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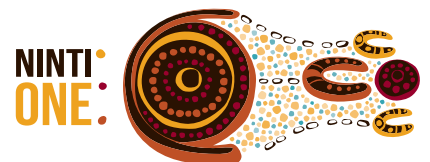
Learning from country: the value of country visits in remote schools for community engagement and natural and cultural resource management

Josie Douglas

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2011



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Contents

Figures and graphs	IV
Tables	IV
Boxes	IV
Acknowledgements.....	V
List of shortened forms	VI
Executive summary.....	1
1. Introduction.....	3
1.1 Aims.....	3
1.2 The context for education in remote central Australia.....	4
1.3 Indigenous Language and Culture Programs: policy context	6
2. Methods.....	7
2.1 Limitations	8
2.2 Case study communities	9
3. Results.....	11
3.1 Indigenous Ecological Knowledge in ILC programs	11
3.2 Western science integration through Tangentyere Land & Learning.....	16
3.3 ILC programs address Aboriginal aspirations for education	17
3.4 ILC programs help to build strong communities	22
3.5 ILC programs are extremely vulnerable	28
4. Discussion	33
4.1 ‘Two-way’ education is poorly understood.....	33
4.2 ILC programs contribute to community engagement and improved learning outcomes ...	34
4.3 Schools as part of learning communities	37
4.4 ILC programs introduce children to land management	38
4.5 Policy and funding for language and culture in schools.....	39
4.6 Pathways to good ILC programs	40
5. Conclusion	42
6. References.....	44

Figures and graphs

Figure 1: Aboriginal languages in central Australia	5
Figure 2: Aboriginal and Torres Strait Islander population as a percentage in each state and territory	5
Figure 3: Aboriginal and Torres Strait Islander students as a percentage of total student cohort by state and territory	6
Figure 4: Ntaria School.....	9
Figure 5: Willowra (Wirliyajarrayi) School.....	10
Figure 6: Willowra School biannual country visit	12
Figure 7: Willowra School overnight camp to Eight Mile.....	12
Figure 8: Ntaria students learning on country.....	12
Figure 9: Ntaria School students on a country visit (day trip) to Palm Valley	12
Figure 10: Country visits include learning activities during the evening.....	14
Figure 11: ILC program supports the involvement of elders in school activities	14
Figure 12: Country visits facilitate maintenance of IEK; inter-generational learning is experiential and practice-based	15
Figure 13: Students learn the songs, stories, performances and body designs for particular country during country visits	15
Figure 14: Ntaria School students visit the Finke Gorge National Park.....	16
Figure 15: Students are able to see elders ‘doing’ IEK and putting traditional knowledge into practice.....	16
Figure 16: Willowra School looking at native and introduced plants.....	21
Figure 17: Follow-up activities from country visits have a literacy and ecological science focus	21
Figure 18: Students from Ntaria School engaged in worksheet activities related to the endangered mala.....	21
Figure 19: Ntaria School students at the Alice Springs Desert Park.....	21
Figure 20: Non-school-age children take part in activities during country visits.....	23
Figure 21: Social relationships and social capital are developed during country visits	25
Figure 22: School country visits facilitate cross-sector collaboration.....	27
Figure 23: Willowra Youth Program filming oral histories at Pirda Parnta	27
Figure 24: ILC programs enable scaling up.....	28
Figure 25: Ntaria School students learning about water habitats	31
Figure 26: Burning takes place on country visits.....	31
Figure 27: Proportion of births to teenage mothers, by Indigenous status of baby and remoteness, 2007	35
Figure 28: Teenage birth rate (females aged 15–19), by Indigenous status of mother, 2004–07	36
Figure 29: Interlinked factors that are important for good ILC programs.....	41

Tables

Table 1: Types of Indigenous Language and Culture programs in NT Schools	7
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Boxes

Box 1: Indigenous Ecological Knowledge–based activities during country visits.....	13
Box 2: Science-based activities and concepts introduced by Tangentyere Land & Learning	17

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List of shortened forms

ABS	Australian Bureau of Statistics
CDEP	Community Development and Employment Program
CLC	Central Land Council
ESL	English as a Second Language
IEK	Indigenous Ecological Knowledge
ILC	Indigenous Language and Culture Program
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
NT	Northern Territory
NT DEET	Northern Territory Department of Education, Employment and Training
NT DET	Northern Territory Department of Education and Training
NTCF	Northern Territory Curriculum Framework
NTG	Northern Territory Government
SCRGSP	Steering Committee for the Review of Government Service Provision
WETT	Warlpiri Education and Training Trust
VET	Vocational Education and Training

Executive summary

The aim of this study is to explore the value of country visits and local Indigenous Language and Culture (ILC) Programs for community engagement and natural and cultural resource management. Findings from this research show ways in which ILC programs and associated country visits integrate education into the social and cultural schema of remote communities. This research shows that school-based country visits and ILC programs should be seen as part of the solution to improving Aboriginal education outcomes. This research used qualitative methods to explore the country visit (day field trips, overnight camps and week-long camps) component of the ILC program in two remote Aboriginal schools in central Australia. The two case-study schools, Willowra School and Ntaria School, belong to the Warlpiri and Western Arrarnta language communities.

This research is important because improving Aboriginal education outcomes is an urgent national priority and is considered key to ‘closing the gap’ in Aboriginal disadvantage. There are a multitude of complex and interrelated factors that contribute to poor education outcomes for Aboriginal students. Education research shows that education service delivery to remote communities is successful if it is integrated into the social and cultural schema of local communities (Kral & Falk 2004; Guenther et al. 2005; Hartman & Henderson 1994; Hoogenraad 1994; Harris 1990). To improve Aboriginal education outcomes, Aboriginal perspectives need to be included in curriculum and pedagogy (MCEETYA 2006), and improved community engagement will enhance education outcomes (NT DEET 2006a). Accordingly, Aboriginal people want their local schools, as places of learning for children, to accord equal value and status to Aboriginal language and knowledge alongside Western knowledge. However, reconciling what Aboriginal people in desert Australia want from their schools – the inclusion of local language and culture – and what schools routinely deliver is not often achieved in practice.

Aboriginal people at both case study sites view education as more than just ‘schooling’. Aboriginal educators and community members request a model of education that encompasses a cultural framework based on local knowledge that can inform classroom work and become a stimulus for reading and writing activities linked to the NT Curriculum Framework. To this end, Aboriginal aspirations for education in the two case-study schools encompassed Aboriginal language–knowledge systems that are country-specific. Country visits are highly regarded as having high cultural and educational value by Aboriginal school staff and community members because they are considered fundamental to an effective language and culture program. During country visits, students travel with elders and Aboriginal teaching staff and observe, talk about, use and prepare plant, animal and natural resources. Visits keep alive and active the detailed knowledge of species’ names, habitats, seasonal availability and other ecological and related cultural information such as rights and responsibilities to country through the kinship system, stories, songs and ceremonies.

Learning strategies that build on community aspirations for education help create connections between home and school; the extent to which these practices are then experienced and reinforced in home and community environments can consolidate school success. Thus, ILC programs link families, schools and communities in a collective pursuit of learning – as ‘learning communities’ (Wenger 1988; Lave & Wenger 1991). Additionally, the indications from this research are that ILC programs and country visits engage remote students with learning and, given adequate priority and resources, can link effectively to literacy strategies. Country visits are an integral part of strengthening and embedding literacy, especially as an effective learning and teaching strategy for English as second language (ESL) students.

There was widespread recognition that ‘this is a critical time in history’ and ‘a lot of knowledge will go with this generation of elders’. Overwhelmingly, there was concern that children should have ‘strong language’ and ‘strong culture’ so that they are in a position to ‘carry culture forward’. This research supports the proposition that Aboriginal languages and the knowledge embedded in them is an important asset in natural and cultural resource management. As Aboriginal people are major landowners in the

NT, the current student cohort has future legal and custodial responsibility for looking after significant areas of remote lands. New and introduced environmental threats on Aboriginal lands increasingly need to be managed with a mix of Indigenous Ecological Knowledge (IEK) and science. However, there are few formal policy links or other systematic connections between the natural resource management (NRM) and education sectors (Pawu-Kurlpurlurnu et al. 2008, Johnson 2006).

Significantly, this research found that the main entry point for scientific education in remote schools is through local ILC programs. The focus on ‘country’, its ecosystems, and interrelated cultural knowledge and practices provides a strong connection point to ecological science. Beyond ILC programs and activities done on country visits, science education is minimal and delivered on an ad hoc basis. Contributing to this limited science content is a lack of even ‘rudimentary’ science infrastructure and equipment in remote schools (e.g. see Robinson 2008).

Maintaining language–knowledge systems through school country visits and appropriate pedagogy and curriculum promotes the practice and context for maintaining IEK and associated practices. When local learning priorities are supported and resourced it can motivate attendance. The inclusion (or not) of language and culture in the local school sends a strong message to the community about the ethos of the school environment and the perceived quality of teaching staff. Language and culture programs build social capital between Aboriginal and non-Aboriginal teaching staff, between non-Aboriginal teaching staff and community members and strengthens inter-generational relationships. The involvement of elders is essential for building and maintaining strong school–community partnerships.

The ILC programs and associated country visits address a dominant recommendation in most analyses of what is required for improving Aboriginal education, that is, improving community engagement. ILC programs and activities done on country visits build knowledge of English language and literacy, and introduce ecological science from cultural foundations familiar to students. Significantly, they are considered by community members and teaching staff to particularly benefit children from ‘not strong families’ who otherwise have little experience ‘on country’ and are also often disengaged from school. The school ILC programs provide experiential learning and experience on country, both of which are important requisites for young people’s later potential involvement in natural and cultural resource management work. At the same time, the research highlights the vulnerability of ILC programs and the ambivalence with which these programs are viewed in policy domains.

1. Introduction

1.1 Aims

Indigenous Language and Culture (ILC) programs and country visits are an optional inclusion in the curriculum of Northern Territory schools. Through case studies in two remote schools, this research aimed to:

- explore the benefits and value of country visits for community engagement
- investigate the benefits that country visits have for natural and cultural resource management.

This research is part of the wider Livelihoods inLand project of the Desert Knowledge Cooperative Research Centre, which is directed at promoting health and wellbeing outcomes from Aboriginal land management.

The disparity between Aboriginal and non-Aboriginal education outcomes was first acknowledged by governments as an area of concern in the late 1960s (Gray & Beresford 2008). Despite well-intentioned efforts over the years, international evidence suggests Australia has ‘the worst Indigenous educational outcomes of any comparable Western settler society’ (Gray & Beresford 2008, p. 204; Zubrick et al. 2006). Remote Aboriginal education in the Northern Territory has been described as being in a ‘state of crisis’ and a ‘national disgrace’ (ABC 2008; Commonwealth of Australia 1999). It is also claimed that the provision of education services to remote Aboriginal communities has suffered from years of neglect and a lack of equitable funding (Kronemann 2007; Simpson et al. 2009). Indeed, it is argued that remote communities themselves have been abandoned by governments at all levels (HREOC 2008).

An analysis of reports and policies that deal with Aboriginal education reveals two major themes. Firstly, to improve Aboriginal education outcomes, Aboriginal perspectives need to be included in curriculum and pedagogy (MCEETYA 2006) and, secondly, partnerships between home and school will enhance learning (NT DEET 2006a). Within these themes, it is essential to understand that, for remote Aboriginal people, keeping language and culture strong is a core value; and that socialisation around the meaning and purpose of education is relatively recent (Kral & Falk 2004; Kral 2007). In this context, socialisation is the process of learning the values, norms and patterns of participation related to formal education (Alsaker 1995). Government-provided education to remote Aboriginal students in central Australia is relatively new (Gale 1997). Historically, mission schools and a limited number of schools on government reserves provided basic education (Kral 2007). Furthermore, for many Aboriginal adults across desert Australia, and especially those in remote communities, adult education and vocational training have been sporadic in nature and have tended to be limited to ad hoc vocational courses. Up until the 1960s, most communities in central Australia had no local primary school and most communities still have no high school or adequate secondary education provision (Hoogenraad 2001; Ramsey et al. 2003). Nevertheless, Aboriginal people have been quick to embrace schools as a valuable local institution and have incorporated schools into the local community domain (Hoogenraad 1994; Kral & Falk 2004). Tellingly, core values relating to language and culture and the pressing need to maintain knowledge systems has resulted in Aboriginal people calling for formal recognition of language and culture in the school system (Henderson & Nash 1997; Hoogenraad 1994; McKay 1996).

Unfortunately, the failure of government to implement the recommendations of its own inquiries at the national and Territory level has contributed to the persistence of poor education outcomes (Gray & Beresford 2008). The willingness of schools to implement policy recommendations has been ad hoc, and the electoral cycle has also worked against long-term improvements in Aboriginal education, with each newly elected government introducing new policies and funding priorities to suit their political agendas (Gray & Beresford 2008; Altman et al. 2008; Sanders 2009). As a consequence, far too many policies and strategies have been abandoned long before their benefit could be realised.

The highly politicised nature and ideological conflict over including Aboriginal language and culture in schools has been raging in the Northern Territory since the introduction of bilingual education in the early 1970s. Increasingly, poor education outcomes for remote Aboriginal students in the Northern Territory have been attributed to ‘language and culture’, and by default to Aboriginal students and their families (Hughes 2008; Johns 2006). As a result, Aboriginal education policy is framed around ‘mainstreaming’ and benchmarking against national literacy and numeracy standards. The importance of meeting literacy benchmarks cannot be discounted. However, the disparate outcomes demonstrate only that there is a problem, not how to go about fixing it. This research shows that school-based ILC programs should be seen as part of the solution and not part of the problem.

1.2 The context for education in remote central Australia

Central Australia includes the southern half of the Northern Territory (NT) with a socio-cultural footprint that extends across the Northern Territory, the mid-eastern part of Western Australia, the north of South Australia and western Queensland (see Figure 1). The Northern Territory faces significant challenges in delivering education to remote Aboriginal communities, partly due to geographical and socio-cultural factors. It is the third largest jurisdiction in Australia, and the least populated. Aboriginal people make up 27.8 per cent of the population, the highest proportion per capita of Aboriginal and Torres Strait Islander people in any Australian jurisdiction (see Figure 2) (NT DET 2009). Most of the NT’s Aboriginal population, 79 per cent, live in remote and very remote areas. That population is young and growing fast. Fifty-two per cent of government schools fall in the very remote category (NT DEET 2008). Aboriginal students currently represent 40 per cent of the NT student cohort (see Figure 3) (NT DET 2009), and this figure is predicted to rise to 50 per cent by 2020 (SCRGSP 2005).

