*Journal of Research in Rural Education*, 2008, *23*(6)

# Creating Physical Education in Remote Australian Schools: Overcoming the Tyranny of Distance through Communities of Practice

Tony Rossi and Karen Sirna
*The University of Queensland*

Citation: Rossi, T., & Sirna, K. (2008). Creating physical education in remote Australian schools: Overcoming the tyranny of distance through communities of practice. *Journal of Research in Rural Education, 23*(5). Retrieved [date] from http://jrre.psu.edu/articles/23-6.pdf

*This paper reports on a qualitative case study undertaken in a remote part of Queensland, Australia. While there is some modest agreement about the capacity of contemporary information technologies to overcome the problems of schooling in areas of extreme remoteness, generally, children educated in such contexts are considered to be disadvantaged. The experiential areas of the curriculum, which often require specific teaching expertise, present the greatest challenge to teachers, and of these, physical education is perhaps the most problematic. This research reports on a case study of three remote Queensland multi-age primary (elementary) schools that come together to form a community of practice to overcome the problems of teaching physical education in such difficult circumstances. Physical education is constructed in these contexts by blurring the school and community boundaries, by contextualizing the subject content to make it relevant, and by adjusting the school day to accommodate potential physical education experiences. Each community gathers its collective experience to ensure the widest possible experiences are made available for the children. In doing so, the children develop a range of competencies that enable seamless transition to boarding high schools.*

## Introduction

While there has been some debate as to the extent to which living in remote or isolated communities constrains opportunities and facilities readily available to children in more urban environments (Patterson & Pegg, 1999), generally, research signals an association between isolated community living and disadvantage in terms of health, economic stability and education (Australian Council of Deans of Education, 2001; Human Rights and Equal Opportunity Commission, 2000; National Board of Employment, Education and Training (NBEET), 1991; Robson, 1993; Scott, 1993).

In terms of education, limited equipment, facilities, and professional development opportunities, compounded by economic constraints are some of the issues facing educators, parents, and community members living in remote areas of Australia. Although computer mediated technology has been proposed as one solution to overcome the isolation (d'Plesse, 1993; Stevens & Mason, 1994), it may offer little assistance for teaching physical education and encouraging physical activity in remote schools or communities (cf. Baills & Rossi, 2001). Inadequate professional support for teachers, particularly in settings where no physical education specialist is available, is of concern particularly given an increasing societal concern for the health and activity status of young people and corresponding calls for schools, and physical education, to be part of the solution (Motley, Rossi, & King, 2005; Australian Sports Commission, 2005). As such, attention to how physical education might be fostered in isolated settings is warranted in order for educational institutions to find ways to support teachers and communities in creating healthy citizens.

This paper presents a case study of a school-related event in order to illustrate the ways a group of educators, working in isolated school settings, fostered community relations which in turn supported the provision of a locally

---

The second author is now in the Department of Sports Science, Douglas College, Vancouver, British Columbia, Canada.

The research was conducted under full institutional ethical approval and the approval of the educational authorities for the state of Queensland. In addition, local community approval was also sought and granted. All normal protocols for anonymity were observed.

All correspondence should be directed to Tony Rossi, School of Human Movement Studies, The University of Queensland, Brisbane, Queensland, Australia (a.rossi@uq.edu.au).

situated physical education curriculum responsive to students' interests, experiences and needs. We draw upon Wenger's (1998) notion of communities of practice to make sense of the social processes through which the educators, parents, and town citizens work to encourage health and active living.

In what follows we elaborate on our use of Wenger's concepts, key terminology, contextual details of the case, data collection, and methods and analysis. Then, we discuss our findings regarding the educators' efforts to foster collaborative practices in building communities. In particular we focus on the educators' use of asset rather than deficit logic (see Morgan & Ziglio, 2007 and Willeto, 2007 for good discussions of asset vs deficit logic) as well as their willingness to blur boundaries between school and community. In other words the contextual parameters are regarded as an asset. In their community-building efforts the teachers took on Ankrah-Dove's (1982) notion of rural challenge with particular reference to the relationships to local community members. This was particularly exemplified by the practice of the two principals who participated in the study.

Findings of this case study are particularly significant for experiential key learning areas such as health and physical education that do not lend themselves as readily to on-line or mail delivery techniques for curriculum provision, professional development programs and learning support, particularly for those in remote settings. In closing we offer recommendations for the field of teacher education regarding ways to support educators while fostering physical education for healthy citizens.

## Communities of Practice

Although we consider the schools, and the towns in which they are located, to be communities, we are not suggesting they are identical. Rather, we think of each school and surrounding town region as a local, distinct community with the three school regions in this particular study together forming a larger, extended community.

According to Wenger (1998; also Wenger, McDermott, & Snyder, 2002) communities of practice have common elements. Specifically, these are a domain of knowledge, a community of people, and the shared practices. The domain includes both common ground (of what is known) and a common identity (by being co-joined in the knowledge), which become legitimized through the shared practices of the membership. As a consequence, membership and domain knowledge are ascribed values, which in turn provide motivation for members to continue to participate.

Rather than being discrete entities, the elements are interconnected. For example, through participation in group practices of a shared interest, individuals create understandings, knowledge, and ways of interacting with one another. In addition, they build relationships and support learning with and from one another. In this way, shared and tacitly understood routines, sensibilities, language, and even identities are produced (Wenger, 1998).

The community is the social fabric of learning where practices mediate the members' development of the domain of knowledge and repertoires. Participation, as a "vehicle for the evolution of practices" (Wenger, 1998, p. 13), requires coherence and commitment for its growth and sustainability.

