# Chapter 4

# **Metaphors Bridge Understandings**

# Introduction

This chapter focuses particularly on the role played by visual metaphors throughout the research. When the research began, food played a key role in the negotiation of relationships and establishing trust. Despite being welcomed at Kulai myself, my original research plan was rejected. Over time, and in a somewhat unexpected way, visual symbols became communication tools and together with food built bridges of understanding between us. The examination of complex concepts such as quality assurance with visual metaphors opened up possibilities for movement in many directions, including the known to the unknown, unknown to known. Suggested changes to the preschool program and day to day routine were initially met with considerable resistance. Metaphors contributed to increased levels of self-confidence and our capacity to take risks, enabling the exploration of changes to practice at the preschool.

Apart from my initial linear research plans, the remaining metaphors were drawn from a base in the natural world. These built up sequentially in terms of depth and complexity. Each reached a limit of usefulness when it became apparent that certain interpretations were highlighted, whilst others were obscured or overshadowed (Atkinson 2001; Charlton 1984; Morgan 1997 & 1996). For example, the 'tree as preschool' metaphor was discarded when it was no longer sufficiently flexible to express the rate of change associated with QIAS. In other words it was useful to have a number of metaphors to reflect what was happening. Any one of the metaphors could have stood alone to clarify particular aspects of the research, but, when overlapped, their value was enhanced with more powerful insights into the process of organization change.

In this study, maps were used to take a wholistic view of what was happening. This built on the work of Game and Metcalfe's (2003: 63), which indicates that a wholistic standpoint is a useful way of understanding "relations and connections", which become apparent in a "continuous unfolding of possibilities". A wholistic view can raise our consciousness of "participation in the world and in the knowledge process. It is as participants that we understand the whole" (Game and Metcalfe 2003: 64). This suggests that by viewing the situation from a position immersed in the preschool, it is possible to gain an understanding of the overarching whole.

This chapter discusses the use of metaphors to meet the challenges of recording and analysing the chaos and complexities of organisational change. These images illuminated significant events and portrayed a range of actions difficult to describe in text alone. An overview is presented of the particular relevance of metaphors to Australian Aboriginal early childhood education settings. The particular metaphors used at Kulai, which are portrayed in this chapter include: the research plan; tree as preschool; banksia unfolding quality improvement and accreditation; pollinator as mentor; stream as project summary. I identify particular values and challenges of the metaphorical images, and explore reasons for adapting and changing to different metaphors. The (re)reading of the journeylines as a multiple tributary river of analysis will be explored in Chapter 5. In the final chapter, conclusions are shared in relation to the purposes of metaphors in the development of this research.

# **Meanings of metaphor**

The New Oxford Dictionary (Pearsall 1998: 1163) indicates that metaphor began to be used in English in the "late fifteenth century: from French *metaphore*, via Latin from Greek *metaphora*, from *metapherein* 'to transfer'". By linking metaphor with use of rhetoric, Charlton (1984: 56-57) traces its origin to a much earlier time, amongst educators in the ancient world, such as Isocrates, Cicero and Quintilian. Charlton (1984: 57) quotes Quintilian (*Institutio Oratoria*, XII. 1, 1;V. 14, 34.) to say "the object of rhetoric was to 'throw a flood of light on the subject' ... to persuade men to do good things". Rhetoric at that time is described "as (1) the art of embellishment and ornament, and (2) the art of communication and persuasion" (Charlton 1984: 56).

In an examination of metaphors from a historical perspective Charlton (1984: 55) suggests it is derived from a Latin term 'translatio', where allegorical terms were used to make meaning of complexity. Whilst metaphors over time have been

recognised as tools to add clarity, equally they have been criticised as trickery and for blurring understanding. Entwistle (1970: 156 cited in Aspin 1984:23) proposes that "education theories would become sharper instruments, less liable to fallacy if we could dispense with metaphors altogether". Towards the end of the twentieth century Lakoff and Johnson (1980: 232) claim people use metaphors to gain understanding of their "own diverse experiences ... [and] to highlight and make coherent what we have in common with someone else". Koro-Ljungberg (2001: 371-372) from a post-modern perspective, uses the Greek based *metapherin* to examine the origin of the word, where

meta = beyond, pherein = to bring. Metaphor creates a relationship between "self" and the "Other" ... We cannot truly understand other people's lives, but through metaphors we can build a bridge between their experiences and our own such that metaphors act as translators (Miller 1987), which "translate" pieces of information to another.

This interpretation of metaphor highlights its importance in bridging the gaps between different people's experiences. It suggests a movement beyond the original definition of a word, to one where several meanings may serve the purpose of bringing clarity. Koro-Ljunnberg's explanation seems particularly relevant to a consideration of the use of metaphors as bridging and translating tools in an educational context. Davidson (1978 cited in Aspin 1984: 33) explains multiple meanings in another way: "When we try to say what a metaphor "means", we soon realize there is no end to what we want to mention". This indicates that there is the possibility of much more than translation involved in the process.

While metaphors open up possibilities for further meanings, at the same or another time they can distort or erase other understandings (Coffey & Atkinson 1996; Morgan 1997 & 1996). However, rather than focusing on distortions, Morgan (1996: para 47) gives emphasis to the capacity for metaphors to have unlimited possible understandings. He explains the energies involved as being "thrust into a mode of inquiry, learning and conversation that leads you to open exploration – to be open to anything really". In a similar way, Koro-Ljungberg (2001), Rose (2002), St Pierre (1997) and Morgan (1996) all warn against attempts to fix one definition, as such a response would deny the fluidity of process personified in metaphor. In explaining this conceptualisation, Morgan (1996: para 83) uses a framework approach: "In a fluid world the frame changes, and its got to, and you want something to evolve in the frame". St Pierre (1997: 407) introduces a new term 'figuration', to take the place of metaphor in her writing: "Using figurations can assist in freeing oneself from oneself, in thinking differently, and thereby in producing descriptions and inscriptions of lives that may do less harm".

Whilst commonalities are apparent to me in the definitions cited, each is different and creates turmoil in my mind as I move from one to another seeking a concrete understanding. This path of searching was my endeavour to escape a state of 'not knowing' (Atkinson 2001; Pence 2001), unaware at the time that such a position would enable me to realise the benefits of viewing multiple meanings, to examine different ways of seeing and not to get locked into one way of understanding. As I examined the way theorists had attempted to define metaphor, a range of positive and negative perceptions appeared as displayed in Figure 3 below.

Brown and Barrera (1999), Barrera and Corso (2002), Grossberg (1996), Morgan (1996) and Somerville (1995; 1999) enabled me to visualise that the major forces that surround metaphors exist not within these definitions but in the space-inbetween. Grossberg (1996: 180) draws on Deleuze and Guattari's research to theorise the space-in-between:

reality must be understood as continually mutating with and across the space of existence. What is crucial is that it is the becoming that is real. Its reality is not defined by the points it connects but by the in-between or 'milieu' which it traverses.

By operating amongst the interstices, tension is created between the meanings which surround metaphor. As Morgan (1996: para 94) explains: "The whole point of metaphor is that it gets you into new space". In this new shared space people think, exchange and discover fresh ways of connecting ideas to practice. "It is through these connections that knowledge develops ... a process of losing our certainties about what we know so that we can rediscover how things go together in the world" (Game and Metcalfe 2003: 56).

