The role of nature-based experiences in the development and maintenance of wellness.
The 6 Dimensions of wellness

The Six Dimensions of Wellness

- Occupational
- Emotional
- Physical
- Spiritual
- Social
- Intellectual
Wellness as part of health
Why the wellness approach

- Central to redefining the National Health agenda
- Wellness development identified as essential for the health of Australian citizens
  - (The National Health and Hospitals Reform Commission, 2009).
- The Commission (2009) concluded that the health system in Australia is “a system out of balance” which is biased towards illness at the expense of wellness and that this negatively influenced the everyday health choices of Australians.
The wellness approach works

- Upstream management of health now seen as paramount by governments
- Benefits for satisfaction and absenteeism
- There are economic benefits of a wellness approach
  - Baicker et al. (2010) meta analysis – for every dollar spent on a wellness program $3.27 were saved on medical costs and 2.73 on absenteeism.
The natural world does play an important part in the development of wellness (Brymer and others, 2009, 2010; Maller et al., 2008; Mass and others, 2009, 2006; strife and Downey, 2009; Townsend and Moore, 2005).

Psychologists, philosophers, public health, horticulture, outdoor education, ecotherapy ...

Fundamental level: Water, Air, Food

Beyond this .... Also vital for wellness

- Views,
- Opportunities for interaction with/ in nature (extended and brief)
- Opportunities for experiences of connection with nature
What do we know?

Viewing nature

- Russell and Mehrabian (1976) - viewing natural scenes increased pleasurable emotional states and thereby reduced the desire to engage in unhealthy behaviours such as smoking and drinking.
- Ulrich (1984) - hospital patients who could see a natural scene through their hospital window (as opposed to a brick wall) were discharged more quickly, needed less painkilling drugs and were generally deemed to be more cooperative by staff.
- A 1995 study by Tennessen and Crimpich of students taking an exam found that there was a higher cognitive performance for students who could view a natural scene out of the window as opposed to a entirely ‘human-constructed’ scene.
What do we know?

**Interacting with/in Nature**

- Kuo and Sullivan (2001) found that *levels of aggression and violence were significantly lower* among individuals who had some nearby nature outside their apartments than among their counterparts who lived in barren conditions, and that residents living in greener settings demonstrated reliably *better performance on measures of attentional functioning*.

- A 2009 study by Kaplan et al showed that walking in the park at any time of the year has benefits for both *attention and memory*: after spending an hour in nature both increased by 20 per cent.

- A 2007 research project carried out by the University of Essex showed that a walk in the country could *counteract depression and increase self esteem*.

- A 2008 study reported in *The Lancet* concluded that ‘populations exposed to greener environments also enjoy lower levels of income-related health inequality’, specifically ‘circulatory diseases’.
What do we know?

- Community gardens reduced personal and neighbourhood problems (Lewis, 1996) and enhanced self esteem in immigrant and refugee communities (Harris, 2009)
- Pet ownership is associated with decreased blood pressure, cholesterol & triglycerides (Anderson et al., 1992) & with better mental health & well being (Rowan & Beck, 1994, Straede & Gates, 1993)
- Green spaces promoted physical activity and neighbourhood satisfaction (Bjorck et al., 2008; Booth et al., 2000; Pretty et al., 2003)
- Green spaces promote social interaction in older people (Takano et al., 2002)
- Green exercise can reduce anxiety and the greener the space the greater the reductions (MacKay and Neil, 2009, Brymer et al., 2010)
What do we know?

Experiences that induce feelings of connection with Nature

- **Increases vitality and intrinsic motivation** beyond social interaction and physical activity (Ryan et al., 2010)
- Instigates **positive transformations** and feelings of non-duality and coming home (Brymer and others 2005, 2009, 2010)
- **Enhances self-concepts** (Schreyer et al., 1990)
- Connection with nature as a child is **important for the promotion of wellness** an adult (Frantz and Meyer, 2009)
What do we know?

