others mentioned in the literature (see Nunn 1994 pp. 2-3 for extensive list). These activities clearly strengthen school-community relationships.

Our case studies go further. The school at Valley provides curriculum which reflects the strong influences of the elders within the Aboriginal community which it serves, and has adopted teaching and learning practices which are appropriate to the students. Further, it provides a vital resource to the community it serves, not only as school, medical centre, child-care centre, pre-school and the like, but because it provides a focus for the whole Indigenous community. This link goes beyond the provision of a meeting place through the physical and social capital of the school, to incorporate the notion of the school as a place where the community can grow and mature. The elders within this community spoke of the school as their focus, where they rediscover aspects of their culture which have been lost as a result of the Assimilation policies of successive governments since the late nineteenth century. In the case of Valley Primary, the old Principal's residence now provides an Aboriginal Cultural Centre,
while the school grounds reflect considerable community input and planning around the culture of the original inhabitants of the area. It effectively gives rise to a reconceptualisation of notions of Life Long Learning.

6.3 Social capital and community cohesion

Contemporary community analysts emphasise the value of substantial reserves of social capital. A school that actively seeks to enhance its relationship with the wider community does in fact generate social capital within the community, which can bring substantial benefits to the school (Miller 1995, p.2). This emphasises the circularity of community relations in a small community, as previously mentioned. Johns et al (2000 p.2) state:

There is a positive relationship between the level of social capital within a community and the community’s perceptions of its schools ... In these communities the school, as both a tangible and symbolic focal point of the community, is likely to play an important role in the generation of social capital.

The case-study at Valley mentioned above is a case in point. The growth in understanding of the culture of the Aboriginal people of that community has united the community around the school, and the school and community continue to learn together. Other schools report that their activities have actively changed their communities, through the provision of education programs which better suit the identified needs of the community (e.g. Dryland literacy program and the academic achievements at Broadacre).

As well as the issues raised above, another consistent theme in rural New South Wales concerned the retention of teachers within community. It is very clear that relations between school and community are enormously strengthened by the existence of long term stayers amongst the teaching staff (Roberts, 2005). The case studies of Channel Primary, Dryland Central, Riverton High, Broadacre and Valley Primary make the point very clearly that the stability of staff (especially the support staff who tend to come from the local community) has a significant effect upon the effectiveness of the school within the community. It takes time to develop trust within the community and to understand the nuance of place. In the case of Riverton and Broadacre Highs, significant numbers of the teaching and support staff had been at the High School for over ten years.

7. Quality teaching and learning

Quality teaching and learning within the frameworks of the Productive Pedagogies (Luke, Matters, Herschell, Grace, Barrett, and Land, 2000; Gore, Griffths, and Ladwig, 2001) has been pivotal in an analysis of the contingencies of rural communities, and those factors which impede the implementation of Quality Teaching and Learning within rural communities. There are three key issues worthy of discussion in the context of rural communities, these being:

- An expectation of high standards;
• The monitoring of student success; and,
• Authentic teaching and learning, associated with the reality of rural place.

7.1 High expectations

A number of the schools seen to be exemplary by the School Education Districts were noteworthy because of the high expectations which the school and community had of the students. Broadacre High School was one such school, where programs such as *Failsafe* were designed to promote the sense of going beyond the average to achieve the exceptional. The Broadacre case-study documented a community that actively encouraged their school to the point where there was a strong anticipation that the school would dominate HSC results for the Riverina Region, and the students would have access to city based higher education programs.

Similar patterns of expectations were evident in other schools, including Riverton High, Dryland and Valley. The point of note here is the commonality of the relationship between the school and community in expecting students to reach high levels. The success was attributed to small class sizes, individual instruction, and the sense of support for students which was given by the community which was beyond that deemed possible in larger centres. This expectation did not come from a sense that their students were superior, but rather from the sense that the whole community was supporting the students and actively sought to see their students’ benefit from attendance at their local school. The whole community seemed in each case-study to take ownership of the programs at the school and wholeheartedly support the initiatives at the school.

7.2 Monitoring success

The overt planned evidence based approaches to educational change were also noted in these same schools. It was worthy of note that both Riverton High School and Broadacre High School began conversations with their feeder primary schools surrounding the Year 3 and 5 Basic Skills Tests (BST) data, and were able to work as teams to enhance student outcomes. The conversations around BST engaged the whole education community in these towns, and then found expression in other curriculum areas where standardised data were not available. These schools all used standardised tests as yardsticks to allow objective comparisons with the rest of the state, and saw BST data as a valid measure to support the development of new teaching and learning initiatives. The evidence based conversations between schools were powerful forces for change within these communities.
There is however an alternative view. A number of case studies (e.g. Riverton) documented the problems of working with a centralised curriculum to the point where local needs were not acknowledged. Monitoring of these communities unsettled the established curriculum as an appropriate means of meeting local needs. Concerns about testing and centralised curriculum were also expressed in an international context by Bryden and Boylan (2004, p. 1) who noted that:

The implementation of standards based school curricula and related regular tests of performance have received strong political support in recent Australian, UK and US educational policy… However, there are particular disadvantages of such policies for children living in rural areas, and these disadvantages ultimately impact negatively on the economic and social viability of rural places.

7.3 Community as curriculum

The case-study schools often used their own community to ensure authentic teaching and learning, and as a means of engaging the whole community in the activities of the school. These go beyond work experience to the centring of curriculum around the resources in the community. A good example of this is Valley Public, which engages Elders from the community in curriculum planning, and in teaching within the school. They have also developed a Learnscape, not so much in the traditional role of promoting environmental education, but rather to begin to redevelop Aboriginal culture, and support traditional understandings of bush foods and the Dreaming.

School based enterprise (SBE, also referred to as school based economic development or school development of entrepreneurial skill) were not evident in the study, but certainly warrant attention, going beyond small entrepreneurial activities to encompass the development of full commercial enterprises under the control of the school. The newly established winery at Riverton High School was a small example of what might be possible, where the local wine industry is supported through programs at the school. The recently completed Enterprise Education project (Sinclair 2004) does document examples from rural New South Wales where the school has provided a focus for broader economic development within the local community.

8. Leadership issues, community and school

Finally, the literature emphasise the importance of leadership in the optimisation of school-community relationships. Three main aspects of leadership are identified which included the general style of leadership, community leadership and school leadership.

Reflecting on leadership style, Johns et al (2000 p.6) state that ‘The new leadership paradigm for the 21st century is a leadership of empowerment which involves the whole group in the decision making process, not just those who are designated as leaders’. They go on to refer to this style of leadership as ‘enabling leadership’, because unlike more traditional styles which focus on ‘the leader’ this approach has the advantage of a greater sense of shared ownership of group decisions. They
conclude that The leadership process consists of articulating common purpose or community vision, initiating interest and commitment to the vision, and encouraging community involvement and participation in achieving the vision (p.7).

Such approaches were exemplified in the Riverton case-study, where distributed leadership has led to the development of an empowered and effective school community. This case-study documented effective distributed leadership and supported Fullan's notions (2003) of the effectiveness of quality leadership. Similar styles of leadership were also found in the Broadacre and Valley case studies.

In the community context leadership is a two-way process, so that what has been stated about leadership style applies to both school and community leaders. There is one significant difference, however. In any given location, there will be many community leaders but relatively few school leaders. So whilst school and community leadership may be equally important to the final outcome, the effects are more concentrated on school leaders simply because they are fewer in number. The literature appears to reflect this state of affairs, with the main emphasis being on school leadership. And though ‘school leadership’ is seen in a broader context, principals occupy a pivotal role in the process. Kilpatrick et al (2002 p.3) comment:

Although leadership for effective school community partnerships is a collective process involving all stakeholders, there are a number of key individuals who facilitate the leadership process. School Principals legitimise the partnership and provide initial and ongoing support, in terms of promoting within their schools an atmosphere of caring, respect, and trust, and providing a school structure that promotes participative decision making.

Leadership within schools and between schools and their communities often involved effective leaders (e.g. Riverton High, Valley Public and the Broadacre schools) and often a long history of close relationships between the school and community. These relationships involved staff at all levels, particularly in close links through marriage, sport and community organisations.

Having made this point, the case studies also document the problem of living in small country towns. A number of staff and executive spoke of the sense of living in a fishbowl. One interviewee described the lack of anonymity to be something horrendous.

9. Conclusions and recommendations on school-community relationships

This paper has briefly discussed the changing nature of rural communities. It has reflected on place as a major ingredient in discussions about rural education. It has outlined the significant changes to the infrastructure of rural New South Wales, in terms of social, economic and political concerns. It has documented decline (population and employment), restructuring and the ambiguities of rural living. These trends have not been sought by country people, but has been forced on them by a variety of factors beyond their control. It has suggested that while some of the larger
regional centres have benefited by virtue of the ‘sponge city’ effect, the more sparsely settled areas and the smaller community clusters have been affected negatively. It has also pointed to a number of case studies which document the complexities of the relationships between school and community.

The paper has established that in smaller rural centres the school or schools are of very real local significance. In addition to their primary and essential function of educating local children, they make a significant economic and social contribution to the town in which they are located. They provide a focal point, and make facilities such as technology, halls or sporting fields available to the wider community. The paper has gone on to suggest that schools, by adopting a policy of community outreach, can be a strong influence for small-community sustainability. They are a possible antidote to local community decline occurring as part of the rural recession.

A new discourse of sustainability is raising questions of what can be sustained, what should be sustained, and how can this be achieved. The apparently inexorable drift into globalisation is transferring control from the traditional decision-makers to outsiders who may hold quite narrow or myopic views as to just who should benefit. Governments face the challenge of achieving a policy balance which works to maximise the benefit to the majority while maintaining equity for the minorities. That is one of the conundrums of rural education in New South Wales.

There are a number of recommendations that come from the case studies with regard to the relationship between rural schools and their communities. Policy may need to be reconceptualised in the following ways:

- Government policy should be cognisant of the wider implication of DET initiatives upon the whole rural community. In the case-study schools, notions of community sustainability and development are often inexorably linked to the school, but lie beyond the charter of the NSWDET;
- Rural disadvantage is likely to continue given the trends documented in this paper. Rural communities need additional support to provide equity of opportunities for all rural students;
- Staffing and resource policies need to consider the impact of place upon school development programs. This means listening to, and working more closely with community leaders to ensure that the school meets the needs of the community;
- Support for Indigenous communities warrants reconceptualisation, using a multi-disciplinary approach which allows the development of whole community programs as was evident in the Valley case-study;
- Blind allegiance to curriculum developed in large centres creates problems in small rural communities, where local concerns must also be addressed. Schools expressed concern at the extent to which their curriculum was dictated by the centre and by standardised testing, to the exclusion of much needed considerations of local issues;
• Teachers at all levels should be encouraged to remain within rural communities for long periods of time. Current staffing policies mitigate against such possibilities, and by implication, impede effective school-community relationships. Policy initiatives here might involve a reconceptualisation of the roles of support staff (including SASS staff, but also Aboriginal tutors); and,

• Leadership in rural schools needs to be sympathetic to local needs. Experienced leaders have shown that strong supportive links between school and community are possible.

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Will privatisation or deregulation have most impact on the provision of distance education for rural high schools?

Charles Bradley
Distance education science teacher.

Abstract
Technological convergence and demographic change will have a transforming impact on rural high school learning programs, with distance education provision expanding. Educational values will be challenged and democratic social and political processes will be threatened. The intention of this presentation is to contribute some perspectives in the politics of education for the discussion we need to have.

SPERA has always featured the splendid vision for distance education in this century. Year after year, each conference celebrates further advances. Globalisation and technological advances have increased convergence in the delivery of educational services and expanded the provision of distance education. Demographic change in rural communities creates even more urgency and an accelerated need for change.

The Human Rights and Equal Opportunity Commission first raised questions about whether the promise of rural distance education was being equitably fulfilled. Increasing social division with the growth of fundamentalism and judgmental attitudes has added to the anxiety and confusion of school communities grappling with the technological and pedagogical changes that will be needed. Rural communities should fear that their needs may be ignored.

Distance education for rural secondary schooling is the focus of this presentation because the challenges are believed to be more urgent and the potential benefits of appropriate change are likely to be greater. The ever increasing political interference by all governments in what happens in schools and the confusion in collaboration between states and territories have hampered development. Private providers and sectarian interests have added to the competition for scarce resources and politicised the curriculum even more.

The presentation contains some of the themes from the politics of education that may be more relevant to rural high schools. Stories from action research that reveal the challenges being faced by education at a distance will be workshopped to develop the issues at the local school community level. With discussion is intended that some of the political processes such as privatisation and deregulation will be made more transparent so that we can contribute to the debates more effectively and facilitate resolution of the inevitable political conflicts. It is hoped that the imminent transformations will be easier to bear.

Obsession
It was only the other day that I bumped into a former colleague at the library. I had not seen him for almost twenty years. I saw him bowed with the weight of years and was chastened by his dishevelled vagueness. I found it hard to face the reflection of what he was thinking of me. The proud figure of a man, striding through Hyde Park on his way to The Correspondence School, whistling as though in unison with the birds, was but a memory to enjoy.
His story was that he had resigned in protest at the Principal’s telling him that he was not keeping up with the times. Yet he had been able to keep his end up for years and years. Why should he change?

Even though he was forced out in the interests of modernising distance education in NSW, I still wonder whether this goal this goal of modernisation has been achieved.

Curriculum warfare.
I experience even greater discomfort when other suppressed memories ooze over my writing about how distance education may adapt to the new century. Our conscientious attempts to apply the new wisdom about distance education in the preparation of materials drove us into paralysing conflict. My management imposed haughty judgments on the materials written and designed by experienced correspondence education teachers. The learning experiences were neither valued nor understood and their wonderful contribution to kids learning was demeaned. For their part, the old hands could not see why distance education should change.

So the benefits of new ways were adopted but the values of the old were cast aside. The people were cast aside too.

On Saturday I was able to recreate some of my illusions when I met another former colleague who had taken promotion to a secondary position in a small country town. He was still doing well. But he was at a bigger school now. I wondered how it was going now, in that small school he moved to, on the western plains of NSW.

The glass is only half full.
So my political quest began as an earnest but flawed attempt to ease the transition of teachers and students in school communities into new ways, new practices and new relationships. It was continually thwarted by the inflexible organisation of distance education, inflexible industrial relations, inflexible and overloaded curricula, judgmental assessment, and confused attitudes about the aims of education. Even though distance education is supposed to provide greater flexibility than traditional schooling, essential change to fulfil that promise has been delayed.

The quest that I pass on has been subsumed in transformations of immense social, political and economic significance. The discussion around some of the issues is intended to emphasise how we might engage in political processes at the grassroots. Here are some “dotpoints” to provoke some of that discussion.

The politics of distance education schooling
While there is a substantial body of literature on the politics of education in the schools of our region, there are few references to the role that distance education might play. Rural education needs are considered but the challenges of incorporating technology into schooling are twisted in the tangled maze of educational jurisdictions.

Jocelyn Calvert (2005) reviewed the issues in contemporary distance education for the tertiary sector. The contribution from our region to distance education as practice and as a field of study takes a proud place internationally.
Kathryn Moyle (1999) comprehensively documents the changes that are needed in distance education schooling. But what changes have taken place in the schools themselves?

“…ask not what your country can do for you – ask what you can do for your country”
Enslaved as we all are to the conflicting dictates of governments, we go begging for inadequate offerings to create the transformation that becomes more urgent with each passing election. It is obvious that there needs to be substantial extra investment by the nations in the region for all education. This will not be achieved without the political commitment of all communities.

**Political, social-emotional, and intellectual at the community level of education.**
It is as individuals that we need to face the political transformations happening in our daily lives. That change needs grassroots participation is acknowledged but rarely achieved. In school communities these include social, emotional as well as the intellectual changes that are all too often expected to happen in isolation. When I have experienced regressive conflict I have observed that there has been no progress at all. What is the support that we can offer each other as this century unfolds?

**The importance of place**
The inclusion of a paper by Letts et al (2005) in the NSW report about future directions in education shows that the importance of place in the education of kids is at least recognised. Whether it can be provided for in the new digital age, and in the distance education provision for small rural high schools, will depend upon the political commitment of rural communities to see that it happens.

**Constructivism and instructivism.**
In secondary distance education we have hardly begun to attempt the challenges of going online. Just accepting the findings of educational research about more effective pedagogy has been too painful. Taking on the benefits to student learning by embracing more of the liberating and engaging practices of constructivism supported by appropriate assessment for learning disturbs decades of belief. It also interferes with the well honed organisation of distance education schools.

Where it hurts most is in the comfortable individual relationships with students. These are rightly valued by the distance education community. These relationships are also dependent upon what the teacher wants. The child is expected to conform to the instructivist materials, or else. There is a vacuum of responsibility when the child does not fit into the distance education mould.

When it comes to digital materials and online communication all of the challenges are amplified and the costs are prohibitive. Yet the benefits are there for all to see. AADES has Glen Postle’s description on the website (Postle, 2004). What must be avoided is going online on the cheap and excluding those who need distance education the most.

**Jodi Tutty’s web-based science**
Jodi Tutty made a substantial contribution to the future of secondary distance education science. Adapting a Year 8 print unit of the Northern Territory Open
Education Centre for the online environment and incorporating a more constructivist pedagogy, she explored the potential advantages of the online environment over traditional distance education methods. She took up the challenge of doing this in “an educationally sound and cost-effective manner.” Her detailed observations on the processes that were involved and her critical appraisal are fundamental.

The positive attitude of the participants to online learning surprised Jodi Tutty in the light of disastrous features of the program.

The findings of this study were disappointing. Due to the poor telecommunications infrastructure in the NT, CDs rather than the Internet had to be used to deliver the course. Without the use of Internet connections, communications tools such as email and discussion boards could not be used in the instructional design. This severely limited the teaching and learning strategies that could be used. The delivery of the module was beset by technical difficulties, as the students did not have the level of technical literacy required to complete the online module. On the economic side, the cost of developing the online module was significantly higher than that for the print based version and worse, the cost for developing subsequent similar modules was unlikely to be significantly less (Tutty, 2002.)

This work in Darwin shows how much is needed to provide appropriate technological resources to students and to improve the appropriateness of the learning experiences. The last SPERA conference showed that the technology was now being provided. But this may be easier than curriculum development. And how are the results of this research going to be communicated to other centres?

Reaffirming the twentieth century vision for education

From the preamble to the constitution of UNESCO

That since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed;

That ignorance of each other’s ways and lives has been a common cause, throughout the history of mankind, of that suspicion and mistrust between the peoples of the world through which their differences have all too often broken into war;

That the great and terrible war which has now ended was a war made possible by the denial of the democratic principles of the dignity, equality and mutual respect of men, and by the propagation, in their place, through ignorance and prejudice, of the doctrine of the inequality of men and races;

That the wide diffusion of culture, and the education of humanity for justice and liberty and peace are indispensable to the dignity of man and constitute a sacred duty which all the nations must fulfil in a spirit of mutual assistance and concern;

That a peace based exclusively upon the political and economic arrangements of governments would not be a peace which could secure the unanimous, lasting and sincere support of the peoples of the world, and that the peace must therefore be founded, if it is not to fail, upon the intellectual and moral solidarity of mankind.
At the beginning of the twenty first century it is timely to reaffirm this vision. Recent events in the Pacific and in East Timor remind us of the implications for people of all nations in our region. Events at Redfern, Macquarie Fields, Cronulla and in North and Central Australia demonstrate that our education systems have not been meeting their obligations equitably. The peoples of our region have not been vigilant enough in pursuit of the real basics of education, its values.

Distance education is expected to facilitate the provision of education for all people and promote freedom, justice and peace. This will not happen in our region unless vigilance by all citizens is maintained in the defence of democracy and in the renewal and pursuit of these ideals.

Privatisation

How can we privatise a national icon like School of the Air? Easily. We just cannot afford the costs of the regional jurisdictions continuing to develop distance education curricula for all. Far better to get private schools, only private schools have values, to provide students with online resources from overseas. If you want Australian content, with the increasing convergence in communications media, let’s get the Nine Network to provide it.

Within each rural community there are different allegiances to the different providers of distance education, from home schooling to exclusive religion. Will the curriculum remain rich and fulfilling or become narrow and divisive?

Even if the developments in essential distance education are to be left in public hands, the collaboration between jurisdictions has been fragmented, with each tackling the international market alone. Then there are the creative people who design the educational programs and the technological innovations to present these programs to learners. Will their intellectual contribution be rewarded?

Deregulation

Teachers and learners in rural communities are so bound by regulation that it is amazing that they have done so well. Governments impose competing values. Boards impose “level playing fields” to flatten kids with learning impairment and homogenise rural and remote localities as simply “out there.” Effective rural innovation and sustainable practice has always had to cope with discouraging regulation. Schooling “out there” cannot be transformed unless regulation is reformed.

The whole organisation of schools will be transformed. Workplace deregulation will be even more politically chaotic than is currently imagined.

SPERA emerged from the proud past and is keeping watch on the challenging future. The discussion of these issues will be able to inform the directions that political action may take and the priorities that may be pursued. But give emphasis to what we can do in our own communities.
Other issues for consideration
• Accountability to government and the community when all communication is on record and subject to litigation.
• Communication to facilitate transformation.
• Do baby boomers want generation Y to have a future?
• Integration of the Learning Federation materials in rural high schools.
• Leadership: is this the abrogation of responsibility?
• Political economy of rural education more generally.
• Progress on the HREOC Recommendations for distance education.
• Regional cooperation in the provision of distance education – Australia, New Zealand, Pacific Nations and Timor.
• Role of national testing in distorting the democratic curriculum.
• Scientific literacy (or science for all) and other literacies.
• Transformation of unions and professional associations for a global information age.
• Uncertain future of public education.

