

CHAPTERS 5 AND 6 – INTRODUCTION DISPARATE TRANSFORMATIVE JOURNEYS

'A journey of a thousand miles begins with a single first step'
Laozi (604BC - 531BC)

Two narratives: Weaving strands together

While a narrative is often described in chronological terms, to merely document a sequence of events does not often convey the richness of lived transformative journeys in action research. Here I convey the disparate lived transformative journeys of Banksia Childcare Centre and Acacia Kindergarten research co-participants. As I visualise it, each lived transformative journey can be described as a unique interweaving of strands. I begin the narratives with a description of the organisational, physical and sociocultural context of each centre. Then, I weave together strands of the transformative process including changing perceptions about sustainability, education for sustainability and the physical outdoor playspace and instigation of an action priority in the outdoor playspace. Both text and images are instrumental to this interweaving and describe two qualitatively very different journeys. I also weave through the narratives first person self-inquiry about my personal transformative journey within the action research process.

As a preface to the narratives a brief report on the demographics of the local government area where both centres were located is pertinent. The local government area was geographically divided into four northern and four southern precincts, but the differences extended beyond geography. Acacia Kindergarten was located in the northern precincts and Banksia Childcare Centre in the southern precincts, but only eight kilometres apart. According to the local government household survey conducted in 2007 (X City Council, 2007) the northern and southern precincts differed markedly on a range of parameters including median wage, food security and disability levels. In general terms the northern precincts were lower socio-economic areas and the southern precincts higher. Cultural diversity, as measured in terms of country of origin and predominant language spoken at home, was much greater in the northern precincts and this was borne out by direct observation at both centres.

The local government household survey (X City Council, 2007) also included a number of environmental parameters. While some parameters such as use of energy efficient light globes and water tanks demonstrated minimal differences across precincts, the use of compost bins or worm farms was highest in the Banksia Childcare Centre precinct and second lowest in the Acacia Kindergarten precinct. As early childhood centres predominantly draw their clientele from local families, the northern and southern demographic differences cited here seem somewhat reflected in the narratives of each centre.

Beyond the Council demographics garnered from text, the initial visits to Banksia Childcare Centre and Acacia Kindergarten prompted a reflection about tangible observed differences. While as an early childhood professional I knew these differences well; it was the repeated visits over time that reaffirmed their reality. Quantifiable staff number differences were anticipated (11 at Banksia Childcare Centre and 3 at Acacia Kindergarten) reflecting the operational hours and total numbers and ages of children. Beyond this there was a constant air of busyness and sometimes calamity at the childcare centre, while the kindergarten was a comparatively quiet, calm and structured setting. Also, physically the childcare centre was a newer building and play materials were diverse, while the kindergarten appeared older with somewhat more traditional play materials such as puzzles, construction sets and dolls. A significant factor effecting ongoing communication during the study was that the kindergarten had no computer for e-mail access. Plus, any photocopying of documents involved a walk to the nearby primary school. These infrastructure challenges were somewhat unusual for a centre today. The extent that some of these observed differences were a reflection of the physical or socio-cultural context was difficult to judge initially.

In the following pages of Chapter 5, I describe the transformative journey of Banksia Childcare Centre and in Chapter 6, I describe the not yet fully transformative journey of Acacia Kindergarten. The disparate journeys created a richness of data that informed theorising in Chapter 7 about the interfaces between outdoor playspaces, sustainability and education for sustainability.

CHAPTER 5 – BANKSIA CHILDCARE CENTRE

The centre metaphor, *Banksia*, is a genus of indigenous Australian bushes and trees (Costermans, 1983; Holliday & Watton, 1975). They are typically long-lived and robust, often surviving well in sandy, nutrient poor soil along coastal areas. The showy flower cones of *Banksias* attract and support a diversity of nectar eating wildlife from insects to possums and birds. Post-flowering, the tree species in particular exhibit woody cones with large embedded seeds that are persistent in the environment. Like many Australian plants bushfire is a key factor in stimulating *Banksia* seed release and germination. The sclerophyllous *Banksia* leaves are well adapted to the dry Australian climate and similarly, they persist in leaf litter. *Banksia* was deliberately chosen as the pseudonym for this childcare centre; I believe this centre reflects many of the characteristics of *Banksias* and I invite the reader to seek these characteristics in the following narrative of the centre's transformative journey.

Overview of organisational, socio-cultural, physical contexts

Banksia Childcare Centre was a fifty-place community-based long day childcare centre located on a main street in a Melbourne inner urban residential area. The centre was owned by local government, but managed by an elected parent committee of management with centre staff representation. The local government had a significant role in terms of approving funding and undertaking any infrastructure changes at the centre and also, with undertaking general maintenance such as regularly supplying tanbark soft-fall for the outdoor playspace. The Committee of Management had a major role working with the centre co-ordinator to support operational aspects, develop policy, employ staff and manage the centre finances including fund-raising. In addition to the centre co-ordinator and assistant co-ordinator, nine staff were employed at the centre in various capacities across four children's groups, namely: babies, toddlers, 2-3 year olds and 3-5 year olds. The latter group where three staff (one degree qualified room leader and two certificate qualified) worked with fifty children over each week was the focus for this study. Most children only attended the group part-time and the 3-5 year room was registered to accommodate twenty-three children. The centre was open from 7.30am until 6pm each day.

The outdoor playspace for the children aged 3-5 years was the largest outdoor area at the centre and at 520 square metres; it was over three times the area required by regulations (Victorian DEECD, 2009b, Regulation 97). Also, it had been earmarked by the committee of management in the year prior to this study for renovation and upgrade. Therefore, the notion of engaging in this study appeared timely, so the committee of management, co-ordinator and assistant co-ordinator readily offered their support during the initial reconnaissance phase of the research. Although the co-ordinator was the first point of contact with the centre, she referred me to the assistant co-ordinator who had a leading role in centre projects and was keen to facilitate change in the

outdoor playspace. As the study unfolded the co-ordinator was on sick leave for many weeks, so the assistant co-ordinator not only took on her role in the interim, but also facilitated the research study from the centre's perspective. She played a major organisational and leadership role as well as being an inspirational force and thus, I refer to her as 'Bush Betty' throughout this thesis to encapsulate her commitment and significant role.

On my initial visit to the centre the impacts of extended drought in southern Australia were evident in the outdoor playspace. For example, the vegetable patch was no longer used, artificial green matting had been installed where real grass once grew and a number of non-native trees and shrubs were dying. In conversation Bush Betty highlighted these concerns and expressed her particular interests in obtaining a grant for a water tank and renovating the area around the sandpit. Figures 6 and 7 illustrated below offer a plan of the outdoor playspace and a collage of photographs visually affirming the areas of concern and the physical context.

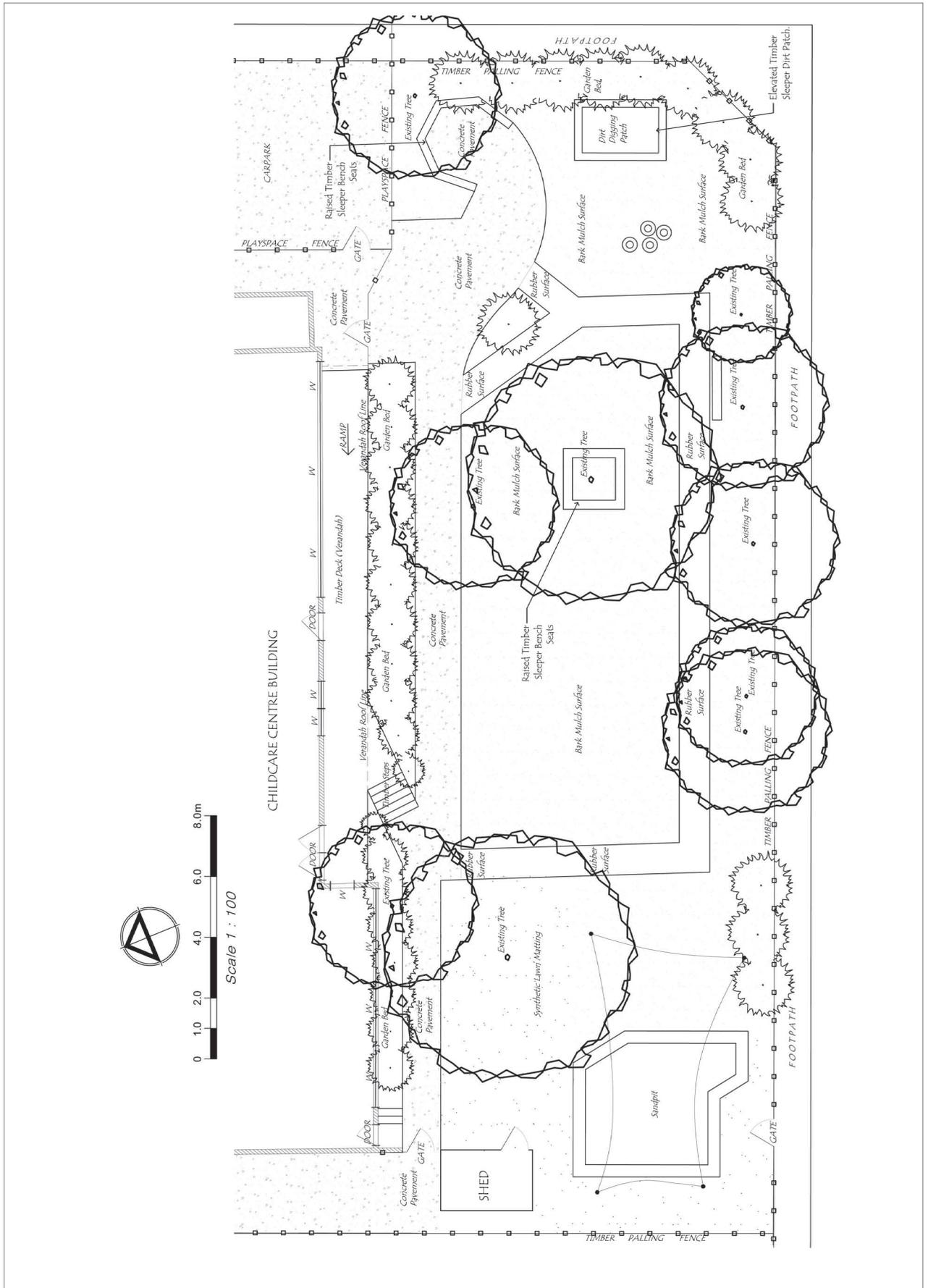


Figure 6 – Plan of outdoor playspace at Banksia Childcare Centre



Figure 7a – Rubberised bicycle track around play-space highlighting mature shade trees



Figure 7b – Non-native European-style garden bed along entrance pathway and ramp



Figure 7c – Open play area around disused vegetable garden



Figure 7d – View of playspace from centre entry point

Figure 7 – Initial photograph collage Banksia Childcare Centre

The centre handbook ('Banksia' Policy Handbook, 2006) was a comprehensive document of forty-six pages that outlined the centre's philosophy and policies as is common in Australian early childhood services. The philosophy statement espoused the importance of collaborative learning programs, partnerships with parents, social justice and the uniqueness of each child and family ('Banksia' Policy Handbook, 2006, p. 4). In relation to the educational program active outdoor play was specifically noted as one of the ways that children's developmental needs were met ('Banksia' Policy Handbook, 2006, p. 7). Also, the centre policies around Safe, Clean and Healthy Environments included mention of minimising the use of chemicals, plus the use of recycled products and recycling programs where possible ('Banksia' Policy Handbook, 2006, p. 39).

Overall, Banksia Childcare Centre presented as a typical Australian community managed childcare centre with a commitment to providing high quality care and education for young children. Partnerships with parents and a play-based program focussed on children's interests, learning styles and developmental needs were paramount.

Researcher's first reflections: Immersing oneself

The initial centre visits during the reconnaissance and planning phases of the first action research cycle were a process of immersion, becoming familiar with the socio-cultural and physical context, whilst establishing collaborative relationships (Refer Chapter 4, p. 47). A number of instances occurred that informed my emerging role as a researcher and active participant observer:

- As I had anticipated, some staff were aware of publications I had written about sustainability and outdoor play spaces and one stated enthusiastically, *I am so excited you are coming here, I've read your books and love them* (JB 30-03-08, p. 14). The notion of immigrant expert was alive and well, so it was essential that I clearly stated my collaborative research role. This was done through an introductory photograph and statement placed on the staff notice board, attendance at a staff meeting and discussion with the co-ordinator and Bush Betty. The plain language statements that accompanied the consent forms distributed to staff (Refer Appendix 24) then further reinforced my role.
- Professionally I have been involved with many centres over a number of years in an advisory or training role or as a university student supervisor and I tend to default to viewing centres through an evaluative lens. During my visits, on several occasions I made genuinely positive comments from an appreciative inquiry stance about outdoor play experiences, but *felt a tension about saying positive things to make the staff feel comfortable in my presence*. I questioned, *if I make positive statements am I seen to be judging them?* (RJ 07-04-08, p. 21). Or, could comments simply be passed off as social etiquette to be complimentary when a visitor in a centre? It was at this point that I fully recognised my new and different role as a researcher not an evaluator.
- Somewhat linked with the above point, how one feels as a visitor can be readily conveyed through one's body language. I was very much aware of how I appeared when the 3-5 year old group room leader was speaking to an introductory parent group meeting that I attended. She explained the program and answered parent questions and I aimed to appear engaged and positive by smiling and nodding; it would have been most inappropriate to sit back with arms folded and a frown (JB 07-04-08, p. 20). This was the beginning of a relationship with the room leader and it was important to ensure it was positive at all levels.
- The term 'active participant observer' (Refer Chapter 4) clearly conveys a sense of being active, but it is also about being proactive in the research context, seeing opportunities to create data and build relationships. This was the approach I took when participating in the parent meeting and staff meeting noted in the paragraphs above. As I reflected it seemed to be an opportunity to *become visible in the centre and face to face contact is important to establish relationships and credibility in the setting* (RJ 02-04-08, p. 19). The meetings occurred after the letters of invitation (Refer Appendix 23) to participate had been sent; so, it was also an opportunity to answer questions and garner support for the study.

With these reflections in mind about who I was as a researcher, I engaged in the act phase of the first action research cycle by implementing interviews and synergetic focus groups with staff and parents.

Initial participants' perceptions

The following paragraphs narrate initial perceptions about sustainability, education for sustainability and the outdoor playspace as explored by four staff and four parent interviewees.

- **Sustainability**

Sustainability is a much-debated term with multiple meanings and the staff and parents interviewed reflected this in the perceptions they offered. They focussed on being *resource wise* (XS3 22-04-08, p. 1), *caring for the environment* (XS3 22-04-08, p. 1), *maintaining something* (XP7 24-04-08, p. 1) or being *cost effective and efficient* (XP2 06-05-08, p. 1). Often these notions were supported with practical examples such as recycling, over-consumption of resources or water conservation. The following two responses in particular serve to contrast the most significantly different perceptions. One parent stated, *I think it's a way of living that is essentially sustainable, it's not an enormous waste being created, that we are using renewable resources, trying to reduce our impact on the planet* (XP1 22-04-08, p. 1) and one staff member stated, *I have no idea, I was just going to ask you the same thing* (XS4 22-04-08, p. 1). It was later evident from an interview with Bush Betty that a number of staff had approached her prior to the interviews to query what sustainability was all about. As Bush Betty reflected,

It is only since you came and started talking about wanting to interview the staff that several staff came to me and said 'Bush Betty' I don't know what sustainable means. I said 'Oh okay' and then I realised at what level we were at and this is so embarrassing. I think I sort of knew a little bit but 50% of the staff here wouldn't know what that really means and then I thought 'Oh my God how is that reflecting in our teaching and what we are doing?' It's a bit of a learning curve to me (XS2 22-04-08, p. 5).

Therefore, for both the staff asking questions and for Bush Betty signs of conscientisation about professional practice seemed evident. Staff interest had been provoked and Bush Betty became aware of limited staff understandings and how her values about sustainability were not necessarily known or shared by all staff.

However, both staff and parents supported their varied perceptions of sustainability by indicating that it was something that they valued and enacted daily in their personal and professional lives, although staff, with the exception of Bush Betty, seemed somewhat less enthusiastic. Bush Betty commented ...

in this particular group [3-5year olds] we have a lot of parents who would be very supportive [but], generally a lot of the staff here are not passionate about it themselves per-

sonally ... it's not on their minds they're not living it, they're not passionate about it and so therefore it doesn't reflect in their conversation and it doesn't reflect in the teaching (XS2 22-04-08, p. 2).

Bush Betty strongly supported embedding sustainability in the centre, *bringing it into the context here in early childhood would be good, this centre could be like a little microspace where children learn to manage what we have here* (XS2 22-04-08, p. 1). Bush Betty appeared to be already creating a new vision for the centre that could extend beyond the action priority yet to be negotiated in the synergetic focus group.

- **Education for sustainability**

Inviting perceptions about education for sustainability prompted a return to describing the tangibles, such as recycling, water saving and composting. It was about engaging children in these daily practices and adults explaining, talking, modelling, telling stories and explicitly teaching to convey the underlying environmental concerns. For some participants there were possibilities of such practices *cementing everything* (XS3 22-04-08, p. 5) or becoming *ingrained* (XP2 06-05-08, p. 2). But, one parent's perception extended beyond practices. It was about *teaching children about the importance of environmental issues and trying to make it [the centre] like the rest of society that we are not just consumers ... the community is very much into change and how can we educate children about change* (XP7 24-04-08, p. 2). This perception raised further questions about the need for shared values between centres and their societal context and how from a pedagogical perspective one might facilitate children's skills and understandings about change. The *Living Sustainably: National Action Plan* (Commonwealth DEWHA, 2009) highlighted that change was a fundamental element in sustainability discussions.