Over half of all the people in Australia who speak an Aboriginal or Torres Strait Islander language live in the Northern Territory (ABS 2008; Guenther et al. 2005). There are twenty main language groups that span the desert region of central Australia (see Figure 1). The comparatively late and sparse European settlement of the region has meant most Aboriginal people have maintained their language and connections to traditional lands (Varzon-Morel 2008). Major languages are still relatively healthy and spoken by adults and children. Yet others are considered under threat, with smaller dialects classified as being critically endangered. Almost all the students serviced by very remote schools in central Australia are learners of English as a Second Language (ESL) or additional language (NT DEET 2006b).

Other factors often cited as influencing education outcomes for remote Aboriginal students include student mobility, attendance and retention. The operational and administrative challenges of delivering remote education are also compounded by high costs and limited budgets. While these are challenging circumstances, the difficulties faced by the NT government in delivering education to remote Aboriginal communities are also said to be ‘partly due to its own departmental history and operations’ (Ladwig & Sarra 2009, p. 7)

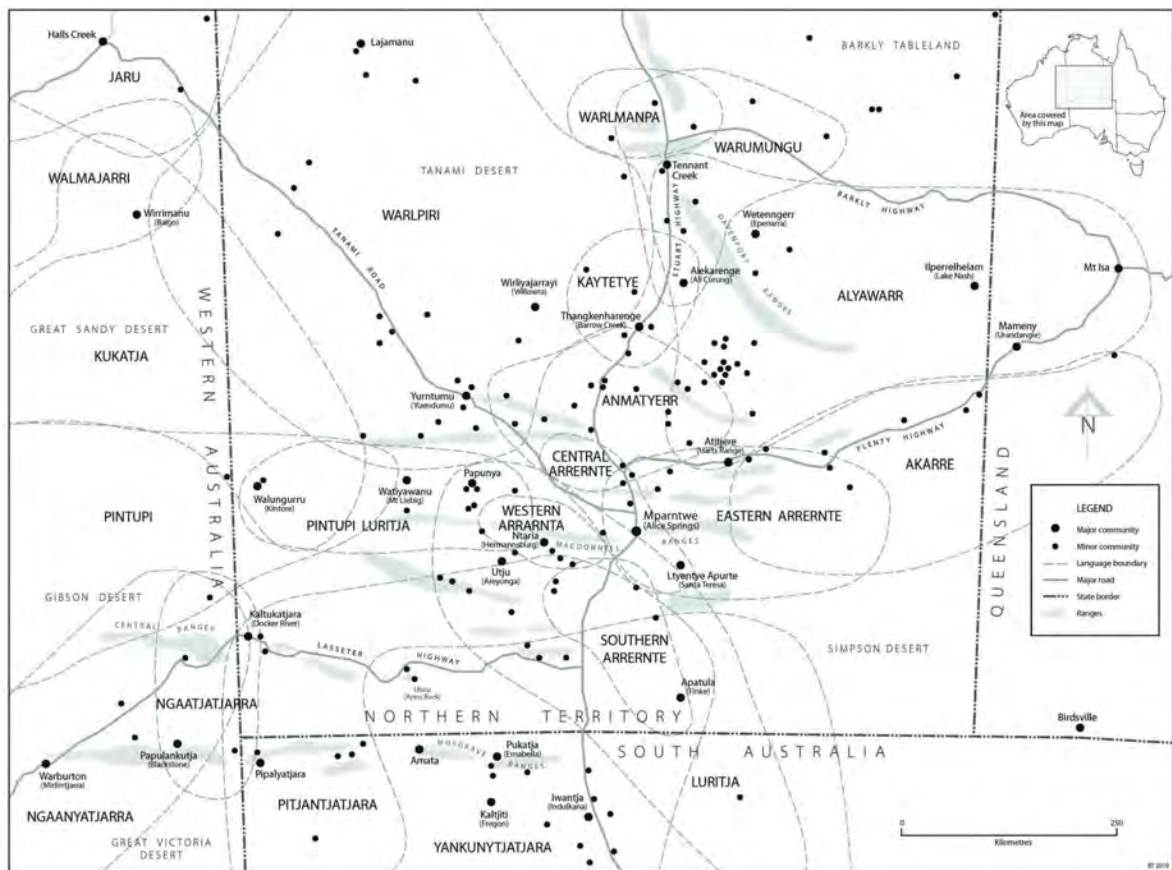


Figure 1: Aboriginal languages in central Australia

Case study schools are located in the Warlpiri language region, Willowra School and the Western Arrarnta language region, Ntaria School

Source: (c) Brenda Thornley 2010 (map compilation); (c) IAD Language Centre 2002 (language boundary information)

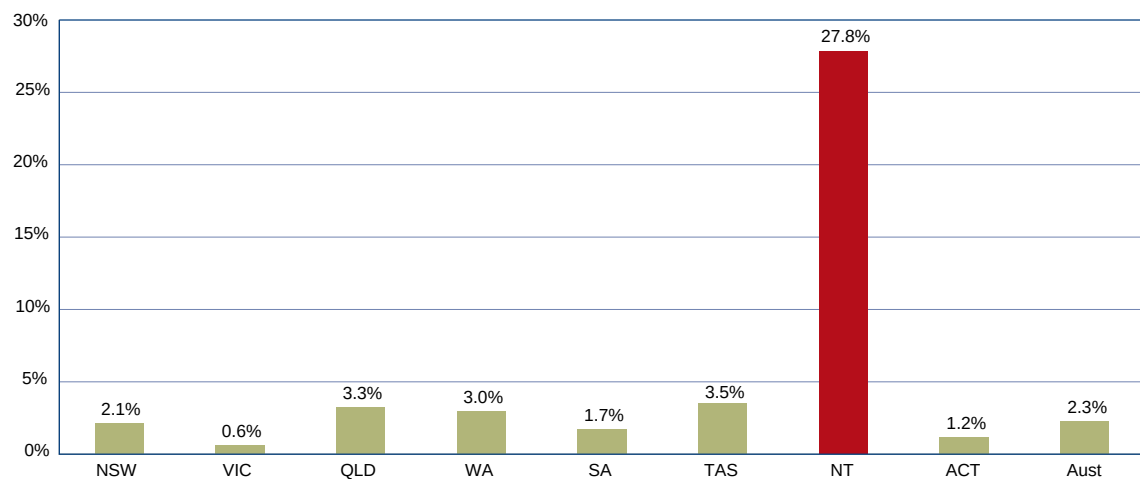


Figure 2: Aboriginal and Torres Strait Islander population as a percentage in each state and territory

Source: NT DET 2009 p. 21

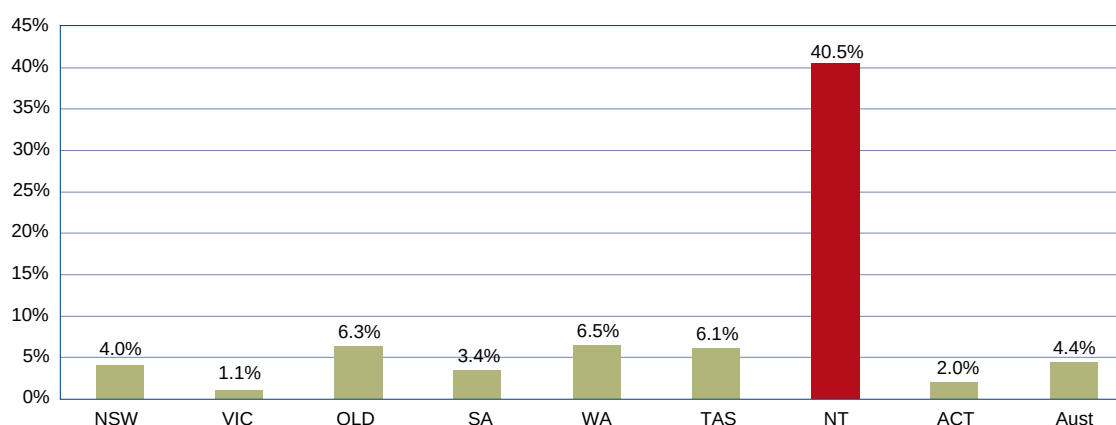


Figure 3: Aboriginal and Torres Strait Islander students as a percentage of total student cohort by state and territory

Source: NT DET 2009, p.21

1.3 Indigenous Language and Culture Programs: policy context

Aboriginal community members have long requested two-way, not ‘one-way’ education (Harris 1990; Gale 1997). They recognise that schools, as a place of learning for children, should accord equal value and status to Aboriginal knowledge alongside Western knowledge and provide education in the language that children speak (Hoogenraad 2001; Simpson et al. 2009; Hartman & Henderson 1994). Bilingual education began in the NT as a Federal Labor Government initiative with bilingual programs commencing in five schools during 1973. At its peak in the mid-1980s there were 21 bilingual schools using 17 languages. A policy shift surrounding bilingual education in the late 1990s saw bilingual schools re-named as ‘Two-Way Schools’. However, the desire for two-way education goes beyond bilingual programs and is requested in many English-only remote Aboriginal schools. Two-way learning in English-only schools is operationalised through an ILC program (see Table 1). In central Australia there are 30 remote English-only schools that seek to deliver an ILC program as an elective (S. Moore, pers. comm. 2008). However, the scope, focus and delivery of ILC programs are highly variable across schools in the central Australian region.

A significant review of NT Aboriginal education, *Learning Lessons* (Collins & Lea 1999), led to further review of education service and delivery (Hoogenraad 2001). This included the development of a new Northern Territory Curriculum Framework (NTCF) that included an Indigenous Languages and Culture (ILC) curriculum component. Schools across the Northern Territory could then choose an ILC program as an elective activity. This was an important milestone as it enabled the inclusion of Aboriginal students’ languages and culture as an integral part of every school’s teaching and learning program, including in English-only schools. It also provided a standard set of staged learning outcomes which could be used for planning, evaluation and assessment in bilingual/two-way programs.

Prior to the new NTCF, there was no formal policy recognition of Aboriginal language and culture in NT education outside of bilingual schools. The Indigenous Language and Culture Learning Area of the NTCF has content outcomes based on Aboriginal organisation of knowledge such as ‘People and Kinship’, the ‘Natural Environment’ and ‘Country and Land’. Aboriginal educators and staff from bilingual schools contributed substantially to the development of these learning themes. The new NTCF offered an integrated and inclusive approach to education (NT DEET 2006a). However, there has been very little research and evaluation on how the ILC programs included in this approach have been operating.

Table 1: Types of Indigenous Language and Culture programs in NT Schools

Program Type		Defining Characteristics
Language Maintenance		All generations are full speakers of the local vernacular language. Program is offered as:
		1. Bilingual (Step or 50/50) program 2. Language and Culture program.
Language Revival	Language Revitalisation	Older generations are full speakers. Students hear local language spoken in the community, and may have passive knowledge. Program is offered as Indigenous Language and Culture program.
	Language Renewal	Students may know some words of the local language. There are no full speakers, but the language is well documented. Program is offered as Indigenous Language and Culture program.
	Language Reclamation	No full or partial speakers. The language is reasonably well documented, and the program relies on historical sources and comparison with related languages. Program is offered as Indigenous Language and Culture program.
Language Awareness		1. Very little remains of the language. Students learn about the language and its socio-cultural context, and about characteristics of Australian Aboriginal and Torres Strait Islander languages regionally and generally. Program is offered as Indigenous Language and Culture program. 2. Students learn about a target language and its socio-cultural context, and about characteristics of Australian Aboriginal and Torres Strait Islander languages regionally and generally. Program is offered as Indigenous Language and Culture program.
Language Learning		Learning the language of someone else's heritage. The target language is still spoken fluently, and communicative competence is a goal for students. Program is offered as Indigenous Language and Culture program.
Indigenous Studies		1. Students learn about the history and identity of Indigenous peoples in Australia and worldwide. Indigenous Studies element of the Social Systems and Structures strand of the SOSE Learning Area. All Indigenous and non-Indigenous learning contexts. 2. Students learn about a particular Indigenous culture. Adaptation of ILC Culture Outcomes plus SOSE, Science and Arts outcomes. 3. Students learn about their own Indigenous culture. Culture program using ILC Culture Outcomes.

Source: NT DEET 2006b

2. Methods

I explored the value local people place on ILC programs, focusing on country visits; the key factors necessary for an effective ILC program; and benefits from ILC programs for natural and cultural resource management through qualitative research in two schools. One school, Willowra, was a bilingual or 'two-way' school, and the other, Ntaria, was an English-only school, where English was the medium of instruction.

Information was collected over a 12-month period (2007–2008) during short intensive visits that fitted around school and community activities and events. Some visits were for a day and others lasted three to four nights. In total, I spent 30 days in the field. In selecting the schools I sought to include two different language groups and to include both an English-only and a bilingual school. Additionally, schools were selected based on the interest of Aboriginal staff and departmental approval.

The main data collection methods used were 20 semi-structured conversations, participant observation and document analysis. I also attended workshop discussions involving approximately 70 Aboriginal people. The sampling of interview participants was opportunistic, guided by the availability of local people and school activities and community events, but I sought to sample people with a significant

relationship to the school and community leaders. Most of the interviewees were women, reflecting the fact that women are more involved than men in the school domain (Kral 2000).

Participant observations were made during country visits that included field excursions, overnight school camps and longer community-school camps. I participated in country visits to four locations that involved a combined total of approximately 250 students, community members and teaching staff.

Interviewees were given the option to be interviewed in English or their first language, since English is a second language at both communities. Most Aboriginal interviewees chose to be interviewed in either Western Arrarnta¹ or Warlpiri. Local research assistants were contracted to assist with interviews, particularly with elderly interviewees. The purpose of the interview was explained to the interviewees by the research assistants, and permission was sought to have the interview recorded. All interviewees signed a consent form. Interviews were recorded, and written transcripts were later prepared and translated into English by David Roennfeldt (Western Arrarnta) and Leanne Napanangka Williams (Warlpiri). Interviews with non-Aboriginal people were in English, and were tape-recorded and later transcribed.

The data were analysed to identify the themes emerging. These form the structure of the results section presented in this report. Testimony from interviewees is used to illustrate findings and provide a local voice in the report. Quotes are de-identified.

The ethics protocol for the project was approved by the Charles Darwin University Human Research Ethics Committee. Central Land Council granted a permit for me to enter Ntaria, Roulpmaulpma and Ltalaltuma Land Trusts and the Wirliyajarrayi Land Trust to undertake the research.