## Rurality, Isolation, and Remoteness

Definitions of "rural" and "isolation" based on demographic data alone tend to be inadequate. The National Board of Employment Education and Training (NBEET) study published in 1991 indicated that there is a distinct lack of uniformity in trying to define "rural," "isolated," and "rurally isolated," suggesting that definitions differ according to the needs of agencies seeking to use such definitions. The Australian Bureau of Statistics (ABS) (1996) defines "rural" as a cluster of people over two hundred and fewer than 1,000. They define "isolation" as a cluster of people fewer than two hundred. Roe (1997) , drawing on a range of earlier work, describes rural as any provincial center of significant size as well as smaller country towns and communities. Even these definitions and descriptions are inadequate. As Daws (1999) suggests to describe or define communities beyond the reach of large metropolitan areas *only* in geographical terms fails to account for the structural (social and economic) and psychological factors that underpin the diversity of those communities. For instance, the popular mythology that comes to represent Australia in global terms is saturated by what Botterill (2006) calls "countrymindedness," so much so that the enduring image of the opening of the Sydney Olympic Games was of stockmen charging across the stadium complete with stock whip, obligatory hat (the Akubra) and raincoat (the Driz-a-Bone). However for at least 10 years it is the resources sector that has driven the economies of more remote areas and led to regional (and mostly localized) population surges at a time paradoxically of general rural depopulation (Haberkorn, Kelson, Tottenham, & Magpantay, 2004).

Of greater use when defining and describing remote areas and communities in Australia is the Accessibility/ Remoteness Index of Australia (ARIA) developed in 2001 by the Commonwealth Department of Aged Care. The index uses Geographic Information Technology to construct five categories of remoteness based on road (paved and unpaved) distances to service centers with a population of more than 5000 people. The five categories are spread across a value range of 0-12 with 0 meaning that a location has the highest level of access and a score of 12 indicating the lowest level of access. The terms isolated or remote, which

characterize the schools in this study, refer to settlements and communities that would fall into category four of the index with a value range of 5.81-9.08. Communities which fall into this category are described as having very restricted access to goods, services, and opportunities. So while the index does use a geographic metric, it does so by indicating the degree of access to the things that most Australians take for granted.

As one might imagine, elementary education (better known in Australia as primary schooling) in such isolated environments occurs in very small schools with enrollments often of less than 25 spread across the seven years of schooling. Multi-age teaching is therefore an essential teaching skill. Usually one teacher is charged with the responsibility of teaching all subject disciplines. The (teaching) Principal is therefore required to teach full time and administer the school in all its facets. For secondary school, students must relocate to a larger community and attend boarding schools, the fees for which are sometimes subsidized. Often, there is a sense of frustration felt by teaching staff and parents brought about by sheer distance (cf. Motley, Rossi, & King, 2005: Rossi, 2006) as well as by children of such communities, particularly with regard to organized sport and physical activity (cf. Baills & Rossi, 2005; Rossi, 2006).

A National Inquiry into Rural and Remote Education in Australia (2000) revealed that parents of elementary age children in remote contexts were concerned about the quality and scope of their children's education. Other relatively recent research revealed similar parental concerns (Killeen, 1998; Lee, 2003; Rossi & Wright, 2000; Wright, Brown, Muir, Rossi, Tinning, & Zilm, 1999). Parents were additionally concerned that sport and physical activity, as examples of additional learning opportunities, were simply not available unless financial burden and other pragmatic issues related to fund-raising and long-distance travel could be shouldered (Wright et al., 1999).

Within Australia rural children are considered to be disadvantaged with high rates of non-completion of schooling and generally lower standards of health (Australian Council of Deans of Education, 2001; Baume & Clinton, 1997; Patterson & Pegg, 1999). Distance, isolation, and relatively uncertain futures account for some of this, with perceived lack of options leading to a sense that there is, "nothing to do" (Patterson & Pegg, 1999).

## Rural Australia: Policy, Education, and People

The traditional (though mythical, see Botterill, 2006) image of the rural sector is dominated by farming and the production of food for local consumption and export markets. Given that "rural" is a somewhat amorphous term, this could literally mean anything and everything depending on where one is talking about. Some areas are dominated by wheat production, some by other grains, rice, vineyards, cattle or sheep grazing, tropical fruit, and so on. People in such regions have had to endure hardship caused by liberalization of global markets and evolving economic circumstances, volatile commodity prices, and severe drought. On the other hand, the resources boom has seen the mining industries become a key employer in rural and remote regions. This has accelerated with the intense demand created as India and China have geared up for industrialization. Not only is the resource sector a major employer, the financial rewards available are significant. As Daws (1999) argues notions of rural and remote are very much a matter of context. As the farming sector has changed to take advantage of economies of scale and the demand for minerals has increased exponentially, the demographic makeup of the rural and remote regions of Australia has shifted accordingly. This has meant that policy making for such reasons is best described as "ad hoc" (cf. Rees, 2003). The description by Rees is consistent with the work of Sher and Sher (1994) nearly ten years earlier.

Sher and Sher (1994) argued that there was little written material related to rural Australia in terms of policy development, economic policy, and in particular, educational policy. This claim may be contentious, but what could be said in 1994 with some certainty is that there was little written anywhere that addressed issues related to children's physical activity, physical education and sport in rural and/or isolated contexts.[1] It seems little has changed 14 years later. This appears to be a matter of indifference rather than a conscious omission from educational research agendas. The basis of Sher and Sher's claim was that in their view, the absence of broad rural policy making retarded the development of rural areas in Australia. Indeed recent deregulation of rurally based primary and secondary industry would, in the view of some, be evidence of political ideology rather than sensible and manageable rural policy. This, however, is simply an extension of the economic reform started under previous governments of at least the last 25 years in reaction to and in an attempt to plan for the changing global economy (see Botteril, 2006; NBEET, 1991).