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Education and Training: ‘The Fijian Way’

Don Boyd
Western Australian Department of Education and Training

Abstract Only
This presentation will be a visual and narrative travelogue of the education and training system of Fiji. It will outline the government plan for education and training, the scope of the curriculum, teaching, learning and assessment practices, physical structures, accountability and resource allocation. The content will be derived from the direct experiences of the presenter who in 2006, spent 6 weeks working on behalf of DET, (Department of Education and Training WA) in Fiji in the areas of School Review and Accountability.
Inter-Sectoral Partnership and Collaboration in the Pilbara: A Reality

Don Boyd
Director, Remote and Rural Education,
Department of Education Services

Emmy Terry
Principal Consultant, Local Area Education Planning
Asset Planning
Department of Education and Training

Abstract
This is a follow-up to a presentation by Emmy Terry and Don Boyd at the 21st National SPERA Conference in Darwin 2005 on the topic: Bringing Educational Change across the Pilbara. The Pilbara Education District is one of ten rural education districts in the state. The Pilbara, located in the north west of Western Australia spans 510,000 square kilometres and is well known for its harsh, arid environment and isolation. To bring about innovation and significant educational change, school clusters across the Pilbara have actively engaged in a Local Area Education Planning (LAEP) process. Systemic initiatives have resulted in the investment of significant funds to bring about educational change particularly in regional/rural WA, e.g. Karratha. As a result of the LAEP process the Year 10-12 component of Karratha Senior High School is currently being redeveloped as a senior colleges integrated with TAFE and Curtin University. Integration commenced in 2004 with 45 Year 11 and 12 VET students being relocated to the Karratha TAFE Campus. This number has increased to 75 students for 2006. The full cohort of Years 10-12 will be relocated in integrated facilities for 2008. Currently, there has been limited analysis by the Department in this integrated context. However, there has been much debate about the initiative of creating co-located/integrated senior colleges and the real “outcomes” or “improvement” they have achieved within the public education sector. As key implementers of this initiative, it is critical that we have evidence of positive indicators of changes, that as a system we are attesting to bring about to enhance and maximise educational opportunities for students from K-12 and beyond.

1.0 PREAMBLE
The purpose of this paper is to provide an overview of the work that is taking place in the Western Australian town of Karratha to develop a fully integrated, multi-sectoral education Precinct. In doing this, the paper provides a brief introduction to the geographic and economic context in which Karratha is located.

Secondly, the paper looks at the vision that the designers of the Precinct have created and are attempting to bring to fruition.

Thirdly, in providing the overview, the paper looks at the dynamic and innovative nature of the three key players who are working together to develop the integrated campus.

A fourth aspect of the paper is a brief elaboration of the key elements that the designers are attempting to bring together to form the Precinct. A central element is the notion of integration. A time-line is also provided for the development of the Precinct.

The paper concludes with the authors highlighting the need for ongoing research into the development of the Precinct, the challenges faced and overall effectiveness of the project.
2.0 INTRODUCTION

Karratha is located in the Pilbara Education District which is one of 10 rural/remote education districts in the state of Western Australia. The Pilbara spans 510,000 square kilometers and is well known for its harsh, arid environment and isolation. It is one of the most vital and dynamic wealth producing regions in Western Australia, responsible for the production of goods and services worth more than $16 billion per annum.

The mining and petroleum industries continue to be the predominant earners for the region, with a total value of production of $15.3 billion per annum, which accounts for more than 55% of Western Australia’s total mineral and energy production. Ongoing development of mining, oil and gas and associated downstream processing opportunities will ensure continued economic growth in the region. Currently the region has investments of $3.75 million committed to the development of resource and processing opportunities with a further 13 projects valued at more than $12 billion under consideration. (Source: Pilbara Development Commission; www.pdc.wa.gov.au/region/default.htm)

The Department of Planning and Infrastructure predicts that the Region’s population could grow from its current level of just over 39,000 to around 50,000 by 2023. Karratha and its environs are predicted to increase in population from just under 16,000 (2002 ABS) to 18,000 in 2006, an increase of 12.5%. The town of Karratha is also expected to grow by 14%, from just under 11,000 to 12,500 over the same period. (Source: Australian Bureau of Statistics 2001 Census & Shire of Roebourne - http://www.roebourne.wa.gov.au/aboutus/aboutuspopulation.htm)

Karratha’s education and training sector is undergoing changes, as a direct result of the unique needs of the local community, in providing quality education. In 2003 a collaborative planning process defined future directions for education and training in Karratha. As part of this, the Minister for Education and Training announced that senior school students (Years 10-12) at Karratha Senior High School would commence co-location with Pilbara TAFE.

The establishment of Karratha Education and Training Precinct (KETP), commenced with the formation of a Steering Committee in 2003 followed with the relocation of 45 Year 11 and 12 students on to the Karratha Campus of Pilbara TAFE, in 2004, to undertake the Western Australian Certificate of Education (WACE) and vocational programs that enable them to complete Year 12 graduation. By 2006 student numbers increased to 65. With a budget of $27 million, planning commenced to develop a brief for the learning environment for all senior school students (Years 10 to 12) to relocate from the existing Karratha Senior High School to the new Precinct, for the commencement of the 2008 school year.

Strategic Planning by the Steering Committee resulted in the development of a Statement of Cooperation in 2004, that commits Karratha Senior High School, Pilbara TAFE, and Curtin University of Technology’s Centre for Regional Education to establishing relationships that will maximise educational opportunities for students and professional development for all staff to enable best use of available resources.
Central to this new relationship is the notion of integration encompassing all sectors. Integration is provided through links and pathways in Centres of Specialisation involving secondary schooling, training and tertiary education, with strong links to industry, community and Aboriginal organisations. Partnerships are committed to creating opportunities and developing innovative, flexible pathways. Active partnerships between providers, parents, business, industry and the community will focus on the local context with links to the global environment. Flexible delivery and use of technology is a vital way to develop links and partnerships, and increase access to programs. The Statement of Cooperation supports each organisation in achieving excellence in its selected fields of specialisation.

3.0 VISION

The vision for the Karratha Education and Training Precinct (KETP) is to provide accessible education and training services to the Karratha region that meet all of their individual needs and aspirations for education, from Year 10 through to TAFE and university. Empowering students to become lifelong learners, with the knowledge, skills and values to embrace change is an important outcome. This vision will be informed through the development of appropriate environments and programs for the unique needs of students at different phases of learning. Leadership will recognise the distinctive features of each of the sectors, while harnessing the benefits of working together.

The vision will be supported by the provision of a seamless approach to service delivery, through the restructuring of the management processes, structures and accountabilities within the KETP. Enhanced, more flexible, connected and innovative delivery from the KETP governance structure, will embrace the implementation of the strategic directions and goals of the Department of Education and Training.

4.0 THE KEY PLAYERS

4.1 Karratha Senior High School

Karratha Senior High School (KSHS) is a progressive and inclusive high school, catering for approximately 800 students in ageing buildings. A senior high school since 1974, KSHS caters for a wide cross section of the community, with students coming from eight primary schools within the Karratha townsite and hinterland. As a result of population growth KSHS also enrols students from approximately 25 schools state and nation wide.

As in all mining communities, the dynamic nature of the population is further exacerbated as large scale capital projects commence and reach completion. This growth phase requires changing skill sets within the region on a constant basis, clearly impacting on statistical figures relating to student transiency and retention year. Due to parents obtaining other employment, 112 of the students who left went to schools in the south of Western Australia or went interstate.

Karratha Senior High School offers a comprehensive range of Tertiary Entrance based subjects. Depending on the nature of the cohort, between 20 –50% of the School’s Year 12 students undertake a Tertiary Entrance Examination (TEE) program of study.
KSHS also offers a wide variety of vocational oriented subjects/courses which have been streamlined as part of this project into Pathways for students.

Aboriginal Education has a strong focus within the school and this has been given additional impetus through the Aboriginal Education Operational Plan. The school has been a pioneer in developing programs to retain Aboriginal students to the end of secondary education. As an outcome the school has had outstanding success with its Aboriginal students, Vocational Education and Training programs and student retention rates into senior school. Based on August 2005 figures, Aboriginal students make up 18% of the student population and the school’s attendance rate for Aboriginal students is clearly superior to the state average. (Source: Karratha Senior High School: Annual Report 2005)

### Attendance Rates: State Comparison %
(Source: Department of Education & Training: School Profile Data: Karratha Senior High School)

<table>
<thead>
<tr>
<th>Year</th>
<th>Non - Aboriginal</th>
<th>Aboriginal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School</td>
<td>State</td>
<td>School</td>
</tr>
<tr>
<td>2003</td>
<td>91.7%</td>
<td>91.1%</td>
<td>62.0%</td>
</tr>
<tr>
<td>2004</td>
<td>92.3%</td>
<td>90.6%</td>
<td>77.7%</td>
</tr>
<tr>
<td>2005</td>
<td>90.3%</td>
<td>90.7%</td>
<td>75.1%</td>
</tr>
</tbody>
</table>

Karratha Senior High School currently has a strong Year 10 to 11 student retention rate of 102% (the School attracts students from the private sector and new families moving into town), with the school’s VET programs being a big attraction. In 1996, the number of students involved in VET related courses was 16 (8%), in 2004 there were over 130 (50%) students involved. By 2005 there were 159 (61%) students involved in VET courses. Structured Workplace Learning has been the key to the high rate of students involved in VET programs. So successful are the VET programs that students often gain employment before completing Year 12.
### Apparent retention and progression rates (%) – secondary
(Source: Dept of Education and Training: School Profile Data; Karratha Senior High School)

<table>
<thead>
<tr>
<th></th>
<th>Years 8-10</th>
<th>Years 8-12</th>
<th>Years 10-12</th>
<th>Years 10-11</th>
<th>Years 11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>86 %</td>
<td>48 %</td>
<td>54 %</td>
<td>82 %</td>
<td>69 %</td>
</tr>
<tr>
<td>003</td>
<td>106 %</td>
<td>63 %</td>
<td>51 %</td>
<td>94 %</td>
<td>62 %</td>
</tr>
<tr>
<td>004</td>
<td>81 %</td>
<td>48 %</td>
<td>55 %</td>
<td>86 %</td>
<td>59 %</td>
</tr>
<tr>
<td>005</td>
<td>6%</td>
<td>4%</td>
<td>1%</td>
<td>8%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**The overwhelming majority of the students who did not complete Years 11 and 12 left school to take up apprenticeships and other meaningful employment opportunities.**

Statistics in the chart below indicate the movement history for the graduating Year 12 class over the 2003-2005 period. It does not show the number of students who may, within the school year, have left school to enter into a Traineeship or Apprenticeship. School records suggest the Traineeship and Apprenticeship intake is far higher than the statistics below indicate. This impacts in retention statistics and does not reflect the school’s success in preparing students for Traineeships and Apprenticeships.
2004 & 2005 School Leaver Year 12 Destination Data
(Source: Department of Education and Training School Profile Data: Karratha Senior High School).

<table>
<thead>
<tr>
<th>Pathway</th>
<th>2004</th>
<th>2005</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAFE</td>
<td>12.5%</td>
<td>12.5%</td>
<td>3.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Traineeships (15%;19.3%), Apprenticeships (36.3%;25%), or some other form of study/training (3.8%;1.1%) %s relate to 2004, 2005 statistics respectively</td>
<td>55.1%</td>
<td>55.1%</td>
<td>45.4%</td>
<td>45.4%</td>
</tr>
<tr>
<td>Full or part-time employment</td>
<td>15%</td>
<td></td>
<td>17.1%</td>
<td></td>
</tr>
<tr>
<td>University studies</td>
<td>13.8%</td>
<td>13.8%</td>
<td>20.5%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Return to Karratha Senior High School for further studies</td>
<td>1.3%</td>
<td>1.3%</td>
<td>2.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>“other/unknown”</td>
<td>2.5%</td>
<td></td>
<td>8.4%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Rounding of % for respective pathway information reaches a calculation of 100.2%</td>
<td>100%</td>
<td>TOTAL to Further Education &amp; Training 82.7%</td>
<td>TOTAL to Further Education &amp;Training 80%</td>
<td></td>
</tr>
</tbody>
</table>

4.2 Pilbara TAFE

Pilbara TAFE was established on 1 January 2003, as a result of the recommendation from the “Review of the WA Training Sector” report to amalgamate the former Eastern Pilbara and West Pilbara Colleges of TAFE.

The College has six major campuses throughout the Pilbara region (including the Karratha Campus) and a number of smaller and remote centres.

Approximately 80 full time equivalent staff are employed at the Karratha Campus of Pilbara TAFE delivering over 200 courses are offered across the campuses in areas including mechanical, electro-technology, business and management, service industry training (incorporating tourism, hospitality, hairdressing and commercial cooking), community services (disability, youth, children’s services and aged care), community and management skills (visual and performing arts, education and childcare, accounting and business services, office and clerical, adult literacy and Aboriginal languages) and Aboriginal short courses.

As is the case of Karratha Senior High School, Karratha TAFE Campus is also very dynamic. Its attention to a customer focus is reflected in the information provided below as is the strong partnership that is beginning to emerge with KSHS.
(Source: Pilbara TAFE 2005 Annual Report obtained with the consent of Kay Gerard).
Karratha Campus is responsible for programs and delivery in the areas of Trades, Business and Management, Service Industry Training and Community Services at Karratha Campus and the Pannawonica Centre. Throughout the year, recruiting has taken place for additional Lecturers in Electrotechnology, Fitting and Machining, Mechanical Fitting/Plant, Community Services and Business Studies;

In response to requests from local electrical contractors, the electrical Apprentice program has been expanded to enable those requiring a qualification from the Utilities Training Package – Certificate III in Electrotechnology Systems Electrician;

Registration was completed with the Training Accreditation Council (TAC) for the Diploma of Engineering – Instrumentation. The program is predominately on line supported by The Learning Manager (TLM) platform. The first student undertaking that program has recently received their qualification;

Local employers were surveyed as to how their needs could be better met in regard to the off job training component of their Apprentice’s development. 66% of surveys were returned with 70% of those supporting a change from a “block” attendance to that of a one day per week program, with 9% having no preference. Pilbara Iron in particular supported the day release concept for introduction in the 2006 first year program;

Twelve students from KSHS took part in phase one of the School Apprenticeship Link (SAL) program. The WS70 Metals pathway was selected as a vehicle to have additional skilled people trained in a region that has identified skill shortages. Woodside Energy Limited (WEL) and Pilbara Iron have supported the program by providing work experience opportunities at their facilities;

Pilbara TAFE collaborated with the KSHS and Curtin University to develop the Pilbara Pathways in the Karratha area. This has been an initiative of the Local Area Educational Planning (LAEP) group. A draft publication has been produced and trialled with Year 10 students;

Local employers have responded in a positive manner in addressing the shortage of tradespeople, particularly in the Electrical, Instrumentation, Fabrication and Mechanical areas. This campus has seen an increase in the order of 46% in First year Apprentice numbers. The greatest increase experienced in the Electrical Trade where numbers have risen from 12 first year apprentices in 2004, to 26 in 2005. Included in the overall figures are eight Fast Track Apprentices;

Two Equipment and Training Technology Submissions were put forward to Department of Education and Training for upgrading aging equipment in the Trades Workshop. Of the combined $597,000 requested, $150,000 has been approved from the Metals and Automotive proposal. Aboriginal students make up 25% of the student population and 60% of all module enrolments;

2005 saw a 15% increase in Aboriginal students enrolled in Certificate III level or higher qualifications;

Number of Aboriginal students in Employment Based Training (EBT) increased by 24% in 2005;

8.4% of students are apprentices and 4.7% are trainees;

Flexible or mixed mode delivery accounts for 29.8% of all training delivered;
The Vocational Education and Training in Schools (VETiS) program accounts for 8.4% of all training; and

Pilbara’s 15 – 24 year olds represent 33% of the student population and 67% of all module enrolments.

4.3 Curtin University of Technology

Curtin University of Technology, through its Centre for Regional Education, is committed to the provision of tertiary access to students throughout Western Australia outside of the Perth Metropolitan area. The University commenced delivery in 2004, utilizing the facilities of Karratha Senior High School and Pilbara TAFE’s Karratha and South Hedland Campuses.

This innovation provides an opportunity for tertiary education bound students to remain in the region, while experiencing the demands and requirements of university life. Courses offered are Bachelor of Arts (Training and Development), Bachelor of Science and Master of Science (Research), Bachelor of Arts (Humanities), Bachelor of Education (Early Childhood), Bachelor of Education (Primary) and Doctor of Philosophy. Additionally the University offers Foundation Courses.

5.0 KEY ELEMENTS OF KARRATHA EDUCATION AND TRAINING PRECINCT

In building the Precinct the education and training leaders are currently focusing on four key elements; learning environment, curriculum delivery, integration and collaboration.

5.1 Learning Environment

The Karratha Education and Training Precinct will provide a relevant and integrated, flexible, safe and inclusive learning environment that responds to the needs of students in Years 11 and beyond. The precinct will be modelled on a “tertiary faculty model” based on: Science/Engineering; Humanities &Arts; Business Studies/Information Technology; and, Hospitality/Human Services.

The Precinct will promote an adult learning environment and ethos characterised by:

- Flexible timetabling;
- Extended learning/teaching day to enhance provision of education through maximising the hours students will have access to facilities;
- Use of specialised facilities in the Precinct and the broader community;
- Alternative courses to expose students to a diverse range of learning opportunities that add relevance to their education and training pathways, and address the needs of the future;
- Enhanced access to dual certification, mutual recognition and advanced standing, with multi entry and exit points;
- Provision for a range of interests, capabilities and destinations, with a strong link to the local context; and
- Accommodating different learning styles.

Extensive planning has occurred through discussions of the Project Consultation Group that is chaired by the appointed architects. The purpose of this forum is to articulate and embed the vision and ethos within the “education brief” for the integrated college. The “education brief” ensures that educational imperatives are
being met in the design phase of the project and considers the uniqueness of the local area bringing the “Pilbara environment” into the learning space.

5.2 Curriculum Delivery
The curriculum offered at the Precinct will be broadbased and configured to enable students to move through and cross pathways of study specifically developed with the local context in mind, but, flexible enough to enable students to pursue their learning and career ambitions.

Underlying principles ensure that the curriculum is:

5.2.1 Broad based within resources available.
5.2.2 Future looking.
5.2.3 Focused on the needs of all stakeholders including students, industry and the wider community.
5.2.4 Informative in delivery, addressing the current skills shortage facing Australia, and in particular mining communities has been considered.
5.2.5 Maximising opportunities provided by an outcomes focused education articulated in the Curriculum Framework and Courses of Study.

To achieve the curriculum intentions, the Precinct is committed to:

- Delivery of a wide range of Courses of Study (from 2007) which allow for entry to the workplace or further education and training;
- School Based Traineeships;
- Development of bridging, access and safety net programs for students at risk;
- On-line Learning for Precinct based courses, access to courses hosted elsewhere and providing opportunities for self paced learning. The Precinct will have a strong focus on flexible delivery, enhanced by the use of Information and Communication Technologies. Student access will be provided across the precinct, with an online flexible learning centre available to all sectors, students and the community, including video over IP. All learning clusters will incorporate access to ICT facilities for staff and students.
- Fostering existing links and developing new partnerships with outside providers including:
  - Pathway development focussing on integrated courses between secondary schooling, university and TAFE;
  - Courses delivered at University, TAFE and the workplace; and
  - Engagement of students in experience of the workplace.
  - Collaborative planning and work with students to provide individualised learning programs and Individual Education Plans (IEP) to accommodate learning needs and styles;
  - Ongoing advisory programs to ensure appropriate course selection and participation; and
  - Clusters, or Centres of Specialisation, will form the basis for program delivery. Through access to one or more Centres, programs will be provided that cater to tertiary entrance, TAFE certification, Western Australian Certificate of Education (WACE/graduation) and employment. This will include access to traineeships and workplace learning opportunities. Clusters share staff facilities to support interaction, collaborative planning, and
innovative and flexible program delivery. There is a focus on dual qualifications, mutual recognition and advanced standing.

5.3 Integration
Parties developing the Karratha Education and Training Precinct are proposing a highly integrated approach that will be responsive to the education and training needs of local Pilbara communities and industry. The long term aim is to provide a governance model that provides strong leadership and enables the most effective and efficient use of scarce human and physical resources and maximise the outcomes.

In designing the governance model educational leaders in the Pilbara want to enable:

- the shared use of physical infrastructure and resources that meets the needs of the students/clients; enables optimum utilisation of resources and ensures that a comprehensive approach to maintaining a quality learning environment;
- shared management functions that enables education and training to work cooperatively to develop curriculum; share knowledge; maximise staff development opportunities; promote quality assurance across programs; and provide coordinated career counselling for students/clients to ensure that pathways and learning/employment opportunities are clearly understood and accessible;
- the ability of academic staff to teach across school, TAFE and university sectors depending on qualifications and experience to optimise staffing resources; enable students to have access to the best available teaching resources; and
- faculty based learning environments that foster collaborative teaching/lecturing across the sectors (school, TAFE and university) enabling multi sector use of facilities and resources concurrently.

5.4 Collaboration
The most significant of all the elements of the Precinct is the evolving nature of the collaborative processes, not only in building the vision, but enabling the vision to become a reality.

Collaborative processes have been strengthened through the creation of formal mechanisms such as a Steering Committee, Implementation Committee and numerous Working Parties. The Steering Committee provides a forum for high level collaboration in developing and setting the strategic vision and directions for the Precinct.

The Implementation Committee involves a significant cross section of leadership and interest groups including parents and students in a forum designed to focus on collaborative problem solving as numerous operational issues, barriers and impediments have to be addressed. The Implementation Committee establishes Working Parties on a needs basis to support its work in collaborative problem solving.

The Steering and Implementation Committees and Working Parties, through a formal structure, provide the opportunity for all stakeholders to collaborate.
As is highlighted later in this paper, integration rather than co-location has been adopted as the preferred strategy for the new Precinct to achieve improved education and training outcomes.

6.0 EDUCATIONAL DRIVERS

The most significant driver behind the development of the Karratha Education and Training Precinct has been an exceptional level of co-operation between sectors to develop something that is unique to the region. Underpinning the strong sense of collaboration is a desire by all key players, in each sector, to improve the provision and quality of education and training. For this new, highly integrated approach to work effectively the Precinct partners have identified the need for a new governance model to be developed. Inherent in this are many risks that are identified later in the paper.