The research project was explained to a joint meeting of Group School principals from the Central school cluster of the Northern Territory Department of Education and Training. Group Schools each consist of a number of smaller community and outstation schools that are closely related in terms of regional and linguistic similarities. The Group School principal works with the principal who is based at these smaller schools. The research was approved by the Group School principal for Lasseters Group School (for Ntaria School) and Tanami Group School (for Willowra school).

2.1 Limitations

Sample sizes are small and wider consultations and more longitudinal research may reveal different perspectives and issues.

This research was impacted by unexpected events in communities, periods of community unrest, high turnover of school staff and unprecedented changes to the policy and political landscape of the Northern Territory. The latter included the Northern Territory Emergency Response from June 2007 (referred to locally and elsewhere in this report as the ‘Intervention’); changes to Community Development Employment Projects (CDEP); imposition of compulsory income management for Aboriginal social security recipients; and NT local government reform involving the abolition of Aboriginal Community Councils, which were replaced by ‘Super Shires’ in July 2008. CDEP reform changed the way that many Aboriginal teaching staff were being employed: positions that had been part-funded through CDEP were abolished. The rapid pace of change from three different levels of government impacted greatly on people’s lives. To avoid the risk of the research adding to what was already a big stress load on elders and community leaders, the planned number of interviews was scaled back and more emphasis was put on participant observation.

¹ Over the years Arrarnta has been spelt in many different ways (e.g. Aranda, Arunta). The spelling used in this report is ‘Arrarnta’ as it relates to the Western Arrarnta spelling used in the *Western Arrarnta Picture Dictionary* (Roennfeldt and community members 2005) worked on by Ntaria community members and school staff.

Deaths at both communities and related sorry business also impacted on the timing and duration of community visits (for example, one case study community experienced the tragedy of losing five young adults in a single vehicle accident).

2.2 Case study communities

2.2.1 Ntaria community and school

Ntaria, previously known as Hermannsburg, is a Western Arrarnta community situated 130 kilometres west of Alice Springs in the Western MacDonnell Ranges. Ntaria has a population of approximately 500 and is surrounded by 30 outstations (Kennedy 2008). Hermannsburg mission was established in 1877 by Lutheran missionaries and was the first mission to be established in central Australia. The establishment of the mission led to the introduction of formal schooling for Western Arrarnta people. Both Western Arrarnta and English were taught during the mission school years. The school at Hermannsburg largely operated as an independent church school up until the 1960s (Kral 2000). The outstation movement that began in 1974 led to many Western Arrarnta families moving out of Ntaria to live on their traditional lands. Each outstation operated their own family-based schools (S. Tickoft, pers. comm.). Classes were delivered for half a day: ‘teachers taught for one family group in the morning and a different family group in the afternoon’ (S. Tickoft, pers. comm.). During that time, the school at Ntaria was mainly used as a resource centre for the outstation classes. In 1982 the Lutheran mission handed control of Ntaria to a community council. In 1985 the transition to an NT Government school commenced with the re-establishment of a central school in the community and the incorporation of outstation schools.

In 2008 there were 112 students enrolled with 55 per cent attendance (D. Fowler, pers. comm.). There were five combined classes, including a secondary class that had approximately six students attending regularly. There were six non-Aboriginal teachers, with one position being a release teacher who also taught Accelerated Literacy. There were six Aboriginal staff positions, consisting of five full-time Aboriginal Assistant Teachers and one Home Liaison Officer. Classes were:

- Transition/Preschool
- Grades 1 and 2
- Grades 3 and 4
- Grades 5 and 6
- Grades 7 and 8 (secondary class)



Figure 4: Ntaria School

Ntaria School is located in the Western Arrarnta community of Ntaria, previously known as Hermannsburg

2.2.2 Willowra community and school

Willowra, or Wirliyajarrayi, is a small community located approximately 350 kilometres north-west of Alice Springs. Willowra is the traditional home of the Lander Warlpiri and derives its name from a waterhole and important Dreaming site on the Lander River (Vaarzon-Morel 1995). Willowra has a population of around 300 people. It sits within the former Willowra Pastoral Lease. In 1978 the Central Land Council lodged a claim under the *Aboriginal Land Rights (NT) Act 1976*, which came to be known as the 'Lander Warlpiri Anmatjirra Land Claim to Willowra Pastoral Lease'. The claim was granted in 1980 and the land is now held by the Wirliyajarrayi Aboriginal Land Trust.

The school at Willowra was established in 1969 and was operated by the Commonwealth Government. Prior to the first permanent school structure being completed in 1979, the school operated out of a caravan (Vaarzon-Morel 1995). In 1977 a formal bilingual program started at Willowra School (Gale 1997).

In 2008 there were 46 students with 66.4 per cent attendance (NT DET 2010). There were four combined classes. Teaching staff included three non-Aboriginal teachers and five Aboriginal teachers, including an Aboriginal Literacy Worker. There is also a core group of elders who work at the school. They are classified as part-time instructors (PTIs). Generally, elders work in the school for three hours per week.

- Preschool
- Grades 1 and 2
- Grades 3 and 4
- Grades 5 and 6



Figure 5: Willowra (Wirliyajarrayi) School

Willowra (Wirliyajarrayi) School is a Warlpiri school located near the Lander River

3. Results

3.1 Indigenous Ecological Knowledge in ILC programs

The content of ILC programs at both schools had a strong focus on Indigenous Ecological Knowledge (IEK) and ancestral country. They used experiential, practice-based learning outside of the classroom with elders. Country visits are the key to this approach.

3.1.1 Country visits

Although the two schools had a different program for these country visits, in this report, day visits, overnight camps and longer camps are glossed as ‘country visits’ as all involved leaving the classroom and visiting country of significance to the Western Arrarnta and Warlpiri language groups (see Figures 6–9).

Country visits at Ntaria School involved day excursions and overnight camps with one or more classes. Teaching staff and key community elders were involved. Due to resourcing and the historical background of Ntaria School (small family-based schools on outstations; education was provided on people’s traditional country), a whole school and community country visit was not part of the Ntaria School program.

Willowra School has a variety of country visits that grew out of the Warlpiri bilingual schools. In bilingual schools, including Willowra, ‘country visits’ means a whole school and community camp over three or four nights. For example, a Willowra School country visit in 2008 involved over 150 school staff, students and community members. Additionally, there is an overnight camp once a term that involves the whole school, young adults from the youth program, some community members and infants and elders. Junior classes also have weekly bush excursions to places close to the community.

2008, nurna urrputja-raanga pmara arrpunha-urna lhaka. Nurna urlpaiya-urna lhaka, parta-urna lhaka, rirrka-urna lhaka. Urlpaiya-urna lhakala, kurunga kwatja-iperra kaltjerraka. Parta-urna lhakala, nurna irna-iperra, kara-iperra, impatjaka kaltjerraka.

In 2008 we went out on country visits several times. We went to the riverbed habitat, the hills and ranges habitat, and the sandhill habitat. Having gone to the riverbed habitat, we learnt about water. Having gone to the hills and ranges habitat, we learnt about trees and bushes, animals that are good for meat, and about tracking.

The IEK activities that I observed during country visits are summarised in Box 1.



Figure 6: Willowra School biannual country visit

Willowra School country visit to Pirda Parnta involved school staff, students, elders and community members



Figure 7: Willowra School overnight camp to Eight Mile

Each term there is a country visit at Willowra School. Here students, staff and families construct shelters for the overnight camp at Eight Mile.



Figure 8: Ntaria students learning on country

Ntaria School students visit sandhill habitat close to the Ntaria community where students identified plants that are adapted to fire/regular burning

Photo: Meg Mooney, Tangentyere Land & Learning



Figure 9: Ntaria School students on a country visit (day trip) to Palm Valley

Teacher Lily Roennfeldt explains the Western Arrarnta explanation for the creation of Palm Valley to students in the junior class

Box 1: Indigenous Ecological Knowledge–based activities during country visits

Ntaria School

- learning the traditional creation stories for specific sites
- tracking animals
- traditional fire-making using traditional methods
- collecting and preparing plant-based bush foods and medicines (e.g grinding wattleseed)
- collecting and using plants for specific cultural practice (e.g. using emu bush to smoke mothers and babies)
- identifying plants and animals of different habitats: river, hill, sandplain country
- learning about traditional water places and their stories
- observing recently burnt country and country that had burnt in the past; learning about why, where and when it is good to burn country and how native plants in different habitats respond to fire
- identifying the owners and managers of country visited
- vocabulary enrichment: listening to Aboriginal teaching staff describe various habitats.

Willowra School

- identifying kinship groups with country, identifying the traditional owners and managers for areas of country
- collecting bush foods and medicines
- identifying plants and animals of different habitats
- tracking and hunting animals, cooking and preparing them using traditional methods (e.g. echidna in river bed country)
- burning country (e.g. to clear a site and to clean the site at the end of the stay)
- learning traditional stories
- performing traditional songs and dances
- painting body designs
- cardinal directions (e.g. during the set-up of camping arrangements, when people were divided into kin groups and they oriented their camps towards particular country)
- making traditional shelters
- learning about rivers and waterholes
- learning specialised language (e.g. the direction of where the country was located, words to describe the location, talking about whose country that was, and the Jukurrpa/Dreaming for that area).

At both schools country visits were viewed as fundamental to an effective ILC program. Country visits provide an experience-based approach to language and knowledge maintenance. Furthermore, country visits enable the intergenerational transfer of knowledge that is context- and site-specific (see Figures 10 and 11). Aboriginal teaching staff and elders decide the location for the country visits, ensuring that the location is appropriate to ILC learning themes and to the knowledge they consider is important for students to learn. For example, at Willowra the location of a country visit was determined by a curriculum unit about land belonging to different groups, who the land belongs to and the significance of that land. At Ntaria, a theme on water entailed a visit to Ormiston Gorge where students heard the traditional story about that site from a local elder.

Elders are the main teachers of IEK during country visits:

Ngulaju karnalu jana yangka yawulyulku yirrarni pirrjirdi karda yangka kuja karnalu jana mulju kari mulju kari show mani. Ngula warnu karnalu jana yawulyulku kijirni yungulu pirrjirdirli mardani country visitor kuja kalu yani.

We teach them by taking them out on country visits and showing them all the water soakages; we come back to the school and paint them up about their country so that they can strongly hold onto this knowledge.

Nganimparlu karnalu jana wurlkumanu wurlkumanurlu pina pina mani purlapaku manu yawulyuku manu yimi yirrarninjaku.

We old ladies teach them the language, songs and stories and the associated body designs.

She [local elder] had all these plants and she just sat there and she had a sprig of each one and she talked about each plant, and the kids had gone from being really rowdy in the classroom to really listening intently. And she didn't just have the plants the kids knew really well, she had some plants that the kids didn't really know, that they don't use much anymore, and she talked about them. It's just such a simple thing in some ways, but it's not something that necessarily happens a lot in some schools. And the white teacher, I think, really learned a lot from that experience.



Figure 10: Country visits include learning activities during the evening

Warlpiri teacher, Maisie Kitson, tying a *Yirriwara* for a student during a country visit in preparation for evening performance



Figure 11: ILC program supports the involvement of elders in school activities

Western Arrarnta elders show students how to grind *intanga* (edible seeds) during ILC program

Photo: Meg Mooney, Tangentyere Land & Learning

3.1.2 Elders are fundamental to successful ILC programs

Elders are viewed by Aboriginal teaching staff as important teachers. They are respected as senior knowledge holders and provide cultural authority and governance to ILC programs. Without ILC programs and associated country visits, the involvement of elders in the school would be critically reduced.

Aboriginal teaching staff facilitated the involvement of elders at both schools. There were differences between the two schools in elders' involvement, due to the different levels of non-Aboriginal staff support and acceptance of ILC programs as legitimate learning activities. As Willowra School was officially classified as a bilingual school, the ILC program was embedded into the school program. There, formal and informal inductions to the daily and weekly routines of the ILC program were given to new staff by non-Aboriginal and Aboriginal teaching staff. At Ntaria School, elders were involved when the ILC program was in a well-supported phase in 2008 (M. Mooney pers. comm. 2009), but there had been much less involvement before that.

The benefits of elders' involvement in ILC programs and associated country visits that were identified from interviews and participant observation are:

- students learn from important family members and respected community role models

- students are taught ‘strong language’ and ‘strong culture’
- by visiting traditional country with elders, children learn in situ, where they can learn about skin, kin and country, where they can observe, talk about, use and prepare plant, animal and natural resources; and where they hear the stories, songs and Dreaming for country
- children are exposed to strong specialised language used in the stories and songs associated with country
- traditional skills are taught, e.g. hand signs; tracking; traditional fire knowledge; directional terminology and spatial orientation skills; how to collect and prepare various bush foods, seeds and medicines
- students learn about seasons and how to identify plants and animals of different habitats, i.e. creek and hill country
- shared experiences with elders on country are used as the basis for reading and writing activities back in the classroom, where experiences are recalled in different language forms, e.g. writing and artwork.

3.1.3 Natural and cultural resource management work during country visits

I observed that country visits at Willowra School facilitated a range of natural and cultural resource management (NCRM) activities. These included digging for water in creek beds and cleaning soakages (see Figures 12 and 22); songs, stories and performance for country (see Figures 10 and 13); and fire management, including burning country (see Figures 14 and 15).

Less NCRM was carried out on country visits at Ntaria compared to Willowra, where the country visits were longer. Nevertheless, Ntaria School country visits facilitated the transmission of two-way knowledge required for NCRM work. For example, learning about mainstream natural resource management involved a school visit to Bushfires NT to learn about how fires are monitored and managed, a visit to Finke Gorge National Park to learn about feral animal impacts, and a trip to Watarrka National Park to see the reintroduction project for the endangered mala (*Lagorchestes hirsutus hirsutus*).



Figure 12: Country visits facilitate maintenance of IEK; inter-generational learning is experiential and practice-based

A young boy watches the digging of a soakage (under the guidance of elders) at Janjipi and imitates what he sees.



Figure 13: Students learn the songs, stories, performances and body designs for particular country during country visits

The school bus in the background shows that effective ILC programs and country visits require adequate school resourcing.



Figure 14: Ntaria School students visit the Finke Gorge National Park

As part of the ILC theme on fire, Ntaria School students learnt about both the contemporary and traditional uses and management of fire.