Sher and Sher (1994) suggested that rural policies in Australia should be driven by a commitment to the people

[1]The terms "rural" and "isolated" are often used interchangeably, but this can lead to confusion. Rural is a term that can be used to describe contexts that are only modestly beyond the reach of major metropolitan services but which are still relatively well served by roads, electricity and water grids, and commercial services such as retail and basic banking facilities. Isolated communities, which will still be in a rural environment, are unlikely to have the benefit of most of these services, be considerable distances from other communities of similar size and will exist in areas of very sparse population. Earlier in the paper, a measure of remoteness is described that provides a more robust notion of "isolated."

within the rural and isolated contexts rather than to the few successful industries located there, in particular mining. Moreover, they indicated that much educational and social policy related to "rural" contexts tends to be developed from a deficit model. In other words policy tends to focus on the problems and shortcomings of the communities rather than on their benefits and assets. At the time, they suggested this was out of proportion with the contribution the rural context maked to the country as a whole, and this is also the case in more contemporary times. Sher and Sher also emphasized that the people who live in very isolated contexts assume incredible levels of responsibility to educate their children in the family home or to contribute to the maintenance of small remote primary schools with very small numbers and invariably only one teacher. This has not changed over time.

Share, Lawrence, and Boylin (1994) considered that much of rural educational policy is founded on the well-worn Australian theme of a "fair go" and as such is imbued with a sense of social justice. If nothing else, this has allowed state and territories to access some level of federal government funds. However, in spite of the best intentions, there remain significant barriers to quality education access.Inequality remains a persistent hurdle in the absence of an equitable funding base not assessed on population metrics only, but on community need and the demands of infrastructure that can support local economies and the intensified social welfare needs (Australian Council of Deans of Education, 2001). Part of the problem is clearly integrating rural, and especially isolated and remote communities, into the provision of national programs based on curriculum documents invariably written under the auspices of large bureaucracies and generally undertaken in large cities (see Waddell, 1993).

## Purpose of the Case Study

Despite the data regarding barriers to education and the constraints associated with remote living, there is, as we have already suggested, limited research related to the teaching and learning of health and physical education (HPE) in isolated areas of Australia (see Lee, 2003). As an area of research, it attracts almost no interest, and this might reflect political indifference to remote community issues such as education. Yet, current educational and curriculum changes in the Australian context include mandates for increased opportunities for physical activity and physical education along with a focus on healthy lifestyles (Australian Sports Commission, 2005). Movements such as these emerge as part of a solution to growing societal concerns regarding the health and physical activity status of citizens and the growing concern regarding obesity-related health problem affecting children and adults (Botterill, 2006).

Broadening our knowledge regarding the ways meaningful physical education can be provided in very small, isolated schools may support efforts to foster sustained engagement of lifelong physical activity. Hence to better understand the ways communities of practice can enhance physical education and activity, we examined the perspectives of teachers, school leaders, and curriculum leaders while observing the students' engagements with movement and activity in their isolated communities.

## Methods of Data Collection

Data were gathered during a week-long event held each year, which draws three isolated schools together. While the educational bureaucracy in Queensland encourages (and in some cases requires) such clustering for intense teaching weeks, the structure of this week for the schools in this study and its carnivalesque atmosphere is entirely of their own doing. This event known locally as a "swim camp" involves three participating schools that we have called *Far Town*, *Dunesville*, and *Greenview*. The meeting of schools, which on this occasion occurred at Dunesville School, encompassed much more than swimming. It was an opportunity for the children to engage in activities related to key learning areas (KLAs are curriculum areas regarded as compulsory) of science, mathematics, art, and physical education. In terms of physical education, in addition to general motor development activity and games techniques, the students were given special swimming lessons from a contracted professional coach culminating in a final swim "meet" or "carnival" (a term more commonly used in Australia) at the end of the week. This is more of a social event than a time of testing, evaluation, or competition.

For the purposes of data gathering, the first author was a resident in the town of Dunesville for the week of the camp. While immersed in the daily activities of the community, the researcher kept field notes of observations in order to assist recall of the local context (Denzin & Lincoln, 2000). Descriptions of the facilities, equipment, community resources, play space, and researcher perceptions were recorded in the field notes. Images of the town (not the community members) were captured using a digital camera. The photographs were intended to aid recollections of the look and layout of the town and its location particularly since a subsequent visit was unlikely due to the distance and the difficulty of travel.

In addition to the participant observation notes and photographs, two in-depth semi-structured interviews were conducted with each of the two teaching-principals present (the third could not attend) who organized the event, a physical education curriculum adviser and the contracted swim instructor/coach who has worked at the camp for the last 13 years. All interviews were audio taped and participants were given opportunities to read and comment on the typed interview transcripts.

Given that a researcher's presence and activities in a town as small as this might be perceived as invasive, research approval of the local community (in addition to standard institutional ethics procedures) was attained from the town mayor and the Aboriginal Elders. Communication with the broader community was mediated by the Dunesville School Principal and all approvals were granted both in advance and confirmed upon arrival. Though not part of the intended research methods, the researcher was invited to participate in many of the games sessions during the PE lessons and officiate at the swimming carnival. Researcher involvement offered opportunities to learn about the physical activity of the children as well as practices for physical education.

In order to foster ethical and socially just research practices (Sparkes, 1997), a reflexive approach was used where the researcher listened to the interviews each evening, made notes on emergent ideas, and his own perspective of the process. The ideas and apparent themes were shared the next day usually in an informal way at a community meal. Full transcriptions were sent as soon as they were available to the participants for member checks. Using an iterative process of coding data, member-checking, and reflexivity throughout the process, major and dominant themes emerged. The constant collaboration with the four participants and other community members throughout the period of residency contributed to the integrity of the research process, trustworthiness of data, and authenticity in representation (Denzin & Lincoln, 2000). What follows are case details regarding the participants, locations, and communities along with data analysis and discussion.