Adults' perceptions about education for sustainability were also informed by observations of children being responsive and playfully engaging in sustainable practices. For example a staff member recalled:

When we play this afternoon there won't be any [water] left, just reinforcing things to the kids trying to get them into the hang of things it's all about the environment at the moment, I mean a lot of the kids would say to us 'you can't have that water out today the trough is empty now and so that's it' (XS1 22-04-08, p. 1).

Similarly, a parent suggested that children *see it as play, but we add a deeper background to it, so they can learn it* (XP2 06-05-08, p. 2).

Education for sustainability was about children playfully engaging in a range of sustainable practices with adults on hand to facilitate deeper understandings about environmental concerns, but the more encompassing notion of change was lurking in the background.

- **Outdoor playspaces**

While the responses to questions about sustainability and education for sustainability had included some pauses for thinking and clarifying, this was not evident when discussion centred on the actual outdoor playspace. Both parents and staff had in some way experienced the centre's outdoor playspace and had perceptions to share about what it offered practically in terms of education for sustainability, connections with nature and children's play. The staff were particularly evocative about the physical constraints of the outdoor playspace and how external factors had impacted over time.

The outdoor playspace was perceived as a context for many hands-on sustainable practices including gardening, composting and water conserving, *it needs to be hands on, it's not about just telling children about vegetables and how they grow* (XP1 22-04-08, p. 4). And children learn by *osmosis or default* (XP7 24-04-08, p. 4) through experiencing these practices. Beyond learning, as the construction of concepts from experience, the notion of affective knowing in the playspace was encapsulated by Bush Betty thus,

Having a positive experience with the dirt, the logs, developing an interest, love and respect with those sorts of things around, would then give them a grounding, a basis to value and want to look after it ... it becomes a passion for them, so you're passing on that passion in the hope that they will then want to preserve it and look after it (XS2 22-04-08, p. 5).

The naturalness of the playspace with mature trees, bushes and predominantly natural groundcover was highly valued by staff and parents alike and invited the passing on of passion about nature as suggested in the transcript above. One parent described the natural playspace as an extension of their child's experiences with nature at home (XP1 22-04-08, p. 3). Another described how when initially seeking a childcare centre, one location with an artificial outdoor roof garden was rejected as she wanted her child *to feel the dirt and the trees and bushes* (XP2 06-05-08, p. 5). Interviewees also highlighted sensory experiences, *it's important that kids get that feel, the smell and a feeling of it so they value it* (XS2 22-04-08, p. 4); and, play opportunities, *it's very open ended, so it can be used in a variety of ways* (XS3 22-04-08, p. 4). The play opportunities most frequently noted in discussion were physical, social or imaginative. Children being physically active climbing, kicking balls or playing hide and seek was similarly valued by parents and staff. The relatively large size of the outdoor playspace that supported such physical activities was often noted. However, Bush Betty questioned,

The climbing equipment is always out and the bikes are always out because that's what we think children want and they always seem to play with these. Is it because they're always there and it's a nice safe thing for children to do? They know what to do, so they don't need to have all those complex storylines that the other things require (XS2 22-04-08, p. 4).

From her perspective the more predictable physical outdoor experiences were the staff's default outdoor plans and more opportunities to create complex storylines through social and imaginative

play were required. Although this was happening to some extent *the staff are very good at facilitating social play ... they set up play areas, for example the tent can be set up in one area to be a rocket ship and another area another day* (XP1 22-04-08, p. 2) and the children,

used to create their own stuff, sometimes when autumn leaves started falling on the ground and they used to do cooking in the tanbark area. They would use leaves and children would ask, 'This is on the ground can I use it now?' And we would sit back and watch and we hadn't done anything the children had started it. They would say 'Smell my cooking it is nice because it's got red flowers in it' (XS1 22-04-08, p. 3).

As alluded to above there were limitations about what loose parts of nature (Fjortoft, 2004; Nicholson, 1971) children used for play, only items collected from the ground were acceptable. However, staff did invite children to move equipment around and set up their own play areas. Further, Bush Betty noted that for the storylines of play to evolve required long periods of time outdoors and this did not always happen:

Children need time outdoors, half an hour to run off the sillies and another half hour to start settling into their play and then more time to develop the play to really maximise their ideas and play out their roles and really explore everything to the fullest. The biggest problem I have is their outdoor time is not long enough in big blocks and the programs will get changed over without considering that the play might still be developing (XS2 22-04-08, p. 3).

Also, the traditional garden beds of non-native plants (Refer Figures 6 & 7) were not considered by staff as part of the children's play area and thus, were described as off-limits. Yet, some staff noted how children valued the play affordances (Gibson, 1986) of areas under the trees and some staff saw more defined planted play areas as important in the large outdoor space. A parent also viewed the bushes as places for children *to build their own cubby spaces from old logs, so they have to use their imagination a bit more* (XP3 28-04-08, p. 3). The notion of defined secret or refuge areas in the bushes to facilitate imaginative and dramatic play (Moore, 2010), were later identified as a priority for the centre working-bee.

The staff were particularly aware about the calming effect that outdoor play had on children, whether the calmness was the result of physical activity and/or the greenness of the outdoors is debatable. Time spent outdoors was perceived as essential to a smooth day with children.

Yes, you can go out for 10 minutes and then back-in, it's calm like everybody is just arriving again that got rid of the energy and they're fine, they're calm and relaxed and back into playing in spaces and it's constructive (XS1 22-04-08, p. 3).

For a significant part of each day's program the children had the choice of being indoors or outdoors. A staff member described how on one occasion, when offered a choice, only two children wanted to stay indoors, *they just love being outside* (XS3 22-04-08, p. 3).

While parents were generally positive about what the outdoor playspace offered, staff could readily identify shortcomings within the playspace and the impact of external factors including drought and the role of the local government Council over time. From the staff perspectives it was a dull and boring outdoor playspace and Bush Betty described how *sometimes the staff are very depressed about the outdoor space ... as everyone wants a change, they hope that better ideas will come from the change* (XS2 22-04-08, p. 4).

Particular aspects within the outdoor playspace were mentioned repeatedly: the non- native plants that were dying and required replacing by drought tolerant native plants; the need for water tanks to support replanting; the disused vegetable garden; limited water play opportunities; and, the sandpit that required major renovation (Refer Appendices 29-32). The sandpit in particular was described as *dull, it's boring, it's just flat, there is nowhere for adults to sit, it's not comfortable for us, it's not built up high enough, it needs to be sectioned off and have plants* (XS1 22-04-08, p. 4). This description was provided somewhat evocatively as the sandpit had previously been unsuccessfully renovated by Council, *they made a disaster of it, it was better off the way it was* (XS1 22-04-08, p. 4). Apparently, divergent perspectives had emerged during reconstruction between what the staff had planned for an effective sandpit and what was deemed appropriate and then constructed by the Council workers.

We put in the plans, we got a council grant and we wanted decking around the sandpit, we wanted the sandpit to be raised a little bit. But, when council came to do it they said 'That can't be done'. They said 'We've been told different, this is what is getting done', so what we wanted didn't happen.

Researcher: So, did you think it was a lack of communication?

Yes, it wasn't a funding issue because we got the grant and they were going to do the work and spend as much as was needed, but they didn't even put the sandpit cover hooks back on the edges, we are still waiting for that two years later. And when they first did it, it was a slipping hazard, kids were slipping all the time and then, last year we closed it off because we had an accident in it and then they came to fix the problem. You just look at the whole area and think yuk (XS1 22-04-08, p. 4).

There was a palpable sense of disempowerment and frustration expressed over this episode, as Bush Betty stated:

It's difficult because we always have to go to the Council and ask permission first and then three months later they say 'You can't because of this, this and this'. We are waiting on a shed permit to rebuild the shed and then we can do the sandpit and then we can do the rest of the yard, all the red tape (XS2 22-04-08, p. 6).

Bush Betty lamented that each time she looked at the sandpit, all she saw was all the paperwork she would need to do. At this point I realised that any research action priority to be implemented would need to be something not requiring Council approval and something that would physically not interfere with the outdoor storage shed rebuilding plans.

Identifying an action priority: The first focus group

A number of potential action priorities were gleaned from the interviews including using indigenous planting to define play areas, installing a water tank, setting up composting or worm farms and reviving the vegetable garden. The focus group canvassed a broader range of priorities, from keeping hens and goats to mud-patches and dry creek beds. Often one participant's suggestion led to a cascade of linked ideas, with each participant building on a previous idea, thus creating synergies. For example, the linked ideas in the following transcript excerpt included worm farm, fertiliser, vegetable garden, watering, nutrition, seasonal vegetables and water saving:

XS9: What about a worm farm?

XS7: Yes and that would fertilise the plants too.

XP9: Having a vegetable garden is really good because you can use the fertiliser on the plants.

XS9: But, I think you need to explain it to the children.

XS7: But is that sustainable do we have enough water to water them, for the vegetable garden?

XS5: The children can learn about nutrition.

XS7: I think you need to establish how it's going to work because you can plant them, but if they can't be watered then it just doesn't work.

XS8: The other thing is you have to be very careful about what you plant because some of them are seasonal.

XS7: You need things that are very quick growing and easy for the children and each vegetable does have a particular season.

XS9: We need to put a small bucket where they wash their hands and then we can use that water to put on the garden (FG 06-05-08, pp. 1-2).

When assessing all the suggestions the group was mindful of measuring each idea against a number of key parameters. The key parameters of doability were the externally imposed research timeframe of two months, the funding required to proceed, the regulatory constraints (Victorian DEECD, 2009b) and the need to avoid Council involvement in terms of permits and approvals.

Also, the children were central to discussion about the action priority and the group was reluctant to make a decision without first consulting them. Viewing children as central to the process was underpinned by perceptions of children as knowledgeable and capable. A number of participants provided anecdotes demonstrating children's prior knowledge and interest in sustainability issues. For example, a parent stated *my son asks which blocks are rainforest timbers and which aren't*

(FG 06-05-08, p. 9) and a staff member cited, *the kids were talking about the bush fires burning the trees down and then they said there wasn't going to be any paper* (FG 06-05-08, p. 9).

Further, the group recognised that a starting point for engaging children needed to be identified. The group did not want to lead children, but support them as leaders and provide prompts to instigate their engagement with sustainability. As Bush Betty stated, *we would really like the kids to lead a lot of this, to lead with the ideas and what they're interested in and what they would really like to do, but also you would need to start with finding out what they know about sustainability* (FG 06-05-08, p. 2). The group discussion then identified a range of starting points while acknowledging that children may have different ways of expressing their knowledge and interests about sustainability. Thus, a range of tangible prompts including books, block building, drawing and songs were suggested as strategies for engaging children to determine their knowledge, interests and possibilities for a sustainability focussed action priority. Links were noted between the children's homes, what they were familiar with and what they might express in the centre in response to the strategies. *I know with a vegetable garden the children will be familiar if they have one at home, they will be more involved and the participation is important* (XS1, FG 06-05-08, p. 4). It was predicted that once children became involved there would be potential for them to scaffold each other and for the values of all centre participants to be reflected.

In terms of practically implementing an action priority selected by the children, parents were viewed as key partners, thus reflecting a culture of parent involvement, typical of many Australian early childhood services.

XP4: We possibly need to put up a notice for a Saturday morning veggie patch working-bee.

XS2: Well we are due for a working bee we usually have one soon.

XP4: *But, it wouldn't take a lot from the sound of it, only three or four interested parents* (FG 06-05-08, p. 11).

As previously noted from interviews, plans submitted to Council to rebuild the outdoor storage shed were raised as an external factor. The group reaffirmed that the action priority must be practically logical and not compromise the shed plans. The focus group concluded with an affirmation of the children's central role and a humorous reference to a potential action priority:

XS2: *Getting the ideas from the children through blocks, drawing and talking and then implementing their ideas.*

Researcher: So, you'll start with the children's ideas and hopefully they will lead to some of the things we have discussed tonight?

XS2: *They might come up with an ornate Italian fountain!*

LAUGH (FG 06-05-08, p. 13)

In summary, agreement was reached to ask the children about a possible action priority for the outdoor playspace and to engage in a collaborative process involving staff, parents and children. Bush Betty was willing to provide leadership, but conscious of the need for

getting a consensus with staff and parents. I mean I can push along about what I think is wonderful, but I really want it to come from them. It also depends on how much energy, commitment and responsibility they want to put into it, sometimes they don't want that and that's fine (XS2 22-04-08, p. 7).

From an organisational perspective the Committee of Management and Centre Co-ordinator were also identified as key players in the implementation process.

The conclusion of this first focus group signaled the end of the act phase of the first action research cycle and a more reflective period as I monitored, considered and evaluated the study to date. This final stage of the first action research cycle created an opportunity to examine emerging themes beyond the actual research agenda.

Beyond the research agenda: Emerging themes

A number of themes relevant to the study, but not explicitly connected with the research agenda were identified through the interviews, the initial focus group and my professional journals (JB & RJ). In particular, beliefs about consumerism, family nature connections, children as leaders and active agents and staff leadership emerged.

- **Beliefs about consumerism**

In exploring sustainability and education for sustainability the notions of being resource-wise and resourceful with materials was evident and considered something that children could readily engage with. For example, suggestions included reusing paper for drawing, reusing cardboard boxes for construction and employing various secondhand items as props for play. Also, there was potential for discussion with children about the origins of materials and which ones were sustainable, as part of a sustainable orientation to consumption.

Sustainability is about using sources of energy and water that come from a source that is not going to run out such as using recycled water for plants ... All our paper and wood products should come from sustainable forests ... I think the kids in early childhood education have got to think about those issues (XS2 22-04-08, p. 1).

Parents were particularly concerned about the invasiveness of consumerism in their children's lives, as well publicised by Honore (2008) and Palmer (2007). They were actively trying to steer their children to more sustainable orientations towards consumption:

And that's the other thing I want to give my children, knowing how to be resourceful and not to be consumers because so much of our society is set up around consumerism. So, I

try to teach them we will not just go and buy another one if something breaks down and those sorts of things (XP7 24-04-08, p. 4).

From this emerging theme there were significant synergies to be explored between the staff pedagogy and practices and the families' beliefs. Such synergies created a further opportunity for building staff-parent relationships and greater alignment between centre and family values.

- **Family nature connections**

Family nature connections surfaced at two levels, firstly, in terms of adults' reflections about their childhood experiences with nature and secondly, how individual families incorporated experiences with nature in their family culture. Not surprisingly Bush Betty described that she was known among her staff colleagues and friends for her camping interests and strong environmental passions and she could trace this firmly back to her childhood. *When I grew up my first friends for the first years of my life were a pet rooster, two guinea pigs and the cat* (XS2 22-04-08, p. 4). Similarly, several parents described how their childhood was either totally rural or involved frequent trips to the country or beach.

Yes, I grew up in the country and my dad was a park ranger so we lived in a national park (XP1 22-04-08, p. 3).

We had a farm in the country that we went to nearly every weekend. So, essentially I grew up with cows, horses and sheep, so although I did grow up in the city I feel half country (XP7 24-04-08, p. 4).

Such childhood experiences then informed their own family cultures and although they lived in the city, the parents made every effort to ensure their children engaged with nature. They also recognised generational changes and how important it was for children to play in nature and get dirty.

I could never live in the inner city, I need a garden and I want my kids to get dirty and go camping and all of that (XP2 06-05-08, p. 5).

So much of what kids do today is sterile they don't get dirty, getting dirty is yesteryear including myself (XP7 24-04-08, p. 5).

One parent in particular shared anecdotes about how she fostered her children's awareness of animals and for me, as researcher, these were the most evocative examples of how values are transmitted within families. She described her children as incredibly responsive to these experiences and her passionate retelling explained why.

We were in New Zealand the Christmas before last and my son and I went whale watching. And to hear him talk about the experience of seeing killer whales and dolphins out on this boat was just so special. Like I only saw my first killer whale when I was in my 20s, and for my son to get that connection when he was only five is one of the best gifts I could give him (XP7 24-04-08, p. 5).

There was a richness of connections with nature expressed in her stories; she attested to the fundamental importance of direct childhood experiences in nature with significant adults as described by Chawla (2006). This highlights the imperative for young children to be immersed in nature today, whether in centres or with their families in the wider world, to promote cultural transmission for future generations. These are the best gifts we can give children, who will be grappling even more so with creating and maintaining sustainable futures. A parent summed up the situation thus,

Well the whole point of sustainability is to try and save our Earth. So even from a young age, if we can teach our children that nature is important, then we've got a lot more chance that they are going to want to save nature and therefore, create sustainability (XP7 24-04-08, p. 4).

- **Children as leaders and active agents**

This study was expressly conceived with a focus on the adults in early childhood communities based on my professional understandings that adults were the key decision-makers if changes were to be made in outdoor playspaces. These decisions usually required funding, voluntary labour, liaison with external bodies and alterations to policy and/or practice. It is the adults that drive these decisions, but they are made in the best interests of children's outdoor play. The step taken by the adults in this centre community was not to assume what would be in the best interests of children as an action priority for the outdoors, rather to collaboratively engage with children to determine the action priority. The staff particularly viewed children as leaders and active agents in this project and themselves as facilitators of children's ideas and actions:

XS5: Children will be interested in something like this because I see it every day, their involvement will be a big part of the project, it's not about us, it's about them (FG 06-05-08, p. 2).

Children were also active and leading agents in their relationships with staff, peers and their families. As the study progressed children were observing, modelling, questioning, reminding others and taking initiative with respect to many sustainability practices:

XS7: I think it is passed on because it's your older children and younger children and the older children role model for the younger children and even just doing all that recycling of the water and watching the older children it kind of slowly just gets passed on (FG 06-05-08, p. 12).

