
Research context

Due to urbanisation and increasing reliance on technology-based activities children’s engagement in active physical play is declining, particularly in contemporary Western contexts (Lester & Russell, 2010; Witten, Kearns, Carroll, Asiasiga, & Tava’e 2013). The global trend of decreasing rates of physical activity (PA) and increasing sedentary behaviour amongst children has become a public health priority. In parallel with the health impacts of reduced PA, concerns have been raised by environmentalists and environmental educators about the negative effects of disconnection from nature that arises from impoverished engagement with local outdoor environments (Louv, 2006; Soga & Gaston, 2016). There is consequently a need to consider a range of strategies to address both the decline in children’s PA and growing environmental disengagement.

The Ian Potter Children’s Wild Play Garden (IPCWPG) was established to ‘create a safe, unique space in Centennial Park for children to explore, learn and connect with the natural environment’. It seeks to

- create ‘nature smart’ kids by engaging children with the environment through ‘wild play’ experiences,
- build and strengthen an ‘outdoor, nature focused’ community for Sydney by providing a gathering space for families and friends of all physical abilities, all cultural and linguistic backgrounds, and to
enable 'nature-based' play by providing a unique opportunity for children across NSW and beyond to actively participate in freely 'wild play' and participate in formal environmental education programs in an outdoor setting.

In addition, through establishing the the IPCWPG and providing children with opportunities for nature play the Centennial Parklands Trust seeks to improve children’s well-being, problem solving skills, imagination, self-motivation and learning capacity.

Many such benefits have been identified in the literature (see Africa, Logan, Mitchell, et al., 2014; Chawla, 2015; Selhub & Logan, 2012; Truong, Gray, & Ward, 2016; Wilson, 2015). Truong, Singh, Reid, Gray, & Ward (in press) highlight improvements in children’s physical development, social interactions, and positive affective states as a result of outdoor activities in nature (Little, 2017; Little, Elliot, & Wyver, 2017). Children’s executive functioning (Schutte et al., 2017), ability to assess risks (Dowdell et al., 2011; Malone, 2013; Ward, 2018), and the development of pro-environmental attitudes and behaviours (Chawla & Cushing, 2007; Chawla, Keena, Pevec, & Stanley, 2014) have also been enhanced when children spend time in nature.

The benefits of play for child development have been highlighted in educational literature (Burdette & Whitaker, 2005). In playful learning, the environment and its possibilities are directed by the child in interaction with their peers and meaningful adults (Lloyd, Truong, & Gray, 2018). The space becomes one where children can explore their interest through playful engagement on tasks (Broadhead & Burt, 2012). “A natural environment can become a learning tool as the structures are flexible, according to the interests of individual children. Playful learning allows children to use their imaginations, and create and practice vocabulary in an informal setting” (Lloyd, Truong, & Gray, 2018, p. 51).

In order to assess whether the expected benefits are occurring for children and families who visit the IPCWPG the Centennial Parklands Trust has commissioned a team of researchers from the Centre for Educational Research to conduct an evaluation study to gather and assess the evidence in relation to its stated aims.

**Rationale**

This research will evaluate the extent to which the IPCWPG is meeting its stated aims, which comprise:

1. Provide an inclusive outdoor learning environment for all children including culturally and linguistically diverse (CALD) and disadvantaged children, enabling a ‘whole-of-life approach’ to education.
2. Break down barriers to nature play, enhancing the chance of each and every child fulfilling his or her own educational potential.
3. Make a positive contribution to improving child health and wellbeing and skills development
4. Make a positive contribution to overcoming ‘nature deprivation’ by re-engaging children, through play-based experiences to create increased environmental awareness, empathy and action.
5. Build and strengthen community provision of a community gathering space where families, friends and people of all physical abilities and from all cultural and linguistic backgrounds can meet, relax and enjoy being immersed in an inclusive and safe natural environment.

A multidimensional design has been developed for this project to enable evaluation of the IPCWPG aims listed above using evidence gathered from the key stakeholder groups identified which will be analysed in light of current research literature in the field.

Research objectives

In order to provide a comprehensive evaluation of the above stated aims of the IPCWPG the researchers will:

- investigate the ways that children and families from a range of cultural backgrounds engage with the IPCWPG and the benefits they derive from it
- examine the involvement of children from special needs and disadvantaged backgrounds with the IPCWPG and elucidate any particular challenges and benefits for these groups
- identify the ways specific features of the IPCWPG site encourage nature play and consider any associated developmental and/or learning outcomes
- explore whether and how nature play at IPCWPG may be associated with increased environmental appreciation, awareness and/or action
- investigate whether and how the IPCWPG provides an inclusive community gathering space.

References


Chawla, L., Keena, K., Pevec, I., & Stanley, E. (2014). Green schoolyards as havens from stress and resources for resilience in childhood and adolescence. *Health & Place, 28*(0), 1-13. doi: [http://dx.doi.org/10.1016/j.healthplace.2014.03.001](http://dx.doi.org/10.1016/j.healthplace.2014.03.001)


Truong, S., Gray, T., & Ward, K. (2016). ‘Sowing and growing’ life skills through garden-based learning to re-engage disengaged youth. LEARNING Landscapes, 10(1), 361–386.


**Research Team**

**Dr Brenda Dobia** holds a Masters degree in psychology from the University of Melbourne and a PhD in Cultural Studies from Western Sydney University. She is a senior lecturer in the School of Education at Western Sydney University and a core member of its concentration in Social Ecology, where she specialises in education for sustainability, community engagement and participatory research methods. She has received several teaching awards for her work in sustainability education. Dr Dobia is an active researcher and doctoral supervisor with particular interests in sustainability, cross-cultural and mixed-method research with an applied focus. She is currently collaborating with UNESCO on the development of assessment methods for linking social-emotional learning to the sustainable development goals. Dr Dobia will provide overall coordination for this project, including research design, ethics approvals, data analysis and report writing. She will also have specific responsibility for survey development, implementation and analysis, for design and analysis of the family video narratives and she will supervise research assistants.

**Dr Kumara Ward** is the Director of Academic Program: Early Childhood, at Western Sydney University in the School of Education. She is also a member of the Centre for Educational Research – Sustainability Strand. Kumara’s research focuses on the symbiosis between the arts and sustainability learning and ways in which this promotes interaction, multifaceted ways of knowing our complex world, and well-being. She promotes engagement in nature, and expression of it, through the arts to help students to develop econnection, a complex state encompassing the affective domain, physiological and sensory connection with nature, ecopsychological dispositions and sense of place. Kumara is a qualified nature pedagogue and the author of a pedagogical tool for early childhood educators: Inquiry Arts Pedagogies and Experiential Nature Education. Kumara’s main role in this project will be the design and implementation of survey tools used with the early childhood groups, photo-voice data collection and focus groups.

**Dr Son Truong**, CTRS is a Senior Lecturer in Health and Physical Education, and a member of the Sustainability Research Strand in the Centre for Educational Research, at Western Sydney University. He is a Certified Therapeutic Recreation Specialist, and has extensive experience working with young people in diverse educational settings in both majority and minority world contexts. Son specialises in the areas of children’s play, wellbeing, and environments, and has expertise in community-based, action-oriented, and child-friendly methodologies. He has been recognised as an innovative educator with university and national awards, and has received a number of competitive research grants. Recent projects include examining children’s active outdoor play in Western Sydney primary schools, community-informed designs for a child-friendly play space, and the impact of the Royal Botanic Garden’s *Community Greening* program. Dr Truong will collaborate with the research team on all aspects of the development and implementation of this study, and oversee the systematic observations and qualitative semi-structured interviews with key stakeholders.