

## Strengthening Identities and Involvement of Aboriginal Children through Learning on Country. <sup>1</sup>

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*Abstract: Djarlgarra Koolunger (Canning River kids) is a culturally centred outdoor learning project referred to as 'On Country Learning' or OCL. The project explores Aboriginal connectedness to the spiritual, social, cultural, environmental and geographic dimensions of particular outdoor spaces. This allows Indigenous and non- Indigenous students and their educators to connect at what Nakata (2007) terms the 'cultural interface'. OCL offers opportunities to transform the ways in which schools engage with Aboriginal perspectives whilst facilitating deep learning through what we describe as culturally responsive pedagogies. This paper stories the journey of Aboriginal students and their teachers, engaging in learning that is situated on Country. We examine the involvement of children when learning on Country and provide analysis using the Leuven Involvement Scales (1994). The analysis compares this group of children in a classroom context and an on Country context over a period of six months and provides preliminary evidence of the efficacy of this approach.*

**Keywords:** On Country Learning, Aboriginal education, early childhood, involvement, wellbeing, outdoor play and learning, Indigenous knowledges, cultural competence, professional standards, Indigenous methodology.

### Introduction and Background

On Country Learning is a unique pedagogical approach to Aboriginal<sup>2</sup> early years education that aims to address Aboriginal perspectives within Australian care and education. Originally inspired by European forest schools, where young children regularly learn in outdoor environments, the OCL project was developed to encourage Aboriginal children to deepen their cultural connections to the land and therefore to foster a robust sense of cultural identity and wellbeing. The intention of this project was to engage Aboriginal children with Nyungar knowledge and cultural immersion alongside the school curriculum to improve wellbeing. This intention recognises that a strong sense of wellbeing can be a protective factor against suicide, self-harm and poor mental health (Dudgeon, Walker, Scrine, Shepherd, Calma and Ring, 2014). The project was designed with input from a team of local Aboriginal people including Elders who were consulted at all stages of the project.

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<sup>2</sup> Throughout this paper the terms 'Aboriginal' and 'Indigenous' are used interchangeably and refer to those people who identify as Aboriginal and/or Torres Strait Islander. We, the authors recognise that Aboriginal and Torres Strait Islander peoples are not a homogenous group. The Term 'Indigenous' is used to reflect this diversity.

In this article, we share the story of *Djarlgarra Koolunger* (Canning River Kids), an early year's outdoor learning project that is centred in Nyungar culture. The research project reported in this paper was undertaken on Country at *Djarlgarra* (Canning River) with Aboriginal children from a nearby Primary School we will call Bonnybrook. A respected Nyungar Elder led the project with support from the researchers and an Indigenous project officer. Bonnybrook is an independent public school situated in the suburbs of Perth, Western Australia. The school is culturally diverse with one third of the students having English as an additional language. Over 30 nationalities create a multicultural blend within the school community and consequent opportunities for cross cultural understanding and culturally inclusive activities (Australian Curriculum, Assessment and Reporting Authority (ACARA), 2017).

This project builds on the *Walliabup Connections* Bush School pilot project reported elsewhere (Lee-Hammond & Jackson-Barrett, 2013). The *Djarlgarra* OCL project develops the model of OCL from the earlier iteration and presents baseline data regarding children's levels of *Involvement* as measured on the Leuven Involvement Scales (2009). The project involved weekly half day trips to *Djarlgarra* for Aboriginal children enrolled in year one (5 and 6 year olds). The project took place over two school terms (approximately six months). During the visits, children were engaged in a wide range of culturally oriented experiences led by the Elder with support from the researchers, classroom teachers, Aboriginal Islander Education Officer (AIEO) and the project officer. We commenced the project with Aboriginal students only and as they gained knowledge and experience, they invited their non-Aboriginal peers to attend. The Aboriginal students became experts about Country and culture and were able to demonstrate and share their acquired cultural knowledge and skills of the *Djarlgarra* space with their peers. We saw this as an important aspect of the project to strengthen Aboriginal children's identities.

## The Nyungar Context

To provide the context of this OCL so that the reader can envisage the space on which the project *Djarlgarra Koolunger* was centred and; as a matter of respect for the protocols of Country we acknowledge the *Whadjuk* Elders and Traditional owners of *Djarlgarra, kura, yeye, boorda* (past, present and future). In particular, Jackson-Barrett wishes to thank her mob (*Jackson, Newman*) for providing her with the heritage and knowledge of being able to use her nana's birth Country (the space on which she played and learnt as a *koolunger*) to pass on *Nyungar*<sup>3</sup> stories and ways of "being knowing and doing" (Martin, 2005, p. 27; 2008). *Djarlgarra* is a subsidiary river to *Derribal Yerrigan* (Swan River) and runs parallel to *kart moorda* (Darling Scarp), both flow through *Whadjuk Nyungar Boodjar*. *Nyungar boodjar* (Country) extends from north of Jurien Bay, inland to north of Moora and down to the southern coast between Bremer Bay and east of Esperance. *Whadjuk* are the people of the Swan River plains, whose country is now occupied by the greater metropolitan area of Perth (Green, 1984).

Prior to the colonisation of Australia that commenced in 1788, the whole *Djarlgarra* space was utilised in traditional ways, and it is a place where life began, where people sustained themselves, where they rested while they travelled and a place where *koolunger* played. In this place called *Djarlgarra* there is an ecological web and this is known as

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<sup>3</sup> *Nyungar Boodjar* – *Nyungar Country* is located in the south-west corridor of Western Australia and extends from south of Geraldton along the coast to Cape Leeuwin, continuing south to Esperance and then in line north-west to re-join the coast at Geraldton. An area of almost 3 000 000 hectares with 1600 kms of coastline and the home to 14 regional language groups (Green 1984 1).

Country and Country is a living entity. Everything came into being in the *Nyitting* (cold times) through the Dreamings of the *Wagyl* (Nyungar Rainbow Serpent). Everything is interconnected, and it is through this inter-connectedness that relationships are formed through the events of the Dreaming. These events are captured in the form of creation stories and *kura, yeye* (past and present) connect so that *boorda* (future) understandings will be safeguarded and the ways in which this place came into being through such stories as The *Wagyl* (Nyungar Rainbow Serpent) and *Karlamarta* (Firestick) are preserved.

*Djarlgarra* is a place where community education has always taken place and where the social and emotional wellbeing (SEWB) of people who are culturally connected to this *boodjar* (land) has been supported. The *bilya* (river) tells us about our communities, our values and ourselves. Importantly, it has and will always be a place of '*kutijin*' (learning or knowledge).