- Instigates various optimal experiences such as **peak experiences, flow** (Davis, various)
- **Increase happiness and wellbeing** associated with increased relatedness to nature (Nisbett, 2011)
- **Increase a sense of belongingness, meaning and freedom** (Brymer et al., 2010; Surridge et al., 2004)

- Also enhances reciprocal experiences
Connectedness to nature and wellness

- A series of studies from 2009 exploring the relationship between wellness and feelings on connectedness to nature.
- All highly positively correlated
- The higher the feeling of connectedness the higher the experience of wellness.
- Major relationships – psychological, spiritual, mental/emotional, physical
- This is true even when considering age and gender ....
What can we draw from this?

Exposure to nature benefits health

- Relieves negative aspects and enhances the positive
- Viewing, experiencing, feeling connected to nature all play a part in the development and maintenance of wellness
What might explain these results?

- In the natural world we have a sense of being away from the day to day stresses and strains of life (Attention restoration).
- Being in nature helps us to put matters in perspective (reflective mirror)
- The natural world stimulates and pleases our senses.
- Being in nature usually makes people feel that they are in a supportive and harmonious environment (nature as nurture)
- Being in nature increases energy (Vitality)
What might explain these results?

- Biological, genetic and psychological
- A human biological need to experience being connected to a larger ecology (Biophilia, Epigenetics)
- An opportunity for selfless caring (nurture)
- An opportunity to experientially realise that we are part of nature (Ecopsychology, Depth psychology, nature relatedness)
- Peak and other Transpersonal experiences (Non-duality)
- Identity (wisdom traditions)
Children and young people – a special case?

- Current research has indicated that young people are disconnected from the natural world and therefore unable to be fully functionally well
  - Increased levels of depression
  - Increased number of cognitive disabilities
  - Obesity, Diabetes, CV conditions
  - Sleep apnoea, respiratory problems
  - Learning difficulties, hyperactive disorders
Children and young people – a special case?

- Why is this so?
  - Increase “screen time”?
  - Safety concerns?
  - Education?
  - Urbanisation?

- Direct contact with nature
  - positively impacts motor skills development, attention, moral development, cognitive development, affective development and academic performance
  - reduces symptoms of ADHD, anxiety, disruption and can increase academic performance

(see: Beyond Blue to Green, 2010; Fjortoft, 2001; Grahn et al., 1997; Wells, 2000; Faber and others)
Humans need opportunities to access nature and experience a connection with nature

- restoration & mental/ physical health
- to promote social connection
- get their hands dirty and feel part of the natural world
- to promote healthy development
Implications: What do we need to do?

- Provide for passive as well as active recreation
- Provide restorative, relaxing environments
- Move towards a new metaphor of Nature ... as not “in need of control” or just a resource or recreation facility ... and encourage ‘engagement’ and connection with the natural world and the feeling of being part of nature
- Green spaces should be considered important for health promotion ... a health “resource” (e.g. hospital gardens, Victoria botanical gardens)
- Encouraging eco-related learning in schools
- Consider how best to use the green spaces we currently have (e.g. Spaces for swings or spaces for interaction?)
- Reflect on how best to facilitate extended wilderness trips, city parks (urban/ near urban), built environments, gardens (e.g. Healthy Parks, Healthy People)
How can we do this?

- Make sure green spaces are accessible and “safe” (distance, locally determined and so forth)
- Pay attention to design to enhance optimal viewing, interaction and experiences of connection
- Provide for range of experiences ...
- Community opportunities (e.g. farms, gardening, wellness and mindfulness)
- Nature experiences by prescription (e.g. US federal funded program)
Over to you?
Questions we still need to explore

- How exactly does nature support human wellness?
  - What are the important aspects of nature?
  - What aspects of nature best suit different issues?
- How do we use the knowledge that we currently have to encourage health/wellness promotion?
- How can we best use this knowledge to encourage groups who do not use green spaces to do so?
  - How could experiences such as ‘wilderness adventure programs’ or ecotourism be made more accessible?
  - What is the economic value of the benefits of such programs?
Be Well