Positive	Negative	Reference
Bringing off speaker's intentions	Fail to meet with hearer's uptake	Aspin 1984: 33
New & startling insights	Cliches or mindless slogans	Aspin 1984: 33-34
Worthy strange identity	Unworthy familiar	Atkinson 2001: 308
Clarity and economy of writing	Obscure reality	Atkinson 2001: 308
Illumination	Produces its own shadow	Charlton 1984: 55
Intellectual equipment	Ornament	Charlton 1984: 57
Helpful	Difficult ambiguities	Charlton 1984: 66
Pure and simple	Paradox and ambiguity	Charlton 1984: 66
Strength in likeness and identity	Danger in likeness and identity	Charlton 1984: 66
Face	Mask	Charlton 1984: 66
Flexible instrument	Incompleteness, lacks depth	Elliot 1984:39
Affinity of identity-in-difference	Misconceive their function	Elliot 1984: 46
Multiple representations	One element represents the whole	Koro-Ljungberg 2001: 371
Present frames of knowing	Thinking differently	Koro-Ljungberg 2001: 377
Partial understanding	Hiding other aspects of concepts	Lakoff & Johnson 1980:12
Clarify	Confuse	Lawton 1984: 79
Helpful	Misleading	Lawton 1984: 81
Tremendously illuminating	Wrong, stuck at naïve level	Lawton 1984: 82
Helpful procedure on one level	Does not work on another level	Lawton 1984: 84
Strengths	limitations	Morgan 1996: 4
All theory is metaphor	No all purpose point of view	Morgan 1996: 4
Highlights certain interpretations	Forces others into the background	Morgan 1996: 4
Complementary insights	Competing insights	Morgan 1996: 6
Creative, evocative images	Constructive falsehoods	Morgan 1996: 6
Distinct frame of understanding	Partial frame of understanding	Morgan 1996: 6
Open dialogue & extend horizons	Closure of all embracing perspective	Morgan 1996: 7
Illuminates	Hides	Morgan 1996: 7
Ways of seeing	Ways of not seeing	Morgan 1997: 348
Adds richness & depth	Emphasis excludes others	Morgan 1997: 427
Sense-making	Privileging one orderingover other	Richardson 1994: 520
Goodness, fit, truth	Falsity	Taylor 1984: 6
Useable	Unusable	Taylor 1984: 10
Prescriptive	Seductively reductionist	Taylor 1984: 11
Common meaning	Particular "insider" usage	Taylor 1984: 17

# Figure 3: Analysis of metaphor definitions

In accepting a position of not knowing, being unsure of definitions of metaphor or what particular metaphors represent we are freed to think and act creatively. Paulston (2000: xxi) adds the perspective of a social cartographer: "In describing the process of mapping meaning, the subject is seen as mobile and constituted in the shifting space where multiple and competing discourses intersect".

These insights made apparent to me the potential impact of multiple meanings in metaphors and maps (Richardson 1998). I realised that as each new meaning emerges more energy is generated to create new knowledges. An initial energy is produced as the first meaning is applied within the frame of the metaphor. Through the discussion and thinking that surround the process positive multiple roles become visible in a similar fashion. Lindell, Melin, Gatmberg, Hellqvist and Melander (1998: 88) notes "[T]hese roles are intertwined, related and exist simultaneously". In describing such movement Morgan (1996: para 107) suggests "[T]he key is to find useful metaphors that allow us to create new knowledge, action and possibilities ... that can feed on itself and evolve". A point will be reached where any particular metaphor has been stretched to the limit and has fulfilled its purpose as a lever to new levels of understanding (Hartley 2002). At this stage positive energies are dissipated (Lindell et al 1998: 88), and signal the need for a new metaphor if further leverage is required. Lindell et al (1998: 88) warn that if the old metaphor continues to operate beyond this time, it can take on a "negative meaning". Richardson (1998: 362) explains the effect this way: "Using old, worn out metaphors, although easy and comfortable, after a while invites stodginess and stiffness. The stiffer you get, the less flexible you are".

The manner in which this pattern of movement was followed from one metaphor to another at Kulai is traced out later in this chapter. In developing my research plan and again in the analysis phase of the research, I embraced maps as a specific form of metaphor to record and look more deeply at how they "convey (or create) shared cultural meaning" (Coffey & Atkinson 1996: 89). In the section that follows the basis for this decision is explained.

#### Maps as metaphors

People throughout time have developed various forms of maps as tools to navigate their way through the landscape. Australian Aboriginal nations are thought to have developed some of the earliest forms of mapping to record events and journeys in a visual way (Watson 1993). "Spain and Portugal early in the sixteenth century" were the first nations to adopt standardised systems of mapping (Turnbull 2000: 67). Maps, in one form or another, have had a key position in enabling course plotting, plus review and analysis of the journeys (Paulston 2000). Ways of applying mapping and navigation terms to understand early childhood leadership practices have also been discussed by McCrea (2000).

Turnbull (1993: 3) notes that what is represented in a map is both selective and specific. He indicates all maps are selective about what is shown and at the same time ensure specific parts are included in a detailed form. The maps used in the Kulai research were similarly selective, in that it was impossible to include all aspects of the journey and in its various representations, shows only part of the landscape.

In the middle of the twentieth century psychologists began to examine learning by way of cognitive mapping techniques (Ingold 2000). These maps form an important part of the field of visual metaphors. Edward Tolman, a cognitive psychologist, is credited by Jenkins (1998) with introducing the concept of cognitive mapping around 1948 with his field theorist approach. Cognitive mapping has come to be used quite widely across education. A key value of cognitive maps in education, according to Gold and Coaffe (1998: 286), is familiarity "to the learner or indeed anyone who has ever drawn a sketch, produced a chart or made a list that conveys key points about a topic to another person". In a similar way Potter (2001: 45) describes how the use of mapping in analysis enables her to "organise the data located in meaningful relationships ... [to] portray a realistic model of learning" within organizations. This aspect of mapping will be explored further in Chapter 5.

Field theory according to Jenkins (1998: 232) "asserts that individuals create fields or maps in order to understand and anticipate their environment". Tolman's (1948) work likens the way brains operates to a 'map control room' where data is

gathered and subsequently used to determine the pathways and behaviours that form the responses. Ingold (2000: 223) understands the learning process as "an immensely variegated terrain of comings and goings, which is continually taking shape around the traveller even as the latter's movements contribute to its formation". This explanation emphasises the continual movement that occurs in the learning process.

The last decade has seen social mapping become recognised as "the art and science of mapping ways of seeing" (Paulston 2000: xv). More recently researchers, such as Jenkins (1998) and Bood (1998) examine development of computer technology to map and analyse data in relation to organizational learning. Following an evaluation of such software Bood (1998: 227) concludes:

The best way to study the social dimension [of organizational learning] presumably remains the direct observation of organizational members as they work together, discuss, argue and choose.