### Current Education Drivers in Australia

At the national level it is an Australian government priority to 'Close the Gap' in educational outcomes between Aboriginal and non-Aboriginal students in Australian schools (Council of Australian Governments (COAG), 2008; Australian Government, 2013). Fogarty and Schwab (2012) highlight that in "*Indigenous policy circles there is a desperate desire to lift the educational outcomes of Indigenous students*" (p. 7). Langton (2013) further argues that successful outcomes are needed regardless of locality and for *all* Aboriginal and Torres Strait Islander students, not just those living in remote areas. In the current context the recently developed Australian Curriculum (Australian Curriculum, Assessment and Reporting Authority (ACARA), 2017), teachers are required to broadly demonstrate knowledge of Aboriginal perspectives, cultures and histories in their programs and to meet associated Professional Standards (Australian Institute for Teaching and School Leadership (AITSL), 2016). The Australian Professional Standards for Teachers stipulate what knowledge and skills teachers should have in order to effectively teach Aboriginal and Torres Strait Islander students and to teach all students about Aboriginal and Torres Strait Islander languages, histories and cultures. The requirements are:

- Focus Area 1.4: Strategies for teaching Aboriginal and Torres Strait Islander Students.
  - Focus Area 2.4: Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous and non-Indigenous Australians.
- (AITSL, 2016)

This framework has been developed to enable teachers to become not only culturally 'aware' but culturally *responsive* in their professional roles, a measure that is perhaps long overdue. In Western Australia the Department of Education has developed an *Aboriginal Cultural Standards Framework* (Department of Education, 2015). The intention of these standards is to drive the direction of what are described as 'culturally responsive schools' (p. 4) in their endeavours to 'Close the Gap' in the educational achievement of Aboriginal students. The above standards identify important focus areas that have been absent in previous Aboriginal education initiatives. Whilst these are a major step in re-addressing Aboriginal perspectives, histories and knowledges there is no accountability measure to which these expectations can be measured against teachers' work. For instance, how does one measure respect? We argue that although the intent of these standards is worthy, without an implementation and accountability framework, they represent a poorly executed attempt to address an entrenched and widely recognised problem in education in Australia.

The significance of Professional Standards is underscored by an overabundance of reports that span half a century, all of which review and recommend changes in education for

Aboriginal students (Department of Education, Aboriginal Education Plan for WA public schools, 2011-2014; The Council of Australian Governments (COAG), 2008; the Ministerial Council for Education, Early Childhood and Youth Affairs (MCEECDYA), 2010-2014; Western Australian Aboriginal Education and Training Council (WAAETC), 2011-2015). A considerable amount of effort, research and funding has given rise to identifying the reasons for disparities in educational outcomes for Aboriginal children in Australia. This has sometimes been ascribed to an innate 'cultural deficit' (Cowlshaw, 2012) and at other times to sociocultural factors (Kerwin & Van Issum, 2012). However, as McKenney and Reeves (2012) suggest, developing solutions to practical problems in learning environments requires long-term collaboration involving researchers and practitioners. An alternative to the 'rhetoric of disadvantage' is proposed by Guenther, Bat and Osborne (2014) who argue that the measures of success in Australian schooling are hegemonic and value only the western knowledge paradigm and the discourses of privilege. Our national indicators of educational 'success' fail to consider alternative measures of success in Aboriginal education such as, for example, the ability to code-switch across two cultures and two (or more) languages. Langton (2013) also reminds us that there is diversity among the Aboriginal peoples of Australia and their needs and aspirations in education:

*there is no 'quick fix, one-size-fits-all' solution to this problem, which is exacerbated by a historical stand-off between the federal government and the state and territory education jurisdictions about whose responsibility it is to ensure that the education system provides appropriate education services to Indigenous students, with their widely different needs and aspirations (p. 11).*

We contest that culturally responsive Aboriginal education has not been earnestly developed in Australia. Successive decades of 'interventions' have not transformed the way Australian education systems think about education for Aboriginal children at a fundamental level. We argue that radically different approaches to Aboriginal education that might have some traction and support from Aboriginal communities have been isolated and guided by individuals with a passion for change. No systemic approaches have been genuinely trialled or even attempted.

'On Country' learning projects like 'Djarlgarra' have the potential to reimagine education for Indigenous students in line with cultural ways of 'knowing, being and doing' (Martin, 2005; 2008) and the aspirations of Aboriginal peoples. Furthermore, as we will explain, OCL projects have the capacity to positively redress, reframe and transform teacher knowledge and perspectives of Aboriginal Australia.

### **Social and Emotional Wellbeing of Aboriginal Children in Australia**

Evidence from the Australian Early Development Census (Commonwealth of Australia, 2015) indicates that there are significant developmental challenges for Aboriginal children living in Australia. At a national level the number of Indigenous children identified as being developmentally vulnerable on one or more domains is 42.1% which is just over twice the figure for non-Indigenous children, when examining developmental vulnerability on two or more domains the gap between Indigenous and non-Indigenous children increases to two and a half times (Commonwealth of Australia, 2015). If we accept the AEDC measures as both accurate and appropriate measures of Aboriginal children's development, then the current situation is very concerning. However, there are complex debates about the validity of developmental discourses in the literature (see, for example, Fler, 1995) that suggest this measure is not necessarily a useful lens through which to view the learning and growth of Aboriginal children in Australia. If we consider the many strengths and

competencies Aboriginal children possess that are *not* measured on the standardised developmental checklists, then we can begin to reframe the discourse of disadvantage and move towards a view of Aboriginal children as strong and competent.

In line with this reframing, an important distinction between the concepts of ‘social and emotional wellbeing’ used in Aboriginal and Torres Strait Islander settings and ‘mental health’ used in non-Indigenous settings is appropriate. The concept of ‘mental health’ comes from an illness or clinical perspective and its focus is on the individual and their level of functioning (Social Health Reference Group for the National Aboriginal and Torres Strait Islander Health Council, 2004) which we regard as western hegemonic thinking. The social and emotional wellbeing (SEWB) concept is broader than this and recognises ‘the importance of connection to land, culture, spirituality, ancestry, family and community, and how these affect the individual’ (Indigenous holistic thinking) (SHRG, 2004, p. 9).

Our approach therefore seeks to redefine and set new parameters for schools and other learning institutions as places that actively promote wellbeing from Indigenous perspectives. To do so, we broaden approaches to mainstream education in order to better meet the aspirations of Aboriginal peoples to be strong and healthy within a holistic definition of SEWB. We know, for example, that strengthening cultural identity at school is a significant contributor to resilience and wellbeing. As Dudgeon et al. (2014) note:

*The term ‘cultural resilience’ is now used to denote the role that culture and a strong cultural identity can play as a source of strength, identity, structure and continuity for whole communities in the face of ongoing change, stress and adversity, and as a protection against suicide (p. 16).*

Long-term wellbeing for Aboriginal Australians is the impetus for our work. We sought, in this project, to explore approaches to strengthen Aboriginal children’s wellbeing and involvement in learning in the formative years of early childhood.