In addition to the above further drivers are:

- a critical need to improve the quality of education and training in the Pilbara as the perceived quality of education and training in the Pilbara is a key determinant of individuals and families decision to relocate to and remain in the Pilbara;
- a desire to stem the relocation of families to metropolitan areas on the completion of their children’s primary education;
- a desire to stem the flow of students to boarding facilities at metropolitan schools and other large regional centres;
- to provide a real opportunity for students in the Pilbara who achieve at a relevant level in university entrance assessments (TEE), to take up university places to the same level as metropolitan students. Anecdotal information also indicates that the ‘drop-out rate’ of rural students in their first year of university study in the metropolitan area is much higher than the State average;
- industry recognising the importance of supporting education and training so that they can attract and retain a locally based skilled workforce as opposed to the ‘fly-in-fly-out’ contract system that currently exists. Industry is keen to support strategies that improved the perception and reality of quality education and training in the Pilbara;
- a small number of large companies (Pilbara Iron, Pilbara Rail, BHP Billiton Iron Ore, Woodside Energy, Dampier Salt Limited and their contractor such as Apprenticeships WA) employ a significant proportion of the Pilbara workforce directly or indirectly, including the majority of apprentices and trainees. These companies want a coordinated and strategic focus for education and training in the Pilbara;
- the importance of an effective and efficient use of infrastructure and resources that could be best achieved through the development of a multi-sector education and training campus;
- strong industry and community support for the development and expansion of higher education programs that Curtin currently offers through Pilbara TAFE campuses. Administrative and other support services for university enrolled students are provided by Pilbara TAFE through a Service Level Agreement with Curtin University;
development of improved strategies to provide more productive education and employment outcomes for the Pilbara’s large Aboriginal population, many of whom retain their traditional culture and languages and live in smaller regional centres and remote communities.

7.0 CHALLENGES

While work is in progress to develop a fully integrated multi-sector precinct delivering senior secondary school education, vocational education and training (Apprenticeships, Traineeships etc) and higher education university programs, there are still several constraints impacting on realising the full intent of the vision. These include:

- the legislation of the Vocational Education and Training Act 1996 and School Education Act 1999, as well as relevant university legislation;
- funding arrangements for the multi-sector stakeholders if the intention is to provide the Precinct with a single and/or integrated operational budget;
- reporting and management arrangements for the multi-sector stakeholders if the intention is to have a single Precinct Director who will ultimately manage and lead the Campus and have decision making over all the multi-sector stakeholders so that a unified approach is provided;
- industrial awards if the intention is to enable the Institute to implement its own Enterprise Bargaining Agreement for academic and non-academic staff so that consistent terms and conditions enhances the opportunity to recruit and retain staff who can teach/lecturer and work in more than one educational sector; and
- inability of the system to provide flexibility for local communities to develop models, outside the norm, to cater for the needs of their students within their unique environment.

These issues require extensive investigation, debate and consideration before the fully integrated vision can be implemented at Karratha and the maximum potential of the project achieved.
### 8.0 PRECINCT DEVELOPMENT

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 (March)</td>
<td>Minister for Education and Training announces that Years 10-12 students would be co-located at the Karratha Campus of Pilbara TAFE.</td>
</tr>
<tr>
<td>2003 (August)</td>
<td>Steering Committee established for the Karratha Education and Training Precinct commencing collaborative planning.</td>
</tr>
<tr>
<td>2003 (September)</td>
<td>Implementation Committee and Working Parties established to plan for the relocation of students.</td>
</tr>
<tr>
<td>2004 (February)</td>
<td>45 students commenced study at Karratha’s Pilbara TAFE site. Curtin University’s Centre for Regional Education (CRE), commenced delivery of courses through Pilbara TAFE</td>
</tr>
<tr>
<td>2004 (December)</td>
<td>Statement of Co-operation committing all sectors to a partnership was launched by the Minister for Education and Training.</td>
</tr>
<tr>
<td>2005 (February)</td>
<td>60 students were based at TAFE and engaged in School Based Traineeships, Certificate II in Hospitality, Certificate II in Business, and the School Apprenticeship Link program. These students had the opportunity to attain dual qualifications.</td>
</tr>
<tr>
<td>2005</td>
<td>Government commits $27 million for the construction of an integrated senior college on the Karratha Campus of Pilbara TAFE.</td>
</tr>
<tr>
<td>2005 (June)</td>
<td>Scoping document developed to inform architects of the vision and intent of the Precinct.</td>
</tr>
<tr>
<td>2005 (September)</td>
<td>Architects appointed and the Project Consultation Group was established.</td>
</tr>
<tr>
<td>2005 (September) to 2006 (May)</td>
<td>Project Consultation Group developed the learning environment brief.</td>
</tr>
<tr>
<td>2006 (July)</td>
<td>Tender document released for the construction phase.</td>
</tr>
<tr>
<td>2006 (September)</td>
<td>Builder appointed.</td>
</tr>
<tr>
<td>2008 (February)</td>
<td>Integrated college for years 10-12; TAFE and University in full operation.</td>
</tr>
</tbody>
</table>

### 9.0 NEED FOR ONGOING RESEARCH

The authors are keen to see ongoing research into the impact of the Precinct. Questions associated with the realisation of the vision, improvement in student outcomes along with perception and attitudes of staff, students and parents need to be explored in more detail. The benefits, or otherwise, of the Precinct to the Karratha community over time needs to be determined. In doing this both qualitative and quantitative data needs to be collected and analysed. Such research would also be extremely valuable in providing an evidence-based approach to the Precinct’s ongoing development and evolution.
Part of this research could also focus on placing the project into a theoretical context with analysis on key educational issues such as change management, the role of leadership, engagement of stakeholders, professional learning and communication.

GLOSSARY

Apprenticeship A structured program, usually of four years duration that leads to becoming a qualified trades person. The training combines practical experience at work with complementary off-the-job training with a Registered Training Organisation (RTO). An RTO can be either a private provider or a TAFE College. Financial incentives are available to eligible employers to encourage them to take on an apprentice.

CoS Courses of Study - WA outcomes and standards focused curriculum based on providing opportunity for students in Years 11 and 12 to engage in more challenging problem solving, and application of knowledge and skills they have learnt.

The new courses will complete the implementation of the WA K-12 Curriculum Framework, which began in all schools in this State in 1999. The move to an outcomes-focus approach to education in Years 11 and 12 is consistent with this Framework and has the endorsement of all school system/sectors and all universities in WA.

CF The Curriculum Framework represents a major step in the reform of school curriculum in Western Australia. It is built upon a commitment to the philosophy that learning is continuous and that the essential purpose of schooling is to improve the learning of all students.

The Framework establishes learning outcomes expected of all students from kindergarten to year 12, regardless of who they are, where they are from or which school they attend. Rather than being prescriptive, the Curriculum Framework is used by schools to develop and implement their teaching and learning programs according to the needs and characteristics of their students.
GLOSSARY-continued

Integration

Within the Karratha Education and Training Precinct (KETP) the term integration refers to the endeavours of the stakeholders (Karratha Senior High School, Karratha TAFE, Curtin University and to a lesser extent Karratha Shire Council) to develop a teaching, learning and training environment for students in Year 10 and beyond that reduces the boundaries between sectors to create a seamless approach to education and training through a series of well defined pathways. The integrated environment is to be achieved through the sharing of all facilities, resources and inputs and in doing so reduce duplication and maximise outcomes for student and the community.

KETP

Karratha Education and Training Precinct comprising Karratha Senior High School (senior students Years 10-12), Karratha Campus of Pilbara TAFE and Curtin University

Pathway

Pathways refers to a collaborative framework of partnerships developed as a result of an integrated approach to educational and training delivery involving Karratha Senior High School, Karratha TAFE and Curtin University of Technology. The focus of Pathways is to identify, establish, document and articulate, quality, innovative education, training and other life long learning opportunities for the Karratha community and the indigenous population in the Pilbara region.

SAL

School Apprenticeship Link (SAL) is an opportunity for young people still attending school and enrolled in the Western Australian Certificate of Education (WACE) to be one step ahead of other young people who want to take up an apprenticeship. SAL provides an opportunity for students to get a real taste of what the workplace is all about.

SAL Phase I in Year 11 is delivered as a Family of Trades within an industry and SAL Phase II in Year 12 the student chooses the trade in which they are interested and commences their trade training. On successful completion of Phases I and II students will be assisted in finding an employer and gaining an apprenticeship. Any training successfully completed will be credited against trade training once an apprenticeship has been achieved.
## GLOSSARY-continued

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>School Based Traineeship</td>
<td>A school based traineeship provides an opportunity for full time secondary school students to begin preparing themselves for a career in the workforce. Participants develop skills and get paid at the same time. With a school based traineeship participants can work towards secondary graduation and an industry recognised qualification.</td>
</tr>
<tr>
<td>Traineeship</td>
<td>A traineeship gains participants hands-on skills and work experience, and improves their employment prospects, while earning a wage. On successful completion a nationally recognised qualification is gained. The difference between a traineeship and an apprenticeship is that a traineeship can be either a full time or part time employment based training arrangement, usually for a nominal duration of 12 months or more, generally in a non-trade related area.</td>
</tr>
<tr>
<td>TEE</td>
<td>Tertiary Entrance Examination - candidates aspiring to enter university across the State of WA sit a written examination paper for a course usually at the end of Year 12. This has been replaced by the WACE Certificate.</td>
</tr>
</tbody>
</table>
| VET                   | Vocational Education and Training is a national system designed to skill workers to work in particular industries eg plumbing, retail and is underpinned by a National Training Framework which comprises two components:  
  - National Training Packages  
  - The Australian Quality Training Framework  
  VET works on a nationwide level, covering four levels of Certificate, Diplomas and Advanced Diplomas within the Australian Qualifications Framework. VET competencies will be part of the new Courses of Study. Some courses will have a VET focus. |
| VETiS                 | VET in Schools programs are based on national industry or enterprise competency standards. Structured Work Placement is highly recommended.  
  Students may exit the course with a full qualification or a statement of attainment. VET stand-alone courses may contribute to WACE graduation as recognised council-endorsed programs. |
GLOSSARY-continued

WACE
Between 2005 and 2009 a new Western Australian Certificate of Education (WACE) is being introduced for Years 11 and 12 students.

The new WACE will have up to 50 new courses that will replace all of the current subjects in Years 11 and 12.
To be eligible for a WACE, students must:

- Complete at least twenty units
- Achieve an average Level 4 on outcomes from at least five courses
- Meet the requirement for English Language Competence
- Complete four units from an English course
- Include all 13 overarching learning outcomes in an overall program of study

The external examination required for university entrance will be called the WACE Examinations.

WSA
Wholly School Assessed subjects completed by students not seeking university entrance. The new Courses of Study will replace these.
Creating multi-age classes: Exploring the challenges, benefits and strategies

Colin Boylan and Dennis Mulcahy
Charles Sturt University and Memorial University of Newfoundland

Abstract
Multi-age classes are a reality in many small rural schools in New South Wales and Newfoundland. For some rural schools the adoption of multi-age classes is a necessity, while for other rural schools it has been a deliberate decision. From the literature, there are many advantages and disadvantages associated with implementing multi-age classes with a school. This presentation will explore some of the challenges for schools, teachers and students, the benefits that are associated with multi-age classes, and the teaching and organisational strategies that surround multi-age classes.

‘Changing to a multi-age classroom reflects a magnitude of change far greater than simply changing to a new textbook or learning a new strategy or program.’ (Bruce Miller, NWREL)

Small schools and multi-age classrooms have been a necessary and important part of our educational systems given the size and location of the communities. Small schools are found in every Australian state and Canadian province and these schools allow children to receive part of their education near to the home. The New South Wales Department of education and Training (1997) stated: ‘Multi-age classes are a necessary pattern of organisation in many government and non-government schools across NSW and Australia, especially in rural areas. There is an increase in the number of schools choosing to introduce multi-age class groupings on the basis of the belief that they provide a better match with the structurally with the curriculum’. (p.23) This assertion is support by the design principles surrounding the construction of primary and secondary curriculum documents using six distinctive and developmentally based stages for defining appropriate student learning outcomes. (See: www.boardofstudies.nsw.edu.au)

Small schools are often described in terms of a particular set of characteristics that are often identified as goals of multi-age teaching. (Mulcahy, 1998)

Teaching in a multi-age classroom is a rewarding and challenging experience. Multi-age classrooms demand that teachers focus more on a 'needs based' or 'child centred' approach rather than a 'curriculum centred' one. The advantages of teaching multi-ages are numerous but include:

* a focus on the individual needs of each child;
* continuity of instruction and class stability;
* a focus on developmental learning stages rather than grade levels; and,
* younger students learning from older students.

Comparing traditional and multi-age classroom settings.
The following table explores many of the strengths and differences between the traditional classroom setting and the multi-age classroom setting. It is adapted from Meada, B. The Multi-age Classroom.

<table>
<thead>
<tr>
<th>TRADITIONAL CLASSROOM SETTING</th>
<th>MULTI-AGE CLASSROOM SETTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational authorities determine the curriculum and assign it to year levels</td>
<td>The curriculum is shared by all year levels and takes into consideration students’ interests</td>
</tr>
<tr>
<td>Subjects are taught separately and in isolation</td>
<td>Subjects are integrated and highlight real life settings</td>
</tr>
<tr>
<td>Teachers are expected to transmit knowledge and facts</td>
<td>Children learn in a community</td>
</tr>
<tr>
<td>Teachers are the central focus of the classrooms and the keeper of information</td>
<td>Teachers act as facilitators and guide the learning of their students</td>
</tr>
<tr>
<td>Instruction often emphasises one learning style and one or two types of Gardner’s multiple intelligences</td>
<td>Instruction focuses on different learning styles and uses all multiple intelligences</td>
</tr>
<tr>
<td>Ability groupings and levels is an alternate to whole class teaching</td>
<td>Heterogeneous grouping is emphasised with students supporting students.</td>
</tr>
<tr>
<td>Emphasis on whole class instruction minimises individual differences</td>
<td>Individual differences are met through small, flexible, changing groups</td>
</tr>
<tr>
<td>Children are expected to learn the same curriculum in the same way</td>
<td>Children are provided with the opportunity to demonstrate their learning through real life application</td>
</tr>
<tr>
<td>Teachers are held responsible for their students’ behaviour</td>
<td>Children are responsible for their own behaviour</td>
</tr>
<tr>
<td>Learning occurs best in quiet orderly classrooms</td>
<td>Learning is enhanced by students interaction and movement</td>
</tr>
<tr>
<td>Children work on goals established by the teacher</td>
<td>Children work on developmentally appropriate goals established by the child, teacher and parents</td>
</tr>
</tbody>
</table>

**Challenges in multi-age settings**

Planning and programming at all levels is important but particularly for multi-age classrooms and this usually requires time and commitment in terms of programming and daily lesson planning. A multi-age class program needs to be a practical and effective document. A program for a multi-age class must cater for the developmental needs of all students.

When planning teaching strategies, methods and organisation, teachers must maintain a balance between teacher directed and child centred activities which cater for all learning styles.
Regular evaluation of the teaching and learning process is essential to improvement. Anticipated learning outcomes should be linked to student behavioural indicators as determinants of the success of the teaching and learning methodologies implemented. The indicators may be qualitative and/or quantitative.

Session interaction

We invite participants to share with us their experiences, reactions and views on multi-age education.

We have selected three discussion questions to start the dialogue.

1. **What the challenges of multi-age education?**
2. **What are the benefits of multi-age education?**
3. **What teaching strategies are needed / used in a multi-age classroom?**

References


**Some Useful Resources about Multi-age Education**


**Web sites that are related**

http://www.stemnet.nf.ca/community/Prospects/v1n3/multgrad.htm

**Multi-age websites**

http://www.mun.ca/educ/faculty/mwatch/win2000/mulcahy.html
http://www.multiage-education.com/multiagen-b/explanation.html

National Middle School Association
http://www.nmsa.org (then select research)
http://www.bctf.bc.ca/ResearchReports/2000eic02/report.html
http://www.stw-tac.iu2.iau.us/effective/multiage.classroom.html
http://www.eric.uoregon.edu/publications/digests/digest097.html
http://www.ncert.nic.in/ Then select Publications from LHS menu, then select Journals of NCERT, then The Primary Teacher journal then the article by Maju Jain.

http://www.state.ia.us/educate/index.html (Iowa DE/AEA Childhood Network Factsheet on Mixed aged/Multiage Grouping)
Connecting Students, Community and University

Julie Godwin and Ingrid Wijeyewardene
University of New England, Armidale

Abstract
UNE has a strong tradition in supporting distance education students. Recognition of the importance of establishing learning communities that extend beyond the university campus to within the students’ community has resulted in the introduction of new concepts in student support that aim to create tangible links between the university and past and present students in their local communities. Graduates of UNE have been recruited to two new and innovative programs that increase the level of social and academic support available to DE students. The tUENin@distance peer support program links students with graduates trained in peer mentoring. The attUNE study skills program is offered in regional Access Centres and is facilitated by local UNE graduates who are qualified and experienced in education. These two innovations to student support are establishing communities of practice in rural NSW and facilitate DE students’ integration into the university.

UNE has a strong tradition in supporting distance education students. Recognition of the importance of establishing learning communities that extend beyond the university campus to within the students’ community has resulted in the introduction of new concepts in student support that aim to create tangible links between the university and past and present students in their local communities.

Graduates of UNE have been recruited to two new and innovative programs that increase the level of social and academic support available to DE students. The tUENin@distance peer support program links students with graduates trained in peer mentoring. The attUNE study skills program is offered in regional Access Centres and is facilitated by local UNE graduates who are qualified and experienced in education. These two innovations to student support aim to establish a sense of community amongst DE students in rural NSW and facilitate their integration into the university.

UNE has been a pioneer in the provision of distance education (DE) in Australia, and indeed in the world, since 1955 (UNE, 2005:online). It is now the second largest provider of DE to students residing in Australia (Distance Education Review Committee, 2005:7-8). Recent reviews of DE and attrition at UNE (Distance Education Review Committee, 2005; Anderson & McCrea, 2005) acknowledge the importance of support for students during transition into higher education and recommend a focus on factors that may influence student persistence and the overall student experience. It is widely recognised that the first year experience has a significant impact on student satisfaction that can determine whether a student decides to persist with their studies and whether they are likely to succeed. Research also suggests that students need to feel a sense of belonging to and engagement with the institution (McInnes & James, 1995; McInnes et al., 2000; Muldoon, 2002).

Social and academic integration into university life are crucial factors in student success. Lave and Wenger (1991) argue that learning is a social activity that is influenced by participation in a community of practice. The ability to participate
within such a community enables learners to develop a relationship with others and to form a sense of identity as a learner. This interaction fosters engagement. If a learner feels isolated, it will be difficult for them to form an identity as a learner (Wenger, 1998: 111).

The responsibility for student persistence lies as much with the institution as with the students. (Tinto, 1993; Tinto, 2005; Jardine, 2005). “An institution’s capacity to retain students is directly related to its ability to reach out and make contact with students and integrate them into the social and intellectual fabric of institutional life” (Tinto, 1993: 204). Tinto offers a model of integration into university in which the institution must support the integration of its students by establishing social and academic communities. It is the student’s ongoing positive assessment of their social and academic interactions which determines persistence. Programs that foster retention should demonstrate the institution’s commitment to student learning by establishing learning communities and by ensuring that students have the necessary skills needed for academic success (Tinto, 1993: 146-148). Tinto also suggests that supportive links be established between the institution and external communities where students are located (Tinto, 1993: 194).

Failure to become integrated into the institution may be because the student has not been able to feel at home with the institution, or because the student has not had sufficient interaction with the university (Tinto, 1987: 50). DE students, having no physical contact with the institution and a lack of identity and sense of belonging, may feel disconnected from the university (Rovai 2001). Yorke (2004:27) notes that developing a sense of belonging in DE students is problematic for institutions and suggests that “the personal may be more salient for students than the organisational” in promoting a sense of belonging.

This paper outlines two new programs that have been introduced to assist UNE DE students to integrate into the university community. These programmes, the tUNEin@distance Peer Support Program and the attUNE Academic Skills Workshop Program, utilise the support of UNE graduates within their local communities to establish communities of practice.

**tUNEin@distance Peer Support Program**

The tUNEin@distance Peer Support Program has been piloted in first semester 2006 to offer DE students the support of a trained peer mentor. This program was developed following the recommendations of the Distance Education Review at UNE and in August 2005, the Student Access and Equity Committee approved the funding for the tUNEin@distance peer support program. The program aims to mirror the peer mentoring program that is currently available for internal students in their first semester at UNE. In its pilot stage, the tUNEin@distance program was initially intended to be offered only in the UNE Access Centre areas. However, due to an overwhelming response from UNE graduates who were interested in becoming peer supporters, the pilot was extended to encompass the whole of NSW and the ACT.

The tUNEin@distance peer support program aims to match beginning students with a supporter who lives in their area and, where possible, who has studied in the same faculty or discipline. The support offered in the tUNEin@distance peer support program is typically of a pastoral nature. Supporters can give non-academic advice, refer students to student support services at the university as necessary, and assist in

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Hobart, Tasmania - July 2006
facilitating their students’ social integration into the university culture. Supporters make initial contact with the students in their group during the university’s Orientation week. The Understanding Attrition at UNE Report identified “strategic moments” (Anderson & McCrea 2005: 106) during the first year of study for an external student. These are prior to HECS census dates, during orientation, before the first assignments are due, and before the exam period. It is up to the supporter to contact the students at these times and then once more at the beginning of their second semester. In addition, students are given the supporter’s contact details and are encouraged to contact the supporter at other times should they need to.

Supporters are graduates of UNE and complete a training module before being accepted onto the program. As graduates of UNE, the supporters possess a working knowledge of the University, its support services, systems and processes. They also demonstrate to new students a level of commitment to the institution that reflects the quality of their own educational experience (Yorke 2004). Distance peer supporters in 2006 have commented that their reason for joining the program included:

“I have learnt so much as a result of my studying at UNE and would like to give something back and feel I have a lot to offer in this role.”