This indicates that although new technologies can assist in the mapping process, much is still learnt by immersion in workplace activities to understand the meanings of social exchanges. What is also clear in Bood's statement, and apparent in the Kulai study, is the importance of co-participation in meaning making and learning. Follow their study of thinking and acting as dynamic processes in organizational change, Lindell et al (1998) indicates the need for further longitudinal data. At Kulai, maps serve as practice and theory bridges in a similar way to Turnbull's (1993: 38) description:

> observation statements are not clearly separable from theoretical statements, and theoretical statements in turn embody sets of assumptions about how the reality is ordered ... As concrete examples they [maps] provide an opportunity for bringing cognitive schema to the fore, and they also provide an opportunity to explore the claim that ... knowledge is inherently spatial, and embedded in practical action.

Through a coupling of theoretical and practical ideals in a visual form, further avenues of understanding may open. These ideas link with the analogy drawn by Weick (1990 cited in Jenkins 1998) between cartography and organizations,

where mapping and analysis become interactive processes. Hargreaves' (2003) research as an emotional geographer, also recognises the importance of making records of the journeys and processes that operate between people and places. In the analysis process these records reveal "the patterns of closeness and distance in human reactions that shape the emotions we experience about relationships to ourselves, each other and the world around us" (Hargreaves 2003: 1056). Such patterns form another approach to problem solving through self-study or group reflection. How an examination of the interactions between the journey lines can provide analytic insights is explained in Chapter 5.

#### Metaphors link early childhood and organizational research

Throughout history, growth and development metaphors have been associated with educators (Taylor 1984a: 1). Therefore the central role of metaphors in the beginning of the early childhood profession is not surprising. Froebel used an ecological base to describe the first prior to school education centres as 'kindergartens', which introduced a new word to German and to many other languages across the world (Aspin 1984). In his description of kindergarten education, Froebel used the metaphor of "the child as a tender plant growing in a garden" (Aspin 1984: 22). He said this child "should unfold like a plant to make the complete adult" (Deasey 1978: 38). He designed a program and equipment to enable the children "to grow like flowers in the garden" (Deasey 1978: 38).

Framing education around an ecological model has continued to integrate a range of philosophies, with a particular prominence emerging in the twentieth century (Warren and Kaiser 1986 cited in McWilliams, de Kruif & Zulli 2002). Recent research explores the use of ecological theory as an inclusive practice for children with disabilities in early childhood programs. "The study reveals layers of the ecology that have not previously been identified ... as it applies to child development" McWilliams et al (2002: 160). A link with the natural world has also been made in organizational research by showing what can be learnt by observing a child's learning as interdependent and intertwined with the environment. Senge's (1993: 170) observations of his young son lead him to the following conclusions:

The learning process of the young child provides a beautiful metaphor for the learning challenge faced by us all: to continually expand our awareness and understanding, to see more and more of the interdependencies between actions and our reality, to see more and more of our connectedness to the world around us. We will probably never perceive fully the multiple ways in which we influence our reality. But simply being open to the possibility is enough to free our thinking.

A decade ago Cleary & Packard (1992: 229) did an extensive review of the organizational change literature, spanning the period from 1964 with Jung's work on *Man and his symbols* through to papers published in 1991 by Preiffer and another by Tsoukas. From this review they conclude: "there has been little written on specific ways to use metaphors in organizational change intervention". However Cleary & Packard (1992) recognise Morgan's contribution to organizational analysis through metaphors. Morgan (1986: 17). describes organisations as "generally complex, ambiguous and paradoxical" and identifies that "[T]he real challenge is to deal with this complexity". From this perspective metaphors are seen as the key "means of enhancing our capacity for creative yet disciplined thought" (Morgan 1986: 17), which allows the multiple layers of organisations to become apparent and open to changes in practice.

In Cleary and Packard's (1992) case study they report the use of metaphor as an adjunct to their analysis of the complexities of organizational development. They recognise the limitations of traditional action research approaches. They also highlight the importance of metaphors in allowing participants the opportunity to work at their own pace in familiar surroundings. In relation to complexity, Senge et al (1999: 557-558) identifies the dynamic, non-linear and interdependent nature of organizational change to be its biggest challenge.

They [the experiences] are dynamic because they arise from balancing processes that naturally "push back" against efforts to produce change. They are "nonlinear" in the sense that you cannot extrapolate reliably from one experience to another ... they are interdependent. Addressing one can increase the challenge of addressing another. Or, in other cases, make it easier.

Ragsdell undertook a series of action research studies in 2000, based on Morgan's (1993) theory of "imaginization", to examine how metaphors and rich pictures are used to engage staff in a process of changing from old to new ways of thinking. Rich pictures illuminate the current position of the organization, whilst metaphors are employed to assist them to project an image of where the organization needs to go in the future. Ragsdell (2000: 114) notes:

The holistic nature of metaphors conveyed every aspect of their desired organizations sometimes intentionally, other times subconsciously ... metaphor captured the whole picture for them and afforded a language through which to disclose their aspirations.

Future challenges are also addressed by Senge et al (1999: 569-570) who indicates that they could be met if:

[organizations as communities] begin living in more harmony with nature and with one another ... [this can be] guided by a few core images, shared metaphors or pictures of the world people are seeking to create. Such images enable diverse actions to become coherent in ways that no plan can accomplish.

Senge's images of integrating the lived experience of nature with an understanding of the unpredictable nature of outcomes, affirms the way metaphors were introduced at Kulai. Morgan (1997) explains how links can be made between knowledges acquired in previous social experiences to draw on and to operate effectively in new situations. He uses Karl Weick's theory of enactment to describe the role "that we unconsciously play in creating our world" (Weick 1979 cited in Morgan 1997: 141). In light of this, Morgan (1997: 141) indicates that people have "a powerful way of thinking about culture" as an enacted part of life. From this perspective culture is seen "as an active, living phenomenon through which people jointly create and recreate the world in which they live". Further to this, Senge (1993: 171) suggests that many of the metaphors people use, occur unconsciously in day-to-day interactions and lead to a feeling of being "controlled by forces we have not yet learned" to understand. McCrea (2000: 1) identifies the role "*mapping* of early childhood organisations' climates and cultures" can play in enabling directors to visualise the complex nature of change. She recommends that these maps should be constructed "by collaboratively adapting and adopting everyday working policies and practices" (McCrea (2000: 3). I used a range of metaphors, including food sharing, natural materials and maps, and used them collaboratively at Kulai to make meaning of how the energies generated influence organisational learning. The studies cited above also helped to extend my awareness of the role metaphors can play in developing an understanding of the change process. Below I will show how this relates to the current research.

#### Overview of food as relationship building

Occasions when people come together to share food and/or drink are performed in a variety of ways in all cultures around the globe. The act of sharing food embraces multiple meanings (Dietler 2001; Goody 1982; Ikeda 2001; Mennell, Murcott & van Otterlloo 1993; Somerville 1995). The food people choose to eat and how it is eaten, according to Germov and Williams (2001), can be read as symbolic of "a certain status or image ... to differentiate themselves from others or, alternatively to convey their membership of a particular group".