### **Outdoor Learning as a Pedagogical ‘Innovation’**

Internationally there is substantial research and policy interest in the health and wellbeing outcomes associated with use of outdoor spaces for children (Sustainable Development Commission, 2008). Much of the literature centres around forest school programs that focus on the kindergarten/pre-school age with an emphasis on social and language development. In addition, there is a focus in these programs on the role of outdoor play in children’s health and wellbeing (Faber-Taylor & Kuo, 2009; Gruenewald, 2003; Lester & Maudsley, 2006; Muñoz, 2009; Warden, 2012; Williams-Seigfredsen, 2007). Forest school programs have derived from the Nordic approach to outdoor learning developed in the late 1950s which has traditionally used nature as a learning resource and not simply as a place for children to ‘let off steam’. The outdoors as a source of curriculum has become a fundamental principle of pedagogy in Denmark for example (Williams-Seigfredsen, 2007). Forest school programs are widespread and well known in Europe, China, North America, Australia, Canada, South Africa, United Arab Emirates, Russia and New Zealand and all are connected to play, physical movement and being in nature. The rationale for such programs is both about motivating the development of a sustainable ecological future and enhancing academic performance (Faber-Taylor & Kuo, 2009; Maynard and Waters, 2007; Nawaz and Blackwell, 2014).

The idea of using the outdoors in the form of forest schools and bush kindergartens has more recently become popular in Australia. The notion that playing outside is innately ‘good’ for children has been adopted enthusiastically. Concerns about childhood obesity and screen time are, no doubt, at least partly responsible for the shift in consciousness among

educators and families of the need for children to spend time outdoors. Organised outdoor programs are springing up in both rural and suburban schools perhaps partly in response to sentiments expressed in the popular text *Last Child in the Woods* (Louv, 2008). However, this uptake has largely neglected the notion of 'Country' as a space where children can experience the rich Indigenous heritage of the land upon which these experiences take place. Commonly, in colonised Australia, many have come to know and understand the 'bush' as a wilderness to be claimed, feared and cleared, notions that have been romanticised by much of popular Australian literature and film (Gammage, 2012, p.18). We have not seen the 'bush' as a classroom, however Country is so much more than just 'bush'. Each Country is imbued with stories, songlines and '*kartijin*' (knowledge) and it is these stories, songlines and knowledge that give rise to understanding ourselves, our worldview and our ways of being. The great outdoors that Australia has become renowned for has actually been utilised as a classroom for well over 40,000 years by the Elders of the respective Aboriginal Countries. Elders all across this vast terrain have utilised the environment to teach generations of Aboriginal children skills and competencies through play and tradition in the preparedness to survive, and for the continuance of cultural obligations, responsibilities and stories. Country is a space where children experience the freedom of exploration and where risk taking is encouraged. Regardless of regional variance of the landscape and location this method of teaching is what contemporary educators are now calling 'place based pedagogy' (Department of Education, Employment and Workplace Relations (DEEWR) 2009; Gruenewald & Smith, 2008). Therefore, the OCL project we describe in this paper extends the popular activity of outdoor learning/forest school to a deeper connection to the land. Children are involved in a learning environment that is strongly connected to their cultures, histories and identities. We argue that it is these connections that underpin their social and emotional wellbeing.

### **Culture and Learning: Implications for Aboriginal Children's Involvement**

Presently, schooling in Australia tends towards separating Aboriginal children's academic learning from their identity as Aboriginal children. The 'Western' curriculum operates in a way that fundamentally overlooks the Aboriginal child's identity. We are reminded of Malaguzzi's *Hundred Languages of Children* when he says:

*The school and the (school) culture  
separate the head from the body.*

*They tell the child:*

*to think without hands*

*to do without head*

*to listen and not to speak*

*to understand without joy*

*(Malaguzzi, 1987, translated by Lella Gandini)*

Malaguzzi describes the school as a place that 'steals' children's multiple expressive languages and tells them there is only one. This metaphor aptly applies to the Aboriginal education context in Australia as a result of the colonising of knowledges and languages. We seek to restore that which was stolen and give Aboriginal cultures a central position in curriculum.

From this perspective then, the OCL project acknowledges and recognises Aboriginal children's strong connections to Country as well as their families and communities, in order to consolidate the links between their identities and their academic learning in school. It also became evident that through the cultural stories that the Elder told, the non-Aboriginal students acquired a sense of connection as well as a new perspective of the Aboriginal significance of the area in which they live. In this sense, OCL applies the inverse of the current curriculum arrangements. Starting with the child and their culture and Country, we work alongside community Elders and school based educators to create learning environments that enable each child's strengths and all aspects of their being (culture, language, spirituality, kinship) to be made visible.

The centrality of culture and connection as some fundamental components of culturally responsive schools is signposted in the Department of Education Aboriginal Cultural Learning Framework (2015):

*“ collaborate [...] create opportunities to engage [...] build on the knowledge and skills and prior experiences that Aboriginal students bring with them to the classroom [...] ensure that learning is relevant, connected [...] use a range of learning opportunities [...] learning environments that respect cultures, languages, experiences and world views of their Aboriginal students [...]”*  
(2015, p.4).

Engaging students in this manner results in levels of involvement that we seek to observe and document in the OCL project. Attention to children's levels of involvement as an indicator of quality learning environments has been explored by Laevers (1994). Learning environments with high levels of child involvement are recognised as being of high quality internationally (Department of Education and Children's Services 2010; Laevers, 1994; Pascal and Bertram, 1995). In this discussion, involvement is defined as a quality of human activity that can be recognised by a child's concentration and persistence (Pascal and Bertram, 1995; Laevers, 1994).

Involvement using Laevers' scales is a measure of the quality of the learning environment evident by observing the 'strength' of the indicators above on a Likert-type scale ranging from one (least optimal) to six (most optimal). Involvement reflects the overall success of the environment in engaging children in sustained and focussed activity, attainment of new knowledge, skills and dispositions. It is clear that unless children are involved, the possibilities to learn are very limited. In a culturally responsive learning environment, we theorised that children's levels of *involvement* would be elevated and perhaps more robust than in a mainstream classroom environment. Hence our overarching research question is: *Does participating in OCL increase Aboriginal children's involvement in learning?*

## **On Country Learning Experiences with Aboriginal Children**

The approach of OCL is child-centred and holistic, emphasising hands-on learning to engage children in experiences that are not typically offered in a classroom. The children are active participants in the experiences, and are encouraged to explore and experiment in collaboration with their peers, teachers and Elders. Through this participation, the children adopt an active role in constructing meaning from their experiences.

The guiding principle of this work is that local Aboriginal cultural knowledge is the source of children's identity, belonging and wellbeing. We have seen in our own work how children's identity can be strengthened with resultant increases in confidence. This practice starts from children's Aboriginal identities and positions this as a strength rather than a point

of difference or deficit as they may have previously experienced it. The children learn to connect with their culture, language and history, through stories, songs, dances and using materials, being shown by their cultural teachers, the Elders that exemplify the continuous connection to the land, language and culture on which the project takes place.