Photo: Meg Mooney, Tangentyere Land & Learning



Figure 15: Students are able to see elders 'doing' IEK and putting traditional knowledge into practice

A Warlpiri elder burns branches used to construct traditional shelters (to clean and clear the camp site) at the end of an overnight school camp (country visit) at Eight Mile.

3.2 Western science integration through Tangentyere Land & Learning

The teaching of natural science often happens almost in isolation from the local environment; kids are learning about rainforests. We make use of the local people and knowledge.

ILC programs are the main entry point for science education at both case study sites. Common to both ILC programs was a focus on 'country' and its ecosystems and interrelated knowledge and practices. This provided a strong connection point to ecological science. Tangentyere Land & Learning, a program run by the community-controlled Aboriginal organisation Tangentyere Council, is fundamental to the integration of environmental science into learning at both case study sites. Tangentyere Land & Learning works with schools by invitation and supports ILC programs in both bilingual and English-only schools.

Tangentyere Land & Learning introduces Western scientific ways of working that overlap with ILC program themes and activities. For example, a term theme on fire involved a visit to the Bushfires NT by Ntaria School to learn Western ways of monitoring and managing fires (see Figure 14). Students were also shown fire-making using traditional methods by local elders and they participated in a day trip to learn about how native plants in different habitats respond to fire.

Tangentyere's program is based on learning outside of the classroom, on country, as a one-day or overnight country visit organised through the ILC program. The science-based activities and concepts introduced by Tangentyere Land & Learning are summarised in Box 2. Activities are practical and hands-on and involve local elders, Aboriginal and non-Aboriginal teaching staff (see Figure 9 and Figure 11). Field activities are tailored to suit the local environment and the interest and priorities of elders and teaching staff. Activities on country are followed up with classroom activities. Country visits thus provide opportunities for students to learn both IEK and curriculum-oriented science knowledge.

To illustrate, a field trip to Tnorala (Gosse Bluff) enabled students to learn both the Western science and Aboriginal stories about Tnorala. Tnorala is a place of great cultural significance to the Western Arrarnta people, as well as one of international scientific interest. For Western Arrarnta people, the site was created during the creation time when ancestral women were dancing up in the Milky Way, and a

baby fell down from a coolamon and created the site. The Western science explanation is that Tnorala is a comet crash site formed around 142.5 million years ago. Five rare plant species are also found in the area, including the western desert grass tree (*Xanthorrhoea thorntonii*).

Tangentyere Land & Learning provides a cultural bridge between Aboriginal and non-Aboriginal teaching staff, ensuring that what Aboriginal teaching staff and elders see as important is reflected in the curriculum while supporting the education outcomes desired by non-Aboriginal teaching staff. Support is provided through producing literacy resources, worksheets, and planning classroom and country visit activities. Tangentyere staff also observed that they provide ‘emotional support’ to both non-Aboriginal and Aboriginal teachers. For example, they described Aboriginal and non-Aboriginal teaching staff as ‘having very hard jobs’ and said that ‘teachers are so run down, they really need support’ and ‘emotional support is probably the most important thing.’

Box 2: Science-based activities and concepts introduced by Tangentyere Land & Learning

Animals

- trapping for small mammals using Elliot traps
- trapping for reptiles and mammals using pit fall traps
- tracking (looking for tracks, scats and burrows)
- birdwatching and identification
- endangered species
- feral animals

Plants

- collecting plant specimens for identification and labelling
- visiting different habitats and making maps
- visiting areas burnt recently and in the past, and recording what plants are growing in these areas
- making plans of the school and planting trees for shade and dust suppression
- comparison of Western and Aboriginal foods (e.g. excursion to Intjartnama Outstation to look at an orchard with bush foods, grapes and vegetables)

Water

- netting for invertebrates, other small water animals and fish
- life cycles (dragonfly and frog)
- cleaning up waterholes
- digging out soakages
- investigating which animals live near and rely on water places (by looking at nearby tracks; and looking for birds, frogs and other animals)

Fire

- contemporary and traditional fire use (visit to Bushfires NT to learn about how they track and manage fires)
- how native plants in different habitats and weeds respond to fire

3.3 ILC programs address Aboriginal aspirations for education

Elders and Aboriginal teachers (as representatives of their community) spoke strongly and passionately about language and culture in schools, expressing their aspirations for education. There was widespread recognition among interviewees that this is a critical time in history and ‘a lot of knowledge will go with this generation of elders’, some of whom witnessed the arrival of the first non-Aboriginal people

to their country (for example see Vaarzon-Morel 1995). Overwhelmingly, there was concern among community members that children should have ‘strong language’ and ‘strong culture’ so that they are in a position to teach future generations and ‘carry culture forward’.

Purlapaku yawulyuku kalu pina jarrimi yungulu yimi jaru mardani nyanungu nyangu, yawulyu kalu mardani purlapa, yungulu mardani pina mani karnalu jana ngulajuku yingalu nyanungurlulku mardani jamirdi kirlangu jaja kurlangu yaparla kurlangu ngula.

They learn about the ceremonies [in the school language and culture program] so that they keep the stories and the words and maintain the ceremonies. We [knowledgeable elders] teach them this so they can carry it on, carry their grandparents’ culture forward into the future.

Etna katjia-karta-erramala, etna katjia etnakanha ngkatja rraatja kaltjinthitjina. Arrkurla etna itja kaltjerrakala, etna yaarna katjia etnakanha kaltjinthitjina.

When they [grow up and] have children, they will be able to correctly teach their children their language. If this is not done initially, these people are not in a position to teach their own children.

3.3.1 ILC programs mitigate against language decline

Community members place a high priority on language maintenance, especially in light of language loss witnessed in other parts of Australia. Middle-aged Aboriginal teaching staff once regarded language loss as ‘inconceivable’. Yet they spoke about changes to language that they have witnessed in the last 20 years. ILC programs are viewed as a way to mitigate the influence of English and language shift.

I think a lot of people have travelled around and some of the Elders have seen the loss of language and identity in other places and they don’t want that for their family.

Pmara arrpunhala etna ngkatja etnakanha pairlpa-ilaka. Etna ngkatja nyinta waara paka, urrputja paka, tnyinama kuta.

In other places they have lost their language. They only maybe have one word that they can utter, or maybe know a few words.

Students are shortening the language and using other languages ... At school they learn the correct language.

Awa, program marra inthurra. Katjiala English kngarra-alkura wuma: computer-la, lyilhintja wumanga, DVD aramanga, radio pa TV-karta namanga.

Yes, the [language and culture] program is very good. [Outside the language and culture program] the children are continuously listening to English: on the computer, songs, DVDs that they watch, and radio and TV programs.

3.3.2 ILC programs balance students’ lives

Aboriginal teaching staff and community members at both case study sites spoke positively about language and culture programs as a way of strengthening students. Such programs ‘balanced students’ lives’ and created a sense of ‘wellbeing’. It was repeatedly expressed that students ‘want to learn’ and ‘feel good about learning language and culture’. ILC programs were viewed as strengthening Western Arrarnta and Warlpiri cultural identity so that students could be ‘more cultured and strong people’ within their own communities and with their engagement with mainstream society. The focus of language and culture programs at both schools is to encourage biculturalism, so students can operate competently in two cultures. Furthermore, Aboriginal community members themselves are empowered ‘when they see children being really strong in their language and culture’.

... so they know who they are and where they come from and what's important to their community, so that they can then branch out into the wider world as more cultured and strong people.

The young people are having social problems as they don't know about their language and culture. When kids know about their Arrarnta they will be strong. They will have a future. They will be standing up and saying 'this is how we want to be'.

3.3.3 ILC programs support children from 'not-strong families'

... what Aboriginal kids know varies a lot, depending on what communities they live in and how much they get to go out bush with their family.

It looks like hardly any parents these days are spending time with their children out bush, and teaching them the names of animals, plants and such like. The ILC program in the school has a valuable contribution to exposing and teaching the children their own language and culture.

A common theme expressed at both case study sites was that ILC programs have an important role to play in the wellbeing of children by providing on-country learning experiences. Interviewees said this was particularly important for children who come from 'not-strong families'. Interviewees articulated that it is the 'strong families' that regularly take children out bush. Some children have strong knowledge from an early age as a result of such experiences:

I can remember, being at a school and showing the children plant and animal cards. There was one particular child in the class who was just so excited to see all these plants. He was only six or seven, but he knew every plant. I sat down with him and did some extra work on what country those plants come from, and he knew that, just someone who obviously goes out bush with the family a lot and knows. He knew the name of 40 plants or something like that, he knew them all.

Constraints identified that reduce opportunities for children to be 'on country' with knowledgeable older people included lack of vehicles and licensed drivers and a lack of money for fuel and tyres; young, inexperienced parents and grandparents; alcohol; and great-grandmothers being over-burdened with child care responsibilities.

There is awareness that the country-situated way of life and learning experienced by previous generations has changed due to modern and sedentary lifestyles. Significant sites are usually a distance from the community and reaching them requires transport and financial resources. The welfare economies of both remote communities, combined with demographic trends impacting on patterns of social interaction between the generations, results in reduced time for families being on country together.

I think they struggle. People struggle to get everything together. I know people go hunting, but maybe they don't take the kids when they do those sorts of trips. Maybe sometimes people go out and look for certain types of bush tucker, but they might not go to the places that are of significance to the kinship groups as much. Country visits through the school program has provided quite a structured, systematic program that's enabled them to go to all the places for all the different kinship groups and reinforce that learning. So it's not just a one-off here and there, or just go to the close place. But it's going to the place that's significant, and learning about the Dreaming of the different places and keeping on learning about it.

Demographic change in central Australia has been experienced first-hand by middle-aged and senior Aboriginal interviewees. They said that 'parents are young and in town [Alice Springs] doing young people things'. Teenage parents are themselves often the children of young parents, who now find themselves to be grandparents. These young grandparents may not yet have moved into the mature roles and responsibilities normally performed by grandparents. Additionally, interviewees said that traditional rules and conventions about marriage (marrying the right skin) were not being followed strongly

anymore: 'Nowadays you can marry any way.' As kinship is inextricably linked to land, Aboriginal interviewees worry about a decline in knowledge of kin and country.

Aboriginal teaching staff worry for children who do not regularly attend school. These 'non-attenders' were identified as coming from 'not-strong families'. The teaching staff would like the ILC program to be included in the school timetable everyday, so that the 'non-attenders' do get the benefit of the ILC program on the days that they do attend.

Concern was also expressed for the young parents themselves who were viewed to have 'missed out on education'.

There should be literacy and language programs for young parents. There is a need for practical education programs for young parents ... which will get them back into education.

3.3.4 ILC programs support English and literacy

The only English students really know is language from computer games and words from dance songs. The students know the rubbish English words.

Ngkatja tharra kuta marra: English, Arrarnta turta.

It is good for both languages, English and Arrarnta [to be taught to the children].

Nurna etnanha ngkatja etnakanha kaltjinthamanga, kurunga etna ngkatja arrpunhaka rukaara kaltjeritjina.

We teach them [the Ntaria children] their [mother tongue] language, then they are in a position to learn other languages readily.

Aboriginal teachers worry that the students aren't learning 'strong language' and also not learning 'good English'. English is considered important and community members want children to have good English literacy and speaking skills. As well as being a way for students to learn language associated with valued and specialised cultural knowledge, ILC programs introduce technical and sophisticated English associated with Science, Studies of Society and the Environment, Maths, and Information and Communication Technology (ICT). In ILC programs, such specialised English is used for the names of plants, measurements and descriptions of plant and animal species, historical events and processes, and in technology and multi-media activities.

Aboriginal and non-Aboriginal teaching staff spoke about the important role of ILC programs for improving English literacy and numeracy by building upon students' existing knowledge and introducing new concepts around familiar and local contextualised knowledge. Country visits were viewed as an integral part of strengthening and embedding literacy, especially as an effective learning and teaching strategy for English as second language (ESL) students. For example, country visits at both Willowra and Ntaria schools provided the basis for students' writing activities; for example, students made posters with paragraphs of English text explaining things about the country visited (see Figures 16, 17, 18 and 19).

ILC programs also enable Aboriginal teaching staff to produce resources relevant to the local context. For example, at Ntaria School Aboriginal teaching staff produced literacy resources such as flash cards, worksheets and books about country visits, effectively translating the country visit experience into a literacy activity.

Resource urrputja marra: book, flashcards, worksheets. Laakinha katjianha ilpangkalhelitjika, iwunha paka arakala, wukala.

There are various good resources that we like to make: books, flashcards and worksheets. These are all good to reawaken and recapture memories of what was learnt, the things that were seen and heard on the trip.



Figure 16: Willowra School looking at native and introduced plants

Willowra class engaged in writing activities during a Tangentyere Land & Learning plant identification activity where students use and identify the language names of plants and learn the English equivalent.

Photo: Meg Mooney, Tangentyere Land & Learning



Figure 17: Follow-up activities from country visits have a literacy and ecological science focus

Student at Willowra doing a Tangentyere Land & Learning buffel grass activity after a weed identification exercise done around the community.

Photo: Meg Mooney, Tangentyere Land & Learning



Figure 18: Students from Ntaria School engaged in worksheet activities related to the endangered mala

After visiting the Watarrka National Park to see the mala enclosure, students engage in writing activities.

Photo: Meg Mooney, Tangentyere Land & Learning



Figure 19: Ntaria School students at the Alice Springs Desert Park

Ntaria School students engaged with written and visual information on display at the Alice Springs Desert Park.

Tangentyere Land & Learning also work with local Aboriginal teachers to develop activities that support vernacular and English literacy acquisition. They have produced their own resources: big books such as *The Fire Book*, *The Camel Book* and *The Water Book*, and flash cards with plant and animal themes in the major language groups from central Australia. Literacy activities and worksheets are tailored to suit the age and ability of students and to complement country visits. A number of listening activities have also been developed, such as vocabulary games using the plant and animal cards.

At both schools locally made literacy resources were ‘read over and over again’ by students. The resources produced from country visits were the ‘books that are the most valued in schools’. Furthermore, ILC programs were widely viewed by interviewees as a way for ‘children to learn to read, to write’, and ‘go on to work’.

I think anything where we get the kids out, like the overnight camps and the bush trips, is really important. They become a major stimulus for anything else that we do in the ILC program, so without it the students couldn’t really engage in that program. There is no point writing about something that’s not real. That is one of the things that really comes through: students aren’t going to write fictional stories, you really need to have real life stimulus.