“TO repay my debt to UNE because I enjoyed my study so much.”

“The UNE experience was good for me...I wish to support other external students.”

Supporters ideally will have also studied at a distance and so are well aware of many of the particular issues that affect newly enrolled distance students. These include feelings of isolation; lack of confidence felt by many for whom university study is a completely new venture and who may not have undertaken any other form of study for many years; and the need to fit the demands of tertiary study into already full workloads. Peer supporters are in an ideal position to offer appropriate and timely support and advice for their students.

For many years the UNE ran a volunteer graduate support network. Interested graduates were included on a list which was distributed to external students in the same geographical location. The program was informal and it was essentially up to the participants to make of it what they wished. Some supporters would contact students in their area, others would organise group meetings for new and continuing students, but the majority would wait to hear from students. There was no training for mentors, nor were there any expectations placed on students or supporters. Supporters reported that they may not have had any consistent contact with students for several years on this program. In 2005, supporters on the graduate support network were informed of proposed changes to the program and were invited to join the new program. In recognition of their contribution to the old scheme, they were not required to complete the training module, but were sent these for reference. They were however required to complete an application form and supply the names of two referees. Recruitment of supporters was through an advertisement in the university newsletter, a web link from the homepage of the Academic Skills Office (ASO), and through the alumni. It was through the alumni that most responses came. To date there are a total of 44 graduate peer supporters across NSW and the ACT, with 25 of these living in regional or rural locations. The supporters are all volunteers.

Potential peer supporters were sent a program handbook and training manual. The handbook contained information about the aims of the program, reasons for attrition,
the benefits and role of peer supporters, program policy and procedures, a detailed section on the support services available for external students and information about strategic moments and the times that externals should be contacted during the semester. The training manual contained a detailed section on communication skills. Supporters were required to complete a workbook on the information contained in these two manuals. They were then issued with a Certificate of Completion. In January and February, 2006, the Coordinator of the program held a series of video and telephone conferences with supporters. This gave supporters the opportunity to meet other supporters and discuss aspects of the program with each other and the coordinator. The major issues discussed included the suitability of the topics covered in the training, the need for evaluation of the program; the supporters’ perceptions of their roles and prior experiences of those involved in the earlier graduate support network. Supporters saw this new program as a positive and proactive move by UNE. Based on their personal experiences, they also saw it as a much needed change which had the potential to build up a network of support, so critical in studying at a distance.

Supporters are also in need of support in their role (see Kennedy 2004). To this end, the Coordinator of the program emails the supporters regularly and has set up a web ct unit to provide a forum for supporters to discuss issues with each other, and to provide online access to the handbook and a noticeboard for FAQs and important dates. Unfortunately, the discussion unit does not seem to be utilised as much as anticipated or hoped. There has been a suggestion to make such a forum open to students also. This may encourage supporters to use the online unit more and is something to pursue in the evaluation.

The tUNEin@distance program targets external students beginning their degree at UNE. It aims to help these students in their transition to tertiary study. The pilot program, which began in February 2006, targeted only students living in NSW and the ACT. Students were contacted by email and by telephone and were given the option of having a peer supporter contact them. If they were interested they were matched with a supporter living in their area if possible. This way, the option of telephone contact was possible without prohibitive costs associated with long distance telephone calls. In cases where the supporter lived out of the student’s area, email was also a possible mode of contact. Currently, there are a total of 274 students being contacted by supporters, with 152 of these students living in regional and rural locations.

Mentoring sessions between supporters and their students occur on several levels. The major mode of contact seems to be one-on-one with the supporter contacting the student either by telephone or email. As stated above, the supporter is required to contact the student at strategic moments throughout the semester and into the second semester. After this, it is up to the student/supporter whether the relationship will continue. It also appears that some supporters are arranging group meetings. The value of this level of contact is immense. Whether the students meet socially or whether they form study groups, as argued by Lave and Wenger (1991) and Wenger (1998), the establishment of learning communities and the importance of social groupings in the learning process is crucial. One supporter who transferred from the original graduate support network is continuing his practice of not only arranging gatherings of new students, but also encouraging continuing students in his area to attend. This way, new students also have the opportunity to meet more experienced students living in their district. For rural students, the divide between themselves and
the campus can be bridged and they are given an opportunity to put a human face to their learning experience. A final outcome that has occurred in the few months since the program’s inception is the formation of study groups and the opportunity for students to be put in touch with other students studying the same degree. One supporter found he had a group of first year students studying law at a distance. He has been able to connect these students and they now have the chance to form a learning community within their own small community. This mirrors the type of learning community they could have formed on campus.

The program will run again in second semester with students from the mid-year intake being given the opportunity to take part alongside those students from first semester who wish to continue with the support. In 2007, the program will be offered nationally. There have already been expressions of interest from graduates across the country who are interested in joining the program. These new supporters, as with the supporters this year, have expressed their commitment to the UNE experience and have emphasised the importance of forming links with the university.

The UNE Access Centres
The establishment (2001-2005) of ten regional Access Centres in the New England region was a UNE initiative in collaboration with the New England Institute of TAFE that aimed to promote interaction between the people in the community and the members of UNE community. The Access Centres are located in areas of New England that are characterised by lower than state and national levels of educational attainment. The presence of an Access Centre is a physical link that provides technologies and facilities that may not otherwise be available to students in these areas. Many of these students are from lower socio-economic groups and lack the social and cultural capital necessary to successfully participate in all facets of their student role. Access to tertiary education is enhanced in these areas by Access Centre infrastructures that include study areas for reading or meeting with other students; computers with Internet access and Microsoft programs; access to UNE’s on-line units, library facilities and UNE support services; a printer and a Tandberg Video Conferencing unit. The Centres can be used twenty-four hours a day, seven days a week with support from on-campus staff available from 9am - 5pm week days via the direct phone link. The two centres located in large regional areas have full-time on-site staff, supported by past and present UNE students. All Access Centre operations are centrally managed through UNE. In 2005, a face-to-face academic skills program attUNE was introduced in the areas served by the Access Centres, to assist the academic integration of DE students into the broader university community. As with the tUNE@distance Peer Support Program, this program utilises the support of UNE graduates within geographically connected areas to establish communities of practice.

attUNE Academic Skills Program
Academic skills programmes are a feature of all Australian universities. It has been argued that the existence of such learning support courses is driven in part by the increasing diversity of students (McLean & Webb, 2002), many of whom are under prepared for university learning. However, it is equally valid to suggest that the majority of students new to the system benefit from assistance in developing the skills required to engage in academic discourse (Chanock, 1995). Bird and Morgan (2003) note, however, that DE students are often isolated in their quest to demystify
academic discourse. They struggle to develop academic skills, such as essay writing, in the ‘as you go’ mode; this becomes a source of frustration and of self doubt.

At UNE, academic skill support is coordinated through the ASO and is readily available to all students in a number of ways: lunch time generic and course specific workshops; supportive pedagogies within units; web-based and print resource materials; webCT and individual consultations offered face-to-face, by telephone and on-line. In addition, in acknowledgement of the challenges of the first year in tertiary education, on-campus first year students have faculty-based academic Mentors. The award winning tUNEup University Preparation Program was designed to meet the needs of DE students and has been highly successful, particularly in the face-to-face mode which requires on-campus attendance for four days. Students who have participated have consistently reported that not only have their skills and confidence in their ability to succeed increased, they also feel part of the university:

“ I know I am not alone” (tUNEup student 2005)
“a sense of belonging at UNE” (tUNEup student 2006)

The success of the tUNEup course prompted us to consider how we could reach more DE students, particularly those from rural areas who often find it difficult and do not expect to attend on-campus programs.

The Access Centre Academic Skills Program, attune, was developed with the aid of Higher Education Equity Program funding to provide DE students living in areas served by the UNE Regional Access Centres with a workshop program consistent with the on-campus “Lunch and Learn” academic skills program. It is jointly funded by the Access Centres and UNE’s ASO. A unique feature of the attUNE workshops is their facilitation by UNE graduates who have qualifications and experience in education and live within the Access Centre regions. Facilitator remuneration is an Access Centre budget item and is organised by UNE's Access Centre Manager.

The program is based around eleven packages. Each package covers a different academic skill area: Learning how to learn at university; Motivation and planning; Effective reading listening and note-making; Essay writing; Report writing; Common problems in writing style; Referencing and avoiding plagiarism; Critical thinking; Oral communication and presentation skills; Effective study and Exam techniques. The packages are designed to be workshopped either individually or in groupings as dictated by student need. Each package (CDROM and print format) consists of a series of PowerPoint slides/OHTs, teaching notes and resources, student handouts and activities. The notes are divided into major topic areas and include discussion topics, activities and background notes for facilitators. These notes are linked to the relevant slide/s, student handout and trainer resources. A suggested time frame is provided. While the workshop packages are quite prescriptive, activities are designed to allow facilitators to draw on their own experience and local knowledge.

Potential facilitators were identified through alumni lists and invited to attend a fully funded ‘familiarisation and feedback’ weekend on-campus at UNE. A vital feature of the weekend is the re-establishment of connections between the graduates and the university. Along with workshop sessions with ASO lecturers, the weekend included a tour of the university and an address by the University’s CEO that reflected UNE’s
goal to “make a real difference to regional and community development, and the prosperity and quality of life in its communities” (UNE, 2006). Twenty one potential facilitators participated; all were currently employed in the education sector. Three approaches were used to familiarise participants with the program. Firstly, the program’s intent and its packages were outlined, next a workshop was modelled by a Lecturer in Academic Skills using ‘the Learning how to learn at university’ package. Finally, participants were given the Referencing and Essay writing workshop packages to prepare and present as a group activity. Throughout, emphasis was placed on the importance of familiarising the students with the range of ongoing learning support options available. The sessions were informal and the exchange of ideas was encouraged to inform the further development of the packages.

In addition to discussion, feedback was obtained by a short questionnaire and observation of group presentations. The overall response to the weekend was very positive. Survey results revealed that all participants agreed that the weekend was a useful preparation for the role of an academic skills workshop facilitator. Participants were honest and constructive in evaluating the materials. Feedback resulted in changes to specific packages, for example, the essay writing workshop was edited to overcome an inconsistency in the terms used in the question analysis section and a section on paraphrasing was removed from the referencing workshop as it was considered too involved in the context of the workshop. This not only assisted the authors of the package, but, most importantly, it gave the facilitators a degree of ownership. Some participants indicated that they would like clarification as to their potential roles, notably the amount of the work they could expect, the timing of workshops, availability of the resources and the extent of student contact. Participants all agreed that the weekend increased their understanding of the role of the ASO, that the sessions were presented in a professional manner and the staff were friendly and approachable. This was an important outcome for the development of ongoing connections with the ASO. Generally the emphasis and delivery were observed to be similar to that of the on-campus ‘Lunch and Learn’ workshops. It was noted that adequate preparation time and ongoing support from the ASO, particularly in relation to the specific needs of our student population, would promote successful implementation.

The implementation of the program has presented few challenges. All commencing students with postcodes in the areas of Access Centres are notified of details of workshops by the Access Centre Manager and asked to indicate their interest. Dates and times of workshop are negotiated with the selected facilitator. This is the beginning of a process designed to maximise support of facilitator by ASO staff. Support includes constant email and phone contact, the provisions of all teaching and support materials and student handouts and inclusion in evaluation and review. In Semester two 2005, with lower than expected enrolments in Access Centre areas, four study skills days were planned based on the four most popular on-campus workshops: Essay writing, Referencing and avoiding plagiarism, Effective reading and note-making. Two were cancelled due to lack of numbers. Full day workshops were held in the two largest Access Centre regions, Tamworth and Taree, and were attended by 58 students. Feedback, by student and facilitator survey, has been extremely positive. All student participants expressed a high level of satisfaction with the content, the materials, the opportunity for discussion and interaction, the delivery and the
facilitator. All students agreed or strongly agreed that their need for information and/or strategies were met.

While we were delighted with the results of the survey we were concerned that we were not meeting the needs of the more isolated student in smaller rural communities. In Semester one 2006, in addition to workshops in the larger Access Centre regions, video conference workshops were offered to students in the Inverell, Narrabri, Gunnedah, Bogabilla, Moree, Glen Innes, Coonabarabran and Tenterfield regions. These sessions were held midweek, commenced at 7pm, were of two hours duration and were telecast from Armidale. Students from all Access Centre regions, except Bogabilla, where there are no students, and Taree, indicated their interest. Student handouts including PowerPoint presentations, activities and handouts were sent to each participant one week before the sessions. The workshop was a combination of the Essay writing and Referencing packages. The session was well received:

“I was at the Gunnedah access centre for the video conference last night on essay writing. I just quickly wanted to thank you and to let you know that I found it extremely helpful...I've received one essay back which I was very happy with.... I will definitely being (sic) putting the advise(sic) you gave tonight to good.....I would appreciate the opportunity to attend any further link ups that you might organize.” (Unsolicited student email)

Evaluation was by semi-structured phone interview. In addition to reporting an increase in skills and confidence, students reported that they now “felt more a part of the university” (Phone interviews, May 10 2006). While this initial video conference session was facilitated by ASO staff, the intention is to train our experienced facilitators to conduct workshops from their local access centres with technical assistance provided on-site at UNE. This clearly acknowledges the place of the university within local communities and promotes connections between past and present students.

A constant process of rigorous evaluation is essential to gauge the success of any program. While the difficulties in evaluating DE support programs are highlighted in the literature, we are simply looking for evidence to inform our practice. The tUNEin@distance program will be evaluated in the following ways. Supporters are asked to complete a record of contact booklet which they will return to the coordinator in the second semester. The web ct unit will be monitored, particularly the discussions as these may highlight any problems that need to be addressed. The video conferences and teleconferences at the beginning of the year were a valuable resource to meet supporters and get a feeling for the issues that concerned them. These will need to be followed up in semester two, to get any feedback on the processes so far. Personal comments and emails are also an invaluable source of information. Evaluation forms will also be distributed to both students and supporters early in semester two. Ongoing evaluation of the attUNE Access Centre Workshop program will be by participant and facilitator survey at the time of the workshop and by semi structured phone interview at the end of the academic year.

As stated earlier, this paper simply reports on two new support programs at UNE. That social and academic integration are important factors in persistence and therefore retention is not disputed. What we are looking for are ways in which to best support
our more isolated DE students. Our programs are novel in that they create tangible links between the university and past and present students in their local communities. Their intent is to assist in fostering a sense of belonging to and engagement with a community of practice amongst DE students. The programs are currently in the early stages of their implementation. The aim of our presentation is to share our ideas and processes and to discuss what worked well and what did not work. Finally, we look forward to hearing your experiences of connecting students, community and university.

List of References


Yes you can afford it! - Supporting Pre-service Teachers in their desire to complete a teaching experience in rural or remote Queensland.

Sheila King, Professional Experience Manager and Alison Mander, Coordinator of Professional Experience, Faculty of Education, USQ

Abstract
The Faculty of Education, University of Southern Queensland has a strong tradition in providing students with the opportunity to complete professional experiences in rural and remote settings. This paper will outline innovative approaches that are used to encourage and support students who take up this opportunity.

The University of Southern Queensland is a regional university with the remit to address the needs of rural and remote Queensland. Whilst a section of students have a rural background many are from metropolitan Queensland, who think Toowoomba is in the far west! For nearly 30 years the Faculty of Education (FOE) has explored ways to prepare beginning teachers for rural positions and encourage them to follow this career path.

The continuing research into the attitudes of beginning teachers and reasons they give for their perceived ideas of ‘rural disadvantage’ are based on maturity, lack of information and personal experience. (Green & Reid, 2004) The recent formation of Rural Education Forum of Australia and the Pre-service Country Teaching mapping project conducted clearly supports these issues. (Halsey, 2005) Pre-service teachers continue to sight the financial cost and the anxiety of being ‘out of their comfort zone’ as reasons as to why they will never teach in the bush. Other reasons for not taking up an opportunity are lack of accommodation, the cost of having to give up part time work to complete professional experience away from home, fear of the unknown and family commitments. The FOE addresses the opportunity costs by providing positive aspects to the negative statements presented by the pre-service teachers and presenting them with practical opportunities to experience teaching in a rural or remote setting.

Some of the well established opportunities are:

- Professional experience in small rural, multi-age settings – all Primary, Middle and Early Childhood students are required to complete a minimum of one professional experience in a multi-age classroom. The pre-service teachers are encouraged and supported to complete this opportunity in rural and remote settings where ever possible. Some support is provided by regional Priority Country Area program (PCAP) towards transport costs.
- Teaching in small rural communities – this is an elective that is available to students across various programs. It provides a theoretical base for students to consider the rural ‘advantage’. After completing this course many students opt for professional experiences in rural or remote schools.
- The Isolated Children’s Project provides students with an opportunity to experience schooling through the distance mode. Pre-service teachers stay on a property for three weeks, work with children from various Queensland
Schools of Distance Education, as well as experience the isolation. This project is financially supported by funds from the faculty.

- The PCAP Enrichment Camp is an annual event held at USQ. Secondary students from all the schools across southwest Queensland visit the university for one week, accompanied by the SW PCAP Coordinator and a small group of teachers. The on-campus program is organised by pre-service teachers and provides them with the opportunity to work with students from rural and remote schools. Pre-service teachers often participate in this program more than once and opt for professional experiences in rural or remote schools after this opportunity. Previous PCAP Camp participants have subsequently enrolled to study education and assumed the role of leader at the camp. Costs of delivery are funded by the faculty whilst other costs are funded by SW PCAP.

The FOE has a long association with a number of partners that has ensured the success of the above initiatives, as well as establishing some new opportunities. These partners include:

- PCAP – the four regional PCAP groups have provided support for transport to enable pre-service teachers to access rural and remote schools. This has alleviated additional expenses for the pre-service teachers and encouraged more to take up the opportunities.
- State PCAP established the Pre-service Forum to provide a collaborative approach to rural and remote placements, with USQ as one of the founding members. One practical outcome is the website: http://www.rural.edu.au/ which provides pre-service with a variety of links and teaching resources. The website also advertises a database of professional experience opportunities which are available to pre-service teachers in the member universities. Schools and communities advertise the placement and the financial or in kind support they can provide.
- ICPA – FOE has a long standing partnership with ICPA Qld. Many ICPA families have participated in the Isolated Children’s Project as well as providing accommodation for pre-service teachers when they are completing professional experience. The annual ICPA Qld conference provides valuable opportunity for networking and continued support. A number of ICPA branches have provided financial support for pre-service teachers to complete professional experience in their local schools.
- Qld Schools & their communities- FOE has strong links with many rural and remote schools in Queensland. These schools and their communities have provided opportunities at minimal cost for students to complete experiences in their schools.

In addition to these opportunities the FOE would like to enable more of our pre-service teachers to experience rural and remote settings. Some issues to be addressed are:

- “we can’t afford it because we have rent to pay…. or
- I’ll lose my job and then I can’t afford to be at uni….or
- it’s such a long way I can’t afford the fuel” .......... etc
In the current economic climate the FOE cannot financially support the pre-service teachers so it was decided to explore a partnership strategy a little further. Rural and remote Shire councils were invited to sponsor a pre-service teacher by awarding a $500.00 scholarship towards the cost of relocating for the experience. The money could be used in any way to support the pre-service teacher and did not exclude the other funding opportunities or in kind support. The Shire councils were asked to commit to three years of support and placements are made in schools within the sponsoring shire.

The pre-service teachers apply for the sponsorships which are awarded on various criteria based on previous rural experience, academic achievement and prior professional experience reports. Successful recipients can then also explore other support opportunities such as transport from local PCAP groups and free or low cost accommodation through the school community. The scheme is now in its third year and is proving very popular with the pre-service teachers as well as the shire communities.

Data is being collected from all participants and a pilot project will review the opportunity. This will be an evaluation of the challenges and opportunities provided by sponsorship for rural and remote professional experiences. The project will investigate and assess the success of the project for the pre-service teachers learning outcomes and the benefits to the local shire councils and their schools and communities. The purpose is to gather information on the progress and value placed on the sponsorship by the pre-service teachers, placement sites and the sponsors. It is hoped to expand these opportunities further in the future enabling more pre-service teachers the opportunity of an experience they can afford to teach in the bush.

BIBLIOGRAPHY


Successful Learning in the Early Years of Schooling - the Indigenous Parent Factor

Indigenous Parent Workshops

Rosemarie Koppe, Maxine Zealey, Leo Dunne
Australian Parents' Council

Abstract

This presentation outlines the parent workshops that the Australian Parents' Council are conducting with parents and carers of Indigenous children in the 0-8yrs age group. The set of 3 workshops Successful Learning in the Early Years of Schooling - the Indigenous Parent Factor which aim at Indigenous parent involvement and engagement in their children's education and Indigenous students' English literacy development are being held across all states and territories. The workshops also have a train-the-trainer component which incorporates more culturally appropriate strategies for interacting in and with Indigenous groups. The Commonwealth is continuing to fund the workshops as it has seen fit that the trials of the program held in 2005 were very successful and met the agreed- to aims outlined by DEST.

1.0 INTRODUCTION

1.1 The History of the Project

In late 2000, Leo Dunne (then President of the Australian Parents Council Inc. – APC)) approached the coordinator of Weemala, (Indigenous Education Unit at the Australian Catholic University) Nereda White with regards to Indigenising the already successful set of workshops Successful Learning in the Early Years of Schooling. This set of (3) workshops focused on assisting parents of children in Grades Pre-school to Year2 in becoming familiar with how children learn, how teachers teach reading and writing and how parents can do their part in helping their own child’s literacy development at home even prior to attendance at compulsory school. These workshops additionally give parents a common language with schools, which would assist them in discussions with school staff about their own children’s language and literacy development. Weemala staff believed the task to be innovative and highly warranted but lacked the staff and firm connections and ongoing relationship with large numbers of Indigenous parents required to complete the task.