## Case, Contexts, and Participants

### *The Look and the Life in Remote Towns*

The three schools are in towns that form an unequal triangle with sides between 300 and 400 kilometers long. Two of the towns (Dunesville and Far Town) sit on the edge of a desert, the third being marginally closer to the Eastern seaboard though still 1200 kilometers from Brisbane, the State Capital.

The Dunesville township, where the meeting was held, is situated about 1600 km from Brisbane and 1200km from Adelaide, the State Capital of South Australia, and has a permanent population of about 100 people. The town has no cemented areas, hence roads, service roads, and sidewalks are all sand and dirt. The look of the town is parched and there is little that is green other than the artificial surface on the newly built tennis courts. This scenario could be different as there is access to water from the Great Artesian Basin, the largest and deepest Artesian Basin in the world,which underlies over 20% of the Australian mainland landmass. However, the community chooses not to use such water to "green" the town as the tourist appeal of the town is in its "frontier" appearance. Dunesville is a major stopping point after a four wheel drive journey across the desert. The town hotel is considered an icon in remote Australia and continues to act as a focal point for the residents. Predictably, as with all the participating towns, other focal points of the town are the school and the town hall, both of which serve as meeting places, sites for social events, and places of refuge in emergency conditions (such as flood or fire).

Far Town does access the available groundwater and, as a consequence, though similar in size and structure, looks quite different. This "oasis" effect is considered worthwhile by the local townspeople, since the tourist market is less important and it allows existence of gardens in the town. Greenview is situated differently and tends to act more as a service center (in spite of its small size) for the "fly-in, fly-out" workers who work in the natural gas fields. This gives Greenview a more transient population, though the permanent population is similar to the other towns.

Demographically the towns (and therefore the schools) have a mix of indigenous Australian and non-indigenous Australian children and this is also reflected in the volunteer parental support. Throughout the week, parental involvement is predominantly from mothers who also contribute to the business of schooling at all the schools through the year. Women's involvement in weekday school events occurs because men of the communities tend to be away from home often due to their work as "ringers" (cattle drovers on vast cattle stations or ranches) or with natural gas exploration companies. Most residents of these towns live here because of a historical family connection to the region or the land itself, as is the case for many indigenous persons.

The size of the towns reflects the level of resources and services they can call upon. All three have a town pool situated at the school. There are no indoor sports facilities, though the town hall space sometimes doubles as a useable indoor space. Dunesville does have a modern two court tennis area, mainly through the lobbying efforts of the major to the state government. All towns have outdoor space though its useability differs. In Dunesville, for example, the "playing" field on the edge of the town has no grass and is covered by razor sharp gibber stone. A car is only needed to get out of the town rather than get around it. All towns could be walked from one side to the other in under 15 minutes.

### *The People*

Currently, Michelle is the Principal of Dunesville School. Prior to taking the position as teaching-principal she had not experienced this level of geographical isolation. Michelle is from a regional Queensland town of significant size. Michelle has taught in places in Queensland ranging from the very glitzy Gold Coast to a rural (but not excessively remote) town. With 13 years teaching experience, Michelle has spent the last two in Dunesville. Although she now enjoys physical activity and sport, Michelle feels her own school

experiences of physical education failed to foster this. She describes being told certain sports were not for her because, "girls don't play cricket and girls don't play football [a local term referring to the rugby codes of football] and girls don't play soccer." Playing these sports would have signaled to the community that she wasn't a "nice little girl." Gendered messages regarding sport and activity shaped Michelle's perspective and left her feeling alienated from participating in physical activity and certain male dominated sports.

Influenced by her own experiences, Michelle believes in emphasizing the social outcomes and associations that can occur through physical activity and physical education. In doing so she encourages the participation of all students in activity as a way to encourage social, physical, emotional, and intellectual development. For Michelle, the Dunesville School location is something of a paradox because, although it is in the middle of the outback, the rugged land and lack of grassed play areas means the children actually have "confined" play space.

Bob is the teaching-principal at Far Town School, which also has less than 25 students. Bob chooses to work in an isolated location because he considers it to be an enviable lifestyle for him and his family. In addition to providing him career opportunities, he believes this location offers his family an environment free of crime and pollution. Although Bob's contract obligation of two years is fulfilled, he thinks since he and his family enjoy living there, they will stay.

Prior to moving to Far Town, Bob had almost a decade of experience teaching physical education and coaching sports at a Brisbane Catholic high school which shaped his perceptions of physical education teaching. For a few years in the middle of Bob's career, he left teaching to join the family business. He attributes these experiences with shaping his current perspective of education as provisional. For Bob, a "needs analysis" is useful in determining directions that best serve the school and community.

According to Bob physical education, physical activity, and sport have social implications for children and society in a broader sense. Thus, he argues that physical education can play a pivotal role in contributing to students' perspectives of themselves and ways of engaging in the world. However, he does not feel the district school board appreciates the complexities of remote living in supporting these aims. According to Bob, curricular decisions and initiatives do not reflect the interests or needs of isolated communities nor adequately support teachers' professional development.

Adam is currently the Regional Curriculum Advisor. His first PE teaching position was in a small town that is considered isolated but not nearly as small as the schools in this study. With four years teaching experience, Adam's current leadership role includes Health and Physical Education (HPE), along with other disciplines. He travels to isolated schools in the region once per term to support their HPE program. For schools lacking a physical education specialist, Adam provides some lessons and teacher guidance regarding teaching daily physical education and promoting healthy lifestyle practices for students.

Although Adam believes remote living offers children opportunities for active lifestyles, he has concerns that the lack of teachers with HPE backgrounds, limited resources, and few opportunities for professional development may restrict students' learning.