And then they’d come back to school ... then, all that they’d learned out on country would be followed up through the different curriculum areas. Through reading and writing and doing maths about these things and writing books and making stories and interviewing and recording. So you can learn all the skills that are taught through education, through this familiar context and material.

We have that really strong link between the school and overnight camps; it’s really linked into the academic experience for the children. So we go out bush, go out on our overnight camp, take lots of photos of activities, take video and then come back to school and we’ve planned earlier on in the planning time for what kind of things we would want them to be doing when they get back to school. So they might come back to school and make a poster with paragraphs on it explaining things about the ‘country’ theme, so you know: physical features of the site, the direction of where the site was located, words to describe what you saw at that place, talking about whose country that was and the Jukurrpa for that area.

3.4 ILC programs help to build strong communities

3.4.1 Supporting community engagement with the school

This research found that ILC programs provide communities with an opportunity and a reason to engage with their local schools. At both case study sites, community engagement was operationalised through the ILC programs. The ILC program provided a mechanism for Aboriginal caregivers and community members to have meaningful engagement and involvement in school activities.

Another one of the strengths of the [language and culture] program is having such high involvement by the community and by them putting such an emphasis on it; it’s really quite important to everybody.

As well as involving elders with the school, ILC programs support early child development and nurturing. Early childhood development and nurturing happens during country visits, particularly school-community camps. Very young children (0–5 years old) attend with parents, grandparents or other carers and with their older siblings. They take part in art activities, listen to adults telling traditional stories relating to country during ‘story time’ and are ‘painted up’ with older children. Generally, they are included, watch and take part in whatever activities are happening (see Figures 12 and 20).



You know one thing you see on the country visits is the kids being painted up and being sung, the kids and the adults all sit close together on a tarp, and the elders paint them and sing, and everybody sits around and everyone watches them. And for that time they nurture them, love them, care about them. So it's such a rich, amazing thing that I think kids anywhere could really benefit from, value that kind of attention and nurturing. And then that they learn and hear the stories and dance ... it's a complete – in terms of education – it's a complete multi-sensory sort of way of engaging them.

Figure 20: Non-school-age children take part in activities during country visits

This infant is being painted up with other school-aged children. Children receive nurturing and are the focus of attention during country visits.

ILC programs also support re-engagement of youth with training and informal learning and cross-sectoral linkages with other programs at community level, as discussed below (see Cross-sector and cross-scale collaborations, section 3.4.3 below). However, the level of community engagement depends on the vitality of the ILC program. The two schools have different experiences of this.

Willowra School, through its ILC program and associated country visits, was a hub for both formal and informal intergenerational learning. However, it is difficult to separate the impact of the ILC program on community engagement from that of the school's bilingual status. Country visits are part of the ILC program, and have involved most of the community with the school, but the community's interest in the school, passion for country visits and capacity to organise them is not just due to the ILC program, but reflects its history as a long-term bilingual school. An indication of the extent of community engagement with Willowra school was provided by a 'Family Reading Night' held there in 2008. It was the first such event, and was organised by linguists from the NT Department of Education and Training who were part of the bilingual school support program. The event attracted over 120 people, about a third of Willowra's population. Activities included a session on 'Reading with your children', or *Pinajarrinjaku Riitimaninjaku Ngurrangkaku*, giving parents practical steps to encourage and help children with reading at home.

The level of community engagement at Ntaria School varied during the time this research was underway. When the ILC program was well supported, the numbers of elders taking part in school activities (both on country visits and at the school) increased. When the program was less supported, involvement dropped off. The level of support depends a lot on the school principal (see sections 3.5.1 and 4.3.1). One principal at Ntaria who was supportive of the ILC program, and the community and its people generally, adopted a strategy of community engagement based on increasing local employment at the school. When he first arrived at the school, there were six Aboriginal staff. Tapping into various funding streams, ten new casual part-time positions were created for local Aboriginal people. These

facilitated the employment and involvement of representatives from the main family groups at Ntaria with the school. This strategy also helped with attendance and developing relationships between the school and caregivers.

3.4.2 Building social capital

ILC programs played a critical role in developing productive and supportive relationships between the school, Aboriginal teaching staff and community members. Social relationships are integral to the way the two case study communities understood and interacted with their schools.

Significantly, ILC programs built trust and respect between Aboriginal and non-Aboriginal teaching staff. Aboriginal teaching staff and community members define teacher quality based on the respect and acceptance shown to local people as demonstrated and applied through their willingness to support ILC programs. Aboriginal community members regard a quality teacher as ‘a good person’ who has positive attitudes, values and beliefs about Aboriginal people and culture.

Other teachers before didn’t want to help us Arrarnta teachers but the teachers now want to help and learn. They are very supportive.

Yesterday we did a map and the teacher tried to say something in Arrarnta. We appreciate it when teachers try.

The morale of Aboriginal teaching staff was linked to the vitality and level of support provided to ILC programs in their school. When Aboriginal staff felt that their ideas were valued, respected and acted upon, they were more confident with their interactions with non-Aboriginal teaching staff.

The morale of the Indigenous staff that were there was much higher and I thought you could just see that in their demeanour and in their willingness to speak up about things. And I think those sort of benefits actually get reflected right through the school. It’s not just a case of including language and culture in the school program, I think it’s an empowering thing, enables people to feel respected and undergirded right across the school. It affects the students too and their attitude to learning and their aspirations for the future also.

The importance to education outcomes of having confident, empowered Aboriginal teaching staff is highlighted by the cross-cultural environment and the language barriers that teachers who only speak English face in doing their work. Non-Aboriginal teaching staff at both Ntaria and Willowra highlighted that Aboriginal teaching staff are fundamental to the effectiveness of non-Aboriginal teachers.

A lot of teachers who come in really don’t know the language ... if you haven’t got a strong assistant teacher, it’s very, very difficult to be able to teach.

I went quite a while without having a teaching assistant which I found difficult, especially with the language barrier.

It’s a great difficulty for teachers who don’t speak the local language ... they feel totally helpless. Like a baby, you know. A situation where they just can’t do anything. So it makes it quite hard.

ILC programs provide a mechanism for Aboriginal staff to take on leadership roles in the school. Often the situation is very different, as one educator noted:

Assistant teachers are used just to discipline the students and aren’t encouraged to lead.

Giving responsibility to Aboriginal teaching staff in delivering ILC programs is a real way of engaging them; they are more professionally involved in the school.

Often Indigenous people, they don’t like to push their way in and if they are not the most knowledgeable person about a topic or something, they won’t sort of assume authority in that area. They will defer to – say it is something like English literacy or maths or whatever

– Indigenous teachers will defer to non-Indigenous teaching staff. Whereas language and culture is one of the only things that non-Indigenous people have to defer to Indigenous people.

Aboriginal teachers at both schools stressed that they ‘want to work in partnership’ with non-Aboriginal teachers. As one teacher noted:

A strong teaching team is vital to the success of any school.

ILC programs give Aboriginal staff a ‘way-in’ that is meaningful to them and also assists in creating strong teaching teams, where Aboriginal and non-Aboriginal staff work together cooperatively to mutually recognised education goals. They were viewed as a way of balancing power relations in schools. Not having an ILC program ‘gives a lot of power to non-Aboriginal people in the schools’.

ILC programs is a way ‘in’ for Indigenous culture; it is very important to keep the balance, to keep the power balance with any relationship.

It’s not just the whitefellas that are the experts, but the Indigenous people that are expert in some areas and whitefellas expert in other areas, working together. You need to be respectful and respect comes out of understanding. And also probably for Aboriginal people, they get to understand whitefellas better because they get them on their terms.



Figure 21: Social relationships and social capital are developed during country visits

Ntaria School students and teachers enjoy a visit to the Alice Springs Desert Park.

ILC programs and associated country visits also provided an opportunity for non-Aboriginal staff to develop relationships with students and their families and to gain cross-cultural understanding. For non-Aboriginal staff, country visits are effectively professional development and staff induction rolled into one.

White teachers that come to communities often have no idea about what's in peoples' minds. And so the country visits, the overnight camp every term or weekly bush trips has meant that they get the chance to go out and be inducted into what's important for Aboriginal mob out bush. And it takes a long time to start to understand that. Like, [Aboriginal] people don't just see a tree, but they see a tree that has a Dreaming and is connected to a certain kinship subsection and has relationships with certain country ... everything is connected, and it takes a long time to begin to even understand that and appreciate that kids aren't thinking the same way as kids might be thinking in Sydney or Melbourne. They've got different things in their head.

Or we went on bush trips ... and they would try and straighten me out. It was, as far as I was concerned, it was just a dream time because it helped build strong relationships with individual families. So it was really was a blessing to me.

3.4.2 Cross-sector and cross-scale collaborations

Experiences from Willowra and Ntaria indicate how ILC programs in school can prompt community organisations to work together, building stronger horizontal networks across the community, and across sectors and scales.

The ILC program at Willowra School provided the means for the school and the Willowra Youth Program to work together collaboratively.

The old ladies wanted to go out in different areas, to go on country. It was very difficult because a lot of the roads were overgrown. The youth program would go out with their chain saws and clear 100 metres at a time and this sort of stuff; it was hard work.

Young adults from the Youth Program were also involved in Willowra community-school country visits (see Figure 22). Young adults worked with elders and Aboriginal teaching staff to develop contextually rich resources for both classroom and community use: documenting cultural practices such as hunting, bush food gathering, traditional food preparation; cleaning a water soakage; oral histories; and traditional stories. For example, the country visit to Pirda Parnta was filmed by young adults from the youth program (see Figure 23). The Youth Program was successful in securing funding available from the Central Land Council that enabled a video technician from Warlpiri Media to be contracted to provide training in video editing over a week, enabling young people to edit and compile films that they made during the country visit. The ILC program thus provided opportunities for young adults to re-engage with training and informal learning environments. The community's networks were strengthened across sectors at a local level and to two regional Aboriginal organisations.

The youth program became quite dynamic. And just seeing the way that it all worked together was very exciting. The youth were able to record and film the elders, and the kids listening to the elders. The young people were able to do their own thing, but also to participate in things, and have a meaningful role and a role that works for them socially, has social capital for them. So in these country visits, the youth were a very important part of documenting and reporting those trips. It meant that they had to engage both with the traditional knowledge and the elders and the kids. And so they became a really great bridge and it brought them back into the education system in a way that they might not have been able to access it otherwise.



Figure 22: School country visits facilitate cross-sector collaboration

Young women from the Willowra Youth Program carry out natural and cultural resource management activities during a school country visit. Here they are digging a soakage at Janjipi.



Figure 23: Willowra Youth Program filming oral histories at Pirda Parnta

Language and culture education at Willowra and Ntaria also benefits from and contributes to cross-scale networks through the Warlpiri Language Triangle meetings and the Western Arrarnta Language Workshop. These forums foster cooperation between schools with shared socio-linguistic backgrounds, enabling information sharing, planning for teaching and professional development. Aboriginal teaching staff benefit particularly from group and peer mentorship through these forums.

This regional scale networking is particularly strong in the Warlpiri language region where three of four schools (including Willowra) are bilingual. Warlpiri Triangle meetings in 2007/08 involved Aboriginal teaching staff from the four schools and linguists in professional development for vernacular literacy teaching strategies. The four schools also work cooperatively together through the Warlpiri-patukurlangu Jaru (or Warlpiri Triangle), formalised as an incorporated body in 2000, and the Warlpiri Education and Training Trust (WETT), established in 2004. Additionally, there are also shorter Jintajarrimi workshops in the three terms outside of the larger Warlpiri Triangle meeting. The Jintajarrimi workshops, involve Warlpiri (Yapa) school staff working together to develop common teaching, learning and assessment strategies. The Jintajarrimi workshops were initiated by Willowra school in 2006. WETT was set up as a result of an agreement between the Central Land Council and Newmont Mining, who operate major gold mines in the region. Under this agreement royalty equivalents paid to traditional owners under the provisions of the *Aboriginal Land Rights (NT) Act 1976* are used for education and community development. The four schools have scaled up from individual schools working solely at the local level to working together cooperatively at the regional level.

Extra resources have been made available to the Willowra ILC program through WETT, including a bus, water container and trailer, more than 40 swags, and cooking equipment.

Some money was contributed by royalty money for elders' involvement in country visits and school programs. So the Warlpiri people have committed money, their own royalty money to supporting the work of elders in schools.



Ntaria School hosts the Western Arrarnta Language Workshop once a term and provides support to the ILC program delivered at Ipolera, a smaller nearby outstation school (see Figure 24). Seeking stronger regional scale networks, in 2007 the Ntaria Aboriginal teaching staff requested that the school principal ask NT DET to ‘strongly consider a hub group of schools’ that consist of Arandic speakers from Ntaria, Ntaria Outstations (Ipolera, Wallace Rockhole), Santa Teresa, Bonya, Harts Range and Alice Springs Schools. To date this Arandic hub has not happened, although NT DET continues to support the Western Arrarnta Language Workshop for Ntaria and Ipolera staff.

Figure 24: ILC programs enable scaling up

Strong local networks are developed through ILC programs as demonstrated by Maxine Malbunka from Ipolera (outstation) School attending a Western Arrarnta language workshop at Ntaria School.

3.5 ILC programs are extremely vulnerable

3.5.1 Turnover of principals and non-Aboriginal teachers

ILC programs at both schools operate in a vulnerable and unstable environment. The high turnover of principals and teachers contributes to ILC programs often being in a ‘start’ and ‘stop’ stochastic process.

Awa, relha arrpunha Ntaria-urna pitjima, urrkaaputjika. Kurunga arrpunha wutha pitjima. Laakinhangha nurna wutha-ma-wutha tjuntama, Arrarntaka program mpaaritjika.

Staff come to Hermannsburg to work. Then, after time, others come. In this way we have to regularly restart the language and culture program.

Awa, relha arrpunha kutatha pitjimanga, pmara nhanha-urna, school nhanha-urna, program nurnakanha itja lhama kuta.

Yes, it is hard. Other staff are continuously arriving here, and this leads to some instability so that the program does not keep on going smoothly all the time.

During the course of this study, the ILC programs at both communities were subject to dramatic changes, almost overnight, with the arrival of each new principal to the school. At Willowra School during 2007 there were three school principals with delays in recruiting during the first half of 2007. Principals at Willowra School during the second half of the year had stays of 2 weeks, 8 weeks and 10 weeks respectively. Similarly, at Ntaria School there were three principals during 2007. Length of stays included 28 weeks, 2 weeks and 20 weeks. At Ntaria School in 2008 there were three principals during Term 1 (5 weeks, 3 weeks and 2 weeks), but the same principal stayed for Terms 2, 3 and 4. Willowra School had one principal for 2008.