While these images of children and staff are a significant aspect of postmodern reconceptualisation of early childhood education (Woodhead, 2006) and reflect the *UN Rights of the Child* (UNICEF, 1989), in my experience such rhetoric does not necessarily translate into practice universally across the early childhood field. Framing notions of children as active and leading agents within the context of sustainability may have more impact in the field because there are many examples of sustainable

practice that young children can readily engage in, either independently or when scaffolded by adults. Adults must be aware and responsive if images of agency are to be fully realised. The potential of this approach was well demonstrated in the education for sustainability research by Davis et al. (2005) and Vaealiki and Mackey (2008). Davis (2007, online) referred to young children as ‘problem seekers, problem solvers and action takers in their own environments’.

- **Staff leadership**

Essentially the theme of leadership arose from Bush Betty; as assistant co-ordinator she had a positional leadership role within the centre and often appeared to be the person who managed all manner of crises. At one point she reflected with me that it seemed everytime I arrived she was dealing with some crisis and how this must colour my perceptions of the centre. Throughout the individual interview and focus group process Bush Betty demonstrated she was not simply a positional leader, but someone with a depth of passion for nature and sustainability. She had a vision for cultural change within the centre and the skills to mentor and collaboratively facilitate that change. As previously noted, prior to the initial staff interviews she had been a mentor of choice for those staff questioning what is sustainability and this in turn had raised her awareness of staff values and perceptions. While generally concerned about the lack of staff awareness about sustainability, she respected how all the staff were at different levels and acknowledged that her deeper level of commitment to sustainability was probably unique in the centre.

Generally, a lot of the staff here are not passionate about it [sustainability] themselves, personally there are a lot of them here that are in different spaces in life. So it's not on their minds they're not living it they're not passionate about it and so, therefore it doesn't reflect in their conversation and it doesn't reflect in the teaching (XS2 22-04-08, p. 2).

She believed that leading by example was an important strategy, but as these anecdotes suggest support from others, adults and children alike, was often not forthcoming. Tangible evidence of staff engaging with sustainability was lacking in her opinion. She was also willing to identify her own leadership shortcomings and her drive to do more:

the kids will see me jump on my bike to go down to the bank rather than drive in the car, then they all think that is hilarious for some reason (XS2 22-04-08, p. 2).

I wanted to sleep the babies outside once on a beautiful day and everyone just looked at me! (XS2 22-04-08, p. 5).

You are just leading by example, but I don't think there is enough of it going on here at the moment. Myself included, sometimes I'm not sure, sometimes I don't have enough contact with leaders in the 3-5year old room to know what's going on or what the interests are, I am not sure from an adult point of view how much is talked about with the kids about sustainability. There is never enough (XS2 22-04-08, p. 2).

In particular, within the focus groups Bush Betty was a collaborative facilitator, she was often posing questions, recapping the conversations and overall demonstrating responsiveness to the group process. Bush Betty also acted as scribe for the focus group and declined my offer of transcribing from butcher's paper to an electronic format, as a researcher I viewed this as a signifier of both her and the centre's ownership of the project:

XS2: Do we need to backtrack a minute and think about what it is, actually what it is about sustainability that we want to teach? (FG 06-05-08, p. 2)

XS2: We've got a lot of ideas and possibilities, we're a bit stuck on water at the moment, but we've got to involve the kids and what they would like to do, so how would we go about that? (FG 06-05-08, p. 2)

Leadership is a challenging issue in early childhood centres and for early childhood educators a corporate positional type leadership does not fit comfortably with notions of collaborative and responsive relationships (Ebbeck & Waniganayake, 2003; Rodd, 2006; Woodrow & Busch, 2010). These are underpinning tenets of early childhood philosophy and to some extent a reflection of the female dominated field. Notions of distributive leadership, as demonstrated by Bush Betty, are more relevant and also, aligned with current thinking around leadership in sustainability (Hill, 2009; Senge, 2006). Throughout the study period Bush Betty was the leader in all respects due to the appointed co-ordinator's chronic illness. Following the study period Bush Betty actually became the permanent centre co-ordinator.

From my perspective, Bush Betty was a key driver for the study to proceed and she was experiencing significant conscientisation of what might be possible in the centre. I reflected in my journal

My sense is that Bush Betty ... is feeling empowered by the research process. Although she is often appearing overwhelmed by her current administrative role, knowing her deep environmental connection from the interview suggests this research has given her legitimacy to promote her passion with others in the centre (RJ 06-05-08, p. 18).

Implementing the action priority: The working-bee and more

At the first focus group in May 2008 a decision had been made to engage the children and follow their lead to determine the research action priority. In the weeks following the focus group session, the staff in the 3-5 year old room began inviting children's ideas about caring for the environment and in particular, rubbish. Staff employed a webbing approach (Arthur et al, 2008; Wheeldon, 2010) with children to document their ideas and later expressed surprise at how knowledgeable the children were. To promote further communication children's drawings about rubbish and the environment were displayed in the centre foyer, entries were made in the staff/parent communication book, items were placed in the children's individual portfolios and a specific Environment Portfolio was created to document children's ideas (Refer Appendices 33

& 34). Over three months the staff employed a range of experiences to extend on the children's interests including: creating a mini indoor worm farm displayed with a worm puppet and book (Refer Appendix 35); reading the picture story book *Why should I recycle?* (Green, 2002); and, establishing a mini-landfill in the disused vegetable garden outdoors for observing rubbish decomposition (Refer Appendix 36). Inspired by the children's responses to finding worms when they dug the mini-landfill and interest in worm farms as a recycling method, it was decided that the action priority would be establishing a full-size outdoor worm farm. Following consultation between staff and Bush Betty it was decided to set up the worm farm during a scheduled working bee in early August when parents, children and staff would be present and some may specifically take responsibility for the worm farm. Other tasks such as pruning and tidying the garden beds and replacing the soil in the vegetable patch were also on the working-bee list.

A working-bee group of about twenty-five children, parents and staff were present on the appointed day. Two parents who had participated in the research were present and one in particular took a lead role. Following discussion with Bush Betty she removed a dead non-native plant from the garden bed and invited some children to stand in the garden bed so she could prune some trees to the right height to create two garden refuge playspaces. The children willingly participated and the parent reinforced that she was making great playspaces for them to hide in the garden. Later, the same parent set up the purchased worm farm with support from several children and myself. Following the manufacturer's instructions was a challenging task, as was ensuring that the eager children all had opportunities to participate; this was a collaborative problem solving venture for all concerned (Refer Appendix 37). Eventually, keeping in mind the rebuilding of the storage shed and the microclimate needs of the worms, the worm farm was located in an accessible corner of the garden bed. The children observed the worms with interest and noted the saddle part of the worms from their earlier indoor worm experience, while I pointed out the tiny worm egg capsules. Following the working bee, these children had a unique opportunity to share their experiences of setting up the worm farm with other staff and peers.

It was increasingly evident that the study was extending beyond setting up the worm farm outdoors as an action priority. Staff were also changing their practices by inviting children to save leftover drinking water for the garden and to reuse drawing paper on both sides. Staff particularly observed children scaffolding each other, sharing knowledge and problem solving in relation to the changing practices. For example, visiting the mini-landfill became a social experience for small groups of children who would eagerly share their increasing language and knowledge about recycling. They observed how the buried paper had seemed to disappear, yet a plastic bottle could still be dug up after many weeks. Changes were not only occurring in the 3-5 year old room, other groups had changed practices too; one staff member described this as the knock-on effect. Further, Bush Betty expressed an interest in reflecting these whole centre changes in the imminent revision of the centre philosophy and policies. I provided Bush Betty with some philosophy and policy exemplars and we agreed that the second focus group could work towards a revised philosophy statement as an outcome.

Researcher's second reflections: Going with the flow

Having immersed myself in the research context and created the first action research cycle hands-on with the research participants, I felt like a more authentic researcher. However, reflections about responsiveness, disappointment and redefinition of my researcher role surfaced in my professional journals.

- **Responsiveness**

Perhaps the most significant initial learning was about being responsive to the research context and going with the flow. I frequently documented the need to be flexible. For example, there was no quiet indoor space conducive to staff interviews, so all interviews were conducted outdoors while children were resting indoors (JB 29-04-08, p. 26). Also, the interview schedule for staff was changed twice to fit with staffing priorities on the day and two prearranged meetings with Bush Betty were delayed due to urgent administrative tasks (JB 04-06-08, p. 29). As an authorised visitor in the centre I needed to balance being proactive to ensure the research happened with understanding the dynamics of the context and maintaining positive relationships. I believe my own professional history provided a secure basis from which to negotiate the balance and productively move forward according to the centre's daily priorities and pace, not mine. Being dogmatic about research agendas is generally counter-productive in qualitative social sciences research, but particularly when busy early childhood settings and transformative processes are involved.

- **Disappointment**

Reconciling my anticipated perceptions about education for sustainability and what were actually expressed by interview participants initially created a sense of personal disappointment. This particular study was prompted by earlier published case studies (Elliott, 2008) where the links between natural outdoor playspaces and the principles of education for sustainability (Commonwealth DEH, 2005; UNESCO, 2005a) had been very evident through my sustainability lens. However, these links were not expressed by interviewees and there was a tendency for interviewees to list tangible sustainable practices. Reflecting historically, I reminded myself that *a decade ago these practices would not have been deemed that relevant in an early childhood centre* (RJ 21-04-08, p. 5). At this juncture it was important to acknowledge my sustainability lens and envision *room for transformation* (RJ 21-04-08, p. 5), after all a transformative agenda underpinned the research. I sought to be appreciative of the perceptions shared and recognise cues of change.

- **Redefinition**

As Bush Betty and other staff increasingly took on roles to facilitate the action priority, I began to question: 'What was my role now and how would I redefine it?' I wrote, *I think Bush Betty will run with it now and this is what needs to happen, but where do I fit in?* (RJ 06-05-08, p. 18). I had

instigated the study, conducted interviews and a focus group, all clearly defined tasks; but what did an active participant observer do at this point? Given the busyness of the centre it seemed inappropriate to create extra meeting times for monitoring and documenting. Over three months I visited the centre only twice to take photographs and informally discuss the study. I participated in the weekend working-bee and provided resources such as information about worm farms, a worm puppet and exemplar sustainability policies. These were all mutually positive experiences that reaffirmed our relationship, but at the same time created a distance for the centre staff to take ownership of the action priority. I sensed that as the intensity of the act phase dissipated for me, the centre staff took ownership and our research relationship changed. The power locus was shifting.

After the monitoring and evaluating phase of the first action research cycle was completed, I began planning the first phase of the second action research cycle. Interviews in cycle two were to be conducted post-implementation of the worm farm action priority and they created an opportunity to revisit perceptions about sustainability, education for sustainability and the outdoor playspace. Further, it was an opportunity to reflect on the action priority undertaken and how it might have impacted on the centre community.

Later participants' perceptions

The set of interviews, conducted as part of the second action research cycle, revealed that while the worm farm action priority had some direct impact, there were additional indirect impacts. Revisiting perceptions about sustainability, education for sustainability and outdoor playspaces created data about these indirect impacts.

- **Sustainability**

Noticeably notions of sustainability were shifting to a greater emphasis on temporal aspects rather than specific practices. Thinking about the past, present and future was a key theme, alluding to notions of intergenerational equity as originally stated in *The Brundtland Report* (WCED, 1987) definition of sustainability. The following examples illustrate this theme. Bush Betty recalled how her father had been thrifty using just one piece of lunch wrap for a whole week. *That whole way of existing just doesn't happen with our generation. It means going back to the way we were kids ... it reminds me about a lot of things that we need to change in our lives and to re-teach that is going to be hard* (XS2 19-08-08, p. 4). A sense of continuity over time was shared and a need to change *because if we keep going the way we are going it's just going to get worse and worse* (XP1 29-08-08, p. 3). Sustainability was regarded as a very high priority for most interviewees and for one particular staff member, who was initially unclear about sustainability, she was now encouraging her partner to save energy at home (XS4 19-08-08, p. 3).

- **Education for sustainability**

Perceptions of education for sustainability now also appeared somewhat removed from lists of practices and focussed more on the participants and their roles. Staff were being role models and promoting awareness through leadership and children were working together collaboratively. Parents reinforced that this must begin early, *its just teaching the children from a very young age how they can have a lifestyle that is more energy efficient and more aware of what our actions do to the environment* (XP7 29-08-08, p. 2). Another parent strongly advocated sustainability being *incorporated into every aspect of education starting from babies* (XP1 29-08-08, p. 3). Such incorporation suggests an interdisciplinary and holistic approach, a key principle of education for sustainability (UNESCO, 2005a). Bush Betty reinforced this principle citing how many developmental and curriculum areas overlapped in education for sustainability. She also reflected on the negative impacts of her earlier environmental teaching efforts about animal extinction and stated, *so I think this way is positive and they can actually do things that make a difference rather than feeling helpless* (XS2 19-08-08, p. 3). Her conscientisation of positive and empowering ways to engage with education for sustainability was significant and aligns with current approaches to early childhood education for sustainability (Davis, 2010). In summary, education for sustainability was *about caring for the environment and educating children to care for the environment* (XS4 19-08-08, p. 3).

- **Outdoor playspace and impacts of the action priority**

Most parents were not aware of the new worm farm in the outdoor playspace and frequently commented that children were playing indoors at drop off or pick up times, therefore outdoors was not readily noticed. The parent who took a lead role at the working-bee setting up the worm farm stated:

I have tried to ascertain what they [parents] know and what they don't know. Some of them didn't even know that it was there and if they weren't at the working bee to set it up I let them know we set it up. And they didn't really know what it was and a lot of people didn't know about it (XP3 29-08-08, p. 1).

However, parents interviewed did support the notion and described benefits in terms of recycling, gardening and as a starting point for further sustainability practices. Staff were certainly aware and described how children checked the worms daily and talked about the worms with peers and younger children. From Bush Betty's perspective the worm farm was a useful hands-on experience for both children and staff.

The worm farm gives the staff a concrete tool to talk about issues of sustainability with children. Before staff were not really sure with books and stuff, but this is something really concrete. They can use it to talk with children about it, they are involved in it and they can see it all in action. So, it is all very concrete and very visual and totally what early childhood education is about (XS2 19-08-08, p. 2).

Below Figure 8 also highlights changes beyond the worm farm that reflected a somewhat different approach and new possibilities in the outdoor playspace.



Figure 8a – The re-established and productive vegetable garden



Figure 8b – A visual diary of children's indoor and outdoor play experiences and interests



Figure 8c – The use of natural materials for play



Figure 8d – The non-native European-style garden bed as a creative playspace

Figure 8 – Final photograph collage Banksia Childcare Centre

In addition to these direct impacts, staff noted two indirect impacts: overall awareness of sustainability; and, how the outdoor playspace was utilised by children and staff. Staff commented on the growing awareness of sustainable practices ... *last year ... we weren't doing anything like this. So, it's a good thing, it needs to happen* (XS1 19-08-08, p. 3). *It has changed our behaviours in just very small ways and if we maintain that motivation then I am sure that it will flow on* (XS2 19-08-08, p. 1) and *we are using more natural materials outside* (XS4 19-08-08, p. 3). A parent confirmed these staff changes in stating *I think just they're more aware in the centre and thinking through other sustainability issues as well* (XP3 29-08-08, p. 1).

Bush Betty noted not only staff and playspace changes, but was very clear about the indirect impacts of the worm farm action priority and reflected on her perceptions about the playspace and links with community. While Bush Betty had many ideas about how the playspace might be improved, she acknowledged there had been no underlying theoretical frame and sustainability was now providing that frame.

Like I have a gazillion ideas flying around in my head like a whirling dervish and very little time, like concentrated focused time to sit down and work it all through. And so for me it [sustainability] has framed a whole heap of ideas and given them an underlying theory or basis from which to develop the ideas from. Which is good, I think it has been good timing for me and through your links I have kind of explored further out to see what other links are around in the industry and in the community to see what things we can get for the centre. The underlying idea of sustainability and education has kind of framed all these ideas that I had in my head about the yard and I think will form a direction for all of us when we go to do the plans and the landscape (XS2 19-08-08, p. 1).

She also reflected on links between the centre and broader community, suggesting that the centre was ready for a cultural shift, so that it better reflected the values of families and the wider community. And she was looking ahead to strengthen this as follows, *including sustainability in the policy and in our philosophy would be good and if we can get parents involved in that it will be a really interesting way of linking it all up* (XS2 19-08-08, p. 2).

The third action research cycle comprised the planning, implementing and monitoring around the second focus group. The timing between the second interviews (noted above) and the second focus group was 3-4 weeks, time for further change. In the following paragraphs the reflections and actions planned by the focus group suggested a group consensus about the positive changes already underway towards sustainability and a vision strengthened by philosophy and policy led by Bush Betty.

Reflecting on change: The second focus group

The focus group began by reflecting on the steps undertaken in the past five months since the initial meeting. In practical terms the worm farm had been set up at the working-bee amongst other tasks. The children had been involved with the worms and the mini-landfill experience. The opening statement by Bush Betty indicated more than the mere practical, but a cultural change in the centre as alluded to above.

XS2: I just think when we first started this about four or five months ago we were a centre that knew very little about education for sustainability. In our work practices and in things we did day to day there was no evidence of anyone thinking about sustainable practices both in what the staff do and what we teach to children. I think now there has been a change and at the start we were all very scared of the word sustainability and what it meant a lot of us did not know what it meant, a lot of us couldn't explain it and we sort of skirted around the word. But, now it is part of our daily conversation, it is, like a day won't go by when one of us won't use the word sustainable confidently. LAUGH ... and I think it has become part of our culture here at the centre. And we all feel different levels of passion about changing the way we operate both as staff in the centre and with the children, we are getting excited about education for sustainability (FG 17-09-08, p. 1).

Many observations were cited to support the cultural change perceived by Bush Betty. For example, staff were trying to find new and creative ways of being more sustainable, staff were reminding each other about sustainable practices and staff in rooms not directly involved in the action priority were also taking on sustainability practices.