They recommended that Leo Dunne speak with Brisbane Catholic Education’s Indigenous Education team. Permission was granted for the Primary Consultant – Indigenous Education, Rosemarie Koppe, to pursue the task and bring it to completion as a co-ordinated effort between BCE’s Primary Indigenous Education team members, parents and caregivers of enrolled Pre-schoolers to Year 2 Indigenous children and Leo Dunne as representative of the APC.

Due to the high level of consultation required, across the Brisbane Archdiocese with Indigenous parents, carers of Indigenous children, Indigenous community elders and education workers, and BCE’s Indigenous Education team, the task to final draft was completed at the end of 2002. Members of the BCE Indigenous Education team and the APC presented the final draft to Indigenous parents in a series of (3) consecutive workshops held at Holy Rosary Primary, Windsor in February 2003 to trial the running of the Indigenised workshops and ensure that before draft printing no further amendments were required.
An important focus of the presentation of the draft in workshop form was also to fulfill a vital aspect of the purpose of the workshops – i.e. to provide training for Indigenous parents. With the delivery of these workshops facilitated by Leo Dunne and Rosemarie Koppe, three BCE Indigenous Participation Officers were subsequently trained to be trainers. At this point, some further but minor consultation was required and final changes were made so that the workshops in the form of a presenter’s manual were ready for the start of the 2004 school year.

The development of the (3) Indigenised workshops was important enough to the general Indigenous community, and Indigenous Education community that a launch of the workshops was held in April 2004 at Ngutana-Lui (an Indigenous community centre at Inala). In attendance were Indigenous elders, community members and educators as well as significant personnel from the general education community. Of particular significance was the attendance of Mr. Tony Greer (General Manager of Indigenous Transitions Group –DEST) and Mr. Jim Castro (Director of National Projects Team-DEST) whose attendance led to the granting of funds to present workshops throughout Queensland and interstate and across educational sectors in 2005.

The implementation of the workshops throughout 2005 involved:

- 1 day – called the Training Day – where Indigenous volunteers are trained to the (3) present workshops. The training manual, all workshops materials and practice in presenting before an audience are provided with the assistance of the three trainer/facilitators; and,
- an additional 1.5 days where the newly trained Indigenous presenters, present the workshops to the local Indigenous community members with the assistance of the trainer facilitators.

1.2 Purpose / Aims of the Workshops
The aims of the project, proven to be attainable in the 2005 evaluation conducted by the APC team and independent evaluator, Dr. Penny Tripcony, will continue to drive the project over the 2006 – 2008 funded period. The aims of the project listed below, fall into categories that meet the DEST requirements of successful, worthwhile and sustainable Indigenous projects:

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Parent Engagement

- To develop Indigenous parent – school partnerships resulting in Indigenous parents and carers gaining greater confidence and ability to participate in the educational decision making processes in their children’s education; and,
• To further the understanding amongst Indigenous parents and carers that their children’s learning is greatly improved when they are involved in their education.

**Early Years of Schooling and Early English Literacy Development**

• To increase Indigenous parents and carers knowledge of how young children learn, learn to read and learn to write so that they can take a more active role in supporting their children’s literacy learning in the Early Years of schooling;

• That Indigenous parents will increase and improve their understandings of student learning, particularly in the first eight years of their children’s life; and,

• To convince Indigenous parents and carers of the importance of enrolling their children at Pre-School and that regular attendance in the early years of schooling establishes a sense of identity and belonging to the school community.

**Community Capacity Building and Sustainability**

• To train Indigenous parents and carers to deliver three [3] Literacy workshops (on Learning, Reading, Writing) to other Indigenous parents and carers in a variety of Indigenous communities;

• To establish a pattern of sustainable adult learning in Indigenous communities in the area of Indigenous parents and carers assisting the Literacy education of their children; and,

• To encourage Indigenous parents and carers in the realisation that their own confidence will improve if they become involved in their children’s education.

Further to these aims, the thrust of the future work by the APC team will be twofold:-

1] to support and extend the work with Indigenous communities who received training and workshops in 2005; and,

2] to take the training and workshops further a-field in all states and territories in 2006- 2008.

**1.3 Supporting the Goals of National Indigenous Education Policy**

• The workshops are in keeping with a primary principle of the MCCETYA National Statement of Principles and Standards for more Culturally Inclusive Schooling in the 21st Century:

Principle 2:
Schooling acknowledges the role of Indigenous parents as the first educators of their children.

- The workshops support the aims of the 21 Goals of the National Aboriginal & Torres Strait Islander Education Policy namely:

Goal 5:
To provide education and training to develop the skills of Indigenous people to participate in educational decision making.

Goal 10:
To achieve the participation of Indigenous children in pre-school education for a period similar to that for all Australian children.

Goal 11:
To achieve the participation of all Indigenous children in compulsory schooling.

Goal 13:
To provide adequate preparation of Indigenous children through pre-school education for the schooling years ahead.

- The workshops also support aims of the Adelaide Declaration on National goals for Schooling in the 21st Century namely:

2.2 That all students should attain the skills of numeracy and English literacy;

3.3 Aboriginal & Torres Strait Islander students have equitable access to, and opportunities in, schooling so that their learning outcomes improve and, over time, match those of other students;

3.4 That all students understand and acknowledge the value of Aboriginal & Torres Strait Islander cultures to Australian society and possess the knowledge, skills and understanding to contribute to, and benefit from, reconciliation between Indigenous and non-Indigenous Australians.

The workshops additionally support the aims of the National Literacy and Numeracy Strategy namely:

- English Literacy and numeracy for Indigenous students at levels comparable to those achieved by other young Australians;
- Lifting school attendance and pre-schooling opportunities;
- Encouraging effective teaching methods;
- Developing self-esteem in Indigenous students;
- Mobilising the active engagement of parents and communities through local and national Indigenous leadership and partnerships; and,
- Raising the expectations of parents... and the community about literacy and numeracy levels which can be achieved by Indigenous students.
The workshops also support the aims of the Commonwealth’s Parent – School Partnership Initiatives (PSPI) namely:

- improving literacy and numeracy in Indigenous students;
- improving attendance; and,
- working towards sustainability of skills within Indigenous communities.

Noel Pearson, renowned Indigenous Australian leader, educator and political activist stated in Brisbane in early 2005, that the only way forward for Australia is to put more effort and support into young Indigenous children’s education especially in the early years of schooling and to equally support the families and carers of these young Aboriginal and Torres Strait Islander children.

1.4 Cross Educational Sector
Workshops have been held across educational sectors with workshop participants attending from State and Territory, Catholic and Private Independent education facilities.

A successful clustering approach has been adopted within the project where, on the request of Indigenous community people, cross-sectorial groups have been brought together to receive training and workshops. Indigenous communities see this as an important aspect of assisting their sometimes isolated and remote communities in pooling limited resources [both human and material] across sectors and agencies in order to achieve a more effective outcome. An example of effective clustering within this project has been in Rockhampton, Qld., where the initial training and workshop round held in mid 2005 has resulted in a small group of trained presenters have continued to conduct workshops within and beyond their local area reaching other communities such as Mackay and Woorabinda Aboriginal community.

1.5 Tapping Into Existing Networks
Endeavouring to ensure the cross-sectorial approach, this project will be tapping into existing community support groups that work with Indigenous families and young Indigenous children in the 0 – 8 years age group. Such cross-sectorial groups include:

- DEST Offices across Australia;
- All Education Systems in all states and territories;
- Indigenous Community Councils across Australia;
- Queensland Learning Education Centres (LEC);
- The What Works network groups across Australia;
- Indigenous Community Housing Co-operative groups;
- Indigenous Community counselling service groups;
- Indigenous Young Mothers’ Groups;
- Indigenous Education Consultative Groups across Australia;
- Early Childhood Education facilities and groups; and,
- National Parent Groups i.e. APC; ACSSO.

2.0 LOCALITIES OF THE WORKSHOPS
Workshops have been held in the following 12 metropolitan, regional country and remote locations localities which have large Indigenous populations and in doing so have netted Indigenous community peoples from further a-field. This strategy is in keeping with the request of many Indigenous community peoples who have expressed the preference to come together in larger mixed community groups for the purpose of mutual support and cross-community networking. This strategy appears to be more culturally appropriate and acceptable to the Indigenous groups who have attended workshops. Hence, though (12) localities have been cited, in fact 42 Indigenous community groups have been involved in, and have benefited from, the workshops to date as listed below [also see Appendix2]:

**Metropolitan Brisbane** – Woodridge, Inala, Windsor, Durack, [all of which are areas of Brisbane with significant Indigenous populations with low SES status]; including Indigenous communities from Loganlea, East Brisbane, Doolandella, Moorooka, Oxley, Waterford, Runcorn, Richlands East, Carole Park, Forest Lake, Jamboree Heights.

**Regional country Queensland** – Rockhampton, Bundaberg, Mackay Cairns - also involving Indigenous groups from the Torres Strait Islands – Hammond Is, Thursday Is. in addition to Ravenshoe, Mossman, Kuranda, Earlville, Bungalow, Yeppoon communities; Toowoomba also including Dalby and Wellcamp.

**Queensland remote** - Mt. Isa, Cloncurry, Cunnamulla, Murgon, Cherbourg;

**Northern Territory** - Darwin also involving remote Indigenous groups from Alice Springs, Humpty Doo, Katherine, Tiwi Island.

**NSW remote** – Bourke including Indigenous groups from Brewarrina

### 2.1 Support and Advancement of Initial Workshops into 2006-2008

Since the initial workshops and training was delivered in 2005, centres such as Cairns, Rockhampton and the Torres Straits have continued running workshops in their own localities. In particular, trainees from the Torres Straits have run follow-up workshops on Thursday Island and Hammond Island. Rockhampton have also run further workshops in Mackay and Woorabinda. Thursday Island, Hammond Island and Rockhampton have additionally given feedback of positive success in their regions as a result of the initial workshops and the subsequent workshops they have run on their own. Expressed intention to run workshops in 2006 -2008 and on-going planning exists in many communities where training and workshops have been previously conducted. For example, remote areas such as Cunnamulla and Bourke are currently planning workshops for 2006. Durack community in Brisbane, and Darwin in the Northern Territory have also inquired about resources with regards to conducting their own workshops in 2006.

Throughout 2006 – 2008 Indigenous centres which have previously received training and workshops will be supported by means of phone and email communication, material resources such as participant workbooks etc, as well as funds for baby-sitting costs, teacher and teacher aide release, catering and so on if and when required.
3.0 WORKSHOP PARTICIPANTS

3.1 Number of Participants
In total 84 Indigenous people have been trained to deliver workshops and 157 Indigenous parents and carers across metropolitan, rural and remote locations have attended the workshops presented by these new trainees in collaboration with the Australian Parents Council team.

The original strategy of attempting visits to a greater number of centres has been replaced by bringing Indigenous community representatives together as a response to their wishes.

This has proved fruitful to the point of Indigenous communities making further requests for more workshops to be run in their immediate localities.

3.2 Advancement of Initial Workshops
Centres such as Cairns, Rockhampton and Mt. Isa have continued running workshops in their own locality since the initial workshops and training were delivered. In particular, trainees from the Torres Straits have run follow-up workshops on Thursday Island and Hammond Island. Thursday Island, Hammond Island and Rockhampton have given feedback of positive success in their regions as a result of the initial workshops and the subsequent workshops they have run on their own.

4.0 DETAILS OF TRAINING and WORKSHOPS

4.1 Positive Social Repercussions of the Workshops
♦ Workshops are held on the basis of a “train the trainer” model where Indigenous volunteers are trained to run (3) literacy workshops – Successful Learning, Successful Learning to Read, Successful Learning to Write. Once attending the training day, volunteer trainees then present the workshops to parents and carers of Indigenous children thus completing their requirements to be trained presenters.

♦ The full day training sessions offered to Indigenous parents, caregivers and Indigenous education workers wanting to be trained as participants have been met with tremendous success. The Training Day held before the delivery of the (3) workshops is led by the APC team. The APC team, using training techniques which are more culturally sensitive and appropriate, begin with demonstration and gradually involve the volunteered trainees. Slowly but surely over the period of (1) day the trainees learn to be co-presenters and are ready to assist in the delivery of the workshops to parents and carers. The use of pairing, small group and teaming techniques have been a successful strategy applauded by participants to date.

♦ The delivery style of workshops which involves Indigenous trainees presenting to Indigenous parents and carers in a relaxed atmosphere, and presenters working in pairs and small groups to present the workshop content, has been a more culturally appropriate and culturally sensitive approach; this particular characteristic of the workshops has received praise from participants in all Indigenous communities visited;
The workshops, which build trust and confidence in participants, have also drawn out strong leadership skills and qualities of many of the participants who on initial contact had been quite reluctant to participate due to cultural “shame”;

Indigenous participants, who choose to train as presenters, learn to work as team members, developing team spirit and a sense of confidence which is gained through working together with others;

The workshops inadvertently have in many cases drawn out emotional exchanges from parents and carers of Indigenous children, eliciting discussions which have allowed those who have suffered the repercussions of past Government educational policy (e.g. the stolen generation) to experience some relief in expressing their thoughts and feelings in a safe environment;

4.2 Influence & Positive Affect on Indigenous Communities
The positive effect on Indigenous children’s learning, especially in literacy in the early years of pre-school to Grade 2 is a target of the workshops;

- The growth of self esteem of Indigenous trainees has been an observable outcome of the workshops to date cited also by participants in their written evaluations;

- The growth of self-esteem in the parents and carers of Indigenous children attending the workshops is a noticeable outcome; the positive affect of this will roll on to the children in their care;

- The delivery of the workshops showing cultural respect for the need of individuals to have anonymity within the group has been a positive outcome of the workshops creating a relaxed atmosphere where participants can interact if comfortable to do so, but equally remaining silent if preferred; To date 100% of all participants have become involved over the course of the three workshops;

- In some cases positive relationships have grown between Indigenous individuals and school Principals and staff where no school contact by the family had been made in the past;

- Cross – community networking between Indigenous parents and carers, and Indigenous education workers (e.g. Katherine- Darwin- Alice Springs) has been a positive outcome of the workshops to date, allowing for mutual support for future workshops and ongoing sharing about learning and literacy;

- Many Indigenous parents who have attended the workshops have made a special point of stating that due to the workshops they now realise that the language of their home, their own cultural way of teaching and their own parenting styles are valuable and valued as a key component of their children’s learning; one parent in particular said that it was the first time that anyone had acknowledged that what she was doing as a parent was good.
4.3 Curriculum Issues
The positive repercussions of the three workshops are that they support the endeavours of schools to have all students literate and numerate on leaving compulsory education. By giving parents and carers of Indigenous children skills and tools to support their own Indigenous children in the very early years of their education, the workshops allow them to proactively take up their vital role in the education partnership. Through the (3) workshops, parents and carers of Indigenous students are additionally given the opportunity to broaden and deepen their knowledge base of important learning and literacy terms and concepts used in school forums so that they are able to discuss their child’s educational outcomes on a more equal footing with school based personnel.

Helping parents and carers of Indigenous children understand that the family’s home language is a foundation stone for all future literacy learning is an issue of paramount importance which is covered in the workshops. Parents and carers are encouraged to be proud of, and continue using the language of the home whilst encouraging their children to also become strong and confident in the language of school – Standard Australian English (SAE). Only when these two factors are deliberately combined do children become powerful language and literacy users.

5.0 FEEDBACK FROM WORKSHOP PARTICIPANTS

5.1 Accountability
In order to demonstrate the success of the workshops validity checks, by means of evaluations, have been factorised into the delivery of the workshops. The following measures have been taken to add validity to the findings of the evaluation process.

- Short term evaluations – participants’ hand-written evaluations;
- Long term evaluation – conducted by an independent party;
- Testaments – collected from larger education systems and facilities; and,
- Supporting media releases.

Short Term Evaluations

- Two page short evaluation feedback forms are completed in the participant’s own handwriting at the completion of each set of (3) workshops;
- The evaluations are simple, non-complicated forms which take approximately 3 minutes to complete; the forms needed to be kept in simple, every-day language to accommodate the sometimes limited literacy skills of the audience; and,
- A facility for accommodating Indigenous participants who are illiterate or have limited English literacy skills has been used so that participants who require it, could have a trusted community friend to scribe for them when completing the evaluation form.
It was suggested that participants may complete one of the written evaluation forms if they so wish but it was not a mandatory requirement. Therefore, not all participants completed a written evaluation form. The return rate was approximately 57% i.e. 89 returns from 157 participants. Towards the beginning of the 2005 implementation, evaluation forms were not available at the workshops for participants to complete due to a printing hold-up. Therefore, evaluation forms were sent by post after the workshops had been held. This produced a very low return of feedback in the early stages and has affected the overall return rate percentage. Return rate was higher when evaluation forms were completed at the end of the third workshop.

Long Term Evaluation

- The services of an Indigenous elder / educator (Dr. Penny Tripcony) has been engaged as an independent evaluator; and,

- Semi-structured interviews were conducted by means of an oral interview to be audio taped in conjunction with the interviewers notes.

The independent interviewer conducted the oral interviews at 3-4 key centres where workshops have been held – the aim of the interviews will be to gain additional information to that already collected from the written evaluations and to document any change or activity that may have occurred in Indigenous or school communities since parents and carers attended the initial workshops.

5.2 Summary of Participant’s Comments

From the participants’ hand-written evaluations to date the most common responses have been able to be summarised as follows:

- Participants like the idea of parents helping parents
- Participants wanted to learn more about helping their children

A re-occurring response in many of the evaluation sheets completed is that the workshops are:

- too deadly ( in Aboriginal English this means “fantastic”)

5.3 Summary of Team’s Reflections

When the three team members (Leo Dunne, Rosemarie Koppe, Maxine Zealey) training Indigenous community people to run the workshops and co-ordinating and delivering the workshops reflect on the activity to date, the common observations were made:

- that Indigenous participants are now believing that home language and home learning is valuable;
• Indigenous parents are understanding that they can participate in their children’s schooling and encourage good Standard Australian English (SAE) literacy skills, but receive a clear message that this must be in conjunction with continued home learning and speaking home language;

• that the workshops provide a challenge to Indigenous parents that they can have-a-go and make a difference to their child’s education;

• that the workshops build self confidence and self esteem in Indigenous parents and Indigenous education workers; and,

• that the workshops provide a positive observable transformation in the Indigenous participants.

6.0 FEEDBACK FROM INDIGENOUS COMMUNITIES and PRINCIPALS

The services of an independent evaluator [Dr. Penny Tripcony], who is also a well known Aboriginal educator and elder in the Brisbane district was employed to conducted semi-structured interviews with Indigenous community peoples who had received training and/or attended workshops. The purpose of the independent evaluation was to elicit further information as to whether Indigenous participants valued or gained any benefit from the training and workshops, whether it had any effect on their participation in their children’s education and whether any further developments had occurred since the initial workshops and training had occurred.

A summary of the independent evaluation follows:

• the aims and objectives of the workshops have been met;

• trainee Indigenous parents and education workers were confident that they now had the skills required to present workshops to other Indigenous parents;

• Indigenous parents, after attending the workshops were now confident in knowing how to support their children’s in schooling;

• Indigenous participants and community members confirmed that the workshops were valuable;

• Participants have gained a great amount of awareness and knowledge in knowing how to support their children’s early language and literacy development at home by attending the workshops;

• Indigenous parents have gained insight into the importance of language use at home;

• Indigenous participants and school personnel cited that a further product of the workshops has been that the communication gap between school/school staff and Indigenous parents which has existed for a length of time is now narrowing in the communities that have participated in the workshops;
• Participants appreciated that within the workshop content, the various forms of English, including Aboriginal English, Torres Strait Creole and other Indigenous languages and dialects were discussed, explained and valued; and,

• Participants attending the workshops additionally appreciated the facilitators’ understanding that even within small isolated Indigenous communities the cultural and language differences of the Indigenous people can often be quite diverse.
One State, Five Distinct Native Cultures: 
Place-based Educational Efforts in Alaska

Ted R. Munsch 
Professor of Education 
Alaska Pacific University 
Anchorage, United States of America

Abstract
Alaska is a very large state with a variety of landscapes, a mixture of many ethnic groups and five distinct Alaska Native cultures. These groups include the Inupiat of the North, the Athabaskan of the Interior, the Yup’ik and Cup’ik of the Southwest, the Aleut and Alutiiq or Unangan of the Aleutians and the Tlingit/Haida of the Southeast. This paper provides a context for “place-based” educational efforts that each group is making to protect their language, their lifestyle and their culture. Experiences with these groups over the past ten years at their places are discussed. Examples of sustainable programs and resource availability to support those programs are provided.

The Alaska Rural Systemic Initiative
Alaska is the largest state in the United States with 572,000 square miles and is also the least populated state, housing approximately 636,000 people in 2004. Of that population, about 82,000 or 12.9% are identified as American Indian or Alaska Native (Quickfacts, 2004). In 1995, the Alaska Rural Systemic Initiative (AKRSI) was funded by grants from the Annenberg Foundation and the National Science Foundation to improve science education in rural Alaska. The project originally was divided into two phases; the initial phase established five specific cultural areas to support improvement efforts while the second phase included development, delivery and assessment of native ways of knowing and culturally relevant science effects on students involved with AKRSI. A description of the intent and goals of AKRSI is provided by this statement from the grant’s final report.

The underlying purpose of the Alaska Rural Systemic Initiative has been to implement a set of initiatives to systematically document the indigenous knowledge systems of Alaska Native people and develop pedagogical practices and school curricula that appropriately incorporate indigenous knowledge and ways of knowing into the formal education system. The central systemic reform focus of the AKRSI strategy has been the fostering of connectivity and complementarity between two functionally interdependent but historically disconnected and alienated complex systems — the indigenous knowledge systems rooted in the Native cultures that inhabit rural Alaska, and the formal education systems that have been imported to serve the educational needs of rural Native communities. Within each of these evolving systems is a rich body of complementary scientific and mathematical knowledge and skills that, if properly explicated and leveraged, can serve to strengthen the quality of educational experiences and improve the academic performance of students throughout rural Alaska. (Hill, Kawagley & Barnhardt, 2006, p. 5)
The map below shows the regions that were established in the state. Although six regions are visible on the map, the Alutiiq and Aleut regions were combined, now often referred to as the Unangan region.