There have been so many principals coming in and out; [school staff and students] are really fatigued by the constant change.

Often Indigenous people are ready for principals to come in and treat the scene as if it requires a complete overhaul and the overhaul always gets started and never gets finished. People can be quite fatigued at the prospect of another [new principal] and that their continuous presence not be acknowledged and their input not being welcomed in whatever changes are made.

It is very wearing for Aboriginal teaching staff and they feel undervalued and disempowered when they are not included in school discussions and planning about changes:

Ngunha etnakanga arrkurla nanhala naka? Etna etlarama etna marra-alkura kaltjinhama, program etnaka-lela. Lyaarta etna itja pmara-rinya-lela nyinta-errama, ngkarritjika nthaakinha urrkaaputjika.

Who was here before they came here? They believe that they have a superior program. These days they don't sit down with the local people as one, and talk through how we can work together [to build up the school program].

Interviewees said that new principals and teachers who haven't been to remote communities before are often 'shocked' with the facilities. They treat the school like they are 'walking into a disaster zone or ground zero'. A non-Aboriginal teacher said that the same attitudes lead to inexperienced teachers jumping to the conclusion that the children have low learning abilities.

3.5.2 The attitude of the principal is critical to the school's capacity to run ILC programs

A community very quickly tweaks whether the principal is supportive of language and culture or not ... even if there's interest from the local teachers or the whitefella teachers, if the principal isn't supportive, it's very hard to make something happen. And by supportive, I don't just mean that they are happy to go along with it. I mean that they actually think it's important themselves.

ILC programs are an optional part of the school curriculum. The 'elective' status of the program contributes to instability as new staff can cancel the program, re-schedule it or cut its time allocation. For example, at Ntaria School, the ILC program was offered for 40 minutes every day. However, under a new principal this was changed to just 1 hour and 40 minutes in the whole week. It was observed that in the mind of the principal, the reduced program time satisfied community requirements. Yet, this change was done without consulting Aboriginal teaching staff or canvassing community opinion. Privately, Aboriginal staff was angry and frustrated with this decision but felt powerless to intervene. One of them said:

We want to explain to each new principal the importance of following the Arrarnta program. Arrarnta staff would like to be on the selection panel for the new principal so we can ask if they are willing and dedicated to supporting the ILC program. If they are not, they can go to another school.

Consequently, at a language workshop in 2007, Aboriginal teaching staff from Ntaria School suggested wording for a policy: 'The Western Arrarnta Language and Culture Program is an integral part of the school program. Education is two-way: English and Western Arrarnta.' They wanted this policy to be 'put where people and visitors can see it and understand'.

Later, in 2008, a new principal appointed to Ntaria School supported the ILC program and the priorities identified by Aboriginal teaching staff. This was done in practical ways by the principal attending language workshops where Aboriginal teaching staff did their program planning and by encouraging other non-Aboriginal staff to also attend. Country visits were re-scheduled and funding was actively sought to support the ILC program.

3.5.3 Ideological differences concerning local language use in schools

Aboriginal teaching staff and community members were aware of negative attitudes towards use of their own languages in schools and the increasing pressure to produce good English results. They recognised that controversy about this influenced parents' attitudes to ILC programs:

Wurlerrintja itja marra naka. Relha arrpunha ngkama, 'Kala-marra katjianha Arrarntaka kaltjinthama.' Arrpunha ngkama, *'English-anta waara etnanha kaltjinthitjika.'*

There is not clear unity on this point. Some parents and guardians say that it is alright to teach the children Arrarnta. Others say that they only want the children taught English.

Some families get the wrong information from non-Indigenous people about language and culture programs. But we know that the students need to understand both worlds.

Some non-Aboriginal teaching staff were considered by interviewees to be unaware or naïve to the difficulties of learning in a foreign language because they are English-only speakers.

Most white Australians are totally monolingual and therefore they have no idea of what it's like to go to school and be learning in a second language and a second culture.

A new principal at Ntaria School observed:

It's like picking me up and plonking me in the middle of Russia and telling me to 'go and get an education'.

Interviewees felt that non-Aboriginal teachers should have ESL teaching qualifications and be familiar with ESL learning methodologies. Some interviewees had this experience and spoke to it:

I think in Australia ... there's a kind of a common wisdom which says, we're spending money and time on Indigenous language and culture, so we must be holding the kids back educationally, taking away from their understanding of English language and culture. But maybe they don't realise what people in Europe or Asia know, which is that you can function at a high level in several languages. You actually function better in your second language if you already have a high degree of stability in your first language. You function better cognitively because you can examine all sorts of ideas at a much higher level than if you're trying to do it in a second language.

3.5.4 Country visits are wrongly viewed as 'picnics' where 'not much learning takes place'

Aboriginal and non-Aboriginal teaching staff spoke about students enjoying country visits but feeling 'frustrated in the school environment'. However, the learning taking place on country visits is not always visible and easy to understand from a cross-cultural perspective. It can be so subtle that it is not often recognised as learning. For example, young adults and students cleaned a soakage at Janjipi during a country visit. Sitting quietly to the side was a young boy (about five) imitating digging with a stick and a small hole (see Figure 12). To further illustrate, during free time, children located and identified *marnikiji* or conkerberry (*Carissa lanceolata*). During this same country visit, children assisted an adult with collecting bark from a northern corkwood (*Hakea chordophylla*), made it into ash and used it as salve for nappy rash on an infant. During the four country visits that I participated in, students listened attentively when elders were demonstrating techniques (e.g. traditional preparation of echidna for cooking) or were highly engaged in activities (e.g. collecting Ininti or bean seeds, cleaning soakage, digging for water in creek beds, listening attentively to traditional stories).



Figure 25: Ntaria School students learning about water habitats

Ntaria School students netting for invertebrates and fish during a trip to a Finke River waterhole near the Ntaria community.



Figure 26: Burning takes place on country visits

Teachers and elders from Willowra School burn country to clear ground

Photo: Meg Mooney, Tangentyere Land & Learning

However, country visits at times can look ‘wild’. Definitions of appropriate play are culturally based and some non-Aboriginal teachers can get very concerned about what appears as ‘riotous behaviour’.

With whitefella teachers watching, you can feel the question, ‘What is cultural about this? All the kids are running riot and they yell a lot or they nick off to the creek whenever they get a chance,’ and in fact that is just cultural and that is how you act when you are out, you know, it is not out of control.

Also, this is only one side of the children’s behaviour during country visits:

Certainly I think they [non-Aboriginal teachers] see the situation [children’s behaviour] in a different light in the way that kids pay attention to the elders. Like the other night on an overnight camp, there might have been a bit of a riot in the middle of the night. But the next day while that elder was talking to the kids, there was almost complete silence.

3.5.5 Policy, resourcing delays and structural constraints

They have always had trouble with financing ... for all of the language and culture programs. It is always a year-by-year application and it is never a known fact whether they would have their program for the following year because they would always have to worry about the money situation and whether they had enough money to pay for resources and for elders and linguists.

There is no coherence in policy or resourcing for ILC programs across schools in central Australia or the Northern Territory. The non-committal approach at a policy level is indicated by ILC programs being an optional curriculum segment. At a local level, principals may be very actively tapping into resources to run ILC programs. Alternatively, principals may be committed to ILC programs but not able to get sufficient resources to run them. There may also be lengthy delays in schools receiving funding. For example, at Ntaria School there was a delay of six months before approved funds reached the school.

A number of interviewees expressed concern that ‘language and culture are not a high priority for the education department’. There was also concern about a lack of unity between non-Aboriginal staff in their attitude for the ILC program and the need for Aboriginal staff to ‘squeeze in to fit whitefellas’ agendas’. The imposition of external programs, such as Accelerated Literacy (AL) at Ntaria School

in 2007, reduced time available for ILC programs. When originally consulted about AL, staff at Ntaria School voted against it; however, the program was introduced by the principal. Consequently, Aboriginal teaching staff at Ntaria School felt that an 'AL and English' emphasis took over. They expressed the concern that 'Accelerated Literacy had pushed the language and culture program out'. They feared that it would impact on country visits. As one Aboriginal educator noted:

It is important to take one day out of the Accelerated Literacy program each term or so for school bush trips. If AL is too much, the students won't take it in. They become overloaded and give up learning.

The issues raised by Ntaria School staff are not about Accelerated Literacy as a program, but about externally imposed programs generally and how they are inserted into schools without regard to longstanding local priorities.

Another indicator of lack of coherent support for ILC programs is the uncertain availability of specialist support staff. The NT Department of Education and Training employs one Language Resource Officer position to support English-only schools and ILC programs for all of central Australia. This equates to supporting 10 language groups and 30 schools. However, at the end of 2008 there was a great deal of uncertainty about the long-term future of this position. Additionally, there is one linguist position available to support bilingual schools in central Australia. A linguist position for the four group schools in central Australia was identified by interviewees as necessary to ensure that Aboriginal teaching staff and ILC programs receive the same type of professional support and training that is available to non-Aboriginal teaching staff. Ntaria School was able to use funding for their ILC program to contract in a local linguist to support their school's program in 2007. As a bilingual school, Willowra has funding allocation for a teacher/linguist position. However, policy changes, for example, the introduction of 'Teaching in English for the First Four Hours of Each School Day' policy, and uncertain funding availability make the future of this position uncertain as well.

Adding to this uncertainty, there is no clear unit within the NT Department of Education and Training that resources or is responsible for ILC programs. Additionally, the department keeps very limited data relating to ILC programs. Hence program support and resourcing tends to be ad hoc and not strategically targeted. Each one of the five different strands in the department provides some support to ILC programs, but not in an integrated way. The current submission-based process for accessing grants to support languages and culture is not designed to encourage collaboration between schools (NT DEET 2006b). So although ILC programs facilitate such collaboration, as discussed above, departmental processes tend to work against it.

Overall, local language and culture programs were felt to be 'radically under resourced'. Anecdotally, this has forced individual Aboriginal teachers to seek support from expertise outside the education department. This support is often provided by non-government organisations that are under-resourced and under-staffed themselves, such as Tangentyere Land & Learning (see section 3.2). Having flexible ways to pay casual staff (elders) is also a difficulty. Although paying casuals can be regarded as a 'small-level issue', it can 'completely put a halt to an organised ILC program' if there is not an easy way to do it. In this context, interviewees were critical that the Northern Territory Emergency Response paid no attention to language and culture education:

Under the federal intervention there is quite a large initiative and it is currently called Strengthening Classroom Practices and its involvement with individual schools can be really quite intense, but it doesn't have any involvement or commitment to language and culture.

4. Discussion

There are a multitude of complex and interrelated factors that contribute to poor education outcomes for Aboriginal students. From the beginning of European colonisation, Aboriginal people have suffered dispossession from traditional lands, violence, family dislocations and policies that were assimilationist and discriminatory in nature (Gray & Beresford 2008; Zubrick et al. 2006). The impact of this historical legacy has continued into the lifetimes of contemporary Aboriginal people (Devitt et al. 2001). As a result, Aboriginal people have had to overcome the influence of factors not shared by other Australians (Zubrick et al. 2006). It is argued that education policies over the last forty years, though well-intentioned, have largely failed (Henry 2006). While there have been some positive gains – improved higher education and secondary school retention and completion – improvement has been slow and incremental and has plateaued over the last decade (MCEETYA 2006; Mellor & Corrigan 2004).

Education outcomes are particularly poor for remote Aboriginal students in the NT (Collins & Lea 1999; Guenther et al. 2005; Wild & Anderson 2007; NT DEET 2006a). Increasing attendance and retention have been central to strategies to improve remote education outcomes (NT DEET 2006a). However, as the WA Health Survey reported ‘high levels of school non-attendance may be an indication of a dysfunctional relationship between school and the students’ (Zubrick et al. 2006, p.137). Education research shows that education service delivery to remote communities is successful if it is integrated into the social and cultural schema of local communities (Kral & Falk 2004; Guenther et al. 2005; Hartman & Henderson 1994; Hoogenraad 1994; Harris 1990). After considering such issues, a number of significant NT government commissioned reports – *Learning lessons* (Collins & Lea 1999), *Indigenous languages and culture in Northern Territory Schools* (NT DEET 2006b), *Indigenous education strategy* (NT DEET 2006a) and the *Ampe akelyernemane meke mekarle: ‘Little children are sacred’* Report (Wild & Anderson 2007) – affirm and highlight the need for Aboriginal language, culture and perspectives to be reflected in the curricula, teaching and administration of NT schools.

Findings from this research show ways in which ILC programs integrate education into the social and cultural schema of remote communities. Factors important in this linkage, and some of the challenges and constraints for making it stronger, are discussed below.

4.1 ‘Two-way’ education is poorly understood

ILC programs are often considered a response to Aboriginal aspirations for ‘two-way’ education. It is surprising then that our knowledge of the full range of meanings that Aboriginal people intend when they say ‘we want two-way education’, or what education administrators and policy makers mean when such terms as ‘two-way schooling’ are invoked, is quite limited. In contrast to bilingual education (which was renamed as Two-Way Learning in 1999), two-way education is not a well-theorised pursuit (Harris 1990). Indeed, two-way education ‘can mean almost anything to anyone – or nothing at all’ (Nicholls 2005, p. 172). Notions of two-way education simply presume that what Aboriginal people want and what non-Aboriginal educators want can be brought together and mutually valued. This research has found that ILC programs facilitate a form of two-way education by enabling language and culture to attain a stronger profile in school-based education. In this way ILC programs connect the classroom to the real lives of students and build on community aspirations relating to education. Additionally, ILC programs assist with making the school culture more reflective of the Aboriginal cohort and create shared meaning and understanding about education.

Nevertheless the factors that make a school program ‘two-way’ need further exploration and clarification, particularly for English-only schools. How do the aims of such a program and its implementation differ from other programs in schools with respect to staffing, curriculum, teaching methodology and practice, classroom management, student body, timetabling and resources? A

systematic effort is required to understand and identify highly effective teaching practices relating to two-way education in English-only schools including, but certainly not limited to, language and culture teaching.

4.2 ILC programs contribute to community engagement and improved learning outcomes

This research found that if effectively implemented and resourced, ILC programs can provide benefits for improved school and community engagement and learning outcomes. Significantly, ILC programs contribute to developing a learning community approach to education. The ILC program connected students learning across the curriculum, building knowledge of English language and literacy and introduced ecological science from cultural foundations familiar to students and their families. The significance of these findings is discussed below.