XS3: If the water has been sitting there in my water bottle and is left over I'll just pour into the bucket the next day. I used to just tip it down the sink, so that is something that I am conscious of now.

XS7: Today one child said to me 'OOH quick quick', because she couldn't turn the tap off, 'Quick quick turn it off because we are wasting water'. So, they are starting to get it, even in my room, which is the toddler's room, they are starting to pick up on it as well, because I have been doing a bit (FG 17-09-08, p. 2).

A significant theme explored by the group was the children's involvement at many levels. Some staff expressed surprise at the children's knowledge and thinking about sustainability issues and it was evident that the children were very responsive to the changing discussions and practices about sustainability throughout the centre.

XS3: I had an interesting conversation with a child outside today. We use the blue bucket outside for water for cooking because we don't have a water tank. And I said 'Once this water runs out we need to wait for it to rain'. Then, some of the children said: 'We live in a dry country and we have to use the water for drinking and washing and so we can't use it for play' (FG 17-09-08, p. 2).

Staff perceived themselves as responsive role models of sustainability for the children and the children actively questioned and reminded staff, parents and peers about sustainability practices. There was an underpinning sense of children as empowered co-participants with values, ideas and interests worthy of being heard and respected by all in the centre.

XS2: Encouraging children to speak up about stuff that they see that they know is not okay. Whether it is other children and their behaviour, or staff doing something. Like if they saw a staff member throw something in the bin that wasn't recycling they could speak up and say something (FG 17-09-08, p. 13).

In this supportive context it is not surprising that children were observed on many occasions taking initiative and being innovative with sustainability practices.

XS3: After it has rained they will get quite ingenious and go around looking for water in the play space. Like on tables, if it has a dint in it, they'll get a little container and scoop it out.

XS7: I had a toddler in my room and after he had finished lunch, he said to me ... 'put it in the garden, put it in the garden' and we couldn't go outside for some reason so I put it in the pots inside. And the children are now starting to do it, so a child initiated that (FG 17-09-08, p. 2).

In addition to these observed sociocultural changes with respect to sustainability, changes were particularly noted in relation to the outdoor playspace. Staff had in some respects changed their perceptions and usage of the playspace and this was impacting positively on children's play and everyone's engagement outdoors. The children particularly realised the play affordances of the new bushy refuges in the garden bed and were utilising more natural found play materials.

XS2: I just love how the garden space there is just so symbolic of our changing philosophy. Like when I first came here the children weren't allowed on the garden beds, the gardens were ornamental. And you weren't allowed to pick the flowers. You weren't allowed to pick anything and we used to spend half the time attending the gardens and caring for them and looking nice, but you weren't allowed on them. And so, having this change of thought and taking down those borders, the gardens are now becoming part of the children's play spaces (FG 17-09-08, p. 3).

Inviting children to make use of the garden beds as playspaces and to pick plant parts for play was a significant change for staff. Also, I noted staff discussed with children the ethics of picking in terms of which plant parts could be picked and how much (JB 22-10-08, p. 57). While this was happening in the 3-5 old year playspace it was still to be discussed at a staff meeting as a change to centre practice. Other changes mooted by the focus group were creating some more small flexible defined spaces for play to further promote hiding games and secret spaces. One staff member identified the value of self-directed play from her childhood play experiences in the country.

XS7: You know I grew up on a farm and I can remember playing in little sections under trees and we used to hide rocks and stuff. Like I was walking past a place and you could tell that children had played there, because I have memories of playing under trees and burying things. It's a play you make yourself and it is more meaningful (FG 17-09-08, p. 5).

Bush Betty had alerted me prior to this focus group about taking the discussion further beyond reflections to include sharing ideas about a centre philosophy and policy incorporating sustainability and establishing a sustainability sub-committee. She had discussed this with the whole centre management committee the evening before the focus group and had their support to move forward. She drew the focus group back to her concerns in the following manner and the group was unanimously supportive.

XS2: So just getting back to the underlying philosophy behind what we want to achieve, I think the underpinning philosophy for us as to why we promote so much natural materials is because we want children to appreciate it and value it. And to grow up with it like we did. And to have that love of it and to feel that it if it was ever lost it would be a really awful thing if we have lost it. We want children to appreciate it and value it and learn to love it. And sometimes you just don't get a chance to do that if you are surrounded by synthetic grass and Lego and all those safe sort of things that a lot of places have. So, I think that is the underpinning philosophy (FG 17-09-08, p. 5).

Discussion then centered on what a statement of philosophy and/or policy might look like and an exemplar from another centre was read aloud by Bush Betty. It seemed clear that whatever documents guided the centre they needed to include an overarching sustainability statement and specific policies about the children's program and operational aspects.

XS2: So we were going to include a blurb about sustainability in the philosophy statement. But, then we were going to extend it further into a policy statement, about how we operate both at the staffing level and with the centre operations like for example recycling paper, the composting, the worm farm, the veggie patch and also education for the children. So, it is kind of two to three levels. I don't know if it is a policy or more of a statement (FG 17-09-08, p. 2).

As a key instigator Bush Betty earnestly clarified that creating such a statement of philosophy and policy could be a serious and potentially controversial undertaking for the centre. It would determine future practice and require some significant changes that not all staff may support.

XS 2: If we did make it a rule, it would be this is it, this is what we are doing we are really serious ... A policy statement, rather than just a few people who are passionate where others might not value it. And it would really mean the implications, if we actually make a statement that this is what we do, our practices are to promote sustainability, it would mean that we would have to carry it through in all aspects. So, some of those big things would have to change like disposable nappies (FG 17-09-08, p. 7).

With some reflections on practices that would change such as use of disposable nappies, there was a general consensus that small steps could be taken over an extended time period and with practise everyone could be involved in the changes.

XS7: We can do bits and pieces, like we are talking about lots of things, we don't have to do everything all at once.

XS3: Is it better to just take a little chunk and you get better at practising, and then you introduce more, because that is what we are doing (FG 17-09-08, p. 8).

The group discussion then returned to the outdoor playspace and how changes for the future might be implemented in keeping with philosophical and sociocultural shifts described above. The importance of seeking a range of views from all stakeholders, inviting professional input and visiting other centre playspaces were all noted as part of the process in developing a master plan for the outdoor playspace.

XS3: And a great idea would be to get everyone's viewpoint, like all the different stakeholders might have a different view (FG 17-09-08, p. 8).

XP4: Once you get a professional on board, they can lead you into areas you may not have thought of, like we got heaps of ideas from the in-service the other day (FG 17-09-08, p. 9).

The practicalities and priorities for implementing these ideas were also discussed. The changes highlighted were redesigning or removing the sandpit, on-going removal of non-native plants, particularly those that were drought stricken, creating several picking and growing gardens, installing a water tank and removing garden borders. A number of strategies were cited for moving forward with these priorities. Firstly, there would be formal communication with staff at their next meeting regarding changing the rules about picking plant parts and playing in the garden beds. Secondly, an invitation to parents to contribute ideas would occur through an annotated visual display about natural outdoor playspaces. This would then garner interest for fund-raising at the forthcoming fete. Thirdly, a philosophy statement would be drafted based somewhat on the exemplar read in the focus group and it would be discussed at staff and committee meetings. Fourthly, staff could consider participating in some training programs offered by the professional organisations PRAV and EEEEC. The centre was now a member of both and staff education was viewed as a priority to facilitate further change.

XS7: I think to change even more we need to do a bit of education because some people have been at the centre for a very long time and haven't studied for a long time, so sometimes old rules are hard to change ... there are new practices and ideas about how things can be different (FG 17-09-08, p. 11).

XS2: We are members of EEEEC now, so they give us lots and we are members of PRAV and this has come about since we started this. And they offer a lot of training and in-services that we can all go off to and get inspired (FG 17-09-08, p. 11).

It was agreed that as the centre moved forward, the changes would be documented in a diary or journal of photographs with captions provided by all staff. The diary would not only document evolving changes, but also serve as a communication tool with parents and children.

XS2: Actually just have a journal, where we keep track of the changes, like we are just at the beginning, so if we kept putting in a paragraph and some photographs just once a month ... and kept it open at the front for the parents, so parents can see the progress.

XS8: And all staff should have input too, because each staff member is going to see a completely different change to others, so it shouldn't be just one person that does it with one view.

XP4: And a suggestion page for parents too, not that you [staff] have to do everything (FG 17-09-08, p. 13).

Lastly, the group reflected on how they viewed the cultural change process that they had embarked on and variously described evolving, journeying and taking steps. Irrespective of the language employed there was no doubt that big changes were in train at many levels, not just in the outdoor playspace.

XS7: I think kind of we are taking small steps and we are learning and building on what we have just started, I don't know how to word that either, but to continue that and keep going with it.

XS2: Like evolving, maybe a journey as much as I don't like using that word, it just sounds so 70s. LAUGH We are evolving, I like the word evolving and changing.

XP4: Yes, it is going to get bigger and bigger and bigger.

XS2: And we are looking at our practices and changing, so we are on a journey LAUGH Well maybe we could say we are beginning a process of reflection and we are thinking about our practices and how we can make small changes, baby steps (FG 17-09-08, p. 11).

As a group reflection and collective process, the data created by the focus group was a powerful statement about the centre and how its transformative journey was happening. The third action research cycle concluded with a period of monitoring and evaluating, a time for me to reflect again about emerging themes and my personal transformative journey as researcher.

More emerging themes

Further themes emerged through the interviews, focus group and my professional journals as the study progressed. Exploring these themes as part of the centre narrative added depth to the transformative journey underway. Emerging themes at this juncture included the knock-on effect, the silenced minority and value congruencies.

- **The knock-on effect**

A staff member had described in her initial interview how what one staff member did in one room influenced staff in another room and she labeled it the 'knock-on effect' (XS3 22-04-08, p. 6). It was perceived as an approach to embedding change that was effective in the past and the current situation was similar. As the worm farm was established it had knock-on effects for the kitchen staff, staff in other rooms, children, parents and even staff partners at home. Also, when water saving practices were instigated these had a knock-on effect to other rooms. This study impacted well beyond the 3-5 year olds outdoor playspace that was the primary site of research engagement.

The knock-on effect became a recurring catch phrase, as I summarised in my professional journal:

Overall, there's a change with all staff not just the 3-5year old room, a sense of excitement about what is happening and changes beyond the outdoor playspace. The outdoor playspace provided a tangible starting point, it was already a priority for the centre, but initiating the project and creating the space for discussion has led on to much broader implications. Analogous to the butterfly effect of many small changes emanating from one change, culminating in a significant cultural shift to sustainability as a frame of mind (RJ 31-08-08, pp. 43-44).

- **The silenced minority**

This theme arose from Bush Betty's reflections on her study participation during the second interview. She indicated that in the past the few staff who were interested in environmental issues had felt silenced by the majority of staff. They had not pushed their environmental concerns in the interests of staff camaraderie and collaboration.

And it is also, like sometimes you can get a bit of a culture in a centre and it has happened here. Where you might have 50% of the staff who say: 'Oh here she goes again about the environment' ... And you see half of them just shut down and it disheartens you. And you think: 'Oh I don't want to make myself disliked', you don't want to put people off or put half your staff off with your ideas. You coming here has given us a lot of, well a bit more courage to speak up and say this is how it is and why. I think that that has helped a lot too. Because often you get silenced, people just come here for a job, and that's fair enough and they don't want to do all that extra. They don't have the same level of commitment. They often silence you: 'Oh here goes Bush Betty again'. ... You do get silenced and then you get put off, and then you think why should I stop just because somebody doesn't like it. Or somebody thinks it is too much or too hard. So, I guess for the 3-5 year old room leader and me and a few of the others this has been encouraging and we feel better about speaking up and speaking out about our ideas (XS2 19-08-08, p. 5).

As a silenced minority the few staff with environmental concerns found a voice through the research study and it appeared that other staff were no longer silencing them. In hindsight, 'unsilencing the sustainable silents' (RJ 31-08-08, p. 35) was a significant aspect of promoting the cultural change towards sustainability within the centre.

- **Value congruencies**

At several levels both staff and parents expressed a sense of growing congruency between the sustainability values of the staff, families, wider community and the early childhood field. In particular, a parent supported Bush Betty's sense of greater congruency when she commented that the centre now better reflected her values.

I have always liked the centre, I was quite comfortable leaving my children there, but now it appeals to me at a higher level and I feel more pleased and more comfortable leaving my children there. And I like the idea that sustainability is being incorporated into their play and into their learning (XP1 29-08-08, p. 3).

Bush Betty also expressed a more encompassing view and suggested that not only did the centre better reflect parents' values, but also the values of the early childhood field as a whole. *We can see that it is an area that early childhood is heading and we like to make sure that we are reflecting our own industry's values as much as the communities and the parents* (XS2 19-08-08, p. 3).

Researcher's third reflections: Feeling transformed

Just as the centre was exhibiting signs of transformation so was I. The research process had transformed me; and, I felt better able to reflect on some shortcomings within my initial constructs and perceptions. I was also buoyed by the journey shared with the centre co-participants. The following reflections explore shifting my research agenda, becoming empowered and revisiting my initial conceptual framework.

- **Shifting my research agenda**

Initially, I was concerned about the frequent listing of obvious sustainable practices in response to my interview questions. The pedagogical description of education for sustainability appeared limited.

Staff in many ways are still focussed on the tangibles, not yet seeing or thinking about it at a deeper level. In terms of education for sustainability, it is about talking, doing and role modeling with children, not yet about collaboration, participatory decision making, critical thinking etc (RJ 31-08-08, p. 44).

As the transformative process unfolded and I could see the change in the centre, I became less concerned about theoretical or abstract articulations by participants. Significant change was happening irrespective of abilities to articulate what I as the researcher perceived to be important. I needed to shift my agenda and it was now their agenda.

As someone committed to following a particular course, the idea that the research will not necessarily answer the questions I began with is challenging. This I have now accepted, it is not failure, the research is about the researchees not me. If they have changed as a result of the research, then there are outcomes. 'Lived change' not theoretical constructs of education for sustainability, change cannot be documented as abstract concepts about what is education for sustainability (RJ 07-10-08, p. 48).

- **Becoming empowered**

Accompanying the shifting agenda noted above, I observed over time how each transformative step empowered the centre community. They were now leading the research study and creating a self-perpetuating cultural climate of sustainability. By the fourth action research cycle I openly acknowledged, *as the researcher becomes disempowered the researchee becomes empowered* (RJ 07-10-08, p. 48; Refer Figures 12-14 in Chapter 7). The researchees were becoming action researchers in their own centre project and taking ownership, rather than simply being participants

in my study. They were now operating and functioning without the need for a mentor or guide and on later reflection I felt empowered in different ways. This process is theoretically a tenet of critical participatory action research (Kemmis & McTaggart, 2005), but to have lived it with the centre community over an extended period deepened the meaning for me and revealed the value of action research approaches.

- **Revisiting my initial conceptual framework**

My initial conceptual framework about the outdoor playspace became a topic for increasing critical reflection because it was created with dichotomies of human and non-human and internal and external. Yet these groupings reinvent the dichotomies in poststructuralist research (MacNaughton, 2005) and give precedence to human perspectives rather than reflect systems theory (Capra, 1997). *The arbitrary ... decisions about human and non-human categories created blurred boundaries* (RJ 18-07-08, p. 40) and such decisions came to the fore in the outdoor playspace. I queried, was the drought stricken outdoor playspace a human or non-human instigated event and were the non-native plants part of human or non-human categories? Temporal elements seemed to supersede these categories. Exploring a systems approach (Capra, 1997) for mapping the various elements and their interrelationships offered a more authentic and complex picture. Appendix 38 illustrates the application of systems approach to the sandpit, one aspect of the outdoor playspace that was of ongoing concern for staff. Many elements both human and non-human are interrelated and variation in any one element had repercussions for all other elements, the system was dynamic and responsive.

Transformation for sustainability

Early in 2009, a year after the research had begun I returned to Banksia Childcare Centre to conduct interviews with Bush Betty and the 3-5 year old room leader as part of the fifth and final action research cycle. Note the fourth action research cycle, that focussed on children's perceptions about the outdoor playspace, is not included here for reasons considered in Chapter 4. The final visit revealed that the worms in the worm farm had died due to excessive summer heat; however, the joint interview confirmed that a significant transformative process had occurred and more importantly, was still underway. Key points identified in the interview were: embedded sustainability; program planning and use of outdoor playspace; organisational change; and, future plans.

- **Embedded sustainability**

Sustainability was now *just everyday practice embedded in the day to day running and routine* (XS3 24-03-09, p. 7). The 3-5 year old room leader did not view sustainability as comprising isolated or discrete projects, but part of daily practice. As she commented *you kind of look at everything that you are providing and say how is this impacting on resources* (XS3 24-03-09, p. 8). Her approach to sustainability appeared to have shifted from discrete practices to a more

holistic everything everyday style. Furthermore, the notion of impacts alludes to systems thinking in which dynamic relationships between humans and the environment are fundamental (Capra, 2005). The notion of sustainability being embedded was reinforced by observations of children as they moved from the 2-3 year old room to the 3-5 year old room in the New Year. They carried over practices from one room to the next, as the 3-5 year old room leader noted:

It was lucky that the children this year have moved up into 3-5 year group from the 2-3 year group because what we were doing in the 3-5 year room last year, was infectious. So they were already saving water and doing other things ... That has helped for the transition (XS3 24-03-09, p. 2).

Further, children were scaffolding each other and asking questions about sustainable practices, staff believed that their role modelling was impacting on the children.

The other day we were doing an observation of some children in the cooking area which we had a bucket of water there. And one of the children said something like: 'You need to be careful with the water as we don't have a lot and it's very precious'. ... So, all of the time that the staff have been engaging them in discussion about water, it has been sinking in (XS3 24-03-09, p. 8).