Stories of food collecting, cooking and eating have long been an important part of the ritual surrounding gatherings of Gumbaingirr peoples (Somerville et al 1999). Tony Perkins identifies to Somerville some of the symbolism of food to his ancestors:

When they had their gatherings ... like they'd meet there and they might have had whatever and they'd bring it across - there might have been a lot of sea mullet this way or might have been lots of pipis and that sort of thing. They sort of have a lot of sharing and things so they used to meet like that (Perkins 16/12/97 in Somerville et al 1999).

During the research project, as in the past when clans got together, whatever foods are brought in are shared around to meet everyone's needs. As detailed in Chapter 3, at Kulai food is used to encourage the staff, families and community to attend significant events. They are welcomed to these activities with various types of foods. Thought is also put into the meaning behind the way food is prepared and presented. In planning such occasions there is a consciousness of the power of food to promote social interactions, which can build and extend relationships (Ikeda 2001).

# Visual metaphors in the Kulai research process

Early in this study I presented an outline of the research plan in visual and spoken forms at a doctoral seminar. Reflections on that presentation, along with the feedback given by participants and my supervisors, helped me to generate the visual metaphor in Figure 4 below. This metaphor began as a multi-coloured rough sketch of some component parts of my research plan and over a period of months emerged as the visual representation portrayed.

The visual metaphor of the research plan allowed me to map the initial structure and research questions. In a visual form, the elements of the research and how they might interact facilitated my discussion with supervisors and presentation to colleagues. This diagram as a tool for understanding, formed a framework to begin the development of my ethics proposal. Its linear structure and vocational education and training (VET) focus, gave primacy to external educational bodies. It demonstrated how these exterior and national views might be imported into the local setting of an Aboriginal preschool.

The structure and content of Figure 4 reflect a stereotypical base of understanding in regard to Aboriginal early childhood education (Sondergaard 2002). I brought into the project a decade of training TAFE students for work in early childhood settings with only limited reference to other ideas. This contributed to a narrow perception, that everything hinged on the Australian Qualifications Framework and accredited training packages run by vocational training institutions. Preschools in this perspective provided a context for the practical aspects of training.

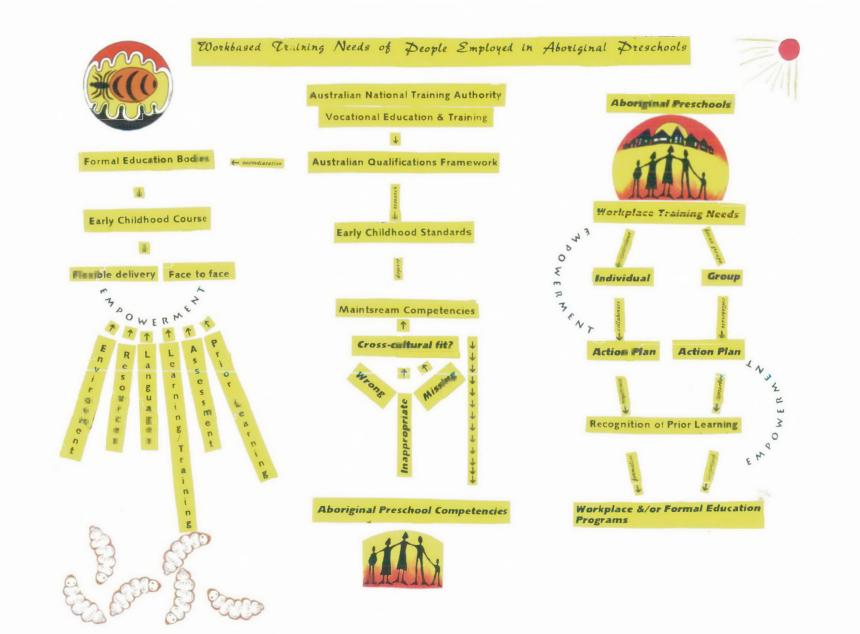


Figure 4: Initial Research Plan

This plan could have been read to suggest that I as researcher, and associated VET staff, were experts, who had the answers to the challenges Kulai was facing in the workplace and would teach these to the participants from the preschool. The experts situated within VET systems espouse plans to import their training packages into workplace settings. It is implied or assumed in this diagram that the Kulai staff would comply with the plans, by accepting and integrating new knowledges into their ways of working.

Within the VET system, when competencies prescribed by the Australian Qualifications Framework are achieved, certificates acknowledging the development of these skills are awarded. This approach to workplace training ignores or obscures the local perspective of the preschool team, who have an intimate and in many cases long term understanding of community needs and appropriate ways to provide for these.

Figure 4 shows a top down linear model, strongly influenced by the Australian National Training Agenda [ANTA] and Vocational Education and Training Accreditation Board [VETAB], with Aboriginal preschools fitting on the right hand margin. Much of the workplace training literature supports these perceptions (Butler 1998; Falk & Golding 1999; Gale 1999; Lowrie & Smith 1999), apart from Boughton's (1998: 1) paper which signals the need to rethink the way the ANTA framework is applied to Aboriginal and Torres Strait Islander communities. He suggests such education and research should be positioned within and controlled by local Aboriginal and Torres Strait Islander communities to meet and follow their development goals (Boughton 1998).

The opportunities I had to talk the process through and engage with others generated a greater awareness of what might be involved, and a more complex diagram emerged. The act of drawing helped to intertwine my kinaesthetic, visual and integrating senses with verbal and cognitive understandings of the process. It also provide the opportunity to engage the multiple intelligences (Gardner 1983; Roberts 1999a) of supervisors and research peers when they listened, questioned and guided me to deeper meaning making, whilst viewing the research plan. Roberts (1999a: 548) believes all people [are] intelligent in a variety of ways, but most of us have not learnt to exercise all of them at once. If we can do so, then we can become more comfortable and facile with complexity and ambiguity.

This diagram as a metaphor for my research plan was a beginning point. It showed where I was in my thinking prior to discussions with Kulai Aboriginal Preschool. It illustrated my perspective and mapped my plans and the research aims that had emerged prior to the stage of agreement with a preschool to be involved in a research project.

After Figure 4 was developed I made contact with Kulai preschool to talk through my research proposal. During these exchanges staff welcomed me as an old friend, who had not made contact for some years. They agreed to listen to the ideas put forward, but they gave fairly guarded, though polite responses to the proposal. Without an intimate understanding of the research plan or me, the Kulai people probably saw me and my proposal as stereotypical Anglo-Australian, as Foley (2000: 17) describes:

researcher (or educator) misinterpreting (or ignoring) the cultural values ... in the process of subjugating Indigenous Australian social practice, the differences between the two cultures have resulted in conflict, misinterpretation and the total dominance of one culture over the other.

These fears were not articulated in our discussions of the research plan, but could have been hidden and unvoiced (Hewitt 2001). As the preschool had not previously been directly involved in research, some of their resistance could be based on reported experiences of other Aboriginal communities, for example, as Todd, Frommer, Bailey and Daniels (2000) describe. These concerns accumulate a significant basis to resist involvement in research judged as alien to local Aboriginal cultures.