Christine is the swimming instructor at the camp and has over 30 years experience teaching and coaching aquatic activities. She has worked across eastern Australia helping to set up swim schools often in very small communities. Christine is also a life saving trainer, has extensive coaching qualifications, and has coached elite amputee swimmers. (She is an amputee.) When she is not working in schools, Christine runs a hydrotherapy business in one of the larger Australian cities.

## Findings and Discussion

This case study provides examples of two approaches the educators used to build and sustain local and extended communities of practice. Specifically, the educators drew upon an asset rather than deficit perspective in working with students and community members. Innovation was not only admired but encouraged in physical activity. In addition, the educators blurred boundaries between school and community in order to support students' learning and development of healthy lifestyles.

### *Flexible and Creative Engagements with Physical Activity*

Although the numerous challenges facing those living and teaching in remote areas of the country did not go unnoticed by Bob, Michelle, Adam or Christine, they focused on the creativity, flexibility, and innovation it inspired in students and themselves. According to Bob, the students demonstrate a "can do" attitude. Similarly, Michelle emphasized that students "make do" with resources and create movement activities and games from what they have.

For instance, although the town has no cemented areas (except for recently built tennis courts) and the main "field" (referred to as an oval in Australia) is made of gibber stone, the students adapt so that different things can be done in different parts of the playing space. Additionally, well known sports such as cricket and basketball are adapted to "undercover cricket and undercover basketball" according to Michelle. This means that in cricket (a striking and fielding game), the ball must be struck in certain ways in order to make scoring shots; fielding positions are based on how the ball will behave when it rebounds from certain surfaces. This is further complicated by one side of the undercover area being open, meaning the ball can escape the confines

of the playing area.

Similarly in basketball there are no rings and backboards, since the area is not a basketball court per se. Consequently the children have invented an "alternative basketball" game complete with scoring system, which emphasizes different aspects of the game such as possession, accuracy in passing, and getting the ball into particular zones. These techniques and strategies have been developed in the children's free time but extend the more formal work done in curriculum time physical education. With the spaces being available for children outside of formal school hours, these play-based activities can be further developed with little intervention from adults other than supervision for safety reasons.

Adam, the regional curriculum advisor, reflected on the students' ingenuity in physical activity stating,

> They make their own fun, they'll go and spear their own fish down at the river or they'll play soccer on the rock oval with special rules about where you can and can't tackle … the kids are so independent that they have their own fun and generate that themselves.
>
> They use the surrounding area for their games which may involve running, cycling, hiding, chasing and so on. They are games that the kids have developed and when they find something is not working then they create a new rule or new dimension so that the game can continue. They even modify their own rules to suit the different ages of the children playing.

In addition to recognizing students' creativity and innovation, the teachers emphasized their desire to develop it in relation to HPE and lifestyle practices.

Physical activity, and by extension physical education in these remote schools, is grassroots in that it emerges as described by Adam above, out of the local interests, contexts and limitations. Yet, numerous variables such as availability and conditions of equipment, the land conditions, weather, as well as the ages, interests, and capabilities of other participants involved influence the options for activity. As such, encouraging activity given the complicated and shifting conditions requires imagination and an openness to adapt.

Linking curriculum in meaningful ways to students' experiences and local contexts requires the teachers to embrace curriculum as dynamic and emergent. This approach enables the teachers to deliver an outcome-based syllabus through locally mediated contexts. Curriculum that is responsive to the community cannot be realized in a static pre-set course that must be followed to a pre-established outcome. Rather it flows from an active perspective emphasizing the experience of engagement. The focus is on "running the course" (Pinar, Reynolds, Slattery, & Taubman, 1995) rather than the end point. Curriculum, more specifically, physical education curriculum for these educators and students is lived in that it encompasses all the teaching and learning experiences, formal and informal, in the local setting. In the ongoing process, students, parents, teachers, and community members are all involved in a continual process of creating curriculum.

According to the teaching-principals, the written curricular HPE document created by the State does not reflect their students' lived experiences, local contexts, or the material realities of daily living in remote areas. Nonetheless, the capacity within the local context is such that required syllabus outcomes can be met. Bob suggests that the interests and needs of students and teachers in remote locations simply are not understood or even considered by those making decisions at the district office. He claims the district office "has great difficulty in first off getting someone to come to the district and then delivering the service to your school." Similarly, Michelle contends that the tyranny of distance is not overcome by the dispatch of a compact disc or video materials. Yet, this method of professional development and professional support is frequently used by the Regional Offices.

Given that opportunities to meet with colleagues and participate in workshops for professional development are limited, curriculum resource personnel such as Adam are hired to support teachers in all subjects. However, this method of professional support has limitations also. For instance, the curriculum support personnel are specialists in certain areas but may not be able to provide specialized knowledge of other subject areas. In addition, they have large regions across which that support must be offered. This often results in reduced contact frequency, duration, and response time for specific situations. Although Adam tries to get to each school in his very large district at least once per term, during that time HPE is only one of the many subjects he must deal with during his short visit. In some of his schools where there is no teacher with an HPE background, Adam teaches as many HPE classes as his time will allow, but acknowledges his own limitations in this regard. In addition, he tries to support teachers as they create curriculum that includes teaching skills while being responsive to the community.

Limited professional development opportunities are just one of the numerous challenges facing educators in remote areas. Others include modest equipment and limited funds to alter the material conditions that impact upon teaching and learning. Yet like their students the teachers adopt a "make do" and a "can do" attitude toward their work. For example, Michelle expresses her perspective about resource constraints:

> I don't mind teaching any of them [art, music, PE] and I'll have a go at teaching whatever, but more often it's when you want the resources and

> they're not available, you just think heck, put me on a plane and I'll go buy it and bring it back…. I understand that things cannot be done this way so I'll just figure it out and if I can't, someone in the community will be able to….