While Bush Betty acknowledged centre practices had changed, she was still concerned about the broader community picture and how sustainability had become a catch phrase with insufficient realisation of the implications. *Everybody talks it because it is the in thing, I don't think we really realise it enough, and it worries me at the moment that it is such a catchphrase (XS2 24-03-09, p. 8).* Bush Betty was already recognising further challenges in her role as an advocate for sustainability.

- **Program planning and use of outdoor playspace**

In practical terms the 3-5 year old group staff had introduced specific changes in the way they planned for the outdoor playspace, demonstrating a greater valuing of outdoor play opportunities, *the way we write our programs has dramatically changed (XS3 24-03-09, p. 5).* For example: the displayed hard copy of the outdoor program plan was increased to the same size as the indoor one; the period of indoor/outdoor play choice for children was soon to be all day; and, a visual diary for documenting indoor and outdoor play was established. As a result of renewed staff enthusiasm for being outdoors, the staff rotation time for outdoors was now one week not two. While each change appeared small, in total they reflected a significant pedagogical shift about outdoor play and playspaces. Such change likely communicated to other centre staff, parents and the wider community that outdoor play was highly valued in the centre.

Linked with the above changes, the staff put less equipment out from the storage shed and promoted more play with found natural materials and use of the bushy refuges in the garden bed. The 3-5 year old room leader described how she had previously observed a lot of wandering and undirected play outdoors, but now children were more actively engaged. She attributed the change to removing limits about using garden beds and picking plant parts; she painted a typical scenario as follows:

At the moment there is a group of boys that adore playing up near the stairs [in the garden bed], it was their favourite place to play and they have built a cubby, and they keep saying they are going to sneak back at night. They take the trucks and they take the cooking equipment, they take the buckets and they take the dolls, and little bits and pieces that they need for their game (XS3 24-03-09, p. 10).

Children were being resourceful, self-directed and creative in their choice of play materials and playspaces. The co-ordinator affirmed that children's play opportunities had expanded and she believed staff had changed their use of outdoors as a result of the study (JB 22-10-08, p. 55). Further redevelopment of the outdoor playspace was planned and the 3-5 year old room leader keenly expressed her wish to continue to expand the play opportunities.

- **Organisational change**

At a Committee of Management meeting late in 2008 it was *established that the centre definitely wanted to go in the direction of sustainability* (XS2 24-03-09, p. 3), so a review of the philosophy and policy statements, noted during the second focus group, would include sustainability. Also, the Committee of Management established a Sustainability Sub-committee that linked with two other sub-committees, the Grants Sub-committee and the Grounds and Maintenance Sub-committee. Working collaboratively it was envisaged the three sub-committees would take responsibility for redevelopment of the outdoor playspace and issues of sustainability. Bush Betty described the sub-committees as *highly motivated* (XS2 24-03-09, p. 3), but I sensed they were now entering the planning phase with some trepidation. *It is going to cost a lot of money and we are really scared of stepping off and making a start* (XS2 24-03-09, p. 3) *because it seems so daunting the whole thing* (XS3 24-03-09, p. 3). Although the organisational changes were aligned with the new centre vision, there were dilemmas to be resolved as tangible change occurred.

- **Future plans**

Planning to redevelop the outdoor playspace framed by sustainability was clearly viewed as a major task and with limited funds of \$30,000 raised over three years, it was evident they did not want an outside professional to impose a vision and quickly expend all the finances. Collaboratively taking small steps, building a sense of ownership and making do were highlighted and reflect the learning from other studies (Gough & Fein, unpublished; Davis, 2005; Vaealiki & Mackey, 2008).

XS2: I think it needs to happen in little steps, or projects, where all the families can contribute, either knowledge or something practical or physical. (XS2 24-03-09, p. 3).

XS3: And that gives ownership then, because at the moment a lot of the staff feel they don't own the yard, that they are just being there because they have inherited the yard as it is (XS3 24-03-09, p. 4).

Despite the high motivation and recent positive experiences in the outdoor playspace, some phrases alluded to concerns about getting it right. It was clear that a grand plan was required to ensure funds were used wisely and the priorities of all concerned were realised. More broadly, Bush Betty envisioned the redevelopment of the outdoor playspace as a way of adapting to the current climatic conditions. Perhaps ... *we'll give the kids positive ideas, what they have to do to change and what we will all have to do to change to survive in the future* (XS2 24-03-09, p. 5).

A recurring theme in considering future plans was the challenge of working with Council. Bush Betty's language was evocative as she described the processes of obtaining permits for the rebuilding of the shed as *annoying and tedious* (XS2 19-08-08, p. 5). The paperwork required for funding and planning through Council was a significant concern to Bush Betty and as she observed, when compared to schools there are not the resources or time to devote to such tasks in comparatively small early childhood centres. Further, the 3-5 year old room leader (24-03-09, p. 5) described how tanbark soft-fall had been delivered over the recent summer holidays and lamented *we didn't have any say, the whole area had just been tanbarked except for the pathways*, echoing earlier sandpit renovation issues. The Council processes were perceived as both challenging and disempowering by staff.

A synthesis of Banksia's transformation

In conclusion, reflecting on the one-year process Bush Betty and the 3-5 year old room leader described it as hard work, slow and overwhelming. The following transcript encapsulates their final thoughts.

XS3: It was so overwhelming to begin with, but then you started to get excited about it.

XS2: It is hard work organising people, organising and liaising with Council, managing budgets and making decisions. And, all the personalities ... LAUGH

XS2: But, I still have the vision, so I know that even though it has been slow, I still have the vision and that this is what we want to achieve.

Researcher: You have described the hard work and why it was hard work, can I go back to you [3-5 year old room leader] and ask why you chose the word overwhelming?

XS3: Because I think I was struggling with sustainability myself, and how to teach that in the program, and how I was going to model that to the children. And then, when I got a grasp of what I was wanting to engage the children in, then it became easier. Like starting the worm farm, the initial bottle ones that we made, that was the turning point for me (XS2 & XS3 24-03-09, p. 9).

The worms had died, but there was a vision; sustainability had created a frame for organising ideas and thinking about the outdoor playspace for the 3-5 years group. Individual people

had experienced turning points and there was a collective sense of excitement about the lived transformative journey. Returning to the centre's pseudonym, the research fire had stimulated *Banksia* seed release and germination, the very beginnings of change. The adaptive robustness and persistence of the *Banksia* plant in a challenging environment was evident; and, many participants grew along the way. They had shared and benefited from the rich nectar of change and strong seeds of leadership had been nurtured. There was no doubt about the centre continuing to grow and flower into the future; and, I began to reflect, question and theorise about why and how the centre was now flourishing with a vision of sustainability.

In the following chapter I describe the qualitatively quite different story of Acacia Kindergarten. Contextual variances were readily observed, but these case studies revealed deeply embedded disparities that I believe impacted significantly on the potential for realisation of a more transformative journey at Acacia Kindergarten. Later in Chapter 7, I explore this in depth drawing on the narratives of both Banksia Childcare Centre and Acacia Kindergarten.

CHAPTER 6 – ACACIA KINDERGARTEN

The centre metaphor *Acacia* or wattle (Costermans, 1983; New, 1984) is indigenous to Australia and well known for the showy yellow flowers, emblematic of Australia. As a tree they are relatively short lived compared to other indigenous trees and prone to damaging insect attack. The flowering occurs over a brief period and the dehiscent seed pods quickly become part of the leaf litter. Typical of many Australian plants, including the *Banksia*, the seeds require exposure to fire before germination will occur. A unique feature of the dominant phyllodinous type *Acacias* in Australia is that their germinal leaves are somewhat fragile shade tolerant pinnate forms and gradually, as the seedling matures, the leaves change to the more robust, sun tolerant phyllodinous type. *Acacia* is the pseudonym of choice for this case study kindergarten as characteristics of the *Acacia* tree reflect elements of this narrative. The journey of Acacia Kindergarten was challenging, while the research fire prompted germination, there were only brief flowerings of sustainability and these were underlined by a sense of fragility and questionable longevity.

Overview of the organisational, socio-cultural and physical context

Acacia Kindergarten was located in a middle urban residential area, co-housed with a maternal and child health centre and opposite a primary school. The kindergarten offered two sessional programs for four-year olds, one program over two sessions and the other over three sessions and only the latter group participated in this study. Approximately twenty-five children were enrolled in each program. In addition, a sessional three-year old program with twenty children operated for two sessions per week; therefore, a total of seventy families accessed the centre weekly. Session times varied from two and a half to five hours and were scheduled either morning or afternoon. Many children were from culturally diverse backgrounds including Indian, Chinese, Macedonian and Sri Lankan. Also, in one of the four-year old groups there were several children with special needs who required additional support from an intervention aide.

Local government owned the kindergarten, but a joint committee of management that represented three local kindergartens managed it. This is not an uncommon practice to spread the considerable administrative load of management committees in sessional kindergartens in Australia, particularly where parents have less time or few skills to contribute. Parents and staff from all three kindergartens participated in the joint Committee of Management. The role of the Committee of Management was to facilitate communication and social interaction within the kindergarten community, organise fund-raising, co-ordinate special events or projects and employ staff. The Committee of Management also has an operational role, guided by sixteen policies ranging from sun protection to fee payment and the Victorian State Government Children's Services Regulations ('Acacia' Kindergarten Parent Information Book, 2009; Victorian DEECD, 2009b). Further, the 'Acacia' Kindergarten Parent Information Book (2009, p. 2) outlined that the kindergarten offered

an educational and social program based on observation of the needs and interests of individual children and the group. The program was designed to promote children's whole development. It stated that the planned weekly program could be viewed on the parent noticeboard and families were encouraged to discuss the program with staff.

Three staff were employed at the kindergarten, a teaching director, an assistant and an intervention aide. The teaching director had originally completed a College of Advanced Education (CAE) three-year diploma that qualified her to teach both primary and early childhood. The assistant and intervention aide both held integration aide certificates, an initial qualification for working with additional needs children. The teaching director and assistant worked full-time across all three children's programs and the teaching director, as centre director, also had responsibilities for planning, resourcing and management during non-contact times. The aide was only employed for one of the four-year old groups which included children requiring additional support and she was concurrently employed part-time in two other centres. The teaching director was my main point of contact throughout the study, but all three staff were involved in interviews and/or focus groups.

My initial visit to the kindergarten was during a planning time; no children or other staff were present. The teaching director highlighted that the kindergarten was about 30 years old and a number of original native trees including *Casuarina*, *Eucalyptus* and *Acacia* species had recently died or been blown over in storms. Coincidentally, between my first and second initial reconnaissance visits to the kindergarten another tree had fallen down irreparably damaging the swing frame. A joint project with the two other kindergartens was underway to install shade sails, however it had been delayed for about two years due to supplier issues. The outdoor playspace was north facing and comprised extensive verandahs, a purpose built wooden cubby, a tanbark soft-fall area under the climbing frames and swings, a grassed area and a roofed sand pit (Refer Figures 9 & 10). The total outdoor area was 314 square metres not including the verandah, well above regulatory requirements (Victorian DEECD, 2009b, Regulation 97). Also, clearly evident were two high brick boundary walls that were not shaded, so became very warm in summer. The Council was responsible for on-going maintenance of the outdoor playspace. Parent working-bees at the kindergarten had been well attended in the past, according to the teaching director. The teaching director was keen to do some work on the outdoor playspace as part of this research and suggested that the other two co-managed kindergartens might also benefit from the study.

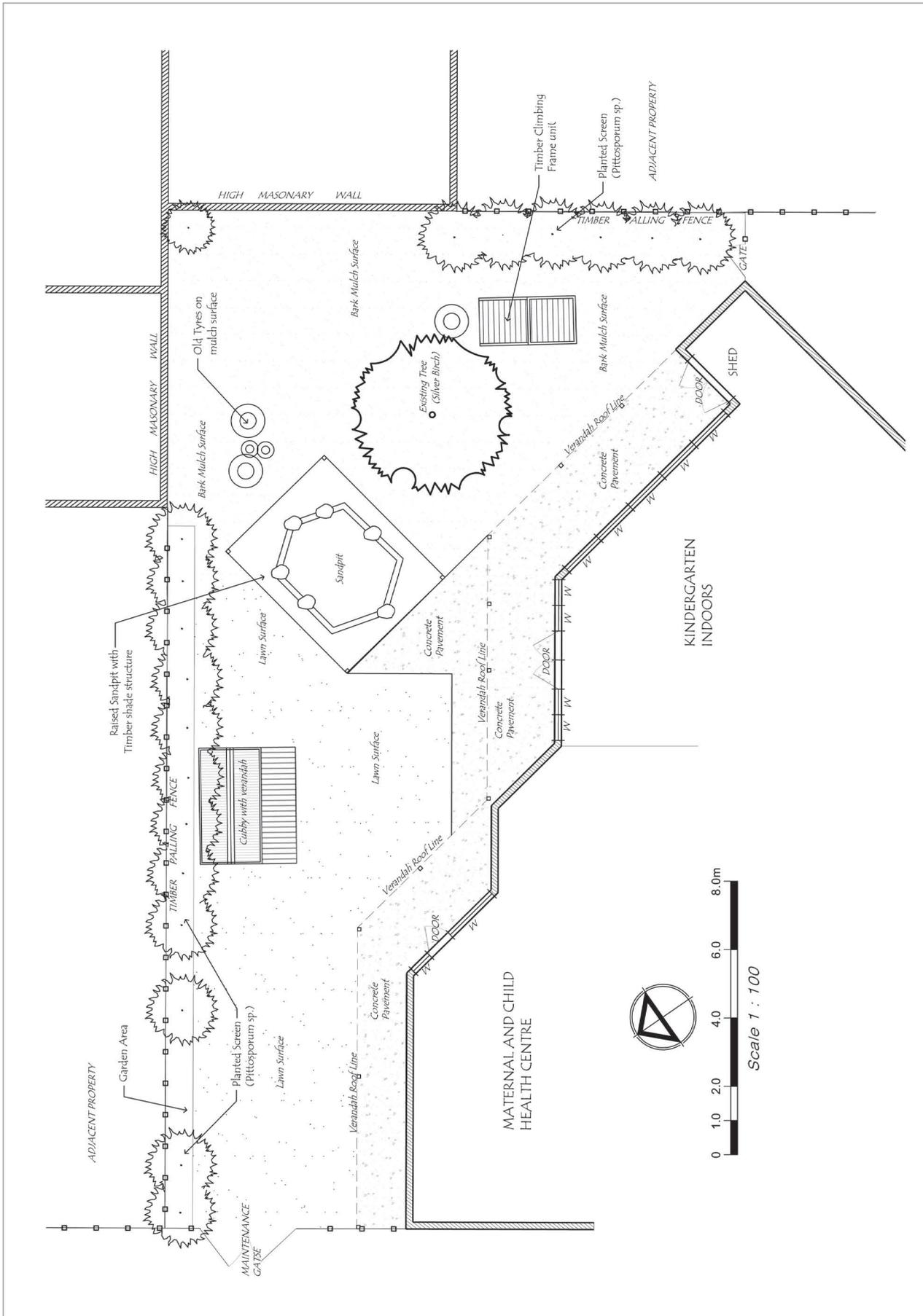


Figure 9 – Plan of outdoor playspace at Acacia Kindergarten



Figure 10a – A grassed area and garden border where mature native trees had been prior to the study

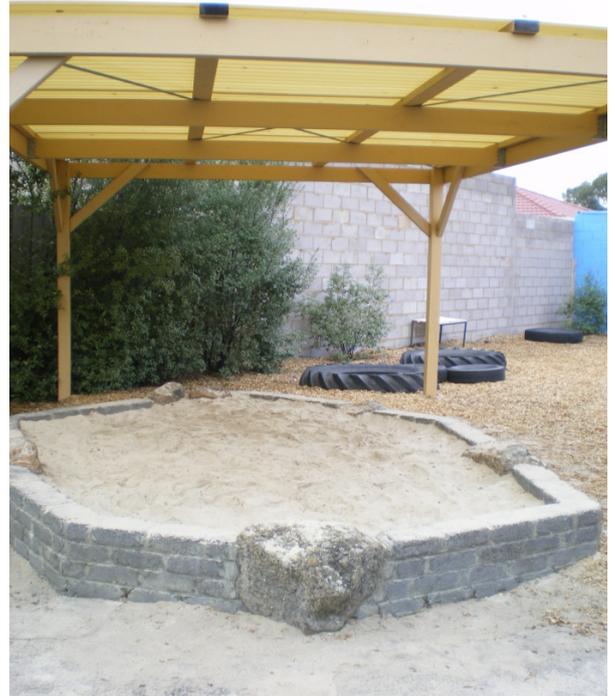


Figure 10b – The roofed sandpit



Figure 10c – The tanbark soft-fall area where a swing frame and mature tree had been at the very beginning of the study with the high brick boundary walls in the background, the birch tree to the left was the later location for the bird box action priority



Figure 10d – The purpose built wooden yellow cubby house

Figure 10 – Initial photograph collage of Acacia Kindergarten

Researcher's first reflections: Being there

My first reflections from visiting Banksia Childcare Centre (Refer Chapter 5) offered a sound basis for creating a research role at the second case study site Acacia Kindergarten. The initial reconnaissance visits at Acacia Kindergarten were conducted at the convenience of the teaching director during planning times when the teaching director was the only staff member present. So, it was not until the act phase of the first action research cycle that I had an opportunity to meet other staff and briefly observe the program in action prior to the staff interviews. I had placed an introductory photograph and statement about myself and the research on the kindergarten noticeboard inviting contact if required (Refer Appendix 28). While a relationship was established with the teaching director at Acacia, for me there was not yet a sense of immersion in the context. I was very conscious of being positioned as an authorised visitor.