My original research proposal had presented limited potential for community involvement or direction. However, the way the project evolved and the approaches taken to change practices within the preschool, allowed everyone to substantially reposition and take ownership of the project. This approach is affirmed by Siegel's (1997: 213) report that indicates educational reform projects in Papua New Guinea had been "successful because they were initiated by each community, tailor-made for each community's needs ... and thus supported and sustained by the community". When Julie sought my involvement to work as a co-participant in the quality improvement and accreditation pilot project in their centre, this invitation meant Figure 4 was already obsolete. Local needs had come to prominence, with Kulai directing the research project, whilst the remaining two thirds of the Figure 4, taken up largely by government instrumentalities, receded into obscurity.

In agreeing to become research partners, Kulai changed the frame of reference and rendered the research plan visual metaphor redundant. It had been relevant to my thinking, not theirs. Julie, as director, invited me into their project as a partner, rather than expert. She envisaged a project which the preschool would direct on their terms and I would be welcomed as a part of it. Kulai had local priorities, largely driven by the needs of their community and were asking for support on their terms and not mine. Just prior to my engagement with them, Julie had agreed to be part of a broader evaluation of Kulai services by an external agent, conscious of the leverage such a project might have. The concept of leverage is a metaphor that has come from Systems theory. The leverage principle is described by Senge (1993: 64) as "small, well-focused actions [which] can sometimes produce significant, enduring improvements, if they're in the right place". Julie saw the potential for QIAS to provide the leverage or pressure in appropriate areas, which could instigate organisational change and development within the preschool.

Julie had an understanding of how the preschool could utilise QIAS and a researcher to move forward, but this awareness was not shared by her staff. She had a sense of belonging to the preschool, which was not always apparent in her staff. Their job was to work and receive their pay from the organization, but some had not integrated their work as part of their identity. Apart from Julie and Katrina, the Kulai staff continued to respond to the concepts related to accreditation, put forward in workshops and staff meetings, in a fairly guarded, and in some cases, critical and/or actively resistant manner (Hewitt 2001).

Tensions built for the staff and me, as I tried to fulfil simultaneously the roles of researcher and visitor to the workplace (Robertson 2000). However, after longer

periods at the preschool listening and forming more substantive relationships, it became apparent the staff had substantial knowledge of what worked best for them, the children and families. Gilbert & Smith (2003: par 5) identify in their study the importance of researchers becoming aware of what staff know of "practical classroom puzzles that must be solved while teaching and researching in their classrooms". The Kulai people did not want or need an expert to come in and tell them what to do. Rather they wanted to know how all these plans fitted with the current role of the preschool.

I had to invest time in meeting with the team and individuals to build trust (Galford & Darpeau 2003; Siegel 1997). Relationships of trust are identified in a study of quality management to be the essential place to begin to enact change. Without trust the process cannot proceed to "develop honest dialogues and discourses" (de Vere 1999a: 49). Where trust is an outcome, this can lead to engaged learning and development partnerships, a to-ing and fro-ing of knowledges in the space-in-between. Galford and Darpeau (2003: 95) describe trust as a vital element in organizations, "[B]uilding it, maintaining it, and restoring it when it is damaged must be at the top of every chief executive's [and researcher's] agenda".

Associated with trust is an obligation to reciprocity, which is quoted in Chapter 1 from National Health and Medical Research Council (2002) draft policy on Indigenous Research. Lather (1986: 263) also describes reciprocity as a vital element in the development stage and throughout a research project:

Reciprocity implies give-and-take, a mutual negotiation of meaning and power. It operates at two primary points in emancipatory empirical research: the junctures between researcher and researched, and between data and theory.

To enable staff to identify with Kulai as their place, where they could feel trusted and expect reciprocity, a metaphor was required that could show a belonging of each staff member and perhaps establish a space for me within this framework. Metaphors can facilitate such understandings by establishing communication bridges. Giroux (2000 in Gonzalez III, Louder & Melles 2000: xi) explains the importance of people seeing themselves as integral to team problem solving: a basic reality of our times: that no one actor has the power and resources to solve society's problems and that progress in the 21st Century will depend crucially on the building of new inclusive partnerships ... the people in the communities and agencies involved, who breathed life into the projects by taking ownership and taking action to shape their future.

Giroux's metaphors conceptualise the workplace community as a living organism. Across the globe various metaphors have been adopted to describe collaborative ways of working, for example Billett (2000: 16) talks of "co-participation" as "doing and learning [which] coalesce through work"; Lederach (2000: 470) calls it an "accompaniment-in-discovery"; Rumsey and Knott (forthcoming) coined the term "interactive learning"; and Solomon, Boud, Leontios & Staron (2001: 1) the "co-creating of knowledge". Researchers, such as Grundy (1995) describe research links between higher education institutions and local communities as a "journey". All of these terms describe the collaborative nature of participatory action research with similarities to what happened at Kulai.

It was important to move from the research plan to the tree as preschool metaphor, to bring life into the project and illustrate the central role to the local community. This approach is supported by Ball and Pence (1999), Fettes (1998), Haig-Brown and Archibald (1996) as Canadian educators, in their descriptions of sharing and learning theory and practice, which emphasise relevance as a priority for local Indigenous communities. Suchet (2001: 123) also describes the importance of communicating local relevance in community development projects with aboriginal communities in Africa:

Coalitions and networks at all scales are vital for local groups and their representative organisations to be heard, for their ways of knowing to be recognised and engaged with, and for more effective and informed processes to be adopted. It is important that these alliances are not based on stereotypes or set models of international relations but, rather, the commonality of experiences and motivations see a multiple, fluid set of networks emerge (Barsg 1991; Jhappan 1992).

In her explanation Suchet introduces metaphors to illuminate her manner of collaboration with communities. She recognises the importance of moving with the community and capitalising on local knowledge. [d]e Vere (1999b: 4) in her description of an Australian cross-cultural workplace, notes the need to respect and value knowledges in a spirit of mutuality and reciprocity, which affirms local and personal ways of operating found useful at Kulai:

It requires structures and processes other than those that rely on hierarchical line management, if truly consultative decision making is to take place. Common ground and an authentic culture of reciprocity needs to be built.

Raymattja Munungiritj (1999) talks of the cross-cultural partnerships in learning that have been developed to operate in a balanced way between the Yolngu peoples and teachers' from Anglo-Australian culture. Such an exchange of knowledges is most often understood through metaphorical tools, framed around the ebb and flow of salt and fresh waters. She explains how energies are generated through the meeting of these different forces to facilitate the learning process. Munungiritj (1999: 307) describes the teachers' role as an interpreter of information that helps others to 'see' and to come to a deeper understanding of education:

This implies the teachers and learners must negotiate the meanings together ... Every Yolngu teacher only has an approximation of the ultimate structure. A person with a well developed Milnurr<sup>\*</sup> can help learners understand how to proceed for the next say 30 years.

A description of the use of metaphor at another school in the Northern Territory, by de Vere (1999b: 4), expands on Munungiritj's description, and forges a link to the emotional geography and intelligences present:

> At Papunya school we use both visual and metaphorical representation as valuable tools to provide communication that develops effective

<sup>\* &</sup>quot;Milnurr is the principle fundamental teaching and learning" (Munungiritj 1999: 307)

dialogue, processes and a way of working that crosses cultures. The capacity to communicate effectively in a transcultural situation comes from within. It evolves, out of the way people feel about each other and the level of trust that exists between all parties. It requires developing and recognising intelligences beyond the domain of verbal and written documentation.