4.2.1 Literacy

There have been numerous studies of minority and Indigenous cultures, both in Australia and internationally, that provide evidence of improved literacy outcomes as a result of stronger community engagement. As literacy levels are the universal benchmark used to define successful schooling, there is an increasing focus on remote literacy outcomes (Kral 2007). A number of reports show that successful strategies for improving literacy outcomes depend on establishing and maintaining effective relationships between home, community and the school, for instance by making the school culture more reflective of the community in which it is located (Cahill & Collard 2003). Contemporary learning theories view education from a socio-cultural perspective. This view encompasses a situated perspective on learning with an emphasis on learning through participation in the social world (Lave & Wenger 1991; Street 1993; Heath 1983). Recent Australian research also demonstrates that a social theory of learning has relevance to remote Aboriginal education, particularly literacy acquisition in informal learning environments (Kral 2007). In a Canadian study of ten Aboriginal schools, successful schools were defined by levels of engagement, local ownership of education, a shared vision for the school, and communication between the school and community (Bell 2004). Additionally, research shows that best results come from a combination of good teaching and management on the school side, teamed with support and determination on the community side (Storry 2007). Student's literacy learning, and overall learning, is more likely to be enhanced when local values, language and cultural knowledge are made an implicit part of teaching and learning practices (Fletcher et al. 2009).

In the remote Australian context, approaches to improving Aboriginal education are increasingly based on literacy levels and meeting national literacy benchmarks. While this may seem sound, a 'one-size fits all' approach to literacy does not provide equitable education to remote Aboriginal students. Rather, it ignores the learning needs of students from diverse backgrounds who speak English as a second language. A focus on literacy benchmarks also reifies literacy as the only educational problem requiring attention in the remote education context. Consequently, little attention is paid to what Aboriginal people want from education and the necessary systemic support required in terms of staffing, timetabling and resources, policies and funding regimes. While not discounting the importance of meeting literacy benchmarks, the disparate outcomes in literacy benchmark results demonstrate that there is a problem, but not how to go about fixing it. The indications from this research are that ILC programs and country visits should be part of the solution. They engage remote students with learning and, given adequate priority and resources, can link effectively to literacy strategies.

4.2.2 Science

This research found that ILC programs provide the main entry point for science education, particularly ecological science in remote schools. However, the content and amount of time dedicated to science is dependent on the health and quality of the ILC program. There is a lack of even 'rudimentary' science

infrastructure and equipment in remote schools (Robinson 2008). Science education is delivered on an ad hoc and minimal basis (Johnson 2006). However, school and community engagement, with ecological science at least, is facilitated by the services provided by Tangentyere Land & Learning whose main entry point into remote schools is through ILC programs.

Tangentyere Land & Learning repeatedly falls between the cracks of ‘education’ and ‘natural resource management’ program funding. The short- and long-term future of Tangentyere Land & Learning is under threat due to this precarious funding situation. The systematic and structured support that this program provides to the delivery of science education in remote schools is also at risk from year to year.

4.2.3. Supporting children from ‘not-strong families’

Significantly, this research indicates that school-based language and culture programs are particularly important for the support they give to remote Aboriginal children from ‘not-strong families’. Additionally, children from ‘not-strong families’ have reduced experience on country due to a range of socio-economic factors.

A common proposition is that ‘language and culture should be taught at home’. However, this point of view does not take into account the demographics of remote Australia. A high percentage of teenage parents combined with a high death rate and poor health of knowledgeable elders, poses formidable challenges to maintaining language and culture ‘at home’. Nationally, the NT has the highest proportion of Aboriginal births to teenage mothers (see Figure 27 and Figure 28). This is highest in very remote areas, where 24.9 per cent of births are to teenage mothers (SCRGSP 2005). More than half of the NT’s Aboriginal population is under 25 (Lea et al. 2006; ABS 2008). Children are increasingly being born to teenage or young parents and have correspondingly young grandparents. As grandparents are young themselves, they may not have moved into mature roles and responsibilities. In many instances, senior women (older female relatives and great-grandmothers) are the main caregivers of children (Smith 2000). The poor health and high morbidity rate in remote Australia also means that middle-aged and older generations are passing away too early and too quickly (Johnson 2006). This demographic, experienced first-hand by Aboriginal community members, underscores their requests for language and culture programs in schools.

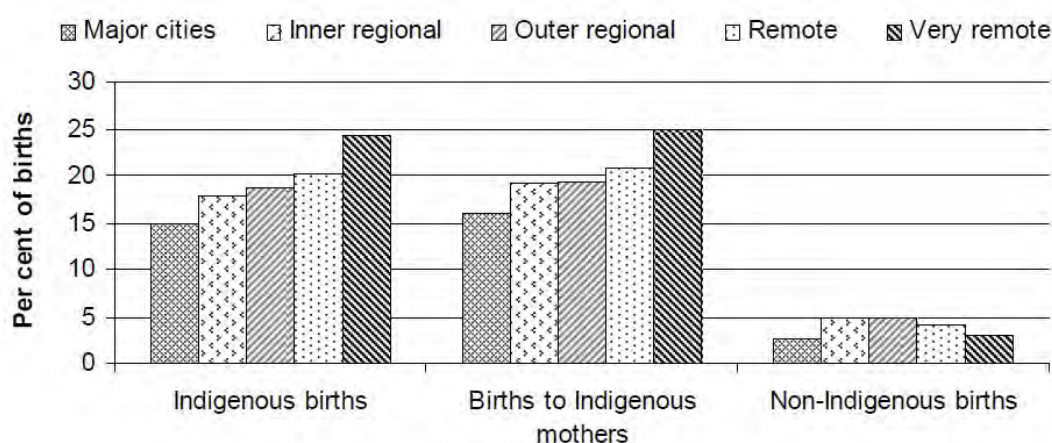


Figure 27: Proportion of births to teenage mothers, by Indigenous status of baby and remoteness, 2007

Source: SCRGSP 2009, p.5.18

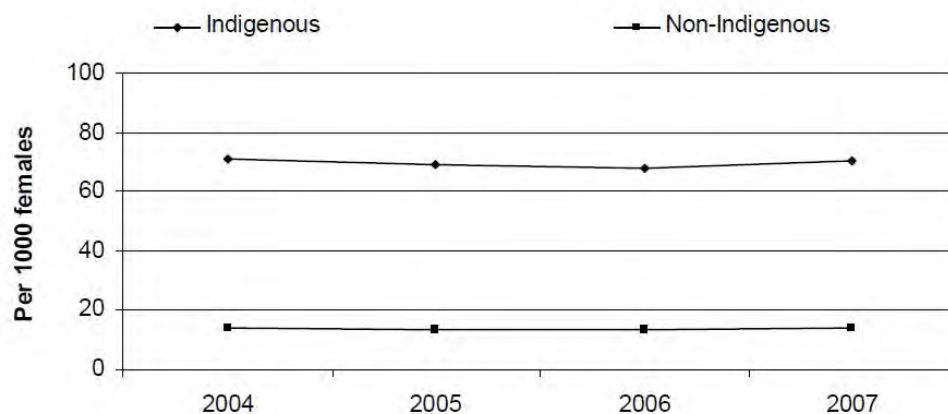


Figure 28: Teenage birth rate (females aged 15–19), by Indigenous status of mother, 2004–07

Source: SCRGSP 2009, p.5.15

Quite apart from this, schools themselves are a cultural institution and maintain the culture, identity and values of society. However, the degree of cultural maintenance entrusted to schools is invisible to most Australians (Harris 1990). Accordingly, Aboriginal people want their local schools, as places of learning for children, to accord equal value and status to Aboriginal language and knowledge and to Western knowledge. While many Aboriginal people in central Australia practise and maintain language and culture with little cross-over to Western institutions, the actions of organisations on remote communities can either support or impede local efforts (Johnson 2006; Pawu-Kurlpurlurnu et al. 2008). The great concern for Aboriginal educators is that students are not spending time ‘on country’ or at school. Maintaining language–knowledge systems through school country visits and appropriate pedagogy and curriculum promotes the practice and context for maintaining IEK and associated practices and also motivates attendance.

For example, at Ntaria School attendance increased dramatically with a new principal who responded to local priorities and facilitated the inclusion of an ILC program in the school’s timetable. In 2009, there was a reported increase in enrolments of nearly 30 per cent and attendance rates increased by 8.4 per cent to an average of 77 per cent (DEEWR 2009).² Ntaria School went on to win the Remote School of the Year in the 2009 Excellence Awards for Teaching in the Territory.

As well as findings from the case studies, the educational value of incorporating language and culture is evidenced by results at other schools in the Northern Territory, relating to improved school attendance and improved student motivation and confidence. For example, the Lajamanu School is involved with the Milpirri cultural festival. This Warlpiri cultural event has caused ‘soaring school attendance’ (Pawu-Kurlpurlurnu et al. p.7). In the Top End, when the Jabiru Area School attended the annual Yolgnu cultural festival, Garma, a teacher observed:

Overall our students got an enormous amount of pride and confidence from Garma and they returned to school more empowered and approached the principal for further funding for tutors and more computer access, much of which was forthcoming. They also returned with extra energy, ready to tackle their Year 12 studies. (Lea et al. 2006)

² As well as changes to ILC program support, attendance figures reflect other changes such as the impact of efforts under the Commonwealth Government’s Northern Territory Emergency Response to enforce school enrolment and attendance. The relative impact of the various policy and practice changes can only be speculated on.

4.3 Schools as part of learning communities

Education strategies that build on community aspirations for education help create connections between home and school. ILC programs link families, schools and communities in a collective pursuit of learning: as ‘learning communities’ (Wenger 1988; Lave & Wenger 1991). The role of country visits is particularly important in stimulating this, through generating shared experiences, relationships and stimuli for further inquiry and learning.

The concept of ‘learning communities’ draws on a wide body of theory related to learning and sociology. It is now understood that learning does not occur just in school. Rather, it occurs in multiple contexts and is both a ‘life-long’ and ‘life-wide’ process (Schuller & Desjardins 2007). The phrase ‘learning community’ when applied to a school relates to learning goals that are shared by the principal, teachers, parents and community members. Highly effective and successful schools operate as part of a professional learning community and share the following characteristics:

- explicit expectations of learning
- aligned values, culture and action
- focused leadership and teaching
- networked linkages (school and community)

(NT DET 2007)

Further, to be effective in the complex cultural environments of contemporary societies, schools need to make fundamental changes in thinking and practice, from a monocultural to a multicultural lens in order to promote effective parent, community and school engagement, as was highlighted by a literature review and synthesis of education research from 1980 to 2005 (Gorinski & Fraser 2006). This is particularly pertinent to remote education in central Australia, given that Aboriginal students come from diverse cultures that are very different from the culture of most of the teaching staff. Specific issues related to school effectiveness that are highlighted in this research concern teacher quality, school leadership and networked linkages or relationships, as discussed below.

4.3.1 School leadership

Strong leadership is needed for schools to build relationships with parents from diverse backgrounds (Eckermann 1994). The most frequently identified indicator of a successful school in a Canadian study was strong leadership (Bell 2004). The hiring of ‘excellent principals’ is also seen as necessary to force change in schools (Glickman & Scally 2008). It is apparent from this research that the opportunity for schools to run an ILC program and the effectiveness of the ILC program depend on the attitude and leadership directions set by the school principal.

4.3.2 Teacher quality

It is widely established that teacher quality and the quality of teaching are key determinants of student outcomes. However, particularly in a cross-cultural domain, defining and measuring teacher quality is difficult (SCRGSP 2009). This research found that local definitions of a good teacher are based on a teacher being ‘a good person’ who has positive attitudes and beliefs about Aboriginal people and culture. Teachers demonstrated these qualities through their willingness to support ILC programs. According to the Garma Report (Lea et al. 2006), poorly selected teachers to remote Aboriginal schools can result in another ‘lost generation’. The ILC programs offer a way for governments to refine what attributes and capacities a teacher needs to be effective in remote education. Above all, non-Aboriginal teachers need to be adaptable, able to match their teaching strategies and approaches to the local environment.

4.3.3 Relationships

Relationships between home and school and between community and school depend on the quality of relationships between Aboriginal and non-Aboriginal teaching staff. Aboriginal staff place high value on working collaboratively and in partnership with non-Aboriginal teaching staff. Crucially, ILC programs align educational goals and values at the local level and provide the means for relationship building. Such alignment leads to successful ILC programs, tangible school and community relationships and improved community engagement. A ‘whole school’ approach to ILC programs enables Aboriginal and non-Aboriginal teachers to work cooperatively to mutually agreed and valued education outcomes. The support mechanisms for ILC programs become embedded in daily work practices and attitudes. Conversely, when Aboriginal and non-Aboriginal teachers are working towards different education goals and in opposition to each other, it creates tension and mistrust, reduces staff morale and leads to a negative school ethos. The end result of this is a poor community perception of the local school and reduced value placed on formal schooling itself.

4.4 ILC programs introduce children to land management

This generation of remote Aboriginal students are the future land owners and managers of very large areas of central Australia. The knowledge base and experience on country of remote students will impact on the future sustainable natural and cultural resource management of remote regions. Many Aboriginal people are well aware of this and have been for some time. For example, teaching knowledge and skills to children were among the top three issues raised by Aboriginal people in central Australia during land management and rural enterprise workshops facilitated by the Central Land Council in the late 1990s (Walsh & Mitchell 2002).

In Australia, English and migrant languages are widely regarded as being economically useful languages, whereas Aboriginal languages are not (Mühlhäusler & Damania 2004). This research supports the alternative proposition, that Aboriginal languages and the knowledge embedded in them are important assets in natural and cultural resource management. Indeed, they are a key to linking remote Aboriginal people with market economic activity associated with use and management of the natural environment (Walsh & Douglas 2009; Myers 2002). Examples of these links include offering special tourism experiences; supplying bush foods and knowledge about bush foods to the national industry; natural resource management and biodiversity conservation (including involvement in scientific biological surveys and mining exploration); art and the creative industries of film, literature and drama; and the knowledge economy generally (research, linguistics, climate change adaptation). Aboriginal opportunities in these sectors are strengthened by strong cultural practices, detailed knowledge of country and language maintenance. A new approach must be developed, based on an assumption that Aboriginal knowledge and language are equally valid and useful for promoting education and development outcomes (Dockery 2009).