Initial participants' perceptions

I initiated the plan and act phases of the first action research cycle at Acacia Kindergarten. Planning the interviews and focus groups around staff work times was again difficult and enlisting parents' involvement in the research was a particular challenge. The demographics of the families (Refer Chapter 5 & 6 Introduction) may have been an inhibitory factor in this centre. A reminder notice was placed on the kindergarten noticeboard and both the interviews and focus group were deferred one week to allow more time for positive responses. Initial perceptions about sustainability, education for sustainability and the outdoor playspace were drawn from the first interviews with the three staff and two parents.

- **Sustainability**

Perceptions expressed about sustainability were both varied and in one instance quite unclear to me. Notions of temporal intergenerational impacts were clearly stated, for example *what we do now is the footprint we leave for our children and our grand-children* (YS2 24-06-08, p. 1). Conservation of resources was also conveyed, for example *using the natural resources around us in a way that is not depleting them* (YS1 24-06-08, p. 1). One parent perceived sustainability as something *safe and secure with certain outcomes* (YP5 31-06-08, p. 2). I invited expansion of the perception, but the response seemed confusing:

Researcher: Some people use the term sustainability, like they use the term sustainable investment, sustainable farming or sustainable environments do any of those ideas about sustainability come into your thinking at all?

No, something safe and secure with an outcome. So, if you are talking about an outdoor play space, I'm thinking it's something like an obstacle course that is going to help children develop confidence (YP5 31-06-08, p. 2).

This particular interview was a further awakening to the nuances of meaning and how, without expansion I might have tenuously interpreted her initial comment as referring to sustainability, but the obstacle course example proffered suggested otherwise.

There appeared to be diversity about the priority of sustainability in the lives of interviewees. The teaching director stated *I think about it, but don't know how much a priority it is* (YS1 24-06-08, p. 1), while the assistant acknowledged her priorities had changed, *I think it has become a very high priority* (YS2 24-06-08, p. 2). The assistant outlined examples of practices from home and the kindergarten. A parent separated being sustainable and being environmentally conscious, suggesting *I don't know that I think about sustainability as much as trying to be environmentally conscious* (YP2 24-06-08, pp. 1-2). She then listed a range of practices that I would interpret as equally relevant to both terms. This parent had lived in the United States of America for the past nine years and on returning to Australia the term sustainability seemed relatively new to her. I interpreted this comment as a signal of cultural and/or linguistic perspectives that may further compound the challenges of defining sustainability.

- **Education for sustainability**

As at the first case study centre education for sustainability was generally perceived by interviewees as practices such as vegetable gardening, recycling and conserving water with children. One parent reflected a more encompassing picture of social change towards a greater collective or community orientation.

Certainly in my generation there was a pretty big focus on the individual and aspiring to things and looking after yourself and I think of us as being the me generation. It's all about me. I would like to think that for the kids we are moving out of that to more of a sense of community again ... Thinking about the impact we have on other people and fostering interactions with other people (YP2 24-06-08, p. 2).

There appeared to be some consensus that beginning in early childhood was important, *sustainability would be setting them up for life, something that you start off with criteria from kinder and school, and even home ... so they can grow up to be knowledgeable and better adults* (YP5 31-06-08, p. 7). However, education for sustainability requires adults working and living with children to be aware in the first place. Only then, can adults convey their awareness and commitment to children through talking with, demonstrating to and encouraging them such that *it becomes part of your day to day things, without realising, that that is what you're doing* (YS2 24-06-08, p. 3). The teaching director was also concerned that education for sustainability was something for all, *we can do it in kindergarten and school, but it needs to go right through. And it also needs to be something local governments think about and educate the community and population as a whole, so we're all thinking about it* (YS1 24-06-08, p. 2). She believed that incorporating education for sustainability would be easier in kindergarten as staff could follow what they think children are interested in year to year, but in schools it would be harder due to curriculum pressures. *School curricula are so packed as it is, but our curriculum we*

can work through with our children and our families and it is easier for us to do different things with our children each year, what we think they are interested in (YS1 24-06-08, p. 7).

- **Outdoor playspaces**

Participants' perceptions around education for sustainability in the outdoor playspace focussed on observing, discussing and caring for nature. Whether the focus was birds, bugs or plants the staff perceived a role in supporting and extending children's nature interests. As a parent stated *I think an appreciation of nature is the most vital thing for sustainability and there is an innate sense of happiness we get from nature* (YP2 24-06-08, p. 4). It was acknowledged by the teaching director that *it would be lovely if we could create outdoor play spaces where nature could be central or a very important part* (YS1 24-06-08, p. 3) and where children could connect emotionally with the natural environment. However, one contentious point did arise in relation to bugs as a nature experience. While one parent stated *for my kids bugs are the best thing* (YP2 24-06-08, p. 4) another disagreed, *my daughter does have a bug phobia like me, [but] she doesn't run away when she sees a fly any more* (YP5 31-06-08, p. 4). The teaching director added that some children *don't have a lot of experience of nature, their only experience might be a pot plant in the corner* (YS1 24-06-08, p. 4), due to their very urban lifestyles and possibly diverse cultural backgrounds including Indian, Sri Lankan and Macedonian.

The value of the outdoor playspace was expressed in terms of children's play as predominantly encompassing fresh air, freedom and physical activity. *Outside they [the children] know ... they can run and climb and jump and spin they can do all those things and there are no restrictions* (YS1 24-06-08, p. 3). The large size of the space was noted as supporting these opportunities and for the teaching director the naturalness of the space was important. For some interviewees sensory, social and imaginative play priorities were stated and often linked with the need for diverse or different play opportunities outdoors, particularly when compared to indoors.

They love hiding in and behind bushes, so I think if you didn't have equipment but had bushes to hide behind. I do think less is more. The more toys that you have for a child and the more structure, then the less they use their imagination (YP2 24-06-08, p. 5).

Beyond the play opportunities afforded by the playspace, both staff and parents raised the amount of time that children spent outdoors. Staff expressed concern that children did not spend enough time outdoors beyond the kindergarten program due to working parents and limited backyard opportunities. While a parent stated that with respect to the in the kindergarten program, *I think they only get out there for a short period of time like I wouldn't say it is 50:50* (YP5 31-06-08, p. 4). The teaching director stated *I think children just love to be outside a lot of them ask: 'Are we going outside today?' It is the first question that some children will ask* (YS1 24-06-08, p. 3). These comments, combined with some children's limited experience of nature cited above, suggested a need for more outdoor playtime within the kindergarten program. Additional support

for this need was drawn from my direct observations of the program (Refer later this Chapter). Further, the need for more outdoor play resonated with literature citing the deepening erosion of children's outdoor playtime and potential impacts for their long term health and wellbeing (Clements, 2004; Hofferth & Sandberg, 2001; Honore, 2004).

These perceptions about sustainability, education for sustainability and the outdoor playspace provided the basis for staff and parents to consider an action priority within the focus group context. The focus group was also part of the act phase of the first action research cycle.

Identifying an action priority: The first focus group

The focus group of two parents and two staff members began by briefly exploring meanings of sustainability and education for sustainability and they acknowledged it was more than just recycling. Meanings cited included careful resource use, stewardship and valuing of the natural environment achieved through adults talking and doing with children in the outdoor playspace.

YP4: When I think of sustainability I think of something that can be reused and something that can be replaced so that it never runs out.

YS2: We could talk with the children about the natural resources, like the trees and grasses and the plants. And that becomes an ongoing thing, it is part of the educational process.

YP6: If we can do this in front of the children then it makes a lot of difference, but if we just talk about it they won't understand (FG 25-06-08, p. 1).

The teaching director then provided an historical context for group participants describing how in recent years a number of mature native trees had either been blown over or died in the outdoor playspace. A Council grant of \$5000 had been applied for to replace the trees and if the grant was successful, some of this money could be used for other priorities too. In addition, the group were aware that: the swing had been damaged and removed due to a tree falling down; the installation of shade sails across the three co-managed centres had been in progress for two years; and, a second high brick boundary wall had been constructed by a neighbour. Hence, it was not unreasonable that the teaching director referred to the outdoor playspace as a *blank canvas* (YS1 FG 25-06-08, p. 1). She viewed this positively as opening up many possibilities for change.

The group enthusiastically contributed and discussed a diverse range of ideas to identify an action priority for implementing in the outdoor playspace. Possibilities included a frog or fish pond, a vegetable garden, animal pets, a tricycle track, different play equipment to inspire discussion about the origins of materials, seasonally diverse areas, fruit trees, bird feeders or boxes, plants in boxes or pots, a children's mural, worm farms or compost bins. Ideas beyond the outdoor playspace also arose, such as rubbish-free lunches, sustainable transport and incursions or excursions.

The teaching director was very responsive to the ideas shared and positively stated several times about how many possibilities had been generated *lots of really good ideas* (YS1 FG 25-06-08, p. 7). One parent was a particularly strong contributor of ideas. Her background in primary school teaching combined with her personal values and home experience were clearly evident. The following excerpt is illustrative of their particular discussions.

YP4: What about fruit trees too?

YS1: Well yes, I must admit when I was at the other centre we had an apple tree and some of the kids used to pick them and eat them, they were very tart.

YP4: At home we've got apricots, peach, nectarine, cherry and mandarin and they all grow and they are edible.

YS2: That's interesting, why don't we have fruit trees?

YS1: Yes, that would be great, why don't we?

YP4: And you can get a lot of mini ones too, like the lemon tree, that can just be in a pot, it doesn't have to be a massive tree (FG 25-06-08, pp. 7-8).

Initially children were mentioned often as somewhat passive participants, rather than actively involved or as leaders, within the various ideas canvassed. Notably they were observing, listening or doing. Later, the assistant acknowledged that in relation to reusing resources, *maybe the teacher and I should talk more about why we are doing that. When mums and dads are bringing in bottles and boxes ... and how we are reusing them ... About why we do it, so that they [the children] understand* (YS2 FG 25-06-08, p. 4). Also, the assistant introduced the idea of children taking ownership. She stated *planting is a good idea because they can take some ownership of it, like this is your seed, this is your group's seed, let's see what happens and we will share whatever comes from it* (YS2 FG 25-06-08, p. 7).

The group also extended the content of discussion beyond just centre practices. One parent had recently read an article about local playgroups including elderly visitors and viewed this as a positive way of exploring intergenerational and cross-cultural knowledge and skills. Scenarios envisaged included elderly people sharing stories of their childhoods or teaching skills such as knitting, gardening or woodwork. Participants were supportive of this as an approach to creating links between the centre and wider community and more importantly getting community back.

YP2: Now we have become a bit more isolated from other families and families are smaller, so children don't always get that opportunity today, so maybe we do need to start looking at the community in a broader sense and create our own family situation in a way. The children going together and doing things together.

YP1: But I mean society has changed ... but to try and bring that community back (FG 25-06-08, p. 5).

Underpinning attitudes and values were expressed during the focus group that supported the intent of the group and promised commitment to implementing an agreed action priority. There was group support for children climbing trees, getting dirty, experiencing natural textures and making things from reused materials. Generally, children being outside was advocated, *that's how it should be, kids should want to be outside* (YP4 FG 25-06-08, p. 8). The same parent shared an anecdote about Father's Day that again illustrated the depth of her sustainability values.

When you do Mother's Day, that's like a sustainability process because you are getting kids to give something that comes from recycled stuff it is not something that is bought. And that's a lot better, like at the last kindergarten for Father's Day they gave out an order form if you would like to order a bottle of wine for Father's Day with your child's name on it. And I said: 'No I do not. My son doesn't need to think that men need alcohol all the time, he could just make something' (YP4 FG 25-06-08, p. 4).

The assistant supportively agreed that it was not about what the gift was made from, but *putting the value back* (YS2 FG 25-06-08, p. 4) into the gift as something the child had made for his or her parent.

At the instigation of the teaching director, the group then reflected on all the ideas discussed to decide what the action priority should be. They returned to focus on the bird feeder or bird box, worm farm and replanting with fruit trees. The potential to involve people from the centre community or wider community in sharing their skills was reiterated. The teaching director stated: *I think the bird box and maybe the worm farm to start with, does everyone think that's a good idea?* (YS1 FG 25-06-08, p. 10). The group chorused 'Yes', then discussion ensued about a range of strategies to support the suggested action such as obtaining relevant children's books, creating a photo diary, communicating with parents via the newsletter and a parent social evening.

YS2: I like her [other parent] idea about keeping a diary because then we can talk about what the parents did for one half of the year and then, that will encourage parents from the next year. For them to come along and say we would like to see something else.

YS4: If you are going to be doing things like veggie patches and compost, then it's good to use newsletters to inform the parents and they'll talk to the children and maybe do some of those things at home too (FG 25-06-08, p. 10).

In practical terms implementing the action priority would also involve presenting a costing to the joint Committee of Management for approval and seeking assistance from interested parents. Two parents from the group offered specific assistance via personal contacts, someone who made bird feeders from reused metal poles and a company that provided recycled plastic pipe sections for planting pots. While the bird feeder was the stated action priority there were many other possibilities that could be part of broader changes in the outdoor playspace and a high level of enthusiasm was exhibited to carry them through.

Beyond the research agenda: Emerging themes

Once the first interviews and focus group were completed, the monitoring and evaluating phase of the first action research cycle provided an opportunity to reflect on emerging themes. Two relevant themes, family nature connections and signs of staff disempowerment, are addressed in the following paragraphs.

- **Family nature connections**

Both staff and parents supported their interview statements by frequently referring to their own childhood connections with nature as had occurred at Banksia Childcare Centre. Memories of childhood were coloured by growing up in the country, camping trips to the bush or beach or simply being outdoors.

They [natural elements] are important because its children's imagination isn't it, it is not the television or the indoor play. Like when we grew up we weren't indoors, we made mud pies, the things that we did as kids, these children, they don't do it because they are wrapped up in cotton wool (YS3 24-06-08, p. 4).

Also, an awareness of generational change was conveyed by suggestions that young children today are not spending enough time outdoors getting dirty and being socially engaged. One parent seemed quite proactive in passing on nature connections to her children. This parent described the *innate sense of happiness we get from nature* (YP2 24-06-08, p. 4), but the other parent stated *we are not tree people ... we try to do lots outdoors, but I don't think we talk about nature that much* (YP5 31-06-08, p. 3). This parent was more concerned about technology driving the lack of outdoor play and viewed socialisation to develop 'people skills' as fundamentally linked with being outdoors. She evocatively described her observations of young relatives, who owned numerous electronic gadgets, thus:

They're young, they are very clever, but you never see them outdoors and they don't have people skills. And I don't want my children to be like that. I would be wrapped if they were clever, but I want them to know a bit more than what is on the screen (YP5 31-06-08, p. 7).

These sentiments echo concerns expressed in the literature about generational trends leading to children's greater engagement with sedentary technology experiences at the expense of active outdoor play and connections with nature (Ginsburg, 2007; Louv, 2005; Moore & Cooper-Marcus, 2008). The longer term implications for children's health and wellbeing are just beginning to be recognised and further research is required (Munoz, 2009; Oliver, Schofield, Kolt & McLachlan, 2007).

- **Signs of staff disempowerment**

From the time of my initial visits a picture began developing of staff, particularly the teaching director, who seemed to have simply accepted events that had occurred in the outdoor playspace.

Events included the high brick wall installed by a neighbour, the shade sail delays over two years and the loss of mature trees and the swing frame. A sense of resignation that ‘this is what happened to us, well what can you do?’ and ‘we are doing the best we can’ was conveyed through my observations and in the following excerpts.

We have put in for shade cloth as well to go over this and we have been waiting on that. You know when the storm went through last school holidays, that’s when the swing broke, so it has only been about 10 or 12 weeks ago and Council doesn’t move very fast (YS3 24-06-08, p. 6).

Well, we are trying our best, sadly we’ve ended up with another brick wall and what can we do about that. We could have protested I suppose ... so we think our outside is a bit sad at the moment. The teacher and I have a few ideas that we would like to do, to put to our committee ... but of course unless they provide the funds, like we can’t just produce it out of nothing (YS2 24-06-08, p. 5).

While I was not totally aware of all the details of these centre concerns, there seemed to be a number of contributing factors to this sense of disempowerment. There were ongoing frustrations in dealing with Council over outdoor maintenance and delays were particularly highlighted here similar to the experiences of Banksia Childcare Centre. Also, it was suggested that a Council grant would be required to replace trees, yet this could be perceived as ongoing maintenance, not something new or different by Council.

The teacher as director had responsibility for all of these issues, in addition to her teaching and she did mention twice that insufficient time impacted on her work. Staff seemed similarly busy at Banksia Childcare Centre, but various administrative and educational roles was shared by several staff, not invested in one person as is typical in Australian kindergartens. Also, the resigned rather than proactive attitude of staff may have been a contributing factor. A landscape architect colleague who designs playspaces with early childhood services, local government and schools, once referred to this specifically as the early childhood victim response (M. Jeavons, personal communication, April 11, 2010). Her perception resonated with my experiences at Acacia Kindergarten and more broadly in the early childhood field.

The noted events were significantly impacting on the outdoor playspace over an extended period for both children and staff and there needed to be proactive responses from Council and staff to expedite matters. I personally felt frustrated on behalf of the staff, but at the same time I sensed resignation and disempowerment within them. This was most probably derived from a combination of long standing Council maintenance and funding issues, a lack of time and/or skills to deal with such issues and a broader community undervaluing of early childhood education. Perceptions of early childhood educators as gendered childminders rather than active and empowered professionals still do pervade despite ongoing discourse debate (Ailwood, 2007).