This illustrates in a practical manner how metaphors provide bridges to over-ride or blur cultural boundaries. It also highlights how metaphors make use of multiple intelligences (Gardner 1983; Roberts 1999a) in their development and interpretation. Wright (2003: 3) concludes that such an approach is "common to all cultures". Narratives and metaphors are integral to de Vere's communication and learning in the Aboriginal communities she worked in. If non-Aboriginals want to operate effectively, de Vere (1999b: 4) recommends altering their ways of working to embrace all the sensory systems in learning:

> Metaphors allow us to see through our eyes, hear through our ears, it allows us to feel and experience and learn using head, heart and hand. It levels the playing field and recognises Indigenous knowledge. It requires that western thinkers relearn ignored intelligences and forgotten values and become more attuned to universal knowledge, to make the mind shifts necessary and to find common ground on which to negotiate ... metaphor acknowledges everyone's skills and allow for every ones learning and professional development, it is inclusive, consultative, authentic and it aligns and links culture, structure and pedagogy.

Munungiritj (1999) and de Vere (1999a & b) highlight the positive elements of using metaphors as communication tools to engage more deeply across cultures. Wright (2003: 15) reminds early childhood educators that valuing only speaking and reading skills "diminishes the significance of non-verbal forms of understanding". Rather, she recommends integration of all communication forms to be the practice of choice. She challenges Anglo-Australians to think outside verbal and print based approaches to teaching and learning to capitalize on a wide range of meaning-making tools, such as metaphors. Morgan (1996) also identifies a need in organizational theory for further investigation of the use of images in cross-cultural contexts. In the following section, other visual metaphors used in Kulai's research will be examined in some detail.

# **Tree as preschool**

The poster used to introduce the 'tree as preschool' metaphor was produced by the forestry movement to promote the value of trees to society. One large and strong specimen tree stood out in the poster from a forest of trees, which surrounded it. When I affixed the poster to the wall at Kulai, the large tree became a metaphorical communication point as it became transformed into the preschool. Without any adornments the tree as preschool was already quite solid, a product of the natural world that each of us could relate to. As I talked about how I conceived the metaphor, I attached cardboard overlays. Each part was labelled as shown in Figure 5 below. The transformation was enacted.

The tree showed how each staff member could be seen to belong within the preschool framework. It linked each one into the roots formed by the Elders, children and families who had been a part of the preschool since it establishment in 1960. The current children and families, program, building and equipment were layered on the trunk as core components. The trunk was firmly rooted in the past, but growing in the present and reaching to the future. The staff in the branches above, were there to meet the needs of the children and families. In the final stage of the initial development of the preschool as tree, the staff were asked to identify where a volunteer, such as I was, could be linked into the preschool. The response was to position me as a limb, or out on a limb, attached to the branches on the edge of the foliage.

The tree metaphor aided learning by making visible the identity and belonging of each of us to the preschool. It demonstrated that being a staff member had a lot more meaning than just a pay packet each fortnight. Rather, there was a belonging, a role in making the place work, an obligation to the Elders, children and families to meet their respective needs.

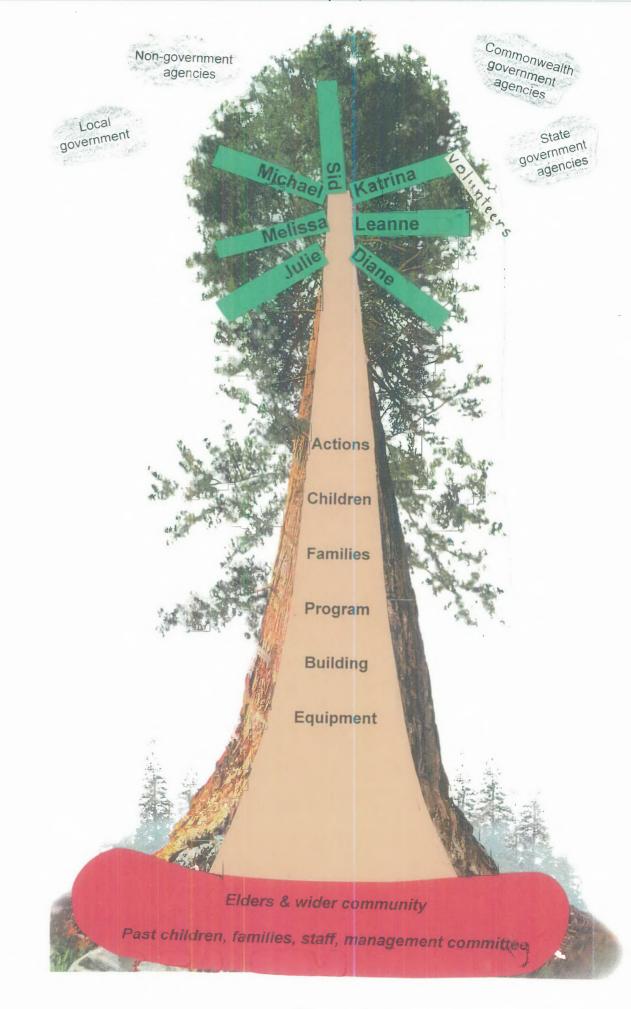


Figure 5: Tree as preschool\*

<sup>\*</sup> Note: adapted from Trend nd Why are forests important, Trend enterprises, St Paul.

The preschool as tree metaphor created potential problems/fallacies through overgeneralisation. This was particularly apparent in the clumping of all children and their families into one trunk. This could be read to portray Kulai as one homogeneous group. Whilst Kulai peoples shared some characteristics, many differences also existed in what elements each brought to the preschool and took away from it. If all branches of the tree are seen to be of a regular size, shape and length, this could be taken to indicate that each of the staff contributed equally to the operation of the preschool and received similar material and psychological rewards from their roles. This would ignore the hierarchies which existed in the operation. It underestimated the significance of changes to the way staff related when Julie, as director, was away from the centre.

If volunteer off-shoots were attached to each staff branch, a false impression could be created that everyone related in an equivalent manner to volunteers and all utilised the relationships to the same degree and elicited identical outcomes, when each was unique. As a limb I would have been constrained to a fixed position. However, in (re)defining my role I interacted with and observed every aspect of the preschool and could look at the impact of internal and external agents. My location on the margin allowed me to contribute without dominating the operation. It raised my consciousness of local, and refocussed me away from national or global issues. The impost of the national or global were still apparent whilst ever preparation for accreditation was part of the agenda at Kulai. Local needs, however, remained dominant throughout the process.

Kulai's significant dependence on outside agencies for funding and in turn accountability to those bodies was made evident by surrounding the tree with bureaucratic clouds. Their inclusion in the metaphor showed some of the forces they exerted and the ways they interacted or engaged with the Preschool. This provided a space to explore the impact of changes these agents brought with them. For example, officials from the Commonwealth Government came in to inspect the centre for financial accountability purposes on a regular basis. When new bureaucrats were appointed there was inevitably a period of (re)adjustment. Some services suggest "you just get one trained and begin to work well with them and someone new is appointed and the process begins all over again" (Paul Gorrick 2002 personal communication). The preschool as tree presented a picture that was solid and firmly rooted in the ground, but these same features could be read as inhibiting the movement needed to respond to the demands of the multiple stakeholders. By contrast the task of applying quality improvement principles called for a continuous ongoing process. This required a metaphor that could embrace more complex and intertwining movement than a tree could provide.

