Reclaiming Aboriginal Knowledge at the Cultural Interface

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Abstract

Many studies and papers have explored and critiqued the "what" and the "why" of working at the cultural interface of mainstream curricula and local Indigenous knowledge, but this project sought to understand the "how". Participants went beyond explorations of "cultural items" and worked in the overlap between the New South Wales Department's Quality Teaching Framework and Indigenous Pedagogies drawn from local lore, language and the sentient landscape. Indigenous knowledge was used not merely as content, but to provide innovative ways of thinking and problem solving in the field of design and technology. The methodology for the study was based on a significant site in the local river system. The focus of the action research study shifted in the early stages from the students to the teachers, who required a radical shift in their thinking in order to set aside deficit logic, or stimulus-response approaches to teaching and learning, to embrace sophisticated Indigenous ways of knowing.

Sense of Place - The Junction

Garriya Community College (actual place name has been changed) is situated in a remote Indigenous community in Western New South Wales. Garriya itself is located at a junction of rivers (Figure 1). This is also the meeting-point of three traditional territories – the Wayilwan, Gamilaraay and Yuwalaraay/Yuwalayaay. The geographical and cultural overlap of the site holds a special significance for the community. It situates the college in a dynamic space where many different interests compete within the colonial context of lands occupied by Australian agribusinesses in a region that boasts the hemisphere's largest silo storage facilities.

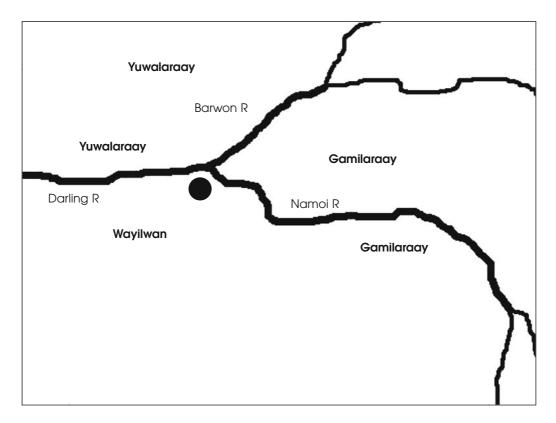


Figure 1: Territories

The Indigenous facilitator of this action research project was invited by the New South Wales Department of Education to work in the school from mid 2007, specifically to introduce Aboriginal perspectives in the curriculum and strengthen relationships between the school and community. These elements were seen as areas that could be improved in order to address low levels of literacy, attendance and engagement for Aboriginal students, who represented the majority of the Primary Campus and all of the Secondary Campus. The facilitator was engaged in many projects involving land, language, culture and community knowledge, several of which intersected with and informed the action research reported here.

The study sought to answer the question of how to operate at the interface between Western curriculum knowledge and Indigenous knowledge. Participants engaged in negotiating a space where common ground could be determined and built upon in culturally safe, yet challenging, ways.

For this work the project drew heavily on local knowledge of land and place, with the river junction (Figure 2) becoming a central metaphor for working synergistically in the overlap between multiple social realities and ways of knowing. Hence, the theoretical model for the project was constructed visually and mapped onto local geographical and political notions of place.

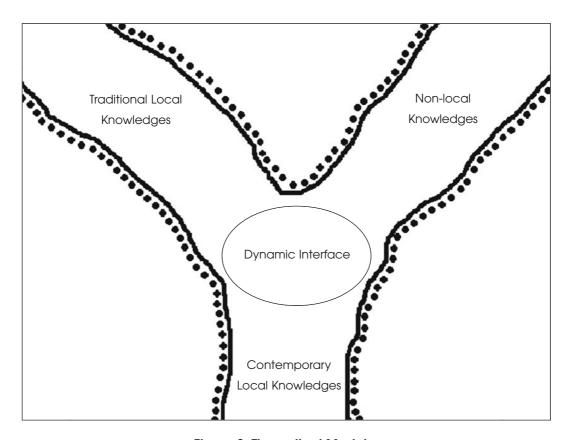


Figure 2: Theoretical Model

Place of Knowing

Culturally responsive education from an indigenous perspective is sublimely ecological and place based ... asserting pedagogies drawn from the "sentient landscape". (Marker, 2006, p. 482)

Much of the theory for this project has been informed by Indigenous knowledge drawn from local language and culture. As such, the theory is strongly place-based as most Indigenous knowledge is grounded in long-term occupancy of land and is indivisible from place (Shahjahan, 2005).

In Garriya, an Indigenous orientation to the "local" is dismissed by some school staff as "the levy bank syndrome", framing local knowledge as ignorant and restricted to the levies that enclose the town.

So the theoretical design for this project sought not only to challenge these assumptions, but above all to privilege Indigenous and local place-based knowledge in the curriculum, to value such knowledge as a sophisticated system rather than viewing it as a parochial limitation. The interface theory at the heart of the project is drawn not only from the local land based knowledge of the river system and territory mentioned above, but also from concepts of balance central to Gamilaraay cosmology, particularly the way spiritual beings representing Law/Lore are framed as having equal and opposite counterparts, each controlling different aspects of existence and maintaining tension and balance between competing social interests. This theory is also informed by Indigenous knowledge systems involving synergy from other language groups, such as Kirridth Yordtharrngba from Ya'idmidtung, or Ganma from Yolngu, which views the interaction of opposite systems such as fresh and salt water as a magical source of creation (Yunupingu et al., 1993).

Nakata's notion of the cultural interface (Nakata, 2007a, 2007b, 2002) provides a conceptual framework for exploring the dialogical exchange between Indigenous and non-Indigenous systems, as well as situating the lifeworlds of contemporary Indigenous people in the dynamic space between ancestral and western realities. Although he asserts this space is highly political and contested, it also carries a strong reconciling dynamic (Nakata, 2007a). Elsewhere in the literature, the interface is seen as an opportunity for innovation and creative dialogue (Ball, 2004; Bala & Joseph, 2007), a harnessing of two systems in order to create new knowledge (Durie, 2005).

However, while most of the literature focuses on the why of cultural interface, very little explains the how in terms of what actually happens in the classroom. The aim of this project was to design and implement a unit of work based on the common ground between local Indigenous knowledge and the *Quality Teaching Framework* of the New South Wales (NSW) Department of Education and Training (2007).

Some proposed points of intersection between Quality Teaching and Indigenous epistemology are: narrative, self-direction, self-regulation, connectedness, cultural knowledge, social support and integrated knowledge. The aim in working with these common elements at the cultural overlap between Indigenous and non-Indigenous knowledge systems, is to realise the dynamic balance envisioned in the theory of action based on the local river junction (Figure 2).

Re-searching Back to the Centre

Action research gives school communities the tools to become reflective researchers of their own practice, a kind of cyclical inquiry that is critical and relevant to local contexts rather than generalisable. In this way it differs from positivist research frameworks in that it can become participatory and emancipatory. The "objects" of research become co-researchers who can determine the direction of the research (Carr & Kemmis, 1983). So the emphasis of action research is on local rather than non-local, communal rather than individual, participatory rather than objective, which makes it a good match for the theoretical framework and Indigenous orientation to place and community. Aboriginal researchers such as Yunupingu et al. (1993) assert that participatory action research is a model that can accommodate Indigenous ways of knowing.

The emancipatory nature of participatory action research is a major factor in its appropriateness for Indigenous contexts. The aim is not only that the research products will influence social change, but that the action part of the project – the participation and reflection – will assist the co-researchers in challenging their values and beliefs, and thus transform themselves in the process, while also transforming the institutional situations that block progress in Aboriginal education (Hooley, 2005). Arguably, it is this kind of personal reflective work that is needed to facilitate a paradigm shift in the way teachers view and work with Indigenous Knowledge. There is a strong research base for participatory action research as the obvious framework for such critical educational research (NSW Department of Education and Training, 2007).

The project ran through three spirals (Figure 3) (Carr and Kemmis, 1983), each including a component of planning, acting, observing and reflecting. These sit within a larger "macro spira", as each phase reflected a wider focus on planning, acting or observing/reflecting. This conforms to aspects of Aboriginal cosmologies in which increasing circles of knowledge about the universe continue to repeat the patterns of the local centre and ultimately return to it (Brad Steadman, Ngemba – Brewarrina, personal communication, April 2007).

The first spiral, the act phase, involved several months of the Indigenous research facilitator making links with community members, organisations, students and teachers, while exploring and negotiating the world of local cultural knowledge, protocols, relationships. It involved developing program ideas in consultation with community and drawing down learnings from many other projects in the school, introducing the unit and then observing student reactions and choices that changed the direction of the work and informed the next round of planning.

The second spiral, the plan phase, was larger in scope, involving more teachers and another class, extending the vision and scope of the action, bringing in more Indigenous staff and community members to contribute to the program, and shifting more decision-making to the students. This informed the final spiral, the observe/reflect phase, which saw the culmination of the unit and presentation of student work and findings in the school, community and beyond.

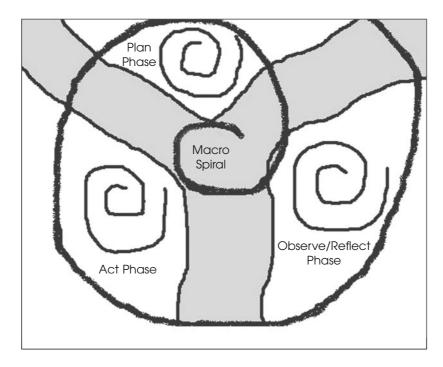


Figure 3: Action Research Spirals

The third spiral involved planning approaches to analysis and presentation of findings, acting on these through the practical experience of synthesising the findings and making future plans. The reflection informed recommendations and planning for units of work the following year and in this way led back to the centre again to begin a new planning phase in a process that it is hoped will become part of the organisational culture of the school.

In the planning phase, the Indigenous knowledge data that informed the unit content and pedagogy was offered by a wide range of Community Members and Elders. These were offered orally (stories and explanations) and in print form (dictionary and local research/archival texts). An evaluation was completed by the students at the beginning and end of the unit. They were asked to rate aspects of the program on a scale of one to ten. Conversations were held with the teachers involved, in groups as well as individually. Opinions and quotes were recorded from these conversations. Some teachers submitted written reflections, while others preferred to do this orally with notes taken by the facilitator. The facilitator kept a detailed journal including narratives, quotes, experiences and the day-to-day running of the project in school and community contexts. Planning was constantly in motion, so the changing planning documents also became data used in the reflection and analysis. Photographs were taken of students for body-language analysis. Student work samples were also used to steer the direction of the project, so these work samples became data as well. The

result was a broad canvas of diverse interactions capturing a wide range of participants' responses and learnings.

The pool of teacher participants was transient, with staff shuffled around as roles within the school changed. For example, the main teacher for the class was shifted into an acting administration role following the planning phase of the project, so a new teacher had to be inducted into the project to take her place. The acting administrator remained a participant in the project from her new role, meeting twice a week with the facilitator and holding longer sessions with the group in the reflection stage. A group of new teachers met fortnightly to act as a sounding-board for the project, offering suggestions while also learning from the experiences of the participants. The teacher in charge of the class had learning discussions with the facilitator every school day for at least half an hour, while the class itself operated for 25 hours over the term on a rotating fortnightly timetable. Others participating as "team-teachers" had variable attendance in the classes, but participated in learning conversations with the facilitator and class teacher at least once a week.

Law and Conflict at the Junction

The ethical dimensions of the study are problematic, as the non-local Indigenous facilitator needed to operate within multiple layers of consent and ethical concerns from the local Indigenous, non-local Indigenous and academic points of view. Once again these were addressed from a dialogical standpoint. It was necessary to create a blending of Indigenous and university protocols, with informed consent taking on different meanings for different participants (Riecken, Conibear, Michel, & Lyall, 2006). This meant waiting up to weeks and months for permissions from Elders to undertake certain cultural activities and learnings, and adherence to communication and relationship protocols that often delayed the seeking of permissions/information while relationships and routines of exchange were established. Another example of different layers of ethical meaning is in the area of human rights benefit. While the emancipatory potential of the project may be obvious to some through reading and talking about the process, for many local participants the potential benefit was viewed with scepticism until they were able to actively participate in the project and see results for themselves.

One concern from the local point of view was the relevance and impact of the Indigenous facilitator 's Aboriginality. He has ties through both descent and adoption to Ngarrindjeri/Kaurna and Wik peoples, but no kinship connection to the Gamilaraay community. (However, he did have a past history of past cultural activity with Northern Gamilaraay and extensive work in language with related family groups from other territories across the region.) This was the subject of ongoing negotiation, with

the facilitator moving between positions as insider and outsider researcher throughout the project. There are "multiple ways of being both in Indigenous contexts" (Smith, 1999, p. 137). Smith's examples of Indigenous criteria for an ethical researcher were a good match for the approach to this project – humility, a clear spirit, a good heart and an awareness of "baggage".

Smith's (1999) assertion that "research" is one of the dirtiest words in the Indigenous vocabulary, and that it is implicated in the worst excesses of colonialism, set the tone for the project's approach to ethical issues in the Indigenous domain. These were further informed by the theoretical model outlined above, especially with regard to cultural safety, legitimate space for exploring culture, and community benefit and ownership.

Core values for the facilitator encompassed the ethical guidelines set out by the National Health and Medical Research Council (Australian Government, 2005). These values centred around Spirit and Integrity, giving rise to Respect, Reciprocity, Responsibility, Equality, Survival and Protection.

Learnings on the Journey

In the Gamilaraay worldview, learning pathways are not direct and the outcomes and the journey are one and the same. This logic can be seen in the language. For example, the word for search and find is the same – ngaawa-y, and the word manila-y means hunt, search and find simultaneously (Ash, Giacon, & Lissarrague, 2003). This indicates that the process is as important as the outcome, or rather that the outcomes are integral to the process.

The analysis of the findings of this study does not focus on outcomes such as improved attendance and test scores, but rather on the lessons, conflicts and stories that were created along the way. The coding of the data for analysis utilised the Three River dialogical model again (Figure 2), with the three streams being teacher conflict, student/community conflict and curriculum/organisation conflict. At the junction of the three lies the learning that came from these struggles, coded as pedagogy and processes, interface content, attitude shifts. These were the themes and concepts that continually arose during the action, reflection and data analysis, so they were the natural choice for organising and presenting the data.

Teacher Conflict: "Out of my comfort zone, their lack of logic"

Originally the focus of the study was on the students and their journey, but it soon became clear that the largest issue with the interface approach was the teachers' own conflict around their perceptions of students and their relationship to the community. In the struggle to unpack their own subjectivities many entrenched beliefs were revealed. One concept that emerged regularly was a perceived intellectual deficit in the Aboriginal community. Teachers used phrases like "they have no logic", and "their lack of logic" which communicated a strong deficit view of local culture and knowledge. One teacher wrote:

...well a lot goes against my grain, diet, lifestyle, their journey. It is difficult, very difficult to button up when it is all so detrimental to their children...(Teacher, Sept. 2007, Field Notes)

The perceived pressure to "button up" was linked to a deeper resentment around ideas of teachers belonging to an oppressed Anglo minority servicing a socially privileged Aboriginal group. This emerged in comments like:

I feel we bend...are bowing to their every needs [sic]. (Teacher, Sept. 2007, Field Notes)

...everything handed to them on a platter. (Teacher, Sept. 2007, Field Notes)

...felt abused, no respect. No acknowledge [sic], take take, they just tolerated me. (Teacher, Sept. 2007, Field Notes)

...feeling discriminated against. (I have it all?) (Teacher, Sept. 2007, Field Notes)

One teacher's response to this cultural discomfort was to "relax, get slacker myself, lower my expectations" and "cut off emotionally".

The cultural discomfort extended beyond relationships, impacting on content. Aboriginal perspectives were avoided because they made teachers "feel uncomfortable". One teacher said she was "made to feel that you don't have a right as a non-Indigenous person to explore Aboriginal culture". There was a "fear of overstepping" as well as a reluctance to utilise Indigenous staff as sources of knowledge because "sometimes aides are slack – not always reliable" and because "some people might have an issue with ATAs (Aboriginal Teaching Assistants) speaking up". Cultural knowledge was also seen as difficult to "track down" and the community was seen as having "lost its culture". Victim-blaming discourses emerged, for example, in a statement about a group of

students who were being marginalised because of their disengagement. But perhaps they were disengaged because of their marginalisation and lack of teacher attention.

These statements of cultural discomfort in teachers and perceived deficits in students were used not only to justify avoidance of Aboriginal perspectives in curriculum, but also to lower expectations and curriculum standards. For the first half of the project there were repeated requests from the teachers involved to abandon the unit and "do some fun cooking activities instead". The unit, which worked with deep Indigenous knowledge and pedagogies, was initially seen as being too difficult for the students and teachers alike. But ironically it was also seen as "unstructured", "slack" or going "with the flow". These comments came from the same sources who viewed Aboriginal people as having "no logic", which suggests that an inability to see Aboriginal logic patterns go hand in hand with the inability (or unwillingness) to perceive structured activity in Indigenous contexts.

These negative perceptions and discomforts were the greatest barrier to implementing an interface approach. This link became clear when a teacher said "You say we should be like this, (gesture – lacing fingers together) but . . ." The sentence was left incomplete. The teacher then went on to catalogue negative community behaviours like swearing and smoking around small children.

For much of the project, non-Aboriginal teachers asserted that the success of the interface approach was not based on the content and pedagogy, but on the presence of the facilitator. The variables suggested were: personality and Aboriginality, so it was not considered possible for the Anglo teachers to reproduce the successful lessons without his support.

Learning – Attitude Shifts: "Maybe we should think more rounded"

The variables of personality and Aboriginality were proposed early as the key to successful implementation of the interface approach, but this was based on the observation of an Anglo teacher that whenever the Indigenous facilitator left the room or was absent from a lesson, student behaviour deteriorated and no work was completed. She reported having to call administration to intervene the first time the Indigenous facilitator was absent (the only time this happened during the project). At other times during these absences the class abandoned the project and did "fun cooking activities instead".

However, it was also observed that when a different Anglo teacher/participant was left alone with the class, some very successful lessons occurred. The new variables that emerged from reflections on these lessons were persistence with the Indigenised content/pedagogy and belief in the interface concept. This realisation allowed new understandings to be developed, facilitating a shift in the attitudes of non-Aboriginal staff, who now realised that the interface provided a safe, dynamic space for exploring Indigenous knowledge.

Today we ignored the external factors beyond our control and concentrated on the internal factor that had been missing – the Indigenous knowledge framework of values and ways of thinking, which we revisited at the start for structure. Then it was amazing – the first time in this project the students demonstrated self-direction and self-regulation. (Teacher, October, 2007, Field Notes)

Teachers began to see the "logic" of the Aboriginal knowledge that informed the content and pedagogy. The same teacher who had most often complained about the students having "no logic" earlier in the study later said of the Gamilaraay non-linear thinking patterns we had used, "That's in me now and I'll remember that. I can embrace it as my stuff now. It was authentic to me." She also changed her mind about the paradoxical blend of communalism and autonomy we had adopted as the base for our Indigenous pedagogy, stating that: "It sounds like it's loose, but it's actually structured".

Indigenous notions of maintaining balance between direction and autonomy were the key here – previously she had been unable to reconcile the two, but now described it as "communicating together, letting ideas and projects evolve with direction; it's a more gentle approach". She described her journey in the project as "a let-go of my set ways". Another teacher stated that she had embraced Indigenous circular logic and holistic thinking as strengths in her teaching, explaining that: "We think in steps, taxonomy. Maybe we should think more rounded."

At the interface, these Indigenous learnings informed assertions about pedagogy from the *Quality Teaching Framework* (NSW Department of Education and Training, 2007).

Good Aboriginal content. Self-Direction. We decide – a bit of both.

Need to go further for background knowledge, not just listen to negatives that we 're told.

High expectations – plan for high performance. No more tokenism. (Field Notes, Oct. 2007)

In reflection, teachers stressed the importance of "accepting students for who they are" and being "able to be creative in finding our own personal links with Aboriginal culture". For one teacher, negotiating a safe place at the interface between cultures involved working with visual symbols and stories. Her attitude shift came during a lesson when she was recounting a personal narrative for the students using pictorial symbols the class had been working on in previous lessons. She later reflected that working with Indigenous knowledge at the interface is "not necessarily something that happens all at once, but something you develop in pieces". She stressed that learning this knowledge had to be hands-on and modelled, asserting that it could not be done in a formal, theoretical induction situation.

Student/Community Conflict: "You're living in the Dreamtime!"

At various stages during the project, students fulfilled teachers' low expectations outlined previously, in terms of disruptive behaviour, violence, disrespect and refusal to engage with tasks. Every one of these incidents was linked in the data to poor teacher (and facilitator) performance in terms of the pedagogy and content developed at the interface between Aboriginal and curriculum knowledge.

Initial student resistance to the cultural interface knowledge was centred around early attempts at fostering learner autonomy explicitly as an Indigenous value and way of learning, which was outside of their previous experience at school. This was evidenced by comments such as: "Well how come you want us to do this then ... you won't even do it yourself!" In reflection, this data was seen as an indication that we had not yet got the balance right between self-direction and social support. This lack of balance between teacher direction and student autonomy was found to be a major cause of student conflict. Regrettably, a middle path between the two was never sustained for more than one lesson at a time, so performance in this area throughout the project was erratic.

The other major cause of student conflict was lapses in the rigour of Indigenised content and pedagogy. When teachers who were uncomfortable with these concepts were left alone with the class they "reverted" (as one teacher put it) to disconnected content and stimulus-response pedagogy, resulting without exception in major behaviour disruptions and instant loss of engagement.

For example, one day a group activity was begun without any reference to the Aboriginal communal knowledge principle used previously. Students fought with each other over resources and did not settle down until the activity was begun again with the communal protocol in place. Another day, when a teacher offered treats as a bribe, the established protocol of sharing with the group rather than rewarding individuals

was violated. The class responded by "reverting" to disruption and disengagement, even though they had all been working well on a task they enjoyed before the bribe was offered. No amount of threats or further bribes would move them from this path, and in the end they could only be redirected through reference to the deadline for a community presentation. Focusing on the local, real-life Indigenous link to the content was found to be the most effective way of resolving these student behaviour issues.

Whenever the Indigenised content lacked community relevance or intellectual rigour, student conflict increased. A study of student body language in photographic data, mentioned previously, across a range of activities showed this connection. The data tracked two students who had demonstrated extremes of conflict and engagement. Body language like slack jaws, distancing the pelvis as far as possible from the activity of the hands, scowling, hunching, invasive proximity and so on were all associated with tasks where the Indigenised content and pedagogy were at a low level. For example, the research team was shocked at the outcomes of the "prac" lessons, which almost without exception ended in student conflict. The students had raised their expectations during previous lessons using local Indigenous knowledge for higher order thinking and problem solving, so saw the prac lessons as lacking value. Photo data of the same two boys working with local place and meaning to innovate a logo for their products showed a complete turnaround in their body language. So for the students, conflict around the cultural interface content and pedagogy arose mainly when the approach was abandoned or moved from deep to shallow knowledge.

Most community conflict was around locals challenging the integrity of keepers of knowledge from opposing community groups or families. The facilitator asserted that this was a sign that culture was strong, rather than eroded by "politics". Balance was sought in consultation with diverse groups. This conflict produced diverse and rich content. It was not used as an excuse to ignore local Aboriginal perspectives.

With a very small minority of Aboriginal community members, some conflict arose in the planning stages around whether Indigenous Knowledge was relevant or sophisticated enough for inclusion. One Aboriginal community visitor to the class suggested that we should abandon our work on Gamilaraay logic systems in innovative technology and instead do some simple beading activities. This suggestion was accompanied by doubts as to the capacity of Aboriginal knowledge to support higher order thinking. Another community member accosted the facilitator and said, "Who wants to go back? I don't! You're living in the Dreamtime!" Her assertion that Aboriginal knowledge applied only to a past perceived as primitive basically confined Aboriginal perspectives to the softer areas of the curriculum. However, the Indigenised content developed for the interface project was quite the opposite.

Learning - Indigenised Content: "In the eyes, burning"

Local knowledge and understandings, like the three river junction metaphor (Figure 2), were utilised with success throughout the technology unit. This interface diagram was used for higher order thinking activities like analysing the local resources, local needs and non-local market forces that impacted on the students' product designs. Teachers identified this local interface model as being generalisable across the school, with statements like, "The junction symbol is one that can be done. The methodology can be incorporated across all classes." The diagram was particularly useful in combining diverse knowledge to innovate new designs and ideas.

The local "Wamba Star" story also served the same purpose. From that story came the notion that local Aboriginal ways of thinking and innovating took a winding path rather than a straight line, a concept that had considerable overlap with DeBono's (1996) lateral thinking techniques. Both ways of thinking were explored and used not only in product design, but also classroom design, as the students practised the technique initially by customising the classroom environment, procedures, activities and content to suit their needs. In this way they became active participants in the study rather than passive objects of the research.

Another story that was used in class was about an Aboriginal man from a neighbouring tribe called Red Kangaroo, who designed a new kind of shield three hundred years ago. Students mapped the story to establish a class procedure for developing and manufacturing their own technology designs. This procedural text was also based on the traditional local genre called "manday", which referred to steps cut in a tree but is also a procedural text or list of items. Thus knowledge was constructed as something that came not just from teachers and media, but also from land and ancestors.

This allowed the inclusion of Spirit in the learning process. Knowledge was seen as a spiritual force, with knowledge production as a sacred or ceremonial duty to be performed. Following a writing activity grounded in this way of knowing, the facilitator wrote,

The engagement was...beyond that – it was in the eyes, burning. There was some inspiration there. Interesting that the students engaged at the level of spirit in a writing activity, when they failed to do that in a practical activity. (Field notes, October, 2007)

The research team eventually learned the hard way that practical activities could no longer be soft or unstructured, but needed an intellectual component grounded in Indigenised learning protocols. An example of this was the class's communal approach

to knowledge ownership and production, which was developed with the students through an examination of Aboriginal and western symbols. An analysis was made of a Gamilaraay meeting symbol formed by a circle surrounded with "C" shapes facing the centre. This was compared with a copyright symbol, which was reframed by the students as a greedy person sitting alone, keeping knowledge for himself. The communal protocol arising from this discussion was often referred to in resolving disputes over resources and information and in establishing a community of practice in hands-on activities.

The students identified the Indigenised/interface content as a major factor in their improved behaviour and engagement. They disclosed to the facilitator that the Indigenous knowledge used in the lessons

...give them confidence, help them believe they can do the work. One said he felt smarter with the kind of talk we have been using. One said he felt the same way when the other (non-Aboriginal) teacher did the work with him on Aboriginal symbols today – so it seems the Indigenous knowledge is the main variable here. (Field Notes, Oct. 2007)

Curriculum/Organisational Conflict: "It's Garriya!"

I feel it from the institution, as all the staff do. I was just trying to create a model text for a marketing plan, then halfway through ditched the whole idea and decided not to even attempt it with the students. ...I have lowered my expectations of the students, and it has nothing to do with anything they have done or said. (Field Notes, Oct, 2007)

This excerpt from the facilitator's own field journal illustrates the extent of low expectations institutionalised in the school organisation. Despite support from the administration for Aboriginal perspectives and engagement, teachers still perceived unspoken mandates of cultural exclusion and low expectations. These messages were repeatedly described as "drummed in", although nobody could quote or produce actual instances of this being communicated explicitly.

One teacher, responding to a question about teacher expectations theory, stated that low expectations were "drummed into us at this school". Another similar response was, "The curriculum is drummed in – hard to meet the need (cultural perspectives) when you must do it this way!" Another teacher said that she wanted to use some Gamilaraay language in her class but was actually worried the Department might sue her for it. One phrase that continually arose in response to plans for rigorous learning

activities was "It's Garriya!" The implication of this was that teachers should be mindful of their location and lower their expectations accordingly.

So although Aboriginal perspectives and high expectations (NSW Department of Education and Training, 2007) were officially mandated, teachers were somehow perceiving the opposite message. The research facilitator also fell victim to this powerful induction into curricular and organisational "slackness". Although he was unable to pinpoint exactly where this "force" was originating, he did find that rigorous self-analysis and also monitoring of his actions by the rest of the research team, followed by deep group discussions, helped him to unpack and reject this deficit logic that had previously been alien to his experience.

Following a group analysis of this institutionalised "deficit induction", participating teachers agreed that low expectations were communicated informally through the curriculum, the school design and the organisational structure. They agreed that it was "a whole institution thing – in the culture of the organisation".

Learning – Pedagogy and Processes: "When they were creative they were well-behaved"

The facilitator felt the institutional culture problem as stemming from a force that was beyond his ability to see, let alone address. However, all the participants agreed that the curriculum was something within their sphere of influence that could be both observed and changed, particularly at the level of classroom organisation and pedagogy. Optimum ways of learning illuminated through exploration of the interface between Indigenous and mainstream knowledge soon became clear.

Qualitative data from teacher and student responses indicated that successful learning and behaviour outcomes occurred when we worked cooperatively in Indigenous learning circles, but also when students were supported to work autonomously and creatively. The common ground between these seemingly opposite Aboriginal pedagogies was identified as the notion that "students had equal roles". Successful learning was also linked to the use of Indigenous cultural knowledge through the interface method. Additionally, it was found that redirection of misbehaving students was only possible by reiterating aspects of the content that were some way connected to the land or Aboriginal community life. Threats and bribes failed. Story telling and sharing was found to be the cornerstone of successful lessons.

From these observations six Quality Teaching pedagogies were identified as standing out most in the common ground with Aboriginal epistemologies. The six were Selfdirection, Self-regulation, Social Support, Connectedness to the World, Narrative and Cultural Knowledge. The last four of these were identified in a curriculum review as being previously non-existent in the technology subject area. Also previously missing from the subject, but now present during the project were: Deep Knowledge, Problematic Knowledge, Higher Order Thinking, Student Background Knowledge, Substantive Communication and Knowledge Integration. It was found that use of the six identified interface pedagogies also ensured that these other Quality Teaching elements were all covered. The *Quality Teaching Framework* (NSW Department of Education and Training, 2007) began in this way to be viewed as a dynamic interactive system rather than a linear checklist, with the teachers encouraged to use holistic Indigenous logic to reconceptualise the framework.

The students as research participants also were encouraged to design their learning around Indigenous learning styles. In negotiating their classroom environment, they jointly constructed their own definition of the local Aboriginal "way of learning", which was "to watch first and join in for small parts, then take on larger parts". They clearly identified Social Support as the key pedagogy, balanced with a gradual shift to Self-direction. Getting the balance right between these two proved to be the greatest challenge of the project.

Acknowledgements

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