Working from a pragmatic approach becomes part of the educators' lexicon particularly given that many elementary educators are generalists likely to lack highly specialist skills in areas of the curriculum usually regarded as specialist.

Although the educators in this study viewed having specific skills in HPE or a particular sport as an asset, they did not consider its absence as a deficit. Offering students meaningful engagements with physical activity, movement, and health was not contingent on HPE specialization. According to Bob, innovation and a positive attitude toward physical activity were the main ingredients for offering a meaningful program.

> It's more to do with your perception of what you need … teachers are going to locally base some of their teaching out of these types of ideas and I think that is what's meant to happen.

Bob's pragmatic view suggests it is not only understandable but expected that teachers adapt and (re)create curriculum that is locally responsive. Practicing from this perspective requires the teachers to demonstrate creativity, flexibility, and sensitivity to local contexts, as well as openness to students' experiences and interests in physical movement.

Drawing curricular experiences from the interests of the students and the materials available to them was an important pedagogical practice for the educators. In this instance, providing swimming lessons and a swim carnival responds to the local contexts. First, the climate is hot especially in summer, and since all the schools have swimming pools, there is some logic to swimming being a curriculum activity through which a range of syllabus outcomes can be delivered. Of greater importance, however, is the necessity to skill children to a level where they can be in water safely with the capacity to survive difficult conditions. Having said the Australian interior is harsh and dry, this may sound odd. However, water holes (known locally as billabongs) that form after heavy rain and floodwaters that can travel from elsewhere are often used unsupervised by the children of isolated communities (researcher's notes). As such, great importance is attached to the swim lessons as a fun way to build on their play interests but also in promoting safe life practices and the minimization of risk, which is an explicit syllabus requirement in Queensland. Thus, during the swimming week, the students receive intensive swimming and water survival lessons while also having opportunities to play and create water activities and games.

The climate also influences the school day. During the hottest months of the year, the school start time has been moved to the earliest time allowable by the district. Accordingly, outdoor physical activities are done early in the morning in order to avoid the heat of the day. According to Michelle, these alterations are a start but she would still like the district to allow greater flexibility with the operating hours because some days the searing heat of afternoon (up to 45° C or 107° F) makes it difficult to engage students in movement or other learning activities.

Students' limited exposure to "correct" rules, formal game structures, and perhaps even the "ideas" of some major games worries some parents in such small communities (Rossi & Wright, 2000). Parents in these communities expressed some concerns that their children would not develop certain important skills that might exclude them from future opportunities in physical or social activities particularly upon transition to boarding school. Rossi and Wright found that parents regarded this as a potential "health" risk in that it could lead to exclusion and withdrawal from physical activities which have such cultural capital in Australia.

In this study however, the teachers felt this concern was unwarranted. They proposed that any specific skills students lack at the end of elementary school are well compensated for with other skills such as ingenuity, agility, creativity with movement, and a sense of physicality which enable them to adapt rapidly to expectations and demands of any situation. As such, the teachers believed that once at boarding high school, the students could catch up on any specific physical movement skills their urban born and raised counterparts experienced. As Baills and Rossi (2001) suggest, physical education and sport has the potential to contribute to supporting students' transition from isolated elementary school settings to boarding high schools.

Based on her 30 years experience across three Australian States, Christine, the swim coach, proposed that when children such as these transfer to large boarding schools for high school, they are able to draw upon the positive sense of self they have developed through participation in physical activity and sport in their communities. According to Christine,

> Their motor competencies develop at a rapid rate. They're able to not only mix it with all these new found friends or peers but then, they're able to in some cases, supersede them. Coming from a desert community that's extraordinary you know.

Similarly Adam suggested that while there may be some isolated cases of students having lower games skill levels, based on his experiences as a curriculum leader, the children from this area could fit in anywhere with regard to their movement competence and general self-confidence in movement activities.

Generally speaking it seemed that the teachers' view of the students, contexts, and community from an asset

perspective assisted them in encouraging physical activity and healthy lifestyles. However, what also supported them was their commitment to establishing and maintaining strong community connections.

*Blurring Boundaries: Schools in Community*

The teaching-principals willingly extended their role at school into the local communities and in turn, welcomed the reciprocal. Connecting with community was viewed to be important to the educators who believed it helped them better understand, appreciate, and respond to the interests, needs, strengths, and complexities of living in and around the town. As a result, the school became integrated into the community acting as a gathering place for young people, parents, teachers, the principal, and other local residents.

Creating a community of practice in which parents, educators, and local citizens were members brought the education of local young people front and center as a shared community endeavor, responsibility, and commitment, rather than the sole charge of the teacher-principal. Not only were knowledge and skills of the local citizens recognized and valued, the generative potential of working together to support the development of the town children and young people became evident. Investing in strong school-community links was thought to have significant ramifications for the town. According to Adam, students, parents, community leaders, teachers, and school leaders were all responsible for and committed to preparing young people as healthy citizens.

Michelle, Bob, and Adam acknowledged that many of the community members had lived in the region for generations while teachers arrived intending to work for two years as fulfillment of a contract commitment. Over time, experiences shared by town members contributed to the generation of their shared knowledge and negotiated understandings about one another, the community and local context. Through interactions with one another, local citizens developed shared repertoires or ways of engaging with tacitly understood meanings. According to Bob and Michelle, these practices contributed to the citizens' deep commitments to the wellbeing and sustained culture of the community.

Consequently, both Bob and Michelle recognized that school teachers were frequently viewed as transitory interlopers and given peripheral community member status. It was thought that unlike the town people, the teachers had limited investment in the region. This was evident by a rapid turnover rate in teachers, principals, and curriculum leaders.