### Banksia unfolds quality improvement and accreditation

No one at Kulai had had prior experience of QIAS, and accreditation was a term unfamiliar to most. In searching for a metaphor to make visible the meaning of this amorphous concept, I realised the accreditation segment of QIAS, had beginning and end-points, that feed into overall quality improvement. It was apparent that the loop involved in preparation, implementation and outcomes of accreditation resembled the life cycles of living organisms. To find a communication tool to break down the complexities of accreditation I looked to the natural world surrounding Kulai. The banksia is a common local plant, that each year forms buds, which become flowers and then transform into solid woody masses, later opening to release seeds to begin the process again.

When I introduced the metaphor to the staff to describe accreditation, the presence of fresh specimens of each phase of the emerging banksia, allowed each of us to physically hold it in our hands whilst the metaphorical transformation was enacted. Touching, talking and hearing about the banksia as accreditation allowed multiple intelligences (tactile, kinaesthetic, auditory, visual and olfactory) to interchange and facilitate understanding. The concrete objects made it possible to explore organizational change as resembling the emergence of the banksia in nature.

During this discussion the first critical point of transformation occurred. In essence the flowers dematerialised into ideas, concepts and provided a frame for understanding. The transformation was not the banksia becoming the Concept/Idea of banksia, rather, it used the movement in the developing/evolving flower to visualise and illustrate the change process the preschool organisation and/or individuals must embrace for learning to occur (Latour 1995: 164). In analysing what was happening with the use of Latour's (1995) framework, it was this instance of transformation and connectedness, when awareness and understanding began to emerge and the full impact of the energy generated was felt.

The learning process moved from the known and real forms of the banksia and likened it to the unknown and unreal terminology of accreditation. In the transformation, a general idea of the meaning of accreditation was introduced in a concrete three dimensional form. The confusion caused by the complexity of the QIAS handbook and workbook, was ameliorated by the transformation of the banksia flower into a metaphor of the quality improvement life cycle.

At a later stage in the research I sketched and photographed each banksia flower specimen and combined it with an explanatory text. The photographs took the place of fresh specimens for logistic reasons of displaying the phases as a timeline with captions and labels securing the metaphorical link to the accreditation process. In this way the point of transformation was captured and the idea represented in a two dimensional form. Once the photographs were affixed in sequence to the Kulai staff room wall, a further transformation of the metaphor occurred as it came to symbolise the action steps the organisation and individuals were passing through. The point of substitution was important, and so too was the aftermath. Discussions centred on the metaphor carried the redefinition forward and between individuals, to fill gaps in people's understanding.

The photographic timeline (as shown in Figure 6 below) presented a tunnelled vision of quality improvement and accreditation, appropriate to a beginning level of understanding. The timeline illuminated the ideal case scenario where achievement of accreditation was an assumed outcome. Kulai as banksia presumed cooperation and conformity with the QIAS handbook (NCAC 1993) path, to ensure the bud would transform to a flower, through to a woody seed pod, and release seeds to regenerate. Such a timeline was built around a premise that each Kulai person came from the same base of knowledge and experience to fit into a common mould which overtime reached a replicable form. To accept that as a true picture of what happened would be a fallacy.





policies and ideas are tried.

Flower starts to get colour. A second lot of staff observations and parent questionaires are done. The results form the accreditation report Finally Kulai's Banksia is in full bloom - the accreditation report and the preschool are thrown open for the

Figure 6: Banksia as quality assurance timeline \*

\*Note; Photographs courtesy of Jan Carruthers

In nature the Banksia is unique to every tree and each flower. Some plants conform and follow the typical stages of development and the Kulai banksia photographs mirrored that scenario. This overlooks the cases where the normal chain of events is interrupted and a thin grey calix emerges to eventually disengage from the tree to form mulch.

Throughout the Kulai project Julie and I grew in our understanding of accreditation as reflected in the banksia life cycle. We directed staff from a hierarchical position to make changes required in preparation for review day. Most staff resisted these directions, and shifted little from the early bud stage of development. Reflecting on this lack of movement, Julie and I elected to reorient our way of operating, with a bottom up approach. A metaphor with a broader more flexible role was needed to conceptualise our work alongside staff, spreading and sharing information, identifying and responding to individuals.

# Pollinator as mentor

As director and researcher, Julie and I began the accreditation process from a topdown hierarchical position. We had an assumption that the early childhood educators on the staff would accept QIAS and strive to meet the quality standards described in the handbook. However, attempts to change practices within the preschool in line with QIAS met with resistant and non-compliant responses. Whilst Julie and I talked about QIAS as a collaborative project, we were faced with conflict and avoidance (Achinstein 2002). Staff appeared to feel no ownership of the plan, and demonstrated this by reference to QIAS as *Julie's project*. Conscious of the tensions our hierarchical position had created, Julie and I looked to change our way of operating.

The idea for the metaphor of banksia pollinators was stimulated by Vaughton's [1991:4.7] research, conducted in Gumbaingirr land. She identifies eastern spinebills (Acanthorhynchus tenuirostris) as the most common pollinators. Other types of pollinators visit less frequently, but "involve[d] eastern spinebills being displaced by larger honeyeaters" (Vaughton 1991:4.8). In a similar way, Kulai had other visitors, all in relatively more powerful positions than mine, who stayed for short periods and then moved on. When we adjusted our positions to become pollinators of the banksias, learning began to be shared with staff. By visualising

the role change in a metaphor it was possible to see the need to be on an equal level with staff, be a part of the action, to talk, to creatively experiment with and enact changes to practice.

Enactment of the reconceptualization gave Julie and me an opportunity to think about our partnership, our belonging and our identity. As a consequence in the role of pollinators we adopted a respectful, responsive and reciprocal position beside staff on the floor of the program (Barrera and Corso 2002). In this position it was possible to negotiate differences and to make meaning of new ways of working (Achinstein 2002). As pollinators we were situated to listen, share, learn, relate and nurture the staff and each other. This allowed us to work and nudge each person, including ourselves, and the preschool as a unit in the direction called for to achieve accreditation.

The trust built with staff through this repositioning forged a path to engagement in the space-in-between. Staff reciprocated with confidence to challenge the suggestions put forward and to assertively explore new ways of working and communicating. We all took more risks, questioned each other more and responded at a deeper level to the children and families using the service. Together we enacted new strategies, creatively experimented with these ideas and implemented what worked best for the children and us in that setting (Vaill 1996).