## Project Overview

On Country Learning was developed to address the serious inequities relating to Aboriginal attendance and educational outcomes in Australia (Dreise, Milgate, Perrett & Meston, 2016; Krakouer, 2016). One of the well-known factors impacting on some Aboriginal students' academic achievement is low school attendance rates (Department of the Prime Minister and Cabinet, 2017). Efforts to improve attendance have tended to apply a rewards system with enticements like earning the right to attend an end of year school camp, weekly attendance gifts from a 'prize box' and similar rewards. Our unease with these approaches is that they promote extrinsic motivation for school attendance. We wanted to trial an approach that encouraged intrinsic motivation in children so that they wanted to come to school for the sake of learning, because they were engaged, involved and interested. In a pilot of the project reported elsewhere (Lee-Hammond and Jackson-Barrett, 2013) data were collected from school attendance records before, during and after the OCL project. We were able to ascertain that during the period we implemented this approach, some student's attendance increased up to 40% compared to previous school terms. We believe this demonstrates that a culturally responsive approach ignited children's desire to attend school and learn. In an interview about the pilot project, the school Principal explained that:

*"The project categorically increased our Indigenous attendance; ... it gave our students life skills and experiences, but most significantly, it provided students the opportunity to learn things that they may never have had the opportunity to be taught in a 'standard' classroom. As a direct result of the Project, our students wanted to be at school" (Interview with Principal, 2014).*

Hence, having established that OCL can improve school attendance, the project we report in this paper sought to capture outcomes for children in terms of their *involvement* in learning. The 'Djarlgarra Koolungar' OCL project had the following broad aims:

- Strengthened involvement and wellbeing of Aboriginal children participating in the project,
- Empowering children in their sense of cultural identity and security, and
- The development of a successful model that could improve educational outcomes for

During the course of the OCL we conducted weekly field trips with children and their teachers. Parents were invited to attend and on several occasions parents joined in at *Djarlgarra* either as participants or observers.

The curriculum offered during OCL is best described as emergent (Jones & Nimmo, 1994) whilst being centred around Nyungar cultural practices, language and values. Elders provided this knowledge. The initial experiences revolved around cultural artefacts that the Elder would bring and share with the children. The children gave feedback in terms of what they wanted to learn more about, and the project developed in this way over time.

Through the practice of critical pedagogy, the project team integrated learning outcomes from the Early Years Learning Framework (DEEWR, 2009) and the Australian Curriculum (ACARA, 2017) retrospectively. This was a deliberate strategy to explicitly connect Indigenous knowledges to the mandated curriculum in authentic, rather than tokenistic, ways.



As we have stated, the project's intent was to connect Indigenous children being on Country with their experiences in the regular classroom. We were conscious that the external perception of the project could be quite dismissive in terms of the rigour of the learning taking place, so we were committed to demonstrating the connection to mandated curriculum content by developing explicit connections between OCL and the Australian Curriculum. In the process of learning on Country we explored, for example, why it's important in our climate to be water-wise and what it means to live sustainably, we considered together how this was a matter of survival for the ancestors as much as it is for us today. In this way, the connections between being on Country and formal curriculum-based learning were made explicit and provided compelling justification of the project beyond it being 'a nice day out at the river'. By developing this approach we were able to work alongside classroom teachers who, through their own educational experiences and their teacher education, were underprepared in their knowledge of Aboriginal cultures and histories and how to embed these perspectives in their programs for Aboriginal and non-Aboriginal children. This is a dilemma many Australian teachers face and has been previously documented in the work of MaRhea, Anderson and Atkinson (2012). The OCL experience developed teachers' appreciation and understandings of how Aboriginal students' identities, culture and belonging to country provides the strongest foundation for learning. We will share some of the teacher's insights about this later in this paper.

## Methodology

Scientific method has traditionally required researchers to locate their work within a rigid methodological paradigm. In postcolonial Indigenous research, these western scientific notions of what constitutes methodology are challenged and redefined (Chilisa and Tshenko, 2014). Our study is conducted using Indigenous research methods which are unapologetically relational and are situated within an Indigenous epistemological and ontological framework. This relationality is a core epistemological tenet of the work and refers to dynamic relationships between self, others and nature (Kovach, 2010). If we were to characterise our work in western scientific terms, it would best be described as a mixed methods approach (Creswell and Clark, 2007). However, we draw primarily on interpretivist methods and analysis using participant observations, interviews, yarning in addition to externally validated observation scales. In addition, we use an iterative approach most commonly associated with Design based research (Reeves, 2006).

Indigenous research methodologies and practices are as varied as Aboriginal peoples, their community contexts and the 'Country/s' that ground them. The methodologies enacted in this project are applied with the purpose of engaging Indigenous knowledges and voices within the institution of education.

Indigenous methodological approaches lend themselves to 'situational responsiveness' (Patton, 2002) and given the depth of the cultural diversity among Aboriginal peoples, their communities and contexts, it is necessary and culturally appropriate to draw on a number of inquiry methods, while keeping in mind the Aboriginal protocols and school regulations that need to be negotiated throughout. Further, as we are working in localised spaces, we acknowledge that these are grounded in "the politics, circumstances and economies of a particular moment, a particular time and place, a particular set of problems, struggles and desires [...] and possibility/s" (Denzin, Lincoln & Smith, 2008, p. 9). By understanding and acknowledging the unique locality of each space on Country, we give voice to the project participants, all of whom are key cultural brokers in their respective roles within the school community. A central tenet when working alongside Aboriginal peoples is

the protocol 'to sit and listen' to the voices of all the stakeholders, who have something worthwhile and important to say about the spaces they occupy within Aboriginal education as well as participants in research.

Further, this research applies a pedagogy of emancipation (Freire, 1970) and empowerment that encourages a 'shared approach' as participants are considered to be co-researchers and this 'sharing' requires constant negotiation and renegotiation if the research is to be truly equitable and responsive to participants and experiences. This speaks to the relational aspects of Indigenous research.

Indigenous epistemological and axiological ways of conducting research are through established relationships. This cuts through the 'humbug' of unfamiliarity and allows us to [re] connect at the 'cultural interface' (Nakata, 2007) in this case, schools and classrooms. More importantly, it allowed us to [re] connect to the community. These established relationships fostered the goodwill that developed into the OCL projects. It was the hours of 'yarning'<sup>4</sup> that transformed the ideas for On Country Learning into reality. It is here that Indigenous research methods, through local epistemological ways of knowing and doing, are used to empower the community to work alongside the researchers thus decolonising research. This offers insights into specific approaches that work across borders that engage and privilege Indigenous voices, knowledge's and experiences within the academy that were previously prescribed by western institutions and the disciplines contained within them.

## Methods

Children were encouraged to share their reflections, thoughts and ideas informally throughout the project and these were recorded using field notes, photographs, video and artefacts of their creative responses. Children and parents were invited to yarn with the researchers about OCL and these yarns were recorded and transcribed. Their voices are significant in documenting the relationship between the child and the project.