Given the community perspective of educators, Michelle contended it was best not to think you would "come in and change the world." Instead, both she and Bob believed they needed to build connections to the community if they were to offer students the best possible education. By demonstrating their commitments to the best interests of the students while seeing strengths rather than focusing solely on problems resulting from remote living, the teacher-principals fostered community membership. Not only did the teacher-principals draw from the local community for inspiration in creating curriculum, but for personnel, material resources and support.

It quickly became evident to the teachers that investing in the community by taking an interest, getting involved, participating in local events, and respecting the strengths, culture, and conditions of the people living in the community, had a reciprocating impact on their work at the school. According to Bob parents were

> …very quick to realize that there's someone there trying to do the best they can for their kids and their community so…for us it works both ways, we put in and it comes back to us.
>
> Yes well sometimes we don't have all the necessary equipment or indeed ready facilities for repair but out here, you can normally find the skills to either build or adapt what you need … so we have had frames and shelters built, welding of equipment such as goalposts, field repair and earthmoving … and it seldom costs us.

The educators' respect for the perspective and contributions of the local citizens, along with their own involvement in community events, mediated the strong and trusting relationships they had with parents. These efforts contributed to the creation of a community of practice where knowledge and meaningful practices are shared (Wenger et al., 2002). For instance, at Dunesville Michelle and students worked on a vegetable and herb garden. Initially she began the garden but noticed students staying after school to work in it with her. Michelle believed that working together on projects such as these supported her relationship with the students and their parents. At the same time she was able to get the children to achieve syllabus outcomes related to healthy nutrition. Eventually she found parents welcoming her into their circle as a guardian of the children but also as an advisor on what best to feed children for a healthier lifestyle.

Reciprocally, local citizens were valued participants in the decision-making and organizational processes related to both Michelle's and Bob's school. Aboriginal Elders, as leaders of the local aboriginal community, had voice and presence in school practices. For instance as mentioned at the outset, the on-site researcher was required to gain permission of the Aboriginal Elders in order to participate in school-based events. Thus, decisions regarding school practices were made by those whose children would be affected by the outcome. School-leader Michelle was striving to generate a community of practice where members share an interest in educating all students in the community

and actively engage in working with one another toward this interest.

For both Bob and Michelle, the parents and citizens groups are central to the functioning of the schools and communities, and in turn, the teacher-leaders participate in decisions and actions shaping the town and region. According to Bob, "it's very rare that I make some sort of a decision where I have to make it on my own and if they feel that the school needs a hand, in they go." In turn, Bob participates in town activities by volunteering as a lifeguard at the school/community pool, as a sports coach (particularly for track and field athletics), and also as a driver to ensure the children are able to visit cultural and sporting events.

According to the teacher-leaders, the permeable boundaries between school and community contributed to the development of shared commitments and responsibilities. Through ongoing interactions with one another toward a common goal, communities of practice as well as participant membership and identities developed (Wenger, 1998). These were generative, socially mediated processes whereby meanings were constructed through interaction in the group, and both the principals indicated that school policy was driven in this way.

In each of these three small communities, where the school enrollments number less than 25, there is a deep sense of shared purpose, knowledge and ways of engaging. This was apparent not only within the three local communities but also between them. Each of the teaching-principals formed communities with one another across towns (cf. Wenger et al., 2002). As Wenger et al. (2002) suggest, one of the key features of communities of practice is shared knowledge. This happens because as members of communities spend more time together they become bound in the learning of that community. Through this process, community members were contributing their knowledge and supporting the education of their children while the teaching-principals were gaining professional development.

## Isolated Schools as Communities of Practice

This case reveals the extent to which the community can influence the teaching and learning space as well as the professional development of teachers. The data are replete with references to the communities' involvement in joint decision making about use of facilities, learning experiences of children and curriculum decisions, and even in the management of the schools and board school policies that occasionally fly in the face of conventional decision making processes and state expectations (observation notes).

Much of the physical activity and education (as distinct from the written curricular document) is incidental and independent, but it finds its way into curriculum activity. Thus, the borders of this learning become particularly blurred. Consistent with Wenger's (1998) description, the communities make up the social fabric of the learning. Although this occurs across all facets of school life both within the curriculum and beyond it, within physical education there is great social participation in the learning and teaching of, about, and through sport and physical activity. As such, the structures that form communities of practice (Wenger, 1998), namely the shared domain of knowledge, practices, understandings, and repertoires, are deeply embedded in the ways these schools operate.

The findings of this case offer insight for teachers, teacher educators, school leaders, and policy makers regarding the potential communities of practice holds for supporting educators who work in isolated schools to challenge the tyranny of distance in teaching physical education and encouraging healthy lifestyles. Yet, this potential necessitates first that educators respect the interests and strengths of students and communities in shaping curricular experiences and secondly schools and communities to join together in their commitment to students' learning and development of health and physical activity. In our view, an appropriate treatment of these processes at work at the teacher education level is long overdue.

## References

Ankrah-Dove, L. (1982). The deployment and training of teachers for remote rural schools in less developed countries. *International Review of Education*, *28*(1), 3-27.

Australian Bureau of Statistics. (1996). *Australia in profile: A regional analysis*. Canberra: Commonwealth of Australia.

Australian Council of Deans of Education. (2001). *New learning: A charter for Australian education.* Canberra: Author.

Australian Sports Commission. (2005). *Building a healthy, active Australia*. Retrieved July 27, 2005, from http://www.ausport.gov.au

Bailles, L., & Rossi, T. (2001). The transition from isolated rural contexts to boarding school: Can school physical education and sport play a part? *Journal of Physical Education New Zealand /Te Reo Kori, 34*(1), 40-52.