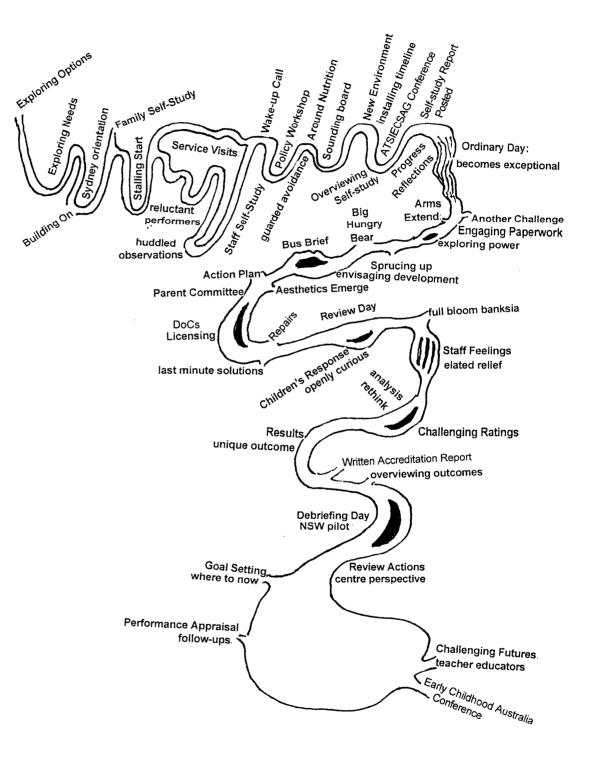
The pollinator metaphor presented a picture of sharing knowledge and spreading ideas between participants. It illustrated a way of working on an equal plane, where there was some neutralising of power. The pollinators were able to fly around, observing the whole picture. This gave Julie and I the flexibility to see more clearly where and when input was needed. The language used to talk about QIAS altered from *Julie's project* to what *we* might do to further improve *our* ways of operating. We worked as a team, co-participating towards providing a nutrition and education program that effectively met the needs of the children and families who were linked to Kulai.

The metaphor of pollinators could create a false image of being so busy moving between sites of engagement, that other tasks were avoided. This could imply no time to reflect or to take a longer term view of where Kulai should go in the future. The banksia and pollinator metaphors had followed the pilot quality improvement and accreditation process through to the certification. At the end point there was a research report to write on the journey and an analysis of the narrative to complete, which were not adequately captured by the banksia and pollinator metaphors.

# Stream as project summary

The stream metaphor took up the task and mapped the accreditation events as they interwove into a complex whole, as depicted in Map 2 below. It traced Kulai's movement through the life cycle of accreditation, as though it was a stream traversing the landscape. In the early stages the stream seemed to move slowly across a plateau. In this period ups and downs were visible, as the stream went around, doubled back, enfolding on itself through deviations and diversions. The stream suddenly descended as a major waterfall to another level of operation. The rate of movement and events increased as review day approached. In the aftermath of accreditation the water spread out across the plains and formed into a delta as certification was received and plans were made to disseminate the knowledge gained to a wider audience.

The stream metaphor aided the process of analysis by giving an overview of the actions of the group and major events that the preschool was involved in. This tool enabled the analysis of the QIAS process to be presented to my colleagues and supervisors. I experimented with acetate sheet overlays of the stream to bring into view multiple perspectives. These acetate sheets included the phases of accreditation as banksia; an examination of the use of voice by staff in various phases of the process; how food use impacted on the learning process. These experiments suggested that ownership of learning was a core element in the change process. It also became apparent that trust was a beginning point to facilitate interactive partnerships.



Map 2: Stream as project summary

The stream in Map 2 follows the QIAS process in broad but limited terms, as there was no clear indication of each person's part in the operation. From Map 2 it was not possible to gauge the impact of those who interjected from outside the organization for short periods and disappeared again. To analyse the process more closely the stream broadened out into a river in Maps 3, 4a and b, as shown and discussed in the next chapter.

The metaphor of the stream in Map 2 depicts the journey through organisational change in a series of critical events the preschool team engaged in. The initial events were grouped across the top of the page, with some twists, turns and deviations, but largely on one level. This was intended to demonstrate a business-as-usual response associated with the uptake of quality improvement and accreditation concepts. Although there was simmering resistance and conflict around the additional work demands imposed (Pile 1997), these elements were not obvious. Completion of the self-analysis, the move into the new building, plus an 'explosion' within the program seemed to induce a significant and rapid change in direction depicted by the waterfall, also symbolising the energy generated within the turmoil. One staff member transferred to a job outside the local area, whilst the other team members came together in a more focused way. The surge of energy seemed to allow a take-up of the changes needed to prepare the centre for the scheduled inspections in the form of the accreditation review. Hargreaves (2001: 1068) explains how this process can operate:

People acknowledge and understand each other's purposes, and try to work together *towards* creating more common ones. Indeed, this very process of narrowing distance and working through difference makes organizations emotionally vital (Goleman 1998).

The stream in Map 2 aims to make the adult's response to organisational change at Kulai apparent. It illuminates how attempts to change practices were accommodated in the workplace. Engaged learning experiences (incidental and formal) became the focal points for changes in approach and practices. Opportunities to learn were not taken up before effective partnerships were built on trust. Until these emerged movement in the research project was slow, people stood still, moved sideways or reversed away, each in her/his own time. As partnerships emerged, most people gained the confidence and energy to try new approaches (Hargreaves 2001). When risks were taken and success resulted, this often led to positive feedback from partners, colleagues, service recipients and sometimes the wider community, which energised staff to take more steps forward. When conflicts erupted people moved in a range of directions (Gilbert & Smith 2003).

# Conclusion

The prominent role of metaphors in the Kulai research journey was unplanned. A review of previous studies in Aboriginal education introduced me to the potential of metaphor as a communication tool. I brought food to share and took a mental note of the communication processes used during our initial discussions about the research project. The food was received enthusiastically and I felt welcomed as a friend, although the vagaries of my research plan ideas were not accepted. Reflection on this initial exploration across cultural borders indicated that to rekindle and build relationships reciprocity was a key element. Little interest was generated by print materials or my talk of workplace oriented research. After consultation with Kulai not only was a new research plan required, but also different tools to link with existing knowledge whilst reducing the abstraction and complexity of the unknown quality assurance process. I experimented with metaphor as a meaning-making tool, in discussion with the staff about their links and mine with the preschool and later to increase familiarity with approaches to quality assurance.

As the preschool staff were dependent on their prior experiences to make meaning of metaphors, it was logical to select objects or frames that were frequently encountered to act as metaphors. In selecting the tree, banksia, pollinator, stream and river, my basis was familiarity in the local environment. I was initially unaware that metaphors would outgrow their usefulness. I came to realise, in the process of observing the staff responses, that metaphors could plant seeds and partially open some doors to understanding, but could not dictate how ideas would be taken up or evolve. Energies were generated by the paradoxical nature of meaning making, which operated in the space-in-between the possible understandings of a particular metaphor. Charting the process and mapping the journey allowed the visualisation and analysis of the learning process, much of which would have been difficult, if not impossible to explain in text alone.

Analysis of this learning journey revealed an unconscious use of food and language with metaphor, until we become aware of what these communication tools were doing. Then I began to make use of the them consciously. I started initially with a basic idea of: 'Let's choose a metaphor to map what's here'. Later I came to recognise that metaphors took on a life of their own and provided space for collaborative, but nonetheless challenging partnerships. I moved from seeing metaphor as a tool for clarification and tracking, to experiencing and observing the process of transformation for all of us as each metaphor emerged in its own way. Metaphors in this project have been used to facilitate communication, and provided a framework for summarising and analysing the research journey.