This paper provides a glimpse at place-based educational efforts supported by the AKRSI funding and now continued through the Alaska Native Knowledge Network (ANKN). Examples of activities in each of the five regions are highlighted that affect students, teachers and the larger learning community in those regions.

**The Inupiat Region**

The Inupiat region includes: 1) North Slope Borough (NSB) consisting of seven villages, served by the Arctic Slope Regional Corporation, 2) Northwest Arctic Borough consisting of eleven villages and 3) Bering Straits Regional Corporation including 16 villages. Barrow Alaska, the most northern U.S. city, is located within the NSB territory and situated 700 miles north of Fairbanks AK and approximately 1000 miles below the North Pole. (National Network of Libraries of Medicine Pacific Northwest Region, 1999). As is the case in most rural areas of Alaska, subsistence hunting accounts for the majority of the livelihood across this region. Moose, caribou, whale, duck, and fish are wildlife staples in the diets of Inupiat families. Walrus skin boats are still used to “catch” whales, but the dog sleds of the past have been replaced by the “iron dogs”, snow machines that provide transportation for hunting and other winter subsistence activities. Motorboats, “four wheelers” and “three-wheelers” are the travel modes on the rivers, along the coastlines and across the tundra.

In an effort to connect culture and everyday life in the region, a teachable calendar was developed in cooperation with the Inupiaq and Bering Strait Yupik elders and educators. The calendar incorporates subsistence activities on a daily basis for the majority of the year. Katie Bourdon writes about this special project in the “Sharing Our Pathways” newsletter from the ANKN.

In hopes of sparking more interest in expressing our culture in the classroom and at home, a group of Native educators from the Inupiaq &
Bering Strait Yupik regions have compiled a teachable calendar for teachers and parents. Our subsistence way of life shapes or determines our daily activities every season. It provides a natural and relevant means for bringing cultural life to the classroom. Preschool through high-school teachers use a calendar for a variety of activities, so bridging our subsistence activities and a yearly calendar makes sense as a way to reach as many folks as possible.

Each month features mini-lessons in various school subjects based on the traditional harvesting activities in our communities. Quotes from Elders and cultural experts offer advice to teachers, parents and children. Photographs that exhibit the wonderful collection housed at the Eskimo Heritage Program are displayed throughout the calendar. Family activities on the calendar encourage parents to not only become more involved in their children’s classrooms, but to also take pride in their cultural heritage and nurture it in their family. All the activities recognize the importance of our culture and the intelligent Native way of living life. (Bourdon, 2005, p. 9)

Pre-service teachers in the Master of Arts in Teaching (MAT) program at Alaska Pacific University (APU) have worked with students in grades K-8 in the North Slope Borough School District. The village of Barrow claims the title of North America’s northernmost settlement. This is truly the “land of the midnight sun” where the sun rises on May 10 and does not set again until August 2 (Environment and Natural Resources Institute, 1997). Pre-service teachers have also worked in the Northwest Arctic Borough, Nome City and Bering Strait school districts in the Inupiat Region. In 2005, a student teacher was placed in Nome City Schools and continues to substitute teach there in her hometown. Several pre-service teachers in the APU Rural Alaska Native Adult Program (RANA) reside in this region.

All districts listed have Internet access and a “web presence.” The table below lists those districts and their Uniform Resource Locator information.

<table>
<thead>
<tr>
<th>School District (SD)</th>
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<tbody>
<tr>
<td>North Slope Borough SD</td>
<td><a href="http://www.nsbsd.org/site/index.cfm">http://www.nsbsd.org/site/index.cfm</a></td>
</tr>
<tr>
<td>Bering Strait SD</td>
<td><a href="http://www.bssd.org/">http://www.bssd.org/</a></td>
</tr>
<tr>
<td>Nome City Schools</td>
<td><a href="http://www.nomeschools.com/">http://www.nomeschools.com/</a></td>
</tr>
<tr>
<td>Northwest Arctic Borough SD</td>
<td><a href="http://www.nwarctic.org/">http://www.nwarctic.org/</a></td>
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The Yup’ik/Cup’ik Region
The Yup’ik/Cup’ik region includes much of western Alaska, stretching along the coast south from Norton Sound to Bristol Bay. The famed Yukon River flows through this area, the delta at its mouth defining the northern edge of the region. Subsistence activities include fishing (both salt and fresh water), berry picking and harvesting of
migratory birds and their eggs, marine mammals (seals and walruses) and land mammals (moose, bears, and caribou). Transportation in this region is by airplane, boat, four or three-wheeler and snow machines in the winter. Delena Norris-Tull, a University of Alaska – Fairbanks Education Professor, describes her impressions of the people of the region after visiting several schools within it:

The Yup'ik/Cup'ig people of western Alaska have a great wealth of knowledge and skills that many outsiders lack. Although, as have people in the cities, rural residents have become dependent on manufactured goods and imported gasoline and fuel oil (which come to rural Alaska at a very high price), the people of western Alaska maintain a reliance on a subsistence lifestyle that provides them with a great deal of independence and self-sufficiency. Seasonal harvest of a wide range of animals and plants, from the sea and from the land, remains the most important source of food and many personal items. (Norris-Tull, 1999, ¶ 8)

This region has focused on maintaining their culture by providing opportunities for Native elders to teach Yup’ik in the schools. Cindy Long, a teacher in one of the village schools, describes the positive effects that are seen in students during and after their interaction with elders in the school.

For the first time all year, they were enthusiastic about homework. I helped them with syntax and grammar, but at the same time I learned what had been said in Yup'ik. Each time, these young people got a heavy lecture: listen to your parents, don't be lazy, go to sleep at night so that you can do your chores in the morning, stick to the trail so that you don't get hurt out on the ocean ice. Interestingly, even though they were getting a heavy dose of dos and don'ts, they never tired having an Elder come visit. It was refreshing to see teenagers listening so intently without rolling their eyes. I was even able to remind my students later, when they were lazy or discouraged, that an Elder advised them against such behavior. (Long, 2004, p. 10)

Pre-service teachers in the MAT and undergraduate Teacher Preparation Program (TPP) at APU have spent time working in Southwest Region and Lake and Peninsula School District schools on several occasions. Both districts have Internet access and a “web presence.” The table below lists their Uniform Resource Locator information. Colin Boylan and I report on the changing perceptions of pre-service teachers after a weeklong rural practicum in the Yup’ik/Cup’ik Region in these conference proceedings. (Munsch & Boylan, 2006)

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<th>School District (SD)</th>
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<tr>
<td>Southwest Region SD</td>
<td><a href="http://dlg.swrsd.org/do/doHomePage.shtml">http://dlg.swrsd.org/do/doHomePage.shtml</a></td>
</tr>
<tr>
<td>Lake and Peninsula SD</td>
<td><a href="http://www.lpsd.com/">http://www.lpsd.com/</a></td>
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</tbody>
</table>
The Athabaskan Region

Often referred to as “Interior Alaska”, this is the largest of the five cultural regions and is bordered by the least amount of coastline and salt water access. A description of the area can be found on the Arctic Athabaskan Council web site.

This vast region has been continuously occupied by Athabaskan peoples for at least 10,000 years and includes three of North America’s largest river systems (Mackenzie, Yukon and Churchill Rivers). It also includes vast areas of both tundra (barren lands) and taiga (boreal forest) as well as North America’s highest mountains (Mount McKinley and Mount Logan) and the world’s largest non-polar ice field (St. Elias Mountains). The southeastern boundary of the Arctic Athabaskan peoples’ traditional territories includes portions of provincial northern Canada.

The ancestors of contemporary Athabaskan peoples were semi-nomadic hunters. The staples of Athabaskan life are caribou, moose, beaver, rabbits and fish. Athabaskan peoples today continue to enjoy their traditional practices and diet. Except for south-central Alaska (Tanana and Eyak) and the Hudson Bay (Chipweyan), Athabaskan peoples are predominately inland taiga and tundra dwellers. Collectively, the Arctic Athabaskan peoples share 23 distinct language and live in communities as far flung as Tanana, Alaska and Tadoule Lake, northern Manitoba, nearly 5400 kilometers apart. (2005, ¶ 6-7)

Joann Herrmann discusses a joint venture among several interested parties that fostered student inquiry regarding good health and traditional practices. A brief description of the endeavor follows:

Mt. Sanford Tribal Consortium received grants that are helping to create a better world for our people. In a partnership with two museums, two school districts, University of Alaska and the National Parks Service, our students are learning about our traditional way of life, how to make healthy lifestyle choices, why we should care for our land and how to use technology. In short, we are teaching our children how to maintain their cultural identity and also succeed in a modern world. (Herrmann, 2003, p. 15)

As a result of these efforts, students were actively engaged in Service Learning Projects, created displays for student led health fairs and interacted with elders in their classrooms. Their leadership skills and positive self-images were improved as they learned more about their culture and made connections with traditional practices and the requirements of current times. Culturally connected curricula were developed to include everything from subsistence and environmental management to gathering, nutrition and traditions of Athabaskan traditional food. In an effort to share the learning community work, an exhibit was created that is meant to travel throughout Alaska and possibly elsewhere in the United States. Stories from elders, artifacts that demonstrate the Athabaskan culture and examples that show how teachers are committed to passing on the connectedness of the people, their values and their respect for the land and one another, are all part of the exhibit. (Herrmann, 2003)

Pre-service teachers from the MAT and TPP recently spent a week working with students in the Yukon-Koyukuk School District. There is one pre-service teacher in the APU RANA program currently working in a school in this region. He hosted one
group of on-campus pre-service teachers during their practicum experience there in April of 2006. The table below lists the URL for the Yukon-Koyukuk School District.

<table>
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<th>School District (SD)</th>
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<tbody>
<tr>
<td>Yukon-Koyukuk SD</td>
<td><a href="http://www.yksd.com/">http://www.yksd.com/</a></td>
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</tbody>
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The Southeast Region
The Southeast Region includes Alaska’s panhandle, a narrow strip of coastal temperate rain forest that butts up against Canada. Alaska’s capital, Juneau, is located in this region where the primary language groups are the Tlingit, Haida, and Tsimshian. This forested region is rich in many ways. The famed totem poles associated with Southeast Alaska are cultural remnants still displayed and created by Natives in the area. This cultural area is described by the Southeast Alaska Regional Health Consortium (SEARHC):

The streams and forests of Southeast Alaska produced an abundance fish and wildlife for the indigenous Tlingit, Haida, and Tsimshian (sic) people of the region. With plenty of food, fresh water, and wood for home construction, the Native people of the region developed profitable trade routes and a rich culture with complex artforms, dance, and storytelling. Subsistence gathering and the preparation of traditional foods still play an important role in Native communities today. Community life is still highly organized with families linked together in historic clans and moieties. Potlatches and other community events continue to bring families together to celebrate their culture. (ND, ¶ 2)

Andy Hope (2005), a Southeast Region educational leader, assisted the University of Alaska-Southeast in creating a Place-Based Education Academy for teachers that was held in Juneau, June 27–July 2, 2005. Four courses were offered: 1) Placed-Based Native Education Resources – providing hands-on training for using several local resources in the classroom. 2) GIS Workshop – connecting curriculum to the culture and community using data collection and designing lessons to promote student projects that address local environments. 3) Introduction to Tlingit Storytelling – demonstrating and discussing the basics of traditional and contemporary storytelling and the application of the concepts presented to personal and professional endeavors. 4) Math in Indigenous Weaving - exploring the mathematics involved in basketry and blanket weaving. Teachers left the academy armed with lessons and activities that are culturally relevant to their students and of high interest because of the connections made to the indigenous cultures of the area.

Pre-service teachers from the MAT and TPP have spent time working with students in the Hoonah City and Chatham School Districts. A former pre-service teacher from the APU RANA program lives and substitute teaches in this region. These districts do not have active URL information.

Unangan (Aleut and Alutiiq) Region
The Unangan region is comprised of Kodiak Island and Alaska’s Aleutian Islands, extending south and west of the Yup’ik/Cup’ik region and into the Pacific Ocean. A
description by Charles C. Hughes provides some history and context for the adaptability and resilience of these people.

The people known as the Aleuts are the native inhabitants of the islands stretching for about 1,800 km (1,100 mi) southwestward from the Alaskan mainland and now called the Aleutian Islands. They also inhabit part of western Alaska. The Russians first called these maritime hunters "Aleuts," the meaning of which is unknown; their name for themselves is unangan ("the people"). Although racially and ethnically related to the ESKIMO, the Aleuts have their own language and culture. Before contact with outsiders in the 18th century, they lived in scattered villages, each consisting of several semisubterranean (sic) houses, and had a class system that included nobles and slaves. They practiced a form of bilateral descent and followed instructions of local SHAMANS regarding hunting taboos and coping with sickness. The Aleuts were adept at harvesting resources of the sea (sea lion, seals, whales, and fish) in their skin-covered boats as well as those of the land (birds, eggs, and plants). Their hunting skills were exploited by Russian fur traders who came to the islands after about 1750 in search of sea otter, fur seals, and foxes. Over next 100 years the Aleut population declined because of sickness and harsh treatment. Today about 8,000 Aleuts remain; before contact with foreigners they had a population estimated at 12,000 to 25,000. (Hughes, ND)

In keeping with the goals of AKRSI, educators in the Unangan region have found ways to keep culture and language at the forefront of teaching and learning. Moses Dirks, a teacher in Unalaska City School District, and an Alaska Pacific University Master of Arts in Teaching alum, helped prepare students in the region for the state Alaska Native Science and Engineering Society (ANSES) Fair. He prompted students to generate ideas about projects that would use good "village science" (2004, p. 13) and that met the requirement that indigenous science be used. The students decided that weather predicting, insulation, Native technology, mollusk investigation, plants and uses, gathering foods and fishing techniques would be worthy of further research. The three top prizes at the local science fair incorporated several of those themes: 1st Place: Insulation How the Unangan People Used Natural Material to Insulate their Semi-subterranean Huts Called an Ula; 2nd Place: Native Technology—Fox Trap Klisa: How you can Build a Fox Trap with All Natural Materials and Make It Work; 3rd Place: Plants and their Uses: How the Unangan Used Plants as Food and Medicine. The 1st Place winner placed 2nd in the seventh-and-eighth-grade category at the state ANSES Science Fair later in the year. (Dirks, 2004)

The ANSES Science Fair was well attended with 21 projects from 8 sites (Danner, 2004) representing all 5 of the cultural regions. A description of the winning project follows:

The winning project, by an eighth-and-ninth grade pair from Circle (Yukon Flats School District) was entitled “Surviving with Snow.” The students explored the life-saving properties of an emergency shelter constructed from snow. They even braved a –54o day to gather data on the experiment. It was a clear winner and both the traditional and Western science judges gave it very high marks. (Danner, 2004, p. 14)

Incorporating Alaska Native Ways of Knowing (Barnhardt & Kawagley, 2005) into science fair projects gives cultural connections and different perspectives of Western
science literacy. The original intent of the AKRSI project was to accomplish exactly what rural teachers supported, Native Elders influenced and Native students demonstrated in the ANSES Science Fair competition.

Pre-service teachers from the MAT and TPP have worked with students in the Unalaska City Schools and Kodiak Island Borough School District (KIBSD). Several student teachers have been placed in KIBSD and two APU alums, one MAT and one TPP, currently teach in the Unalaska City Schools. Both districts have Internet access and a “web presence.” The table below lists these districts and their Uniform Resource Locator information.

<table>
<thead>
<tr>
<th>School District (SD)</th>
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<tr>
<td>Unalaska City SD</td>
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<tr>
<td>Kodiak Island Borough SDSD</td>
<td><a href="http://www.kodiak.k12.ak.us/">http://www.kodiak.k12.ak.us/</a></td>
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**Place-based Education Examples Recap**

The table below lists cultural regions and their place-based education efforts as described in this paper.

<table>
<thead>
<tr>
<th>REGION</th>
<th>ACTIVITIES</th>
<th>Cultural Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inupiat</td>
<td>Teachable Calendar</td>
<td>Daily subsistence activities and cultural events are displayed with lesson ideas</td>
</tr>
<tr>
<td>Yup’ik/Cup’ik</td>
<td>Elders teach in schools</td>
<td>Language and cultural values are taught and modeled</td>
</tr>
<tr>
<td>Athabaskan</td>
<td>Athabaskan Cultural Exhibit</td>
<td>Healthful habits, subsistence and traditional foods are researched and displayed</td>
</tr>
<tr>
<td>Southeast</td>
<td>Place-based Education Academy</td>
<td>Teachers learned about local cultures and developed plans for classroom use</td>
</tr>
<tr>
<td>Unangan</td>
<td>Alaska Native Engineering and Science Fair</td>
<td>Projects are developed that are based on “Native Ways of Knowing”</td>
</tr>
</tbody>
</table>

A common thread running through all examples is the close attention paid to making cultural connections with students and the curriculum being addressed. An excellent source of other examples, described quarterly from 1996 to present, can be found in two viewable/downloadable formats on the “Sharing Our Pathways” newsletter page of the ANKN (ND) (see http://www.ankn.uaf.edu/SOP). As described below, the
partnership with the AKRSI and the University of Alaska-Fairbanks has developed into a resource that provides information for all Alaskans and for and about indigenous peoples throughout the world.

The Alaska Native Knowledge Network

The Alaska Native Knowledge Network (ANKN) is an AKRSI partner designed to serve as a resource for compiling and exchanging information related to Alaska Native knowledge systems and ways of knowing. It has been established to assist Native people, government agencies, educators and the general public in gaining access to the knowledge base that Alaska Natives have acquired through cumulative experience over millennia. (Alaska Native Knowledge Network, 2006)

The ANKN site is a truly rich resource for locating much information about the work of AKRSI over the last 10 years. It also serves as a showcase for recent research, projects and opportunities for Alaskan educators and learners. If one selects the “Indigenous Education Worldwide” button on the “About the Alaska Native Knowledge Network” page (ANKN, 2006), links to several indigenous groups’ resources around the world can be found and connections made, including: 1) Aboriginal people of Australia; 2) Indigenous People of Africa; 3) Ainu of Japan; 4) American Indian; 5) First Nations of Canada; 6) Inuit of Greenland and Canada; 7) Maori of New Zealand; 8) Indigenous People of Russia; 9) Saami of Scandinavia; 10) Native Hawaiians; 11) Indigenous Higher Education; and 12) Indigenous Organizations and Conferences. This work exemplifies how long term systemic reform, community partnerships and commitment started in a local area can transcend the barriers to success and lead to improved opportunities for all members within the global learning community.

The Future of Education

Education is changing as quickly as the Information Age is speeding forward. The challenges facing students who are currently in school may not be fully realized until they are out of school and attempting to join the work force. The challenges facing teachers, especially in rural schools, include keeping students focused, making curricula relevant and involving the community to support educative efforts. David Thornburg foresaw the future of education in an article titled, “2020 Vision for the Future of Education” (Thornburg, 1997). In it, he contends that preparing students for the future will require changing the way we educate students and discusses the importance that technology will play in this endeavor. Looking at what is happening today, it appears that his predictions are sound.

In addition to the basic skills of literacy and numeracy, every learner must also master the "three C's:" Communication, Collaboration, and Creative Problem Solving. Beyond these are the equally important skills of knowing how to use numbers and data in real-world tasks, the ability to locate and process information relevant to the task at hand, technological fluency, and, most of all, the skills and attitudes needed to be a lifelong learner. (Thornburg, 1997, ¶ 29)

The “three C’s” are shown to be a large part of what AKRSI was attempting to instill in the science and mathematics curricula changes they proposed. When teachers in rural schools work to infuse place-based education into their curricula, success is often measured by the quality of the “three C’s” that results. Certainly communication
is the start to all place-based endeavors, wherein administrators and teachers discuss curriculum ideas with students and parents and among themselves. When community partnerships are established and elders or others not directly involved with the school are included, collaboration takes place to direct energy toward creative problem solving. The cycle continues with students going through the processes, having had it modeled for them in real life. Communicating results comes full circle, as is shown by the resultant public display and access to information where success is shared locally, nationally and globally. This in turn requires additional collaboration, creative problem solving and so forth.

Australia has its own examples of excellent, successful and sustainable place-based education endeavors as evidenced by the recipients of several Australian Rural Education Awards (Society for the Provision of Education in Rural Australia (SPERA), 2006). Although indigenous cultural connections are not always the focus of these endeavors, the local culture is the connecting emphasis. In many instances, these efforts are particular to a single school or district, not an entire region as exemplified by the AKRSI project. However, the benefits and meaningful lifelong learning opportunities promoted by place-based education are certainly no less important or impressive in these schools and communities than what has been described in this paper.

Having worked in rural schools as a teacher and now as a teacher educator in rural schools, I am excited about how meaningful education can become for rural students, no matter where they are schooled. Looking for the opportunities to involve students, parents and the larger learning community in making education more relevant, more timely and essentially more exciting should be the purpose of all educational leaders. The AKRSI leadership and eventual partnership with the ANKN is only one example of how it can be done. Other models of success are certainly available where place-based education is being actively pursued and supported. SPERA is leading the way in recognizing and promoting these efforts across Australia.

References


May 18, 2006 from  
http://www.ankn.uaf.edu/curriculum/Articles/BarnhardtKawagley/Indigenous_Knowledge.html


http://www.tcpd.org/Thornburg/Handouts/2020visions.html
The place of social justice in rural education discourse

Philip Roberts
Bowral High School, NSW

Abstract:
Over the last 80 years successive Federal and State government inquiries and reports have made conclusions in relation to rural educational disadvantage. Their conclusions and solutions however invariably expose the metro centric nature of policy making and expose a lack of understanding of the rural context. To counter this tacit acceptance of rural educational disadvantage a new construction of rural place is needed. This paper will begin to explore how such a construction can be discussed through the ideas of justice and equity in a differentiated approach which incorporates place. Such a policy framework that embraces the diversity of communities and results in innovative approaches would permeate not just educational policy but other areas of governmental social responsibility impacting on education such as dominant economic and social theories. This session will explore some elements that a new policy framework may encompass based upon the understanding that the quality of education available in disadvantaged communities is a social justice issue.