At the conclusion of the project semi-structured interviews were also conducted with teachers and the Aboriginal Education Officer. Interviews were transcribed and thematically coded (Gibbs, 2007). A total of fourteen semi structured interviews or informal yarns (as appropriate) were conducted with classroom teachers, parents and children at the conclusion of the ten week project. Interview data underwent a process of content analysis to identify themes (Hsieh and Shannon, 2005).

## Involvement Scales

The data collected regarding six Aboriginal children's involvement was completed using the Leuven Involvement Scales (Laevers, 1994). The scales provide indicators of involvement in learning that are observable in different learning environments. The scales include categories with indicators for each of the following: *Concentration, Energy, Complexity and Creativity, Facial Expressions and Gestures, Persistence, Precision, Reaction Time, Verbal Utterances and Satisfaction*. The protocol for the scales is that the observations are undertaken in periods of five minutes duration and observed behaviours are recorded on a checklist immediately following the observation. It is not expected that all

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<sup>4</sup> Yarning is an methodological tool used in Aboriginal research. It is an informal conversation rather than a formal interview.

categories will be observed in a given observation, hence the repetition of the process at several intervals and in different situations. These observations were recorded with the same six children in this project during each of the ten OCL sessions and ten classroom sessions. To ensure reliability, ratings on the checklists were made by the project officer and one of the researchers. In this way, the highest level of agreement on each indicator was made possible (Hallgren, 2012). Discussion between the observers about a particular observation may be used to clarify the overall rating for that observation. This data was analysed using numerical rating scores associated with the scales. Learning environments are allocated an overall score out of five based on the frequency of scores that indicate high medium or low levels of child involvement in learning. These results are presented below.

## **Findings**

The major themes emerging from the interviews are:

- Social and emotional benefits of OCL
- Cultural knowledge and understanding as a result of participating in OCL
- Curriculum and pedagogy outcomes arising from OCL

## **Social and Emotional Benefits of OCL**

Teachers explained that before the project, some of the Aboriginal children were disengaged in the classroom, lacking confidence and involvement in the learning that was taking place. Following the project, the teachers described the same children as being excited about what they were learning and doing, and wanting to share their knowledge with their peers and teachers at school along with their families. Children's language and literacy levels were notably improved as they began to use spoken, written and visual modes to record and share their experiences. Nurturing children's cultural identity and wellbeing enabled participating children to have their identities valued and celebrated in their education.

Teacher Edith, explained that children's "confidence absolutely blossomed" and with regard to a particularly shy child she said "what do you say about Michael? I mean his confidence has gone through the roof but he relates back to that experience (OCL) all the time ...because he was engaged in it and it meant something for him so he's definitely moved forward - even his ability to communicate" (teacher interview).

This increased involvement at school was possible because of the support and collaboration of teachers who were willing to take risks, embrace the unknown and trust the process we invited them to be part of. Teachers exercised some humility in recognizing their own lack of knowledge and understanding of Nyungar culture. This was a significant finding of the project that we explain next.

## **Cultural knowledge and Understanding as a result of Participating in OCL**

Classroom teachers attended all OCL sessions with children, their participation enabled them to gain first-hand knowledge of local Nyungar culture in a way they had not experienced before. This enabled them to make culturally responsive connections between learning On-Country and the mandated curriculum back in the classroom. As one teacher explained:

*“I’ve worked with Aboriginal children pretty much my whole career but I’ve never brought it into the classroom as much, you know, the understanding because I didn’t know. I wasn’t going to teach it (culture) specifically – it would have just been very superficial, whereas through the Bush school (OCL) I am deeper in the history and everything [...] it’s definitely building my own understanding, absolutely” (teacher interview).*

Prior to this project the teachers involved admitted that they had little experience or knowledge of Aboriginal cultures and histories and they unwittingly held to a Eurocentric notion of curriculum, we acknowledge that it is very difficult for teachers to teach what they don’t know. The OCL project has created the space to assist teachers to disrupt the dominant discourse, develop their own understandings and appreciation of Nyungar culture and meet the professional standards required of them (AITSL, 2016). They are also better equipped to embed Aboriginal perspectives more authentically into their programs in ways that draw on Aboriginal children’s identities.

### **Curriculum and Pedagogy outcomes arising from OCL**

Historically, Aboriginal studies or perspectives in Australian schools have not held a place of significance in the curriculum, nor have they been particularly well taught (Purdie & Buckley, 2010). When Aboriginal students do not experience their own culture valued in schools, then they do not feel included in education. Education has and does remain for many Aboriginal students an alien environment. However, in this project students demonstrated not only their engagement with Country and its emerging curriculum they actually demonstrated a deeper more meaningful engagement that extended beyond the classroom. The children retained, recalled and shared their experiences on Country in a way that had not been observed before. An example of this is highlighted by the Aboriginal Education Officer discussing one child’s experience:

*“they’re retaining information a bit more and excited to share it with other people...they became teachers for each other and to their parents and things like that... Carl really loved it, he really found value in the lessons he was learning ...and he would go home and talk to his mum” (Aboriginal Education Officer)*

Likewise, a parent involved in the OCL project described her son’s detailed reflections on his visits on Country:

*“He could sit down and have, and I’m not lying, a good five minute conversation and tell me about everything that happened from the beginning to the end that happened that day. Every single thing, every little detail, every little activity that youse (sic) did. I ask him about school and he says “oh um oh we made a hat” like there’s no detail but when I asked him about it (OCL) he could recall everything it’s like it all sunk in. And I said that from day one, I’d say to everyone ‘yeah, it’s sinking in” (Parent).*

Comprehension, recall of information, enthusiastic attention to detail are features of this parent’s reflection on her son’s learning. There is a clear comparison between OCL and regular classroom learning and the level of engagement and enthusiasm in which the child reports the events in each learning environment. Laevers (1994) identifies these dispositions as indicators of deep involvement in learning.

## Involvement Outcomes

Using Laevers' Involvement Scales (1993) as described above, six participating Aboriginal children were observed at each session on Country and in the classroom setting on a different day of the same week for eight of the ten weeks of the project. A total of twenty observations (ten on Country and ten at school) was collected and recorded using the scales. The figure below represents an aggregation of the individual scores. The maximum score for the observations of a child in a given environment is six (optimal) and the lowest score for an environment is one (worst). A summary of the Involvement data is presented below in Figure 1.