Implementing the action priority: A two-week experience

Following the intensive act phase of interviews and the focus group, the period of monitoring and evaluating in the first action research cycle extended for almost four months. I promptly supplied text information about worm farms and bird boxes to support implementation of the action priorities identified by the first focus group. The teaching director later reconfirmed these action priorities by phone and indicated that a working bee was likely late in Term 3. A parent had made a bird box for the kindergarten and I photographed it in early August during a visit (Refer Appendix 39). It was soon to be placed in the birch tree by another parent. The teaching director later reported encouraging children to observe any birds using the bird box, but it became evident that despite the children's interest, the box was installed too low in the tree to attract birds. In this action priority children were identified as observers, it seemed they were not active participants. Due to imminent installation of the shade sails, the bird box was removed after about two weeks with the intention of replacing it higher in the tree at a later date.

During the same period a parent from the focus group donated recycled plastic planter pipes and staff reported discussions with children about what to plant. Two parents assisted children to plant the pipes, the teaching director indicated one parent was on parent duty and one overheard the plans on the day and offered assistance. The teaching director seemed pleased with the parent support offered. As with the bird box, the planter pipes were removed after two weeks due to the imminent shade sail installation. Unfortunately, in situ observing or photographing of the bird box or planter pipes did not occur due to the teaching director's cancellation of three pre-arranged research visits with me over two months and the limited time period when each item was in place. These events created a sense of disillusionment for me and I reflect more fully on their impacts in the next section.

When I finally visited the kindergarten almost three months later at the end of October, all plans were on hold until the shade sails were installed and this was to occur any day. The teaching director was apologetic about the delays, but felt some progress had been made. She advised that the Council grant for \$5000 had been successful, so a gardener's quote had been obtained for planting mature trees along the boundary and behind the swing area. Also, plans for the boundary walls were underway; an Indigenous artist known to the assistant was to paint birds with input from the children. Such links with indigenous interpretations are well supported as part of culturally inclusive approaches in early childhood education and also pertinent to understandings of sustainability (Miller, 2010). The worm farm action priority appeared to have lapsed in lieu of other centre priorities. Further, at this point a working-bee was unlikely due to the shade sail delays.

The second action research cycle planning phase began with another month of phone calls between the teaching director and myself before the shade sails were actually installed in late November 2008, too late in the year to contemplate replacing the bird box and planter pipes. As the Christmas holidays were fast approaching it became an imperative for me to plan and

conduct the second interviews and focus groups as soon as possible. They were conducted in early December, although one parent interview did not occur until December 22nd. The act and monitor/evaluate phases of the second action research cycle became compressed into about three weeks. While the research had essentially been completed by the end of the kindergarten year, the earlier extended and challenging monitoring and evaluating period of the first action research cycle prompted my ongoing reflection about relationship aspects of the study.

Researcher's second reflections: Relationships

As described above the challenges during the implementation of the action priority and some aspects of the research context stretched my sense of both personal and professional relationships. I questioned what was a collaborative research relationship? As I never quite knew how collaboratively close or distant the relationships were in this context. I believe this feeling was underlined by my ongoing sense of being an authorised visitor in the centre rather than being more immersed as seemed to happen at Banksia Childcare Centre.

- **Reciprocal building of trust**

A key platform for action research is collaborative relationships between the researcher and research participants; and, I adhered to the relationship descriptors of Barrera and Corso (2003) who outlined successful relationships in terms of respectfulness, responsiveness and reciprocity. These relational characteristics seemed to ebb and flow in my ongoing relationship with the teaching director at Acacia Kindergarten. At times I felt she was responsive, such as actively attempting to engage more parent participants for the study, and at other times I questioned reciprocity when cancellations seemed unexplained, documents were not provided despite several requests and communication appeared inconsistent. External factors, such as Council delays did impact on this centre and Banksia Childcare Centre; but I wondered to what extent the issues were external or internal to the Acacia people? And how could I balance my personal and professional responses? I felt I was a distraction from more pressing matters at times, but as a researcher I needed to be patient, understanding and accommodating. As the second action research cycle concluded in December, I wrote *I struggle with my feelings as a researcher, did they really want me in the centre* (RJ 09-12-08, p. 39)? From my perspective, the ebb and flow over time had created a more superficial research relationship here; one focussed on 'Let us try to get these things done', rather than a genuinely collaborative professional relationship. But, I now acknowledge this is the reality of the lived experience of action research; not all research relationships can be expected to be equally and consistently collaborative.

- **Challenging contexts and professional ethics**

A further professional challenge arose for me as I observed pedagogy in action in the kindergarten during the monitoring and evaluating phases of both the first and second action research cycles.

Given my professional advocacy for outdoor play, the most confronting observation for me was children lined up to go outside, then directed to sit and wait on the verandah bench seats, while staff quickly set up the outdoor equipment. The children played outside for about 30 minutes in the three and a half hour session, then it was time to pack up for a group mat time before going home. I questioned in my professional journal (JA 05-08-08, p.17):

Why should children have to line up and sit for so long wasting valuable playtime? Why wasn't the outdoors already set up? Why was the outdoor play period so brief? What, if any, early childhood philosophy and pedagogy was informing this practice? How did children feel about this apparent imposition? And, what values did this communicate about outdoor play?

There are many daily challenges for early childhood educators managing within staffing and time constraints, but the structured routines and program pragmatics seemed at odds with the children's desires and needs for outdoor play as self-reported by the teaching director (Refer earlier this Chapter).

In the latter stages of the research during the second action research cycle, I observed children taking initiative to set up and co-operatively play their own skittle game outdoors, then told by the assistant that they had set it up incorrectly. She rearranged the skittles and the children correctly, but soon afterwards the play dissipated. Perhaps well meaning, but in terms of children directing their own learning or feeling empowered this staff intervention appeared inappropriate. As I reflected afterwards, I noted the level of structure was intense and it seemed to be a very adult-controlled environment for children (JA 09-12-08, p. 40).

Both of the above observations indicated a pedagogy and philosophy from an earlier era of early childhood education (Bredenkamp, 1987; Bredenkamp & Copple, 1997; Hendriks, 1988) when many educators directed children according to what they identified as developmentally appropriate. While staff were caring and responsive towards children, such observed practices were at odds with what I understood to be best practice in early childhood and certainly outdated by more recent theoretical perspectives (Arthur et al., 2008; Woodhead, 2006). As a researcher I was cognisant that my role was not to directly critique pedagogy and philosophy, but these observations did significantly influence aspects of my generation of theory about early childhood education for sustainability as outlined in the following chapter.

Later participants' perceptions

As noted previously, the second action research cycle became a condensed experience for all due to delayed dates for the shade sail installation. Planning, acting, monitoring and evaluating all occurred over three weeks in December. The second interviews and a focus group were conducted in quick succession with the following perceptions derived from staff and parent interviews.

- **Sustainability**

Later perceptions of sustainability, as initial ones, drew on a range of practical examples such as water conservation, paper re-use and vegetable gardening. The intervention aide still found it a somewhat daunting task and she questioned: *Is sustainable using the environment and all those sorts of things or ...* (YS3 02-12-08, p. 2)? Both the assistant and teaching director drew on personal experience to extend on their perceptions of sustainability. The assistant as a new grandparent returned to intergenerational notions of sustainability and the teaching director extended concepts from her recent experience with African relatives to include both the natural world and global social justice in her response.

I think it is really all about our natural world, but it is also, and this is coming from a different tack, my sister-in-law's family come from Zimbabwe. It is in a real mess at the moment ... They actually can't find the food there, so they have to travel out of Zimbabwe ... wherever they can find food or buy food on the black market. And then, they come back and sell it to try and make money or to have enough food for themselves to eat. And they can't farm at the moment ... and, yes this is a political situation ... but, it is also an environmental situation and sustainability is involved in that ... So, we are teaching children here and our families ... whether it is as little as something like recycling ... that it has an impact maybe on what the rest of the world is doing (YS1 02-12-08, p. 3).

The assistant was still very clear that sustainability was *definitely a priority* (YS2 02-12-08, p. 4) in her life; and, she provided further details of changed practices with respect to reusing and recycling at home and in the kindergarten. In particular, she noted water conservation practices:

I have made some big changes at home ... I don't wash the dishes as much and now I say it is okay to do your dishes at the end of the day. And at kinder when I wash the dishes for the children ... I don't empty the water out, I jug it out into a bucket, then I use that to mop the floors with. I am trying to make sure that I am utilising the resources and not wasting it (YS2 02-12-08, p. 4).

The teaching director in contrast to her indecision in the initial interview stated *I think it is a priority and I try to do simple things* (YS1 02-12-08, p. 4) like saving water. Both parents set a parameter around the prioritisation of sustainability, one raising the economic paradigm as significant and another compartmentalising sustainability by suggesting *I don't think it really falls into the workplace at all, just maybe home awareness* (YP5 22-12-08, p. 3). Such parameters, while personally significant to those interviewed, failed to illustrate examples of sustainability as an all encompassing frame of mind within this early childhood centre community.

- **Education for sustainability**

While the intervention aide could not offer a perception of education for sustainability, the teaching director and assistant indicated holistic and process-orientated perceptions. Practices were evident, but expressed in a holistic manner such as woodwork experiences with children

linked to the origins of wood and lunch box items linked to supermarket shopping then farming, just *trying to link it as best you can, we didn't all come out of a plastic box!* (YS2 02-12-08, p. 3). The teaching director now placed less emphasis on the practices and more on the thinking processes behind the doing.

Well I think apart from the physical side of things, they [children] are actually thinking through, they are thinking through what they are learning or what they are doing and sometimes it takes people a while to process what they are doing and how it affects sustainability. But, eventually ... they will link it with other things. So, I think it is a process that you start and then you keep going and it will link on with other things. It is just a process that starts with something little, whether it is planting a flower or a seed, or watching the birds as you walk to kinder, pointing them out and that sort of thing (YS1 02-12-08, p. 3).

A parent reiterated the points made by the staff succinctly stating education for sustainability for children is *learning about the impact of their lifestyle and choices on the environment and the wider community, not only their local community, but the global community of the whole Earth* (YP2 17-12-08, p. 2). She believed that children of the current generation are more socially conscious and aware, and *definitely more environmentally aware* (YP2 17-12-08, p. 3).

- **Outdoor playspace and impacts of the action priority**

Both parents and the intervention aide had no knowledge of the bird box and planter pipe action priorities briefly implemented in the outdoor playspace. Parents were limited in their opportunities to observe due to the children always being indoors at collection and drop-off times. I questioned parents further that possibly their children may have mentioned the bird box or plant pipes at home, but again this drew a negative response.

I don't get to see anything and only hear about it if my daughter talks about it and she hasn't said anything (YP5 22-12-08, p. 1). *I thought she would have been excited about a bird box to talk about* (YP5 22-12-08, p. 3).

No, I wasn't aware of those, the bird feeder or the garden pots, as the trouble is when you drop the children off and pick them up the children are inside, you don't go outside. There is not very much possibility for parents to see what is going on outside (YP2 22-12-08, p. 1).

So, hypothetically the parents and intervention aide responded that they thought the action priorities implemented could be positive and help promote children's understanding of nature and stewardship of the environment.

The teaching director and assistant were obviously aware of the action priorities and reiterated the positive outcomes. However, as the teaching director stated *it really lost its impetus, once it was out of sight it was almost out of mind* (YS1 02-12-08, p. 1). The assistant described all the delays as disappointing. The action priorities had raised staff awareness; the assistant noted that *as adults we forget to talk to children about some of these things* (YS2 02-12-08, p. 2). She saw

potential for both staff and children learning together. The teaching director noted the children had good ideas about gardening and were very interested *because it was a physical thing they could do* (YS1 02-12-08, p. 1). A further related change outdoors was the placement of a large bucket in the sandpit to promote water conservation; but the intervention aide indicated that discussion of water conservation did not occur during her sessions with children. *If it is empty and the children ask for more the staff just say: 'No, one bucket only'* (YS3 02-12-08, p. 4). The potential of the new practice may not have been fully realised; however, one parent did report how her child now tipped any leftover water in her kindergarten bottle onto the garden instead of down the sink at home (YP1 FG 03-12-08, p. 5).

The interviewees identified a range of possibilities for moving ahead in the outdoor playspace now that the shade sails were installed, but as the assistant said:

Yes, the shade sails are nice and do serve that purpose, but how much nicer to be under a tree? With the wind blowing through the leaves and we can talk about the wind is moving and about the leaves, you can use a lot more from the natural environment than you can from a bit of plastic stuck on a pole LAUGH (YS2 02-12-08, p. 5).

This reflection seemed to hark back to a joint committee of management decision made at least two years ago to purchase shade sails in preference to planting more trees. A sense of disappointment, perhaps disempowerment lingered over this issue for the assistant.

It was anticipated by staff that much would occur in the New Year: planter boxes, new trees, planter pipes, the bird box, a mural; these were reiterated in the second focus group. Parents expressed a keenness for these things to happen and were offering assistance:

I would really like to see something like that [vegetable garden]. I would be thrilled, and as a parent like my son will be attending there in the next couple of years, and I am sure parents would be happy to donate time to make a garden. I am sure that parents would be happy to participate. Even donating seedlings (YP5 22-12-08, p. 5).

Reflecting on progress and thinking ahead in the second focus group

The second focus group discussion was practically focussed considering progress to date and possibilities for the future, but at times these discussions offered deeper insights into challenges and changes. The teaching director began with a practical assessment of progress since the previous focus group. She reported that the bird nesting box made by a parent had been installed in a tree. The children and staff had engaged in discussions about birds, but unfortunately, the box seemed to be too low for the birds. After two weeks it was removed while the shade sails were installed. The teaching director had asked Council workers to replace the bird box at a higher level in the tree, as this task required a tall ladder and was deemed beyond what a staff

member or parent might safely undertake. The children had planted into the donated recycled plastic planter pipes with assistance from two parents and the teaching director described this as a very positive experience. The pipes also needed to be removed after two weeks due to the shade sail installation, but replanting would occur at a later date. The group members were aware that the Council grant of \$5000 for tree replacement had been successful and planting was proposed for the following autumn, just after the beginning of the new kindergarten year. It was considered essential to view the shade cast by the new shade sails over summer to determine the most appropriate locations for planting the new trees, as improving overall shade was a priority. Looking ahead, the teaching director proposed,

What we are going to do is have the permanent planter box and then use the planter tubes [pipes] seasonally, have them in one spot and then move on to another spot each season. Because they are easily moved and the children can help with the dirt (YS1 FG 03-12-08, p. 1).

Then, she opened the group for discussion thus, *so they are the things that I would like to do, but I don't know if you guys have other ideas about what you think you would like to see happen* (YS1 FG 03-12-08, p. 1). A collaborative we seemed to be missing in this opening statement and again raised the question of relationships. This offered a significant clue for informing the theorising in Chapter 7. As in the previous focus group, a range of ideas were explored and all present contributed enthusiastically. Ideas for the expansive brick walls included creating an Indigenous mural, children painting the bricks, making mosaics to embed into it or building a watercourse from recycled materials along the baseline. Both parents frequently referred to external resources; for example, one parent noted a special Council deal for worm farms. Ideas also extended to animal pets, incursions, creating a wooden play stage, waste-free lunches, cubby building with reused materials, fencing to define play areas, fruit trees, water saving practices and making bug catchers. The enthusiasm of the parents and their questioning approach was shared thus:

YP1: Maybe you could try the ice cream containers and the children can see which one is best and how much water they waste and then they take it out, and so if they stand there and talk they know that they are wasting water.

YP4: Yes, it's about how they wash their hands because they turn the taps on and then they get the soap, and then they talk (FG 03-12-08, p. 4).

On reflection it appeared that the parents were scaffolding the teaching director; but, possibly this was the teaching director wanting to elicit as many ideas as possible from parents particularly after she had opened the discussion with her ideas. As in the previous focus group the parents' enthusiasm was palpable. They appeared very interested and keen to contribute in many ways. During the focus group the teaching director reflected on some changes in practices that had occurred across the centre in recent months.

We have been doing things like encouraging them to only have one bucket of water in the sand or just a little bit more, so they use their water wisely in the sandpit. And not to fill

the big bucket with sand but, to use scoops and take the water out carefully. And that has been really good. The children really got that and they have used the water wisely. And done different things with the water ... We also encourage them to be careful with their paper, to think about how they are going to use the paper. We didn't quite get to putting two or three bins, but we will do that next year. Like having a paper bin and the food bin initially and then go from there (YS1 FG 03-12-08, p. 2).

The above transcript suggests changes in staff thinking prompting different practices, but implementation was at times challenging as with other centre initiatives. Time constraints, lack of commitment and/or external factors may have been at play here. On two occasions the teaching director referred to time as a constraint, but could foresee gradual change perhaps as small steps (Refer Chapter 5):

YS1: There are a lot of things that we can do, but it is just time, and we just have to make a two or three-year plan and work towards that. Now that we have our sails, I will be able to start off on these other things and get them going and gradually moved through (FG 03-12-08, p. 7).

A particular topic for extended focus group discussion was the permanent wooden cubby in the outdoor playspace. The teaching director explained in response to a parent's question that for each group the amount and type of use varied. The staff had tried different props for play in the cubby and at times set up dramatic play areas on the verandah or elsewhere. Also, the play props were most often reused materials as they created more diverse play affordances for the children (Gibson, 1986); thus, promoting understandings of reusing and recycling according to the teaching director (YS1 FG 03-12-08, p. 7). One parent drew on personal experiences of her own child showing limited interest in his purpose-built cubby at home and another parent and the teaching director responded positively,

YP1: Making cubbies out of sheets and things like that, they actually make the space themselves. It means more to them and they actually play for longer.

YP4: We have that in our lounge room, we have brooms over chairs and sheets.

YS1: Yes I know, but that's the best way, I like to use the A-frames, the climbing frames and put sheets over them. They make them into tents whatever they want, and they get the steering wheel and the blocks to make cars.

YP1: You could have a hook over there and one on the wall, so they could do like a curtain thing (FG 03-12-08, p. 8).