Both case study sites define a model of education based on local language–knowledge systems that are place based. Place-based education is a relatively new concept (Woodhouse & Knapp 2001). It has particular relevance to remote Aboriginal education because ‘there is something in the Aboriginal imagination which always has, always will link a good quality education to place, and to place consciousness’ (Christie 2006, p.29). Place-based education is congruent with locally requested and defined models of education as it is based upon natural and cultural surroundings; learning is experiential; it is inclusive of families, community members and teaching staff; and it strengthens connections between curriculum and students’ lived experience outside of school (Gruenwald 2008, 2003; Knapp 1996). For example, during country visits students visited traditional lands with elders and Aboriginal teaching staff where they observed, talked about, used and prepared plant, animal and natural resources. Students participated in learning activities that were interactive and experiential,

maintaining the beliefs and practices necessary to keeping active and alive the detailed knowledge of species names, habitats, seasonal availability and other ecological and related cultural information such as rights and responsibilities to country through the kinship system, stories, songs and ceremonies.

Conceptually, this place-based model aligns with frameworks articulated by several central Australian Aboriginal educators for teaching IEK and knowledge about other areas of life, including country, people, language, ceremony, skin, and Law or the creation time (Pawu-Kurlpurlurnu et al. 2008; Turner 2005; Dobson et al. in press). Similar models have also been developed elsewhere in Australia (Grant 1998). The Indigenous Language and Culture component of the NT Curriculum Framework broadly maps against this cultural framework. Nonetheless, recent research recommends a need for further curriculum development aimed at ‘on country’ learning (Fordham et al. 2010).

Effective ILC teaching practice needs to be built from the ground up with local and flexible interpretation of the ILC curriculum. It needs to incorporate a mixed mode of learning; namely didactic instruction combined with learning on country with elders (Bates et al. 2009). Classroom activities that are based on country visits create ‘active knowledge generation’ and encompass an empowering pedagogical approach (Cummins 1986, p. 27). However, ILC programs currently have only minimal pedagogical support for developing these strengths. When such support is available it is ‘bolted on’ rather than being integrated into development of the ILC program and into the reflexive practice necessary to progressively refine and improve the program.

4.5 Policy and funding for language and culture in schools

The research shows that ILC programs are extremely vulnerable to external drivers, particularly the instability created in schools by high staff turnover, uncertainty and delays with funding, minimal departmental support and a mismatch between education values and goals of the community and the school and education department. To date many recommendations relating to language and culture in NT schools have not been implemented (Wild & Anderson 2007). For example, the *Indigenous languages and culture in Northern Territory schools* report (NT DEET 2006b) recommended that the NT government formulate a policy to guide the development and delivery of Aboriginal language and culture initiatives and programs in all NT schools. The *Indigenous education strategy 2006* (NT DEET 2006a) included the incorporation of ILC programs as a priority. It concluded that a greater focus on Aboriginal languages and culture in NT schools will improve Aboriginal student outcomes by:

- increasing the level of engagement of Aboriginal people in schools
- promoting improved attendance through the provision of culturally relevant teaching programs
- improving awareness and promoting understandings between communities by providing Aboriginal languages and culture programs for non-Aboriginal students
- increasing the opportunities and pathways for Aboriginal employment in education
- increasing the self-esteem and confidence of Aboriginal learners.

(NT DEET 2006a)

Despite such recommendations there remains no requirement for remote schools in the Northern Territory to implement an ILC program. The current policy allows schools the option of including ILC programs in the curriculum. Although this provides a starting point, it does not give any clear policy signal about the value of ILC programs to education or allocations of the resources needed to run an effective ILC program.

Because of the importance of country visits in the delivery of ILC programs, remote schools in the NT can only make effective use of the Indigenous Language and Culture curriculum component if they have sufficient resources for country visits. Funding structures and allocations are ‘ignored completely’ in most analyses concerned with improving Aboriginal educational outcomes (Walsh & Lea 2008, p. 51). The funding for ILC programs is predominantly provided by Australian Government supplementary

funding sources (NT DEET 2006b). Funding for ILC programs is precarious, as indicated in this research at Ntaria School where there were long time gaps between the lodgement of ILC program proposals and their approval and receipt of funding. Lengthy delays in funding for remote Aboriginal VET programs, sometimes in excess of a year, have also been documented (Powers & Associates 2003). Funding delays in ILC programs lead to them having a 'stop' and 'start' nature. This contributes to Aboriginal teaching staff fatigue and directly impacts on Aboriginal teaching staff morale with flow-on impacts to relationships between Aboriginal and non-Aboriginal teaching staff, and with elders and other community members.

Monitoring of what is happening in terms of delivery of ILC programs is limited. Data that are available include the types of school (government, non-government, Catholic), language group and school name, program focus (literacy, language maintenance, culture, LOTE), and year level taught. Data also identify external support and funding. A recommendation of the *Indigenous language and culture in Northern Territory schools* report (NT DEET 2006b) was that additional data be collected and made available covering teaching methodologies; community involvement and control; assessment strategies; and parent, student and teacher perceptions of the programs. The lack of attention to monitoring and evaluation extends to a national level: the *Overcoming Indigenous Disadvantage 2009* report concludes that data to monitor its 'closing the gap' indicator about the extent to which Aboriginal and Torres Strait Islander content is incorporated into school education 'are very limited' (SCRGSP 2009, 6.2). This situation is a further indication that policy is not giving attention to recommendations for the incorporation of language and culture into school education. Education systems use data to guide policy and subsequent funding allocations. Education bureaucracies respond to what is most easily counted (Gray & Beresford 2008). So by not collecting data relating to ILC programs, the education system is in a vicious cycle where they only respond to the data that they do have. The consequence of not having data on ILC programs is that it prevents ILC as being valued and funded appropriately. In future, research is needed to identify ILC parameters against which data can then be collected.

4.6 Pathways to good ILC programs

Factors highlighted in this research as important for effective ILC programs and their inter-linkages are summarised in Figure 29. An effective ILC program requires a number of important inter-linking elements. At the local level, there are a number of prerequisites: community engagement with the local school, Aboriginal teaching staff and knowledgeable elders. Critically, Aboriginal teachers and assistant teachers are central to community engagement and effective education service delivery as well as to ILC programs themselves. However, Aboriginal teachers are ageing and near retirement age and are looking over their shoulder for the next generation of teachers coming through. At the school level, a supportive Principal responds to local priorities by actively tapping into available funding to pay elders and find resources for the program and country visits. Strong leadership also sets the school agenda for non-Aboriginal classroom teachers in terms of program planning, team work and timetabling. Curriculum is adapted to suit local needs, and appropriate pedagogic practices and contexts are used.

As demonstrated by the two case study sites, what is important to local people is maintaining language and culture in schools, not the cultural agenda of linguists and non-Aboriginal outsiders. Strong Western Arrarnta and Warlpiri educators and community members have spoken for themselves. Aboriginal people want their local school to be responsive to local priorities. This is not a trade-off between learning to read, write and speak good English, but a desire for education that is two-way and reflects local values and educational goals. This is no different from schools across Australia that respond to local community values.

Remote Aboriginal schools have very little autonomy when it comes to shaping school curriculum, school management and appropriate teaching methodologies and programs to meet community education goals. The vulnerability of ILC programs and the constraints imposed by external systemic drivers reflect the power imbalance and ideological struggles at the highest levels of the western education system.

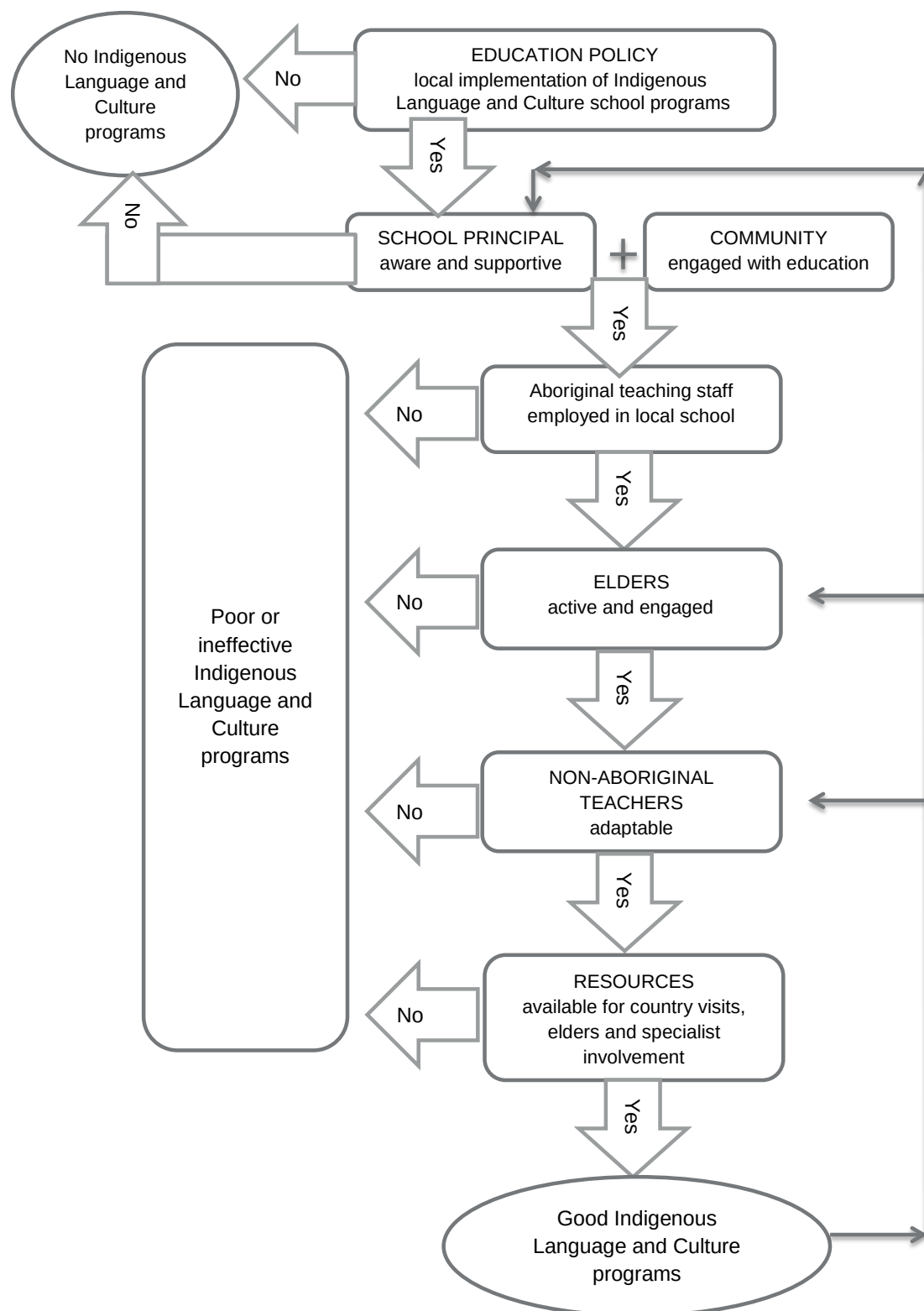


Figure 29: Interlinked factors that are important for good ILC programs

5. Conclusion

While formal education has a recent history in central Australia, Aboriginal people have readily come to accept schools as an important local institution and are clear about their goals, values and aspirations for education. Overwhelmingly, there is a strong desire for two-way education, where schools, as a place of learning for children, accord equal value and status to Aboriginal knowledge alongside Western knowledge. Connections to country, cultural knowledge and language maintenance are the issues Aboriginal adults seek to have transmitted in the schooling sector.

Remote schools, like schools across Australia, are crucial to supporting the wellbeing and development of confident students. In the remote context, imposed solutions do not create meaningful participation, engagement or personal investment in education. Instead, engagement with education for Aboriginal people in central Australia is connected to language–knowledge systems and is place based. It is widely demonstrated that parental and community involvement in schools has a positive influence on the educational outcomes and experiences of Aboriginal children in school. Such involvement is fostered by ILC programs. Furthermore, ILC programs provide the conditions that are conducive to supporting the social wellbeing of students from ‘not-strong’ families. ILC programs model and foster caring and supportive relationships between school staff and students and between community members and students in formal and informal learning environments. They facilitate and strengthen relationships, building trust between the community and school. Consequently, ILC programs foster a learning community approach where students, educators and community members work together in a shared pursuit of learning.

Although language and culture programs are central to community engagement and education aspirations, they are treated as additional to the ‘real’ programs happening in schools. The uncertain policy status of language and culture programs combined with high staff turnover and limited resourcing and system support result in ILC programs existing in a ‘start’ and ‘stop’ stochastic mode. As a result, ILC programs are extremely vulnerable to the interest or lack of interest of non-Aboriginal staff in schools. Compounding this vulnerability is high staff turnover which results in constant change and uncertainty, reducing staff morale and contributing to teacher fatigue. Limited system support and ambivalence at the policy level creates an unstable program environment.

Aboriginal people’s interest in language and culture is currently the main entry point for science education in remote schools. Beyond the ILC programs in remote schools, the delivery of science education is minimal. Engagement with science through ILC programs can facilitate a two-way exchange of knowledge, especially as both Aboriginal knowledge and Western science are increasingly required in managing country. While there is a narrative of loss surrounding language and culture, and despite demographic patterns and socio-economic factors impacting on intergenerational transmission, this research shows that children continue to share a large body of local knowledge. As Aboriginal people are major landowners in the NT, the current student cohort have future legal and custodial responsibility for looking after a significant areas of remote lands. Aboriginal educators and community members request a model of education that encompasses a cultural framework based on local knowledge or IEK. Such a model can assist with making the school culture more reflective of its student cohort. It also has important implications for maintaining the knowledge base and on-country experience necessary for future natural and cultural resource management work.

This research has found that ILC programs and associated country visits relate to core curriculum areas, enrich the academic program and are important methodologies for ESL students learning English literacy. ILC programs are personally, socially and culturally meaningful to adults and students and relate to local aspirations for education. ILC programs enable school-based education to be culturally and linguistically congruent with the goals Aboriginal parents have for their children’s education.

However, these goals do not align with institutional goals. Until these goals are brought closer together, there will continue to be a gap in what parents want from schools and what the education system is willing to support.

The potential exists for ILC programs to be the means by which different knowledge traditions and aspirations, Western and Aboriginal, can be brought together in powerful learning programs premised on principles of shared education goals and values. However, the willingness of schools to accommodate Aboriginal aspirations relating to education is highly variable and impacted by external influences such as high teacher turnover, policy ambivalence, delays in funding and structural constraints. Hence there are significant challenges to sustaining ILC programs and developing their potential.

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