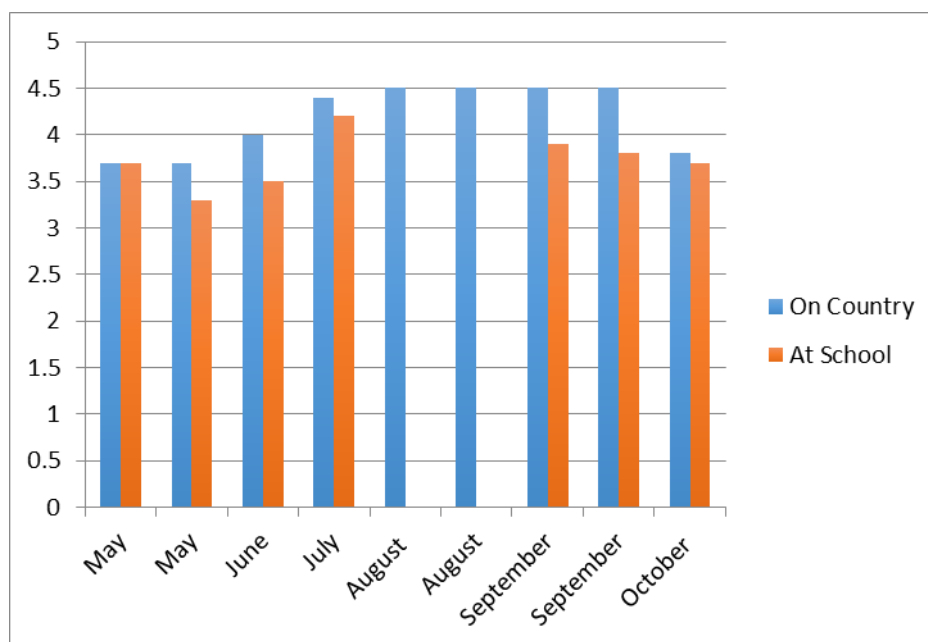


Figure 1. Results from Laevers' Wellbeing and Involvement Scales during the OCL project (Laevers, 1994, 2000).

Involvement scores recorded in the OCL environment are at least as good as the highest score in the classroom and more frequently, are considerably higher. An analysis of the graph shows the OCL score increases over time plateauing at 4.5 (with the exception of the final week where the score dropped, which we may attribute to children's knowledge that the project was ending and a reduced sense of involvement in the final session). The classroom scores indicate an emotionally supportive environment with good levels of learner involvement that fluctuated but also increased at times during the same period. The OCL scores indicate a very robust environment for enabling children to engage deeply with learning. We theorise that the increase over time indicates a type of 'flow' (Csikszentmihalyi 1996) that children were able to attain with familiarity of place and increased self-efficacy in this learning environment.

This data represents a significant outcome of the project. We have demonstrated that participation in OCL provides a direct and measurable benefit to Aboriginal children's levels of involvement in learning and that OCL provides a high quality environment for Aboriginal children.

## Discussion

The research reported in this paper offers insights into effective strategies communities can adopt to improve Aboriginal children's involvement, confidence and interest in learning. We have demonstrated that regular intervals of school time spent on Country with children, Elders and teachers working side-by-side is a model that has considerable merit in terms of children's learning involvement (Laevers, 1993), teacher competence and efficacy, as well as culturally responsive classroom programming. Although the study can lay claim to being situated in a particular context with one cohort of children and educators, we believe that the outcomes have merit for application in other contexts and that the methodology is sufficiently robust to be replicable in other Indigenous settings.

The stated priorities of successive Australian governments to 'close the gap' have not been met with corresponding innovation or substantial change in the outcomes of education for the majority of Aboriginal students (Australian Government, 2017). Our approach in this project was multifaceted and drew on Indigenous research methods to ensure that all stakeholders' voices were afforded equal value and were included in the design and conduct of the research.

In relation to teachers, we have demonstrated that educators need time and support from Aboriginal communities to better know and understand the Country on which they teach. Teachers need to be assisted to develop their own understandings and appreciation for the specific local Aboriginal culture, knowledge and stories that pertain to the land upon which the school is located. Generic cultural competence training provides superficial support for educators and has not resulted in improvements in teacher confidence with Aboriginal content in the curriculum (Ma Rhea et. al, 2012) and makes the attainment of professional standards in this regard highly unlikely and problematic. We contest, based on the findings of our research that educators need a cultural immersion experience in order to be able to meet Aboriginal children where they are, both academically and culturally. It is not good enough to staff schools with teachers who are functionally illiterate about the cultures to which Aboriginal children belong. If we, as a nation, are serious about a widespread and effective closing of the gap then we must be prepared to provide targeted, local, cultural immersion experiences for educators as a necessary part of their induction into a new school setting. If educators are unprepared to undertake an immersion experience, then we would argue that they are unfit to teach Aboriginal students and should be assigned a different role. For education providers such as governments and church organisations, such experiences would need to be met with concomitant payment to the respective communities and Elders. We have seen how such experiences transform pedagogies and we note that this is of benefit not only for Aboriginal children, but also for all Australian children who live and study on Aboriginal lands. We see this as a top fiscal priority in order to enrich both the teachers' understandings, and their capacity to develop culturally responsive pedagogies for Aboriginal students as well as their non-Aboriginal peers.

Children's involvement in learning is characterised by the following indicators: motivation, fascination, openness to stimuli, intensity of experience, deep satisfaction and a strong flow of energy (Laevers, 1993). It is clear in both parent and teacher accounts, as well as our own observation data, that children's experiences on Country have been characterised by these dispositions. When their learning motivation was ignited and connected to the classroom, children's involvement began to increase at school also. Our data on children's increased and sustained high levels of involvement during OCL sessions is a compelling case for rethinking the way curriculum is delivered in Australian schools.