This discussion between both parents and the teaching director demonstrated synergies, a responsive dialogue where each statement built on the previous. There was also a clear acknowledgment of the value of child-directed cubby play and a questioning of the usefulness of the purpose-built cubby in the kindergarten.

In summary, with a few tangible changes reported and many more ideas emerging, several statements did reflect some change at a deeper level. The teaching director described how she thought about different things as a result of the research process and viewed education for sustainability as building simple actions or small steps into the program such that they became part of what you naturally do.

I think this whole thing for me has made me think a little bit more about recycling and different ways of doing things. But, in the kindergarten it has been a bit frustrating because we haven't been able to put into action some of the things that I would have liked to, this year particularly. But, it certainly has made me think about different things (YS1 FG 03-12-08, p. 3).

It needs to be simple things like the recycling and that sort of thing you can build into the program, so it becomes a natural part of what you do (YS1 FG 03-12-08, p. 9).

However, this different thinking has been hampered in practice and she acknowledged her frustration. A parent succinctly summed up sustainability stating *a lot of it is just common sense* (YP4 FG 03-12-08, p. 4) and the teaching director agreed. The challenge ahead was to proceed with the ideas canvassed step by step and engage the enthusiasm of the parents as co-participants, but I did question if this was possible in this particular context.

More emerging themes

For all co-participants the busyness of the condensed act phase in the second action research cycle gave way to the monitoring and evaluating phase. In the following sections I describe further emerging themes and then reflect on how I was travelling as a researcher after the challenges experienced at Acacia Kindergarten. Identified themes here included staff and parent relationships, staff and parents comparisons with other centres and parents' experiences of the outdoor playspace.

- **Staff and parent relationships**

Relationships with parents are a cornerstone of early childhood practice and parents are described by early childhood educators as partners in the learning process (Arthur et al., 2008; Victorian DEECD & VCAA, 2009). Parents repeatedly demonstrated an enthusiasm for engaging with staff and the centre as evidenced by their ideas and donations of materials and time offered in the interviews and focus groups. Further, for some parents such was their commitment to participation that due to family circumstances they brought their young children to the evening focus groups. However, the enthusiasm did not appear to be reciprocated by the staff and in particular, the teaching director. In reviewing the teaching director's verbal responses to interactions with both parents and myself, a positive passive manner was most common. Further, the parents' reference to you, rather than we could be indicative of a teaching director-parent relationship lacking a sense of shared ownership and collaboration. This was also an echo of the apparent absence of

a collaborative we in the teaching director's opening focus group statement (Refer earlier this Chapter). The following transcript highlights the above points:

YP4: And you could tie in packaging too, you could have plastic free or lunch wrap free days. That's why I have that lunchbox.

YS1: Yes that's a good idea (FG 25-06-08, p. 6).

While ideas were positively acknowledged, there was limited responsiveness by the teaching director either verbally or actively and shared ownership was not evident in the phrases used. A parent, unnamed by the teaching director, had made the bird box and apart from the two weeks it was in the tree it was stored away. Six months later, in March 2009 when this study concluded, it was still not clear when it would be replaced in the tree. This parent might have felt that her contribution was not valued and somewhat dejected by the lack of responsive action. I reflectively questioned why the teaching director had not used the bird box creatively in the interim, possibly as a reference point with bird books or for imaginative play.

Further, working-bees are a feature of early childhood centre operation and they can contribute to building community and relationships; one parent even fondly recalled from her own childhood the sense of community derived from kindergarten working-bees (YP2 24-06-08, p. 7). I first interpreted that the planned working-bee was not implemented as a result of the shade sail delays. However, one parent interviewee indicated that there had not been working bees over two years, despite being advised that there would be at her daughter's enrolment at the kindergarten. It now seemed working-bees were not a regular centre feature.

Documented centre program plans are commonly a vehicle for communication with parents (Arthur et al., 2008); and, the 'Acacia' Parent Information Book (2009) explicitly invited parents to discuss the displayed program plan. On one occasion I noted that the program displayed on the notice board in December was dated August 4th (JA 04-12-08, p. 39). Also, the collated program plans appeared to lack details and a professional layout that might facilitate any discussion (Refer Appendix 40). As a researcher, collating such centre documentation was challenging. Copies of the program plans, newsletters and the 'Acacia' Parent Information Book (2009) were received after several requests. This appeared to be another example of a positive passive manner by the teaching director.

The manner of this teaching director may have reflected: the professional time pressures that she mentioned; the diversity and number of families in the kindergarten to relate to; or even part of her personal style and how she interpreted her role as centre director. Whichever, it appeared from my perspective that the teaching director's often unresponsive manner was not conducive to effective partnerships with parents or myself. The teacher/co-ordinator/director is a critically central person in an early childhood community with responsibilities to model responsive, reciprocal and respectful relationships (Barrera & Corso, 2002). Such relationships are the basis of collaborative early childhood communities where ownership is shared and parents are acknowledged as co-participants in their children's learning (Arthur et al., 2008; Commonwealth DEEWR, 2009).

- **Staff and parent comparisons with other centres and schools**

Both staff and parents were also members of or had experienced other early childhood centres or schools and they made comparisons with the Acacia Kindergarten. In particular, the intervention aide, who concurrently worked across three centres, gave the most insightful comments and clearly indicated how interesting the other centres' indoor and outdoor playspaces were when compared to Acacia Kindergarten (JA 05-08-08, p. 18). She also acknowledged that time-demand on the teachers was a key differentiating factor. The following interview transcript examples are illustrative of the comparisons:

I am at my old centre at the moment and it is unbelievable, that teacher only takes one group so she has lots of time, and the programming is so full on. I can't keep up. The teacher here [Acacia Kindergarten] is taking some things that I have told her that they have done at the other centre as well (YS3 24-06-08, p. 1).

I do know that schools have a herb patch or compost and I haven't seen anything like that at [Acacia] kindergarten. They just had a swing and a sandpit, nothing to do with sustainability I don't think (YP5 22-12-08, p. 2).

The overriding sense from these examples is that more could have been occurring at Acacia Kindergarten both in the outdoor playspace and generally in terms of program planning and implementing a range of learning opportunities for children.

- **Parents' experiences of the outdoor playspace**

Early childhood rhetoric suggests that indoor and outdoor play environments are equally valued learning environments for children (Commonwealth DEEWR, 2009; Greenman, 1988) and even identified as the third teacher in Reggio Emilia approaches (Edwards, Gandini & Forman, 1998). However, in my professional experience this is not often explicitly conveyed; instead, the indoors is about real learning or work and outdoors is for play and fun. The teaching director at Acacia acknowledged *I think some children see the inside as work, like being at school and the outside is the play part. Perhaps we as staff have different expectations of children both in and outside, even if we don't acknowledge that in the way we plan* (YS1 24-06-08, p. 3). In particular, the interviewed parents expressed limited understandings of the outdoor playspace, *to be honest I have never been out there* (YP2 24-06-08, p. 6). When children were collected or dropped off they were indoors and there had been no recent events such as working-bees to promote change or understandings in relation to the outdoor playspace. This was compounded in Acacia Kindergarten by the limited outdoor program plans displayed and the absence of visual diaries or portfolios to help convey children's outdoor play experiences. Limited parental awareness of the outdoor playspace was an emerging theme from both case studies and one to be addressed if active outdoor play for children is to be encouraged generally as opposed to sedentary indoor experiences. I return to this issue later in Chapter 7.

Researcher's third reflections: Some change

At this juncture some comparisons with Banksia Childcare Centre seemed relevant. Some shift in awareness, thinking and action appeared to be happening for Acacia Kindergarten co-participants. The CPAR notions of sustained collective deliberation and investigation with growing supportive solidarity (Kemmis & McTaggart, 2005, p. 598) seemed to be just beginning at Acacia Kindergarten. While at Banksia Childcare Centre the collective potential and solidarity appeared greater and the collaborative leadership of Bush Betty had promoted significant change at many levels.

- **A comparatively smaller shift**

The following transcripts highlight increased awareness of sustainability and notably different ways of thinking that were described by the Acacia teaching director. Her suggestions of linking things reflected a systems theory approach (Capra, 2002). Such changes were supported by some actions; however as previously discussed, the full potential of these actions was often thwarted.

I think it has been an interesting study and it has certainly made me think in different ways about things. And the links between things, perhaps more so than what it actually means. How things can be linked in different ways (YS1 02-12-08, p. 6).

Parents also expressed greater awareness and rethinking as a result of their engagement in the study. *It is making me more aware of it, until you came I didn't think about it at all (YP5 22-12-08, p. 3).*

As a researcher with a commitment to facilitating change, I acknowledged it was a beginning, the first of potentially many steps for the co-participants. Throughout the study I had noted the differences between the two centres and now I often reflected on why different degrees of shift were occurring: Were the collective numbers of co-participants an influential factor? Were uncontrollable external factors impacting? Was it a reflection of different starting points? Or were there other less tangible factors at play? These questions formed the basis of later theory generation and deeper discussion in Chapter 7.

Transformation towards sustainability

As part of the third action research cycle in March 2009 I visited the kindergarten to conduct a final interview with the teaching director. Given the enthusiasm to implement further changes during interviews and the focus group in the second action research cycle at the end of 2008, I anticipated that there would be much to observe and discuss at the centre (Refer Figure 11). Some practices had changed as described below, but the teaching director advised they were still waiting for the bird box to be reinstalled and the swing frame, damaged almost one year ago, to be replaced by Council. It seemed my earlier interpretations of a positive passive manner and the early childhood victim response were reaffirmed. In the following pages I also describe



Figure 11a – A view of the outdoors from indoors including the Indigenous mural



Figure 11b – The tanbark soft-fall area where a swing frame and mature tree had been at the very beginning of the study showing the high brick boundary walls now painted with the Indigenous mural



Figure 11c – The new shade sails installed near the cubby and verandah with the juxtaposition of poles evident



Figure 11d – The grassed area and garden border where mature native trees had been prior to the study appeared unchanged

Figure 11 – Final photograph collage of Acacia Kindergarten

how some thinking had changed for the teaching director and her future plans for the outdoor playspace. Then, I finally reflect on this narrative with a metaphorical reference back to the *Acacia* pseudonym and to the disparity between the journeys described.

- **Changing some practices**

The teaching director described that: the water conservation bucket in the sandpit was now an ongoing practice; a conscious effort was being made to conserve energy use; and, discussions with children about the origins of play materials was a focus.

Also, the idea of saving energy because sometimes the children will say why don't you put those lights on and we will say 'Well we don't need them on' so, saving electricity in a very small way. We don't need to have all the lights on we can still see ... So, that sort of thing is teaching the children about saving energy in a very small way (YS1 18-03-09, p. 6).

The most significant change in the outdoor playspace was that an Indigenous artist (Refer Appendix 41) had painted the brick walls with a mural. The visual impact of the mural was striking even from indoors and the teaching director described it as *fantastic* when she walked in on the first day (YS1 18-03-09, p. 5). Parents had also been very positive in their responses to the mural, perhaps more so than the children. The teaching director described the mural process as below:

Well, we had a child with an Indigenous background last year and we had a certain amount of money ... there was an artist friend who went to school with the assistant's daughter, and he said he had done the mural at another local kindergarten where she had been working. So, she contacted him and finally he came through the holidays and looked at the space and made a whole lot of drawings. Then, he came back to us and said 'I have an idea for a big mural', then we looked at the costing and said 'Yes, okay we can do it' ... so this was his idea and he did change it a little bit as he put it up. It's a lovely thing and he did it over about three weeks ... It was lovely for the kids to watch. Every time they came to kinder. Because he never did it when anyone else was here, I would just leave the gate open for him so he could get in and out (YS1 18-03-09, p. 2).

The mural depicted features of local geography and Indigenous culture and certainly created a different aesthetic outdoors. It was anticipated that once the mature trees were replanted near the wall, then the mural would become integrated into the landscape. The children had not been directly involved in creating the mural as the artist chose to work alone. The story within the mural was yet to be fully conveyed to the children; however, there had been some discussion about the depicted animals. While the mural was a positive step, it seemed a lost opportunity not to involve the children in the process by discussing the story as it emerged or by interacting in some way with the artist.

- **Thinking differently**

In previous interviews the teaching director had described thinking about different things as a direct result of the study; this notion was elaborated further in the final interview when I invited her perceptions about sustainability.

I think sustainability to me is probably what I said to you before, but it's an idea of protecting our world and our Earth by using things carefully and wisely, thinking about how we do things and live our everyday life. And helping in this environment, for children to see this too, in smaller ways and big ways too. And whether that is through recycling the paper or saving water ... then that to me is teaching them about how to look after our natural world and sustaining our world (YS1 18-03-09, p. 6).

While anthropocentric underpinning's of *our world* persist (Bowers, 1993), elements of thinking about how we live our everyday lives and the impacts locally and globally suggest a much more holistic appreciation of sustainability here.

This theme is continued in her assessment of alignments between early childhood education and sustainability. The teaching director described her beliefs in early childhood education as balancing children learning through their own interests and learning through the ideas that she presented. Sustainability aligned well,

because sustainability can come through everything, so whatever topic or interest or idea comes up, it's not that you are saying we are doing this because it is sustainability. But, it can come through in how you present that idea or what you are doing with the children. So, whether it is as simple as something like learning to use scissors, then eventually the paper has to go somewhere, so the paper they don't use might go in the recycling bin. Or, if someone comes in with an insect how are we going to talk about that, and that can go on forever. It all includes sustainability. So, I think it aligns quite well (YS1 18-03-09, p. 8).

Based on this concept of alignment there was an emerging sense that sustainability could be part of an embedded cultural change within the kindergarten, rather than the few discrete practices or projects referred to as education for sustainability. In contrast to the Banksia Childcare Centre, there was still some considerable commitment to and action for change required to realise a significant culturally embedded approach, the practices and projects had not yet coalesced to inform a sustainability frame of mind.

Overall, the words chosen by the teaching director to describe her experience of the study were *'frustrating, interesting and inspiring'*. The choice of *'frustrating'* was understandable given the delays experienced and *'interesting'* referred to the changes in her thinking. The choice of *'inspiring'* was more revealing as it seemed to indicate an adjustment of her professional images of children and understandings of pedagogy. Children's different ideas and knowledge were valued, rather than adults being perceived as the sole bearers and purveyors of knowledge.

I think frustrating, is probably the key word because we had all those ideas, but they didn't quite come to fruition as quickly as we would have liked. But, also interesting because it makes you think about how you do things and why we do things whether it is at home or here. And inspiring in a way, talking to the children and getting different ideas, their ideas and seeing what their knowledge is. As you would know many children's knowledge is far greater than what we would give them credit for. They may not have the words to necessarily explain it, but they do know what we are talking about (YS1 18-03-09, p. 7).

With respect to the previously stated links between early childhood pedagogy and philosophy and education for sustainability (Refer Chapter 2), this seems a necessary adjustment if education for sustainability is to be fully embraced.

- **Future plans**

At the conclusion of the third action research cycle, future plans for Acacia still included reinstallation of the planter pipes and bird box, replacement of mature trees, defining play areas with small fences and establishing a planter box. The parent who had made the bird box had now also made a bird feeder that required securing into the ground (Refer Appendix 42). Both items were in storage in a back outdoor area.

Well, the bird box is out there, but we haven't put it up. The Council has not put it up yet. That is part of the problem, but it would have to go much higher in the tree, partly they don't want to get up there and put it up I think. LAUGH So, anyway we will see. But, I still have it there and we intend to do something with it (YS1 18-03-09, p. 1).

Several factors appeared to be impacting on overall progress. The exceptionally hot weather over summer had delayed planting, late autumn was now considered the most appropriate time to commence planting. The Council had been slow in their responses in relation to the bird box and swing frame; and the teaching director alluded to problems with this process. Lastly, the teaching director indicated time was an issue for her, *I think probably the time factor is the most important thing and literally just finding the time to do everything (YS1 18-03-09, p. 4)*. However, the teaching director continued to express an impetus for change. She believed the proposed changes would be *subtle, but long lasting (YS1 18-03-09, p. 4)* with a positive impact on the playspace both visually and in terms of the children's play. Potentially the changes would also promote further philosophical and pedagogical adjustments with the full embedding of sustainability as a major cultural change; a transformation towards sustainability was in progress.

A synthesis of Acacia's first steps

The journey of Acacia Kindergarten was just beginning, so it was not yet fully transformative. There had been significant challenges for all co-participants, but thinking was changing and actions were still in train. Akin to the *Acacia* seed, the research process may have been the fire

to stimulate germination, but in this instance perhaps the fire lacked the required intensity. Just as the *Acacia* seedling matures from pinnate to phyllodinous leaf forms, the kindergarten was at the somewhat fragile pinnate stage with potential to mature into the robust phyllode stage; but, anything could intervene to disrupt the process at this early stage. *Acacias* are somewhat prone to insect attack that may disrupt maturation and impact on longevity; hence, questions could be posed about the possibility for an unimpeded and longer-term transformation at Acacia Kindergarten. Any following stages, with or without further disruptions, for longer-term changes towards sustainability were beyond the scope of this study.

Disparate journeys leading to theorising

The narratives of Chapter 5 about Banksia Childcare Centre and Chapter 6 about Acacia Kindergarten describe disparate journeys as transformative and not yet transformative; the processes and practices were dissimilar in so many ways. Such divergence emerged and evolved over time, true to the tenets of critical participatory action research (Kemmis, 2001; Kemmis & McTaggart, 2005). I now feel a sense of serendipity about the richness this disparity created for theorising about the possible links between outdoor playspaces and the concepts of sustainability and education for sustainability in various early childhood settings. I readily acknowledge that selecting other centres may have provided very different journeys and stories. The disparate lived journeys of Banksia Childcare Centre and Acacia Kindergarten here were instrumental for developing a comparative analysis in Chapter 7. Then, more broadly, I drew on this analysis to theorise about early childhood education for sustainability with a focus on outdoor playspaces.