To date policy frameworks to address rural and other placed base disadvantage have been either ineffective or non existent. The interventions for these areas have generally been devised in large metropolitan centres and ignore the local voices who intimately know their place and the dynamics affecting their relationship with the outside world. This strategy has largely proved unsuccessful since Federation as disadvantage persists despite successive federal and State government reports and inquiries critical of the provision of education in these communities. It appears that once the shock, public outcry, initial media coverage and political promises subside the powerbrokers of the centre forget the issues of the other. The resulting continual disadvantage is as The Australian Human Rights and Equal Opportunity Commission (HREOC) Inquiry into Rural and Remote Education concluded, a fundamental human rights issue (HREOC 2000a). Rather than construct disadvantage as such it is seen as a natural consequence of national and global change and something to be dealt with by individuals rather than governments. What is urgently needed is a public policy framework based on social justice which recognises the uniqueness of place and allows differentiated solutions. It is contended here that the focus of any such framework should be the provision of staff to schools in such communities as they are the critical agents in producing change, and as the HREOC and previous inquiries concluded “in all States and the Northern Territory one consistent theme was that rural and remote schools are difficult to staff”(HREOC 2000a)

The Australian Human Rights and Equal Opportunity Commission conducted a series of consultation entitled Bush Talks in 1998 into the concerns of rural, regional and remote Australian communities. Arising from these consultations was a strong concern for the education of the children from these communities (HREOC 1998) which subsequently led to the HREOC inquiry into rural and remote education. As previously stated this inquiry concluded that there were significant educational disadvantages experienced by these communities (HREOC 2000a). In conducting this initial inquiry the HREOC was performing its legislative function to enquire about the state of human rights in Australia. Why this conclusion, and those that have either
preceded or followed it, are human rights issue are central to constructing a social justice policy framework.

The Universal Declaration of Human Rights, to which Australia is a signatory, has clearly stated that ‘everyone has a right to education’(1948) while ‘The Convention against Discrimination in Education’, to which Australia is a party, states that an inferior standard of education can amount to unlawful discrimination.’(HREOC 2000a). Further to this the Convention on the Rights of the Child leaves no doubt that every child has the right to education without discrimination including discrimination on the ground of race or disability (1989). In Australia this view has been adopted by the Ministerial Council for Employment Education Training and Youth Affairs (MCEETYA) in the Adelaide Declaration on the National Goals for Schooling in the Twenty-First Century. This Declaration stated that education contributes to ‘a socially cohesive and culturally rich society’(MCEETYA 1999) while going on to outline that in Australia:

‘3. Schooling should be socially just, so that:
3.1 Students’ outcomes from schooling are free from the effects of negative forms of discrimination based on sex, language, culture and ethnicity, religion or disability; and of differences arising from students’ socio-economic background or geographic location.
3.3 Aboriginal and Torres Strait Islander students have equitable access to, and opportunities in, schooling so that their learning outcomes improve and, over time, match those of other students.’(MCEETYA 1999)

These international treaties and national statements are founded on a view of the inalienable rights of people regardless of their location and personal family circumstances. They also give education a privileged place at the centre of accessing these rights; however their existence and application in Australia assume that these rights are not being upheld in rural and remote communities. This conclusion is predicated on a view that human rights are an important and valid yardstick against which to measure disadvantage and propose policy solutions. Such an argument needs to explore the nature of human rights and what is needed to support their acceptance and development. There are a number of related concepts to explore such as the nature of justice and equity, the distribution of public resources and the outcomes of these policies. Indeed there is no universal concept of justice and social justice, with the concept of Human Rights, being an international expression of accepted values and ethics. Not all governments are founded on the same ethical principles, and the continuing disadvantage of indigenous and rural communities in Australia is evidence of this. The differing ideologies underpinning the range of political parties, social movements and even motivating individual activism are evidence of the range of ethical constructions within any society.

In this paper the social justice focus is on equitable access and outcomes in universal public education. To claim to be a democratic nation all children, regardless of location, and family background should have equal access to opportunity. As John Ralston Saul says ‘any weakening of universal public education can only be a weakening of the longstanding essential role universal public education plays in making us a civilised democracy’ (Saul 2001) Further to this he notes that the wilful undermining of universal public education in favour of private education is the
biggest betrayal of democracy in the last 50 years (Saul 1999). Many will contend that any lack of access to education has been consequential to social and economic changes, however it is reliant upon any democracy to be vigilant to the unintended outcomes of their social policies and any failure to do so leaves them complicit in any deficiencies.

Human rights are a contentious issue with their legitimacy and enforceability a matter of considerable debate. While they are generally not enforceable by law and their ability to promote distributive social justice policies is limited their moral importance is generally accepted in western liberal democracies. In Australia the importance of human rights is declining in the face of an ideological assault from conservative political philosophies. This consequently creates significant challenges for any discourse attempting to advocate an improvement in educational access and outcomes in disadvantaged communities based on a principle of justice.

The National plan for human rights published in 2004 is underpinned by a strong philosophy that the most effective means of achieving human rights in Australia is through a strong and functioning democracy (Commonwealth_of_Australia 2004). However this view opens the door to a range of philosophical and social questions about the representative nature of democracy and the role of disadvantage in limiting peoples access to it.

Apart from its access and enforceability the National Plan for human rights clearly articulates a view of human rights and their importance by stating that Australia’s view is that;

‘universal observance of human rights, both at home and abroad, helps to achieve amore stable and just international order, which benefits the security and prosperity of all nations and individuals.' (Commonwealth_of_Australia 2004) p.5

Policy and practice do not align in this area to produce practical outcomes. The United Nations noted through the Committee on the Elimination of Racial Discrimination (CERD) in 2000 a number of concerns about the rights and socio-economic marginalisation of Australia’s indigenous communities (UNCERD 2000). In particular;

‘serious concern remains at the extent of the continuing discrimination faced by indigenous Australians in the enjoyment of their economic, social and cultural rights. The Committee remains seriously concerned about the extent of the dramatic inequality still experienced by an indigenous population that represents only 2.1 per cent of the total population of a highly developed industrialised State.’ (UNCERD 2000)
The differing philosophies of justice and equity underlying both the CERD and the Australian Government clashed resulting in the Australian Government attacking the CERD for getting involved in Australia domestic issues (Zifcak 2003b). Similarly when Australia again appeared before CERD in 2005 the delegation leader argued that it was unreasonable for the Committee to get involved in matters that are the subject of ‘democratic deliberation and decision making in Australia’ (Zifcak 2005). Such a statement begs the question of, are they really the subject of such deliberation, especially if reporting and HREOC funding have been reduced, and do marginalised groups have enough power to access the decision making mechanisms?

The view of equity being synonymous with sameness in the governments’ policy approach has not yet been successful. Following the CERD hearing in 2005 the Committee issued a statement recognising that while ground had been made in human rights, a number of areas of continuing concern remained which included: the lack of a constitutional guarantee of rights; the persistence of a wide gap between indigenous peoples and others in health, housing, employment, education and income, discriminatory native title legislation, governments rejection of reconciliation recommendations; and the downsizing of HREOC (CERD 10 March 2005)

Dilemmas about equity and educational provision in rural, remote and isolated areas are not a recent phenomenon. Halsey points out that staffing rural and remote schools has been a problem ‘virtually since the introduction of free, secular and compulsory education in the mid-nineteenth century’ (Halsey 2005b) p. 127. Numerous Federal and State reports over the last 80 years have pointed to educational disadvantage in rural, remote and isolated communities. This long history demonstrates that the ideologies used to either recognise or not recognise disadvantage and difference, and competing views on how to address any such recognised disadvantage or difference have not been successful. Consequently the approaches to equity have clearly perpetuated unequal outcomes. The development of policy discourse that looks at this difference and implements differentiated initiatives to achieve equity is an urgent social justice issue. It should also underlie the fact that human rights and social justice dialogue is not a detached political discussion but a fundamental issue of rights located in a distinct place.

The title of the NSW Department of Education and Training report into the future directions of Public Education in NSW ‘one size doesn’t fit all’ (NSW-DET 2005) suggests that such a differentiated approach to education is a foundational policy principle. However the report and its recommendations apply this principle only to individual schools and not as an approach to areas that have historically experienced disadvantage. While a companion paper included within the report by Letts et al (Letts, Novak et al. 2005) alluded to a number of the disadvantages experienced in these communities, the report itself failed to address these as areas of future concern for the Department. Such a failure for a public sector provider of universal public education gives evidence to how far issues of justice and equity have fallen from the agenda, especially coming so soon after numerous other inquiries raising these concerns.

Education is fundamental to the full enjoyment of most other human rights and to the exercise of social responsibilities (including respect for human rights). Indeed education is ‘an empowerment right, education is the primary vehicle by which
economically and socially marginalized adults and children can lift themselves out of poverty and obtain the means to participate fully in their communities.’ (UN) For the present purpose Education is seen as a human right and recognised for its ability to break the cycle of disadvantage and disempowerment, however the access to this right is linked to personal and political power. Following the recent report by the NSW DET and the Federal governments approach to social justice concerns it could be concluded that a view of equity as sameness and justice as a mainstream concept with no differentiation have become accepted foundations of public policy. Such a view of sameness however ignores how the educational and social disadvantage of rural, remote and isolated communities is constructed.

Equitable access to and outcomes from education in rural, remote and isolated communities is limited by a complex interaction of social and structural factors. Structural factors include town size, distance to the nearest high school, the quality of roads and curriculum breadth due to school size (HREOC 2000a). Equally important are social factors which generally see the rural students' retention rate below the State average, their performance generally lagging behind that of metropolitan students and far fewer going on to further education (HREOC 2000a). A further factor is that in many parts of Australia Indigenous communities have become alienated from the school system resulting in participation, attendance, retention and achievement far below the national average (HREOC 2000a).

Put in the context of a general rural decline the provision of education has also contracted due to a limiting of the economic benefits of gaining an education. When a town is in decline with the availability of employment reducing and social problems multiplying there is little motivation and support for students to endure these hardships and break the cycle. This cycle was described by the recent Senate Inquiry into poverty in Australia (Senate 2004) which noted the links between educational attainment, poverty and other forms of disadvantage. This report described the concentric circles of disadvantage where poverty at home feeds a lack of connection with school, leading to lack of learning and increased behavioral difficulties, as well as a limited capacity of the school to raise extra funds for resources. This impact combined with significant pre-existing social and economic disadvantage compared to many metropolitan centres, further limit the educational opportunities of rural communities and compound their pre-existing disadvantage.

According to Asa Wahlquist, rural business writer for the *Australian* newspaper, in the decade ending in 1996 ‘at least 30, 000 Jobs [were] cut in country NSW: Jobs that put over one billion dollars into the regional economy. Over 19, 500 of those jobs had been cut by State governments’ further ‘between 1996 and 1998 … approximately … 28 500 country jobs were lost nationally’ (Wahlquist 1999). Such figures add evidence to the arguments forwarded by Pusey (Pusey 1991), Pritchard and McManus (Pritchard and McManus 2000) and even Wahlquist (Wahlquist 1999) about the impact of government policy in undermining rural communities and is further supported by the Productivity Commission’s Report into the ‘impact of Competition Policy Reforms on Rural and Regional Australia’ (Productivity Commission 1999). This report argues that many of the difficulties faced by rural and regional communities are caused by long term changes out of the governments control including; better technology; international decline in agricultural prices; changing consumer taste; and the declining importance of primary production in the Australian
economy. The report concludes however that the National Competition Policy has had a range of beneficial and adverse consequences and that these consequences have benefited metropolitan over rural and regional areas. This has resulted in many, particularly coastal, provincial cities growing at the expense of nearby smaller towns, predominantly those in inland areas (Productivity Commission 1999). As previously discussed it is these inland areas that the phrase rural, remote and isolated refers to, with regional being avoided as theoretically every locality are part of a region.

Whatever conclusion one draws from the Productivity Commission report it cannot be ignored that it is yet again a significant public inquiry that reveals the disadvantages experienced by Australians living in these areas. There effect of such policies on people living in these areas is therefore a deliberate choice of the governments involved in how they approach these areas. The report states that the National Competition Policy is predicated on a view that the private sector can provide most infrastructure and services at a more ‘efficient’ cost and find inefficiencies in staffing and organisation, which inevitably result in job losses. That these choices have had adverse consequences shows that rural, remote and isolated communities have little power expressing their views and that there is no accepted philosophy of either justice or equity in the distribution of discretionary public resources.

It is in this context that the staffing of schools is important. If communities are going to be built and maintained it is essential that quality educational experiences are available and that rural youth are provided with meaningful opportunities for employment. Consequently the current approach to the provision of public education in these areas needs to change. Apart from enhancements to attract and retain teachers, the way staff is allocated to schools needs to change. While the decline of rural communities is not going to stop just by providing teachers in schools, the local school has a significant impact on the psychology of the town and can give the town, and its youth, hope of a better future and a possibility of breaking the cycle of disadvantage.

The central importance of education to the national economy has been argued by the Chairman of the Productivity Commission who has described it as the ‘key determinant of economic growth’ (Banks 2005) p.1. Further to this he argues that ‘accessibility and performance of our education systems will be crucial to Australia’s economic future’ (Banks 2005) p.1. Supporting this view is the OECD which points out that of those that had not completed secondary school in Australia 35% were unemployed compared to 19% for completing secondary school and 14% for tertiary training (OECD 2004) in (Banks 2005). Further to this those that had not completed secondary school earn on average 15% less and those with tertiary qualifications earning approximately 50% more (OECD 2004) in (Banks 2005). Adding to this evidence is Dowrick who has concluded that each additional year of schooling adds earnings to an individual of about 8%, and if the average level of schooling rose by one year the economy would rise by 8% over 40 years (Dowrick 2002). While these are hard economic facts in support of policies that overcome the disadvantage experienced by some communities it is important not to ignore the human social side. In this vein Banks also recognises that education increases the ‘social capital’ that enables society to function peacefully and cooperatively.
The realisation that education is a key component to national development has recently gained a high degree of political attention both nationally and internationally (McGaw 2003). This has led to a greater recognition of the importance of education than in previous times; however this recognition has primarily been based on economic development terms. For example the Lisbon Declaration of the European Union in 2000 stated that the future of Europe was as a knowledge based economy, and to achieve this developed a clear link between education, economic growth and prosperity (McGaw 2003). This developing focus on the economic importance of education creates opportunities for authorities to both monitor and assess the performance of their education sector and does creates opportunities to reveal and address disadvantages outside of a purely social justice framework. The economic indicators should be seen to complement existing views on equity by using the language of the dominant policy discourse to advance justice causes.

According to McSwan (McSwan 2003) the fundamental role of education in helping to develop our rural areas has been given little policy attention. While he says issues of social justice are beginning to be raised it is the powerful voices of the agricultural and mining industries that dominate. While he reports similar trends to those mentioned by the Productivity Commission report he adds to this detail about lower educational participation of rural communities. According to McSwan rural and remote schools have retention rates up to 50% less than urban schools; students are significantly underrepresented in tertiary education; have slightly higher rates of TAFE education but in lower skilled certificates; and significant numbers of indigenous students don’t complete school at all (McSwan 2003). These statistics are juxtaposed against the higher rate of educational involvement of the general Australian community as a means of involvement in the post industrial economy. To address this McSawn states that ‘Schools, and other educational institutions, in rural and regional areas should be key players in sustainable community and economic development. Depth of resources in human, social, cultural and economic capital is crucial to sustainable community development’ (McSwan 2003) p. 24.

McSwan’s conclusions build on the Commonwealth Schools Commission report into the impact of the rural economy on schooling (Harrold and Powell 1987). This report noted the impact of rural fluctuations such as drought on the local economy and attempted to uncover the cost of providing schooling in these communities. While it succeeded more in uncovering the complexities of such an approach it did conclude that generally the cost of educational provision is higher than in urban areas. Importantly however it concluded that extra teachers in a school result in the economic expansion in that community of employing about half an additional extra worker (Harrold and Powell 1987). Combined with the further recommendation that rural schools should aim to work closely with their communities industry needs (Harrold and Powell 1987) there is therefore an argument for supporting these schools to aid community development. Vigilance is needed however to ensure that this is not a deficit training model that diminishes the importance of academic and tertiary studies – as this would further entrench future disadvantage by locking students out of the modern economy.

Aspects of a policy framework to look at the impacts upon rural communities as suggested by McSwan (McSwan 2003) already exists in the form of the Review of Government Services, known as the ‘Blue Book’. This review, as apart of the
productivity reforms, was established in 1993 and reports on the equity, efficiency and effectiveness of government services and aims to improve services by promoting transparency (Banks 2005). These equity indicators are aimed at measuring the service against the needs of special groups, however it appears at odds with the efficiency requirements. It remains unclear where the weight of importance lies between these two seemingly contradictory areas. In relation to schools the ‘Blue Book’ has been adapted to align with the MCEETYA national goals for schooling (Banks 2005). However it appears that equity merely refers to participation and retention rates, effectiveness measured only in literacy and numeracy and efficiency as cost per student analysis (Banks 2005). Banks also concludes that methodologies for comparing these areas are not finalised but does indicate that reporting on social justice is more complete than other areas – this completion however appears restricted to indigenous school completion. These definitions of equity are extremely narrow and don’t take into account many of the contextual factors and community needs in disadvantaged communities.

While proving, albeit unintentionally, that measuring equity is a difficult and practically absent from policy deliberation Banks does remind us that; ‘Equity of access is particularly important in education. Not only is it critical to the life choices of individuals, society as a whole loses out if people with potential are denied an opportunity to make the most of their abilities.’ (Banks 2005) p.14. Recognition is the first step – having it as an effective policy principle is the more elusive goal. However it needs to be a goal founded on broad definitions of justice and equity and measured against a broad set of social indicators if positive change is to be achieved.

The key determinants in any resulting initiative are the teachers in the schools. The working conditions of these teachers are critical in achieving a socially just outcome in education. As Hattie has clearly proved ‘teachers make a difference’ (Hattie 2003), and without them no change will occur. However it is not just the presence of the teacher because as Hayes et al point out ‘the quality of teaching and learning experienced by students is a critically important social justice issue for schools today’ (Hayes, Mills et al. 2006) p. 9. The research evidence developed by both Hattie (Hattie 2003) and Hayes et al (Hayes, Mills et al. 2006) provides substantial evidence to support the importance of a quality teacher in every classroom. In this way structures that help attract and retain teachers equitably across the state, supported by policies that recognise the different needs of these communities is essential.

In coming to their conclusions Hayes et al discuss a range of previous research studies over many years that discuss the link between schools both perpetuating and overcoming social inequality (Hayes, Mills et al. 2006). As McGaw points out when looking at Australia’s results in PISA 2000 there is a strong relationship between social background and achievement (McGaw 2003). This test looks at the achievement of 15 year olds on an international sample basis and showed there is no strong link between the money spent on education and outcomes (McGaw 2003). McGaw adds to the conclusions of Hayes et al (Hayes, Mills et al. 2006) and many others when he notes that the PISA 2000 results show that increased social advantage is generally associated with higher levels of educational performance (McGaw 2003). Worryingly the influence of social advantage was of higher importance in Australia than many other nations (McGaw 2003) resulting in greater educational disadvantage for those already disadvantaged. McGaw described Australia as a ‘high quality, low
equity’ educational system pointed out that quality and equity are not exclusive concepts because some countries’ results suggested a high quality and high equity system (McGaw 2003). Such conclusions on an internationally comparative test add to the weight of evidence educational policy is not addressing the issues of equity and social justice for rural, remote and isolated communities. These communities are already some of the most disadvantaged in the country, however international comparison shows it is not ‘too hard’ to create a system which results in quality and equitable educational outcomes. As Hayes et al argue a more equitable distribution of outcomes needs to be a goal of socially just schooling (Hayes, Mills et al. 2006). This supports the view that the big influence of education is quality and the equal distribution of that quality and that following the distributive justice argument of Rawls (Rawls 1971/1999) that the most disadvantaged need the best quality education.

The issue of quality in education has recently attracted great attention from both political and policy perspectives. Even though the push to measure and improve quality implies an increase in accountability (McGaw 2003) it is not an agenda to fear. With appropriate checks or a framework that includes real equity considerations this agenda will in fact reveal that differentiated resourcing is needed to address disadvantage. Thus recognition of difference is essential to ensure different resources inputs are applied and contexts included. This should generally result in an argument to change resource levels for rural schools.

It should be a national concern when the education director for the OECD McGaw concludes that "some countries manage to ameliorate the effects of social background on educational achievement ... Australia (is) not among them". (McGaw 2004) Adding to the disadvantage evidenced by PISA 2000, preliminary results for 2003 show the persistence of inequitable outcomes. According to Thompson ‘Students in a metropolitan area performed at a significantly higher level than students in a provincial city, who in turn performed at a significantly higher level than students in rural areas’ (Thomson, Creswell et al. 2004) P Xiii. Confounding the disadvantage associated with location is disadvantage associated with ethnicity as ‘Levels of performance were generally found to be significantly higher among non-Indigenous students as compared to Indigenous students, and for students in metropolitan areas compared with students in regional or rural’ (Thomson, Creswell et al. 2004) p153. By emphasising the link between socio-economic background and achievement the clear conclusion is that public policy should be directed towards improving the performance of those with lower achievement. Failure to lift the educational standards of socially disadvantaged school children is a fundamental human rights violation.