## References

- Australian Curriculum, Assessment and Reporting Authority. (2017). Australian Curriculum. Retrieved from <http://www.acara.edu.au/default.asp>
- Australian Curriculum, Assessment and Reporting Authority. (2017). My School website. Retrieved from <http://www.myschool.edu.au>
- Australian Institute for Teaching and School Leadership. (2016). *Professional Teacher Standards*. Retrieved on 9<sup>th</sup> February, 2017 from <http://www.aitsl.edu.au/australian-professional-standards-for-teachers/standards/list>
- Australian Government. (2017). Closing the Gap: Prime Minister's Report 2017. *The Prime Minister's annual report to Parliament on progress in Closing the Gap*. Department of the Prime Minister and Cabinet. Retrieved on 1<sup>st</sup> February, 2017 <http://closingthegap.pmc.gov.au/>
- Australian Government: Australian Institute of Health and Welfare, Australian Institute of Family Studies. Closing the Gap (2013). *Clearing House Publications*. Retrieved from <http://www.aihw.gov.au/closingthegap/publications/>
- Chilisa, B., & Tsheko, G.N. (2014). Mixed methods in Indigenous research: Building relationships for sustainable intervention outcomes. *Journal of Mixed Methods Research*. 8 (3), 222 – 233 <https://doi.org/10.1177/1558689814527878>
- Commonwealth of Australia. (2011). *Closing the Gap - Prime Ministers Report 2011*, Retrieved from [http://www.fahcsia.gov.au/sites/default/files/documents/05\\_2012/2011\\_ctg\\_pm\\_report.pdf](http://www.fahcsia.gov.au/sites/default/files/documents/05_2012/2011_ctg_pm_report.pdf)
- Commonwealth of Australia. (2015). *Australian early development census: Community overview*. Retrieved 10th June, 2016 from <https://www.aedc.gov.au/data/data-explorer?id=61328>.
- Council of Australian Government. (2008). *Indigenous reform: Closing the gap*. Retrieved from <http://www.coag.gov.au/node/291#Indigenous%20Reform>
- Cowlshaw, G. (2012). Culture and the absurd: the means and meanings of Aboriginal identity in the time of cultural revivalism. *Journal of the Royal Anthropological Institute*, 18 (2) 397-417. <https://doi.org/10.1111/j.1467-9655.2012.01749.x>
- Csikszentmihalyi, M. (1996). *Flow and the psychology of discovery and invention*. New York: Harper Collins.
- Denzin, N.K., Lincoln, Y.S., & Smith, L T. (2008). *Handbook of Critical and Indigenous Methodologies*. SAGE Publications, Thousand Oaks, California. <https://doi.org/10.4135/9781483385686>
- Department of Education, Employment and Workplace Relations. (2009). *Belonging, Being and Becoming: The Early Years Learning Framework for Australia*. Canberra: Commonwealth of Australia. Retrieved from: [http://www.deewr.gov.au/Earlychildhood/Policy\\_Agenda/Quality/Documents/Final%20EYLF%20Framework%20Report%20-%20WEB](http://www.deewr.gov.au/Earlychildhood/Policy_Agenda/Quality/Documents/Final%20EYLF%20Framework%20Report%20-%20WEB).
- Department of Education, Employment and Workplace Relations. (2010). *Educators Being, Belonging and Becoming: Educators' Guide to the Early Years Learning Framework for Australia*. Retrieved from: [http://www.deewr.gov.au/Earlychildhood/Policy\\_Agenda/Quality/Documents/EYLF\\_Ed\\_Guide.pdf](http://www.deewr.gov.au/Earlychildhood/Policy_Agenda/Quality/Documents/EYLF_Ed_Guide.pdf).
- Department of Education Western Australia. (2011). Aboriginal Education. Retrieved from <http://www.det.wa.edu.au/aboriginaleducation/detcms/aboriginal-education/aboriginal-education/docs/aboriginal-education-plan-2011-2014.en?oid=com.arsdigita.cms.contenttypes.FileStorageItem-id-7148382>

- Department of Education, Western Australia. (2015). *Aboriginal Cultural Standards Framework*. Perth, The Government of Western Australia.
- Dreise, T., Milgate, G., Perrett, B., Meston, T. (2016). Indigenous school attendance : creating expectations that are really high and highly real. Australian Council for Educational Research (ACER). March 2016. (Policy insights ; n.4) 1 online resource (28p.).
- Dudgeon, P., Walker, R., Scrine, C, Shepherd, C., Calma, T, Ring. (2014). *Effective strategies to strengthen the mental health and wellbeing of Aboriginal and Torres Strait Islander people*. Issues Paper 12 pp. 1-72. Canberra: Closing the Gap Clearing House.
- Faber-Taylor, A. & Kuo, F. E. (2009). Children with attention deficits concentrate better after a walk in the park. *Journal of Attention Disorders* 12 402–9.  
<https://doi.org/10.1177/1087054708323000>
- Fleer, M. (1995). *DAPcentrism: Challenging Developmentally Appropriate Practice*. Australian Early Childhood Association, Inc., PO Box 105, Watson, Australian Capital Territory, 2602, Australia.
- Fogarty, W., Schwab, R. (2012). Indigenous education: Experiential learning and Learning through Country. Centre for Aboriginal Economic Policy Research, Research School of Social Sciences, College of Arts and Social Sciences. The Australian National University, Working Paper 80/2012
- Freire, P. (1970). *Pedagogy of the oppressed*. International Publishing Group. Maiden Lane Suite, New York.
- Gammage, B. (2012). *The Biggest Estate on Earth: How Aborigines Made Australia*. Allen and Unwin, Crows Nest, NSW.
- Gibbs, G.R. (2007). 4 Thematic coding and categorizing. *Analyzing Qualitative Data*. SAGE Publications, Ltd, London. <https://doi.org/10.4135/9781849208574.n4>
- Green, N. (1984). *Broken Spears – Aboriginal and Europeans in the southwest of Australia*. Focus Education Services, Cottesloe, Western Australia.
- Gruenewald, D., & Smith, G. (2008). *Play-Based Education in the global age*. Psychology Press, Hove, East Sussex, BN3, 2FA.
- Gruenewald, D. (2003). The Best of Both Worlds: A Critical Pedagogy of Place. *Educational Researcher*, Vol. 32, No. 4. (May, 2003), pp. 3-12. Retrieved 30.10.12  
<https://doi.org/10.3102/0013189X032004003>
- Stable URL: <http://links.jstor.org/sici?sici=0013-189X%28200305%2932%3A4%3C3%3AATBOBWA%3E2.0.CO%3B2-J>
- Guenther, J., Bat, M., & Osborne, S. (2014). Red dirt thinking on remote educational advantage. *Australian and International Journal of Rural Education*, 24(1), 51-67.
- Hallgren, KA. (2012). Computing Inter-Rater Reliability for Observational Data: An Overview and Tutorial. *Tutorials in quantitative methods for psychology*. 8(1), pp. 23-34. <https://doi.org/10.20982/tqmp.08.1.p023>
- Jones, E., & Nimmo, J. (1994). *Emergent curriculum*. National Association for the Education of Young Children: Washington, DC.
- Kerwin, D., & Van Issum, H. (2012). An Aboriginal perspective on education- policy and practice. In Jorgensen, R., Sullivan, P., & Grootenboer, P. (Eds). *Pedagogies to Enhance Learning for Indigenous Students*. (pp. 1-20) Springer Science+Business Media Singapore.
- Kickett-Tucker, C. (2008). *Koordoormitj Culture, Identity and Self-esteem*. ARACY Grid Access, August 2008. Retrieved 30.10.12  
[http://www.aracy.org.au/index.cfm?pageName=publications\\_library&theme=A16D8A05-1EC9-79F9-594530ECF1FF2620](http://www.aracy.org.au/index.cfm?pageName=publications_library&theme=A16D8A05-1EC9-79F9-594530ECF1FF2620).