Bailles, C., & Rossi, T. (2005). Sport in a Queensland isolated community: The views of children and their parents. *ACHPER Healthy Lifestyles Journal, 52*(3-4), 12-16.

Baume, P., & Clinton, B. (1997). Social and cultural patterns of suicide in young people in rural areas. *Australian Journal of Rural Health*, *3*, 1-7.

Botterill, L. C. (2006). Soap operas, cenotaphs and sacred cows: Countrymindedness and the rural policy debate in Australia. *Public Policy*, *1*(1), 23-36.

Botterill, L. C. (2006). Leaps of faith in the obesity debate: A cautionary note for policy-makers. *The Political Quarterly*, *77*(4), 493-500.

Commonwealth Department of Health and Aged Care. (2001). *Measuring remoteness: Accessibility/ remoteness index of Australia (ARIA)* (Rev. ed.), Occasional Papers: New Series Number 14. Canberra: Commonwealth of Australia.

Daws, L. (1999). Dirt roads, bank closures and ice-cream cake for little lunch: Rural communities and education. In D. Meadmore, B. Burnett, & P. O'Brien (Eds.), *Understanding education: Contexts and agendas for the new millennium* (pp. 64-74). New South Wales: Prentice Hall.

d'Plesse, P. (1993). Redefining remoteness in the post-industrial society. In C. Boylan & M. Alston (Eds.), *Rural education issues: An Australian perspective.* (pp. 13-22). Wagga Wagga: Centre for Rural Social Research.

Denzin, N., & Lincoln, Y. (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

Haberkorn, G., Kelson, S., Tottenham, R., & Magpantay, C. (2004). *Country matters: A social atlas of rural and regional Australia*. Canberra: Bureau of Rural Sciences.

Human Rights and Equal Opportunity Commission. (2000). *Emerging themes: National inquiry into rural and remote education.* Sydney: Commonwealth of Australia.

Killeen, M. (1999). A Level Playing Field. *Pedals, 74*, 29.

Lee, J. (2003). The place and meaning of physical activity, physical education, and physical culture in the lives of young people living in rural Queensland. *Education in Rural Australia*, *13*(2), 28-46.

Morgan, A., & Ziglio, E. (2007). Revitalising the evidence base for public health: An assets model. *Promotion and Education*, *14*(2, supplementary), 17-22.

Motley, E., Rossi, T., & King, S. (2005). An investigation of early career teachers' perceptions of professional development opportunities and career advancement for teachers in rural and remote Queensland. *Education in Rural Australia*, *15*(1), 54-64.

National Board of Employment, Education and Training (1991). *Toward a national education and training strategy for rural Australians.* Canberra: AGPS.

Patterson, I., & Pegg, S. (1999). Nothing to do. The relationship between "leisure boredom" and alcohol and drug addiction: Is there a link to youth suicide in rural Australia? *Youth Studies Australia*, *18*(2), 24-28.

Pinar, W., Reynolds, W., Slatterly, P., & Taubman, P. (Eds.) (1995). *Understanding curriculum: An introduction to the study of historical and contemporary discourses*. New York: Peter Lang.

Rees, B. (2003, 19 March). What's wrong with rural Australia? *On Line Opinion*. Retrieved December 17, 2007, from www.onlineopinion.com.au/view.asp?article=239

Robson, M. (1993). Educational change in New South Wales: Rural teacher reactions and rural development. In C. Boylan & M. Alston (Eds.), *Rural education issues: An Australian perspective* (pp. 65-80). Wagga Wagga: Centre for Rural Social Research.

Roe, J. (1997). Identification of barriers that confront rural students entering the university system. Proceedings of the National Conference of the Society for the Provision of Education in Rural Australia (pp. 37-48). Adelaide, Australia: SPERA.

Rossi, T. (2006). Special consideration for HPE in rural schools. In R. Tinning, L. Hunter, & L. McCuaig (Eds.), *Teaching health & physical education: A reader for primary & middle schools* (pp. 99-105). Sydney: Pearson.

Rossi, T., & Wright, J. (2000). Physical activity, health and physical education in isolated rural Australia: Parents' views, concerns and sacrifices. *Education in Rural Australia, 12*(1), 2-7.

Scott, T. (1993). Issues in education in remote rural Australia. In C. Boylan & M. Alston (Eds.), *Rural education issues: An Australian perspective* (pp. 3-12). Wagga Wagga: Centre for Rural Social Research.

Sher, J. P., and Sher, K. R. (1994). Beyond the conventional wisdom: Rural development as if Australia's rural people and communities really mattered. *Journal of Research in Rural Education, 10*(1), 2-43.

Sparkes, A. C. (1997). Ethnographic fiction and representing the absent other. *Sport, Education and Society, 2*(1), 25-40.

Stevens, K., & Mason, D. (1994). Family and school influences on the vocational choices of students in a rural Western Australian community. *Vocational Aspects of Education*, *46*(3), 273-283.

Waddell, E. (1993, July). What the country needs: Post-compulsory education and training for non-metropolitan Australians. A paper presented at the Choices and Chance: National Rural and Remove Youth Affairs Conference, Wagga Wagga, New South Wales, Australia.

Wright, J., Brown, R., Muir, P., Rossi, T., Tinning, R., & Zilm, T. (1998). Parents' and teachers' perspective of children and young people's participation in physical activity. A report prepared for the Commonwealth Department of Health and Family under the auspices of the Australian Council for Health, Physical Education and Recreation (ACHPER).

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity.* Cambridge: Cambridge University Press.

Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice: A guide to*

*managing knowledge*. Boston: Harvard University Press.

Wiletto, A. A. A. (2007). Native American kids: American Indian children's well-being indicators for the nation and two states. *Social Indicators Research*, *83*, 149-176.