Educational policy to date appears not to have considered the unique contextual issues of rural, remote and isolated schools. Instead policy has been concerned with a one-size fits all approach with a bit of tinkering on the edges. No policy systematically addresses the causes and manifestations of this difference – instead they apply ‘metro-centric’ (Christie 2005) solutions to local differences. They also tacitly create a sub-theme of ‘disadvantage’ in relation to these communities. As Taylor et al points out ‘educational policies do not emerge in a vacuum but reflect compromises between competing interests expressed by the dominant interests of capitalism on the one hand and the oppositional interests of various social movements on the other’ (Taylor,
Rizvi et al. 1997) p.4. Concluding from this it would appear that rural, remote and isolated communities have had neither form of power and thus been unable to have their needs addressed. This is in contrast to the relative power of feminist, multicultural and indigenous rights social movements who all ensure their interests are recognised in the curriculum and in educational policy (Taylor, Rizvi et al. 1997). These groups were successful in their opposition to the ‘role education plays in the maintenance of the existing social order’ (Taylor, Rizvi et al. 1997) and are testament to how successful policy activists (Yeatman 1998) can be in influencing the policy agenda, but also how successful educational policy can be in influencing social change.

However if public policies are ‘positive and directional’ (Taylor, Rizvi et al. 1997) made on behalf of the State based on the principle of ‘equality of treatment of citizens’ (Taylor, Rizvi et al. 1997) and the rural educational sector is increasingly being left behind as a residual public education sector as opposed to the privatisation of metropolitan education, there is clearly a responsibility on government to specifically address their needs. After all governments gain their legitimacy from the people and have a responsibility to ensure that its endeavors (inc. policy) reflects the public interest. This idea is referred to as the social contract theory first raised by Plato 2500 years ago and developed in its modern form by the 17th-century English philosopher Thomas Hobbes. Hobbes argued that the legitimacy of the state and its citizens is rationally and ethically mandated by a notional social contract under which individuals agree to constrain their "anything goes" unlimited freedoms for the sake of security, safety, civility and public order which the state guarantees on the basis of mutually acceptable moral principles. However, the state only holds power in trust for the collective good, and its legitimacy is ultimately founded on the implied consent of its citizens. Whereas the state has an obligation to protect and preserve the security and safety of its citizens, the citizens have an obligation to abide by the ethical and legal principles upon which the state is founded.

Free universal public education developed to help ensure equity across society (Hirst 2002). Therefore the purpose of educational policy and the needs of disadvantaged communities are inexorably intertwined with the legitimacy of the state and its ability to mitigate the competing interests of the powerful and the powerless. Historically rural communities were the powerful controlling the fate of governments and the national economy, however their power has declined. In many ways their only power remains in their place in the national psyche and the social justice arguments that legitimise our democracy.

The plights of rural, remote and isolated communities need to be seen in this context of discourse turning from blaming bad policy for disadvantage to blaming people and individual inadequacy (Swan 1995) as well as part of a larger movement away from an egalitarian past to a deeply conservative individualism. The dominance of the economic influence has in the end threatened its own longevity as the economic consequences of not receiving a quality education are profound. Unfortunately the new rhetoric of individual choice and school efficiency and effectiveness is dominant over the earlier issues of social justice and group disadvantage.(Haynes 2002) Policy initiatives to meet the needs of economic and social change are now couched in the language of ‘reform’ in order to give the change a form of legitimacy (Taylor, Rizvi et al. 1997). However if as Taylor also suggests that ‘the state is not neutral’ (Taylor,
Rizvi et al. 1997) in respect to change as it either supports or resists change the state is therefore responsible for and complicit in the policy discrimination experienced by many rural areas.

Policy analysts and activists have an important role in promoting and changing policy as education is a moral idea linked to social justice concerns aimed at creating the conditions of a civil society. This is a vision where the interest of the individual and society are inexorably linked (Taylor, Rizvi et al. 1997). The role of education in creating a civil society builds on Dewey’s’ assertion that education is for the development of democratic communities (Dewey 1958). This ‘educology’ for democracy (Dewey 1916) as Dewey describes it needs to incorporate a differentiated view for disadvantaged communities if equity for all is to be achieved. Without it disadvantaged becomes entrenched and participation and the valuing of democracy declines as people become effectively disenfranchised.

The influence of power on decision making highlights the tension between the role of politicians and policy makers as reflections of the society they are elected, or appointed in the case of policy analysts, to represent versus their role as leaders of society to put challenging ideas for change. It is accepted that we have leadership for economic and social change of groups that have been able to develop power to advocate change, such as the case of Indigenous and Feminist activists. There is no reason therefore that activism for social justice cannot also be successful as it is in many ways a component of and an extension to the accepted dissident voices. Adding a rural voice to this discussion appears necessary as the existing voices have not adequately addressed the continuing disadvantage experienced by the rural members of their communities. This rural voice is a function of rural space and as such needs to be located in that place to maintain credibility.

Achieving change through policy development and application is the legitimate role of a policy activist. Such activists according to Yeatman (Yeatman 1998) are concerned with public interests and values and seek to implement policies to that end. They are not concerned with politics but instead with the policy pursued by the public sector or those of the private sector that will impact on public values (Yeatman 1998). This focus on values implies an acceptance of social justice as an outcome of policy and therefore includes a philosophy of justice and difference as a legitimate component of any such policy. Yeatman argues that in many ways the policy activist is the central component of a democratic state as they strive to ensure that various social causes are incorporated into public policy (Yeatman 1998). In support of this recognition of difference Young argues that public policy needs to recognise and affirm difference in differentiated policies (Young 1990). Such a recognition of difference could be seen as opposed to Rawls’s distributive paradigm that everyone has equal rights and therefore greater benefit should be distributed to the most disadvantaged (Rawls 1971/1999). However considering that Rawls’ view is founded on an idea of justice it is quite reasonable to incorporate Young’s view into any definition of justice.

While Rawls’s distributive views may have given rise to some of the targeted programs for rural schools that exist they are inevitably economic solutions. Many of the arguments that either cause or explain disadvantage have a social dimension which needs to be recognised. The tendency of economic views is to create the social
context as a deficit causing economic dislocation. To do this Young supports the inclusion of context as a way of focusing on the institutional conditions needed to develop community capacities (Young 1990). This could be included as a feature of any revision of the distributive paradigm. The principle behind this paradigm needs not be seen as purely economic. This view of justice could also include the distribution of quality teachers to overcome any pedagogical deficit associated with high proportions of beginning teachers or high teacher turnover.

It could be argued that when Apple places the role of the school in breaking cycles of disadvantage in the broader context of reproducing social order (Apple 1982) he is implicitly referring to the need for the voices of powerless communities to be heard. Overcoming this hegemony requires a policy framework that is founded on Yeatman’s principle of an activist policy orientation based on Rawls’ idea of justice which includes Young’s recognition of difference. Such an approach would address the human rights concerns of natural justice of all communities regardless of location or power. In fact the views of the less powerful would be highlighted in order to achieve equity.

While the needs of rural, remote and isolated communities are many and varied, a policy framework that recognises them is the first step in overcoming their evident educational disadvantage. Future policy can not just rely on equity and hope – instead there needs to be a concreted effort to address needs advocated by policy activists using differentiated justice arguments that are founded on the contextual reality of these communities. In time better understanding of place could lead to a new state / national policy discourse that does not need to rely on equity but is instead built upon effectiveness. Addressing one inequity creates another – whereas working holistically can change the nature of inequity. Without such an approach equity will not be achieved as quality teachers are not enticed to rural and remote areas. As Australia’s report for the UNESCO working party on attracting, developing and retaining effective teachers states: ‘The issue of effective teachers is not only instrumental and pragmatic; it takes us to the roots of society and the quality of life that is being sought’ (Connell and Skilbeck 2003).

References


“When being local is being local” – a description of a mixed media approach to teacher education addressing staffing difficulties in remote and rural areas in the North Island of New Zealand.

Russell Yates
Senior Lecturer in Professional Studies in Education,
The University of Waikato, Hamilton, New Zealand.

Abstract

The Mixed Media Programme is a primary (elementary) teacher education programme established in 1997 in New Zealand by the University of Waikato. It was initially introduced to address a serious shortage of primary school teachers mainly in rural areas of the North Island, but continues now as a viable and accessible flexible option for teacher education. The programme uses a combination of some face-to-face teaching, school based activities and electronic communication with an annual intake of about 60 students. Now in its tenth year the programme has produced more than 400 graduates, many of whom are teaching in schools throughout New Zealand. This paper reports on a small-scale study, which sought to examine the way that students, teachers and school principals from two communities perceive the programme and its effect on these communities. The study asked the principals, teachers, graduates and current students about the way that the programme has enabled people from local communities to firstly study to become teachers in these communities and then to teach in them. It reports that students have found this approach to teacher education is very beneficial to local communities for a number of reasons. The first is that it has enabled these communities to have stable staffing. Secondly, the schools have had a stake in the teacher education programmes and they have confidence in the graduates they employ. The students have found that they are able to become teachers without having to leave their local communities, they are exposed to university education as mature students and that their study has a range of effects on them and their families.

The study concludes that the Mixed Media Programme has had significant effects on the two small communities of the study, at individual, school and wider community level.

Introduction

This paper reports on a small study about the University of Waikato’s Mixed Media teacher education programme (MMP). The study was conducted because anecdotal evidence suggested that the Mixed Media Programme had been successful in meeting its objective of assisting small and rural schools to achieve greater staffing stability. The anecdotal evidence also suggested that the programme had presented effects which were unintended at the outset of the programme but which had turned out to be quite significant for the schools, students and communities involved. The unintended outcomes included a ‘sense of sharing’ with the students while they undertook their teacher education, a heightening of professional development awareness for the teachers in the participating schools and a role modelling effect within families and communities of the MMP students.

The study used two case studies to find out what the effect of the programme was for each of two rural communities. Interviews were conducted with the principals of the schools, former MMP students who are now teachers in their schools and current MMP students. The interviewees participated in semi structured interviews conducted by telephone. The use of the telephone was considered appropriate as all interviewees were known to the author of this paper. The interviewees were asked about the way the programme has affected them and their schools, the way it has affected their families and the perceived effect on their local communities.
Background
If you were to look at the composition of many rural communities in New Zealand, you would probably find that almost all of them would have a former teacher in their midst. It is even more likely that the former teacher would be a woman who had been placed in that community as a young teacher. Many of these women married a local farmer and have remained in that community to this day.

The way that happened was that teachers were placed in teaching positions by a local education board. Education Boards were the employing authority of all primary school teachers in New Zealand until 1989 when the boards were disestablished. The reform of educational administration which was enacted by the Education Act of 1989 placed the responsibility for employment matters on each school’s Board of Trustees. Boards of Trustees, comprised of elected local community members, were given the responsibility to govern their local school and the appointment of principals and teachers has been carried out by Boards of Trustees since that time. Many principals and teachers in primary schools would say that this ability has been one of the outstanding advantages of self management enabled by the reforms of 1989.

While the ability to appoint principals and teachers has been signalled by many principals and Boards of Trustees as an advantage, it is also possible that it has been a significant disadvantage. This is because the staffing of all schools is now the responsibility of each Board of Trustees which does not have the overall picture of staffing needs that the previous education boards had. This means that small, rural, often isolated schools have been essentially left to their own devices to attract and retain staff. Prior to 1989, an education board, which had an overview of staffing and the ability to direct teachers to teaching vacancies, would place teachers where the need arose. Since then each school has had to do that for themselves and many small schools have struggled to find teachers.

In 1995 a staffing shortage was very evident in many New Zealand primary schools. Primary schools in many rural areas of the North Island of New Zealand consistently found staffing their schools difficult. It was not just the way that teachers were appointed that lead to this situation. An increase in primary school rolls and a reluctance of many teachers to move into rural areas was also significant.

With this situation existing, principals throughout the region served by the University of Waikato asked the School of Education to consider providing teacher education in the more rural areas. The principals based their request on a previous small scale teacher education programme which had been centred on two small towns on the East Coast of the North Island, Wairoa and Ruatoria. The earlier programme had involved university staff travelling to the two centres on a regular basis to work with local people who were students in the programme. Between them, the two programmes had provided about 40 teachers and, in 1995, many were teaching in the areas surrounding Ruatoria and Wairoa. Thus, the principals were keen to see a repeat of the programme.

However, the Dean of Education at the University of Waikato took a slightly different view of the way in which the programme should be provided. The Dean accepted there was a need for teacher education in the hard to staff rural areas, but felt that the previous programme had been very staff intensive in terms of both time and travel,
and, in some ways, could have been unsafe for staff because of the travel distance and time constraints. Thus, the Dean asked that a programme of teacher education be developed which was for students in small, rural and remote places which would use new approaches to technology to minimise travel and would enable students unable to travel daily to the university campuses to become teachers in their local areas. The intention was to address the teacher shortage in these areas by using people who already lived there and who were more likely to stay and teach in their local community.

In 1997 the first group of students in the Mixed Media Teacher Education Programme (MMP) commenced their studies towards a Bachelor of Teaching degree. The MMP programme is a replica of the University of Waikato’s primary Bachelor of Teaching on-campus. It is a three year programme and currently comprises 20 papers (360 credit points). Students enrolled embarked on a programme of teacher education which would has allowed them to remain in their homes but still study in order to become a teacher. They attend week long block courses at the university campus in Hamilton, they spend one day each week in their local school (Base School) and their main link with the university is through their computer. The programme generally requires that at least two of their practicum experiences are in schools other than their ‘base school.’ This was insisted upon in an attempt to ensure that the programme was not seen as being insular and that students were exposed to the broader issues of education.

A feature was the high calibre of students selected for the initial intake. The students who commenced in 1997 were selected following an extensive and contested selection process where there had been 5 applicants for each place in the programme. The selection of students was overseen by the university but involved local communities. The local communities were given no special consideration to ensure they were assisted in their staffing needs. Each applicant was required to meet selection criteria for all New Zealand teachers, just as applicants for teacher education in on-campus programmes are required to do.

The initial intention of the University of Waikato was to commence the programme by trialling with a small group of 25 students drawn only from the Gisborne and East Coast areas. However, the principals’ network throughout the geographical area served by the University of Waikato was wide enough to soon know that such a programme was being established and principals from the other areas exerted enough pressure to force the university to reconsider and accept a larger intake. Thus, 54 students commenced the programme in February, 1997.

**What has been the effect of MMP?**

In the time that the programme has been available almost 600 students have enrolled and more than 450 have completed their teaching qualification. While not all have chosen to teach, the majority have taken up teaching positions throughout New Zealand. With this picture in mind a small scale study has been undertaken to establish even a small picture of the effect the programme has had on staffing in small and rural schools. The study is based only on two schools but other anecdotal evidence suggests that the picture shown by the study is consistent with that of the programme in general. The two schools selected for this study were chosen because they have been participants in the programme since its inception.
School A is located in the east of the North Island in a smallish rural town which has four primary schools and one secondary school. Staffing has been an issue for School A since 1989. The town has a population of about 4000. (Census, 2001) The ethnic distribution is 52% European and 48% Maori. (Census, 2001) The school has a current role of 183 with 7 classrooms. The school roll has been consistent for the last ten years. The school has 3 former MMP students currently teaching in the school. Two were students in the 1997 intake and the third has taken up a position this year, having completed her teacher education in 2005. The two 1997 intake students were ‘teacher aides’ (Ancillary Staffing) in the school prior to their selection and continued in that role throughout their period of teacher education. The two 1997 intake students have only taught in School A.

School B is located in a small village also in the east of the North Island but further south than School B. As with School A, staffing has been difficult mainly because teachers who had taught in the school prior to this programme has often stayed only briefly before moving on to or back to larger centres. The village has a current population of 330, of whom 73% are of Maori ethnicity and 37% European. The school has a roll of 129 with 5 classrooms. The school staff currently has three graduates from the Mixed Media Programme, one from the 1997 intake, one from the 1999 intake and one from the 2001 intake. The two students from the earlier intakes have taught in schools other than School B before moving to their current positions. Both live locally. In addition there were two other students in the 1997 intake who completed their teacher education whilst being ‘based’ at School B. One of these teachers is employed in a school in the rural area of school B while the other is now successfully teaching overseas.

In this study principals were interviewed along with some of the current or past participants in MMP.

The participants were asked the following questions:

**Principals:**
- How long has your school been involved with the Mixed Media Teacher Education Programme (MMP)?
- What has been your part in MMP?
- When the programme began, what did you think MMP might achieve for your school community?
- Given your involvement with the programme, what do you think it has achieved for your school and wider school community?
- What benefits do you think you and your teachers have gained through your involvement with the programme?
- What do you consider the advantages and disadvantages of this programme to be?
- Are there any other effects of the MMP on your school and wider community that you think are significant?

**Teachers:**
- What motivated you to become a teacher through the MMP?
- What do you think you have achieved for yourself by becoming or preparing to become a teacher through MMP?
• What challenges do you face or did face as an MMP student? Consider these in terms of technological, financial, support or any others.
• What do you think the effect of your teacher education has been on your family and/or community?

School Involvement with MMP
Both principals were asked about their involvement in the Mixed Media Programme. In each case the school had hosted at least one student in their base school every year since the programme commenced in 1997. That had meant the schools had acted as ‘base schools’ with students attending one day each week to participate in school activities related to their study. The study activities were determined by the university and were communicated to the school via the student. Each student had a mentor teacher known as a ‘coordinating teacher’ who was the ‘constant’ for the students. The principals of both schools indicated that teachers in the school were more than willing to act as ‘coordinating teachers’ and one principal suggested that at times it almost became a contest to act as the mentor. The reason for that willingness was that in most cases, the mentors already knew the MMP or potential MMP student as a community member and they know what they were capable of. The school were financially compensated for their work as base schools in providing mentoring and access and while both principals agreed that this was an appreciated consideration, they also said that many of the teachers involved saw it as a professional opportunity and responsibility.

One of the side effects of the students being placed in ‘base schools’ was the way that the qualified teachers in the ‘base schools’ responded to the presence of teacher education students. In both cases a heightened awareness of the potential of professional development was kindled and the qualified teachers pursued other qualifications. For School A this meant that some teachers began to actively pursue degree qualifications and did so online. The opportunity to study in this way was prompted by the presence of the teacher education students studying online. At School B this manifested itself with the teachers and teacher education students together studying papers at another institution. For the teachers this was based on the school development focus but for the students it was a way of broadening their teacher education programme, an indication of their commitment as these papers were not credited to their initial teacher education programme.

Both principals agreed that the impetus of the programme had significantly advantaged their staffing needs since MMP students had graduated. Both schools had appointed MMP graduates immediately on completion of the graduates’ study. They suggested that they had made the appointments for two reasons. One was that they knew the graduating students capabilities very well and the other reason was, that there was a lack of other applicants. In fact, the principal of School B said that there were no other applicants for the advertised position at that time. The principal added that the school had no qualms about appointing an MMP student. School A appointed two graduates who continue to be valuable members of staff of that school.

The Effect on Local Communities
The effect of MMP on the two school communities varied. School A, which has a larger community, felt that the effect did not spread into the wider community to any perceived extent. In School B both the principal and students felt that their
involvement in MMP was noted and did have an effect. The principal of School B suggested that their school community quickly recognised the value of involvement at school governance level with their Board of Trustees consistently affirming the school’s continued involvement.

The students at School B also suggested there was a wider effect. One student said, *This is the biggie to me. It has provided huge ‘in-your-face,’ ‘we-know-her,’ role model within the community, for both ‘pakeha’ and ‘maori’ people. The lady I mentioned earlier, who wanted to train as a nurse was able to do so because (training institution) in (local area) did take on her suggestion after her insistence that (local area) people could train at a distance. Two men have become policeman as they said they could change careers or get a career, just as they have seen me and others do. I have seen one family man leave the police and take on an adult apprenticeship. He said, “You are the role-model you have shown the way, and you are still changing and adapting work to your family demands.”* (Student B2)

This is indicative of the effect of the programme especially when it is considered that the student who made the comment was one of the 1997 intake and since then there has been a continuing flow of applications for MMP from the School B community. All students agreed that they were seen as role models although one (Student B1) suggested it might not be as great for him as for other students because of his low profile.

A further effect of MMP which needs to be considered is that of raised income and qualification levels. The principals of the two schools agreed that the success of students in gaining teaching qualifications had an effect on the students, their families and their wider community. Many of the communities involved with the MMP programme are relatively low socio-economic communities. That is true of the communities for Schools A and B.

School A is located in a town where the median income (2001 Census) was listed as being $12,500, compared with $12,900 for their wider area and $18,500 for all of New Zealand. School B has a ‘village' median income of $12,700 compared with $14,600 for the wider area and $18,500 for all of New Zealand. In educational qualifications the town of School A has a median population of 20.2% who are aged greater than 15 and who have a post school qualification compared with 22.3% for their wider area and 32.2 for all of New Zealand. The community of School B has a median population of 21.7% who are aged greater than 15 and who have a post school qualification compared with 22.3% for their wider area and 32.2 for all of New Zealand. While it is acknowledged these figures are not conclusive, it would be fair to conclude that the input of five university degrees to the community of School A and six to the school community of School B would have an impact on both income and qualification levels especially when a New Zealand Beginning Teacher commences on a salary of $39,200. The greater wealth, financially and educationally, is likely to affect each school community.

**The Effect On Students And Their Families**

All students interviewed about the programme agreed it had a significant effect on their lives and that of their families. They saw that it had given each of them
worthwhile careers and an opportunity to contribute meaningfully to their local communities. They suggested it had given them confidence in their own ability and some very strong work habits during the period of study. One student (B2) suggested that she had gained in a range of ways – an ability to use a computer, an ability to ask questions and ask for help and a wider circle of friends gained from her times of study. Students also reported that there had been an effect on their families in that the families gained pride from the achievements of the students as well as children finding encouragement from the efforts of their parents. This pattern of effects is similar for all students who have been part of the Mixed Media teacher education programme.

Conclusion
The Mixed Media teacher education programme was established to address teacher shortages in rural areas. The study shows that it has achieved that objective in the two communities studied. It has provided continuity of staffing with teachers who know their area, who are well trained and who will probably live and work in their communities for much longer periods than many previous teachers did. The study has also confirmed that schools, school communities, students and their families have all gained in a number of ways, all of which have advantages for each party. There is no evidence that the programme is insular as the continued employment of graduates in their local and wider areas suggests that the quality of their teacher education programme has enabled them to take a full part in the teaching fraternity.

References