- Kovach, M. (2010). Conversational method in Indigenous research. *First People Child and Family Review*, 5(1), 40-48.
- Krakouer, J. (2016). Aboriginal Early Childhood Education: why attendance and true engagement are equally important. Camberwell Vic: Australian Council for Educational Research. April 2016. Online resource (8p.).
- Laevers, F. (1993). Deep level learning: an exemplary application on the area of physical knowledge. *European Early Childhood Journal*. 1 (1), 53 - 68.  
<https://doi.org/10.1080/13502939385207351>
- Laevers, F. (1994). *The Leuven involvement scale for young children*. Manual and video, 44.
- Langton, M. (2013). *The right to the good life: Improving educational outcomes for Aboriginal and Torres Strait Islander children*. The Centre for Independent Studies Limited, St Leonards, NSW.
- Lee-Hammond, L., & Jackson-Barrett, E. (2013). Aboriginal children's participation and engagement in Bush School. In S. Knight (Ed.), *International Perspectives on Forest School: Natural Spaces to Play and Learn*, pp.131-145 London, England: Sage.  
<https://doi.org/10.4135/9781446288665.n10>
- Lester, S. & Maudsley M. (2006). *Play, naturally: a review of children's natural play*. London: The Children's Play Council.
- Louv, R. (2008). *Last Child in the Woods: Saving our children from Nature-Deficit disorder*. Algonquin Books of Chapel Hill, Chapel Hill, North Carolina.
- Malaguzzi, L. (1987). *The hundred languages of children*. (I cento linguaggi dei bambini. Exhibition catalogue), 16-21 (translated by Lella Gandini).
- Ma Rhea, Z., Anderson, P. J., & Atkinson, B. (2012). *National professional standards for teachers standards 1.4 and 2.4: improving teaching in Aboriginal and Torres Strait Islander education*. Melbourne, Australia: Monash University. Retrieved on 13.7.15 from [http://www.aitsl.edu.au/docs/default-source/default-document-library/monash\\_study\\_final\\_report\\_09092012](http://www.aitsl.edu.au/docs/default-source/default-document-library/monash_study_final_report_09092012)
- Martin, K. (2005). Childhood, lifeworld and relatedness: Aboriginal ways of being, knowing and doing. *Introductory Indigenous Studies in Education: The Importance of Knowing*. pp 27-40, Pearson Education, Frenchs Forest, NSW, Australia.
- Martin, K. (2008). Aboriginal worldview knowledge and relatedness: Re-conceptualising Aboriginal schooling as teaching-learning and research interface. *Journal of Australian Indigenous Issues*, 12, 66.
- Maynard, T., & Waters, J. (2007). Learning in the outdoor environment: a missed opportunity? *Early Years*, 27(3), 255-265.  
<https://doi.org/10.1080/09575140701594400>
- McKenney, S., & Reeves, T., (2012). *Conducting Educational Design Research*. Routledge, Abingdon, Oxon, OX14 4RN.
- Ministerial Council for Education, Early Childhood Development and Youth Affairs. (2010-2014). *Indigenous Education action Plan*. Retrieved from [http://www.mceecdya.edu.au/mceecdya/indigenous\\_ed\\_action\\_plan\\_2010-2014\\_consultation,29978.html](http://www.mceecdya.edu.au/mceecdya/indigenous_ed_action_plan_2010-2014_consultation,29978.html)
- Muñoz, S. A. (2009). *Children in the Outdoors*. London: Sustainable Development Research Centre.
- Nakata, M. (2007). The Cultural Interface. *The Australian Journal of Indigenous Education*, 36, Supplement, pp. 7-14. <https://doi.org/10.1017/S1326011100004646>
- Nawaz, H., & Blackwell, S. (2014). Perceptions about forest schools: Encouraging and promoting Archimedes Forest Schools. *Educational Research and Reviews*, 9(15), 498. <https://doi.org/10.5897/ERR2014.1711>

- Pascal, E., & Bertram, T. (1995). Involvement" and the Effective Early Learning Project: a collaborative venture. *An exploration of the concept of" involvement" as an indicator of the quality of Early Childhood Care and Education*. Dundee: CIDREE Report, 10, 25-38.
- Patton, M. (2002). *Qualitative Research & Evaluation Methods*. Sage Publications, Inc, Thousand Oaks, California.
- Power, K. (2004). Yarning: A responsive research methodology. *Journal of Australian Research in Early Childhood Education*, 11(1), 37-46.  
<http://arrow.monash.edu.au/hdl/1959.1/159762>
- Purdie, N. and Buckley, S. (2010). *School attendance and retention of Indigenous Australian students*. Canberra: Australian Institute of Health and Welfare. Retrieved from [https://research.acer.edu.au/indigenous\\_education/45](https://research.acer.edu.au/indigenous_education/45)
- Rahman, K. (2013). Belonging and learning to belong in school: the implications of the hidden curriculum for indigenous students. *Discourse: Studies in the Cultural Politics of Education*, 34 (5), 660-672. <https://doi.org/10.1080/01596306.2013.728362>
- Reeves, T.C. (2006). Design research from a technology perspective. In J. van den Akker, K. Gravemeijer, S. McKenney & N. Nieveen (Eds.), *Educational design research* (pp. 52-66). London: Routledge.
- Rigney, L.I. (1999). Internationalization of an Indigenous Anticolonial Cultural Critique of Research Methodologies: A Guide to Indigenist Research Methodology and Its Principles. *Wicazo Sa Review*, 14 (2), 109–121. <https://doi.org/10.2307/1409555>
- Sarra, C. (n.d.). *Stronger smarter: Getting closer: Facilitation Guide*. Retrieved from <http://deta.qld.gov.au/indigenous/pdfs/stronger-smarter-dvd-booklet-15092010.pdf>
- Social Health Reference Group. (2004). *Social and emotional well being framework: a national strategic framework for Aboriginal and Torres Strait Islander mental health and social and emotional well being 2004-2009*. Canberra: Australian Government
- Sustainable Development Commission. (2008). Health, Place and Nature: how outdoor environments influence health and well-being: a knowledge base.<http://www.sd-commission.org.uk/publications.php?id=712> Department of Education and Children's Services (2010) *Reflect, Respect, Relate*. Early Childhood Services: Adelaide, South Australia.
- Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard University Press: Cambridge, MA
- Waller, T. (2007). The trampoline tree and the swamp monster with 18 heads: outdoor play in the foundation stage and foundation phase. *Education 3-13*, 35 (4), 393-407.  
<https://doi.org/10.1080/03004270701602657>
- Warden, C. (2012). Nature kindergartens and Forest Schools. Mindstretchers Ltd, Glenruthven Mill, Abbey Road, Auchterarder, Perthshire, PH3 1DP, Scotland, United Kingdom.
- Western Australian Aboriginal Education and Training Council. *Western Australian Strategic Plan for Aboriginal Education and Training*. Retrieved from <http://www.aetcwa.org.au/Documents/Documents/WA%20Strategic%20Plan%202011-2015.pdf>
- Williams-Siegfredsen, J. (2007). Understanding the Danish Forest School Approach: Early Years Education in Practice. Routledge, Milton Park, Abingdon, Oxon.
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Black Point, Nova Scotia: Fernwood Publishing.
- Yunkaporta, T. (2009). *Aboriginal pedagogies at the cultural interface*. Professional Doctorate (Research) thesis, James Cook University.  
<http://eprints.jcu.edu.au/10974/2/01thesis.pdf>

Zubrick, S. R., Dudgeon, P., Gee, G. Glaskin, B. Kelly, K., Paradies, Y., Scrine, C. and, R. (2004). *Social determinants of Aboriginal and Torres Strait Islander social and emotional wellbeing* pp. 75-90. In N.Purdie, P.Dudgeon and R.Walker (Eds.) *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice*