Mrs Blue Gum, Some Puppets and a Remnant Forest: Towards Sustainability Education through Drama Pedagogy

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Abstract This paper focuses on a case study of the collaborative development of an environmental education unit involving the use of puppetry and drama. The collaboration was between an experienced classroom teacher beginning to use drama, and a drama/environmental educator and researcher. The critical lens for the analysis was sustainability education, including how this aligns with some recent theory on multiplist and evaluativist meaning-making. It is argued that these modes of meaning-making are necessary pedagogical goals of an eco-connected pedagogy. This case study showed that collaborative planning, implementation and reflection of drama pedagogy was not only a catalyst for more complex and deeper levels of meaning-making for the classroom teacher, but also prompted discussion about other important issues such as the quality of student engagement, classroom power dynamics and authentic assessment. In addition the teacher observed a range of outcomes achieved by her students that align with sustainability education as they became immersed in a dramatic world. In particular she observed that the students, through role-playing and writing about points of view not necessarily their own, developed deeper understandings demonstrating multiplist and evaluativist meaning creation.

Introduction

This paper focuses on a case study of professional conversations between Julie[1], a primary school teacher and myself, a drama/environmental educator. It analyses the collaborative planning and implementation of a 4-week teaching unit that integrated literacy and environmental education. Julie was teaching a year 5 class of 10/11 year olds in a school of about 600 students from a lower socio-economic area of South-West Brisbane. She had not used drama before but had an interest in it because of research showing that practice with oral language through drama strategies resulted in improved writing (Appleby, 2002; Wagner, 1998, pp. 41-42). In our collaboration, as Julie's mentor and critical friend, I was guided by recent shifts in environmental education that embeds an eco-connected consciousness within *all* education so that an eco-centric voice is heard within a mainly anthropocentric dominated curriculum

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(Bowers, 1993; Sterling, 2001). This shift I will call sustainability education or eco-connected pedagogy and curriculum.

Exploring the Links Between Sustainability Education and Evaluativist Thinking

There is agreement among environmental educators about the urgency to develop in all sectors of society a more eco-connected consciousness (Bowers & Flinders, 1990; Fien, 1993; Huckle, 1996; Hutchinson, 1998; O'Sullivan, 1999; Sterling, 2001). Environment Australia identified four educational goals in education for sustainability: awareness raising, shaping of values, development of knowledge and skills and making decisions and taking action (in Fien, 2001, p. 9). In this move towards a different educational paradigm teachers need to consciously consider issues of sustainability as they reflect critically on their curriculum planning and implementation. Bowers and Flinders (1990, p. 170) argue that this requires shifts in the conceptual frameworks used to make judgments about curriculum and how it is interpreted. This can be achieved by teachers becoming consciously aware, through dialogue and reflection, of how their decision making is guided by habitual or taken for granted thinking embedded in personal discourses and cultural perspectives.

In the middle primary years children are seeking to understand and create meaning from the culture(s) they are immersed in (Hutchinson, 1998). While this development is usually subconscious it underpins the values and beliefs that contribute to individuals' emerging life narratives which in turn inform decision-making and ethical judgements (Polanyi, 1966/1983). Therefore it is important in an eco-connected curriculum that children of this age are encouraged to engage with, articulate and critically examine cultural values and perspectives that influence their own lives and the lives of others.

Recent theory about personal epistemology and meaning-making also offer explanations about how eco-connected consciousness might emerge. Personal epistemology according to Hofer (2003) is how an

> individual develops conceptions of knowledge and knowing and utilizes them in developing understandings of the world ... this includes beliefs about how knowledge is constructed, how knowledge is evaluated, where knowledge resides, and how knowing occurs (p. 4).

This theory builds on Piaget's developmental theories combined with research by Perry with adolescents and concludes there is a clear pattern of evolving epistemological development in individuals (Hofer, 2003, pp. 7-9).

From this theory Kuhn and Weinstock (2003, p. 214) created a model of personal meaning-making with 4 levels: (a) realist, (b) absolutist, (c) multiplist, and (d) evaluativist. For realists, knowledge is certain and unquestioned. Absolutists also assert that knowledge is certain but can be true or false depending on evidence from the real world as in experiential learning and scientific experimental inquiry. At this level critical thinking is useful in comparing assertions and determining their truth. Multiplists believe that opinions are freely chosen and are accountable only to their owners. In this view reality is generated by human minds and is therefore uncertain and critical thinking is irrelevant. An example of multiplist meaning-making is the non-judgmental examination of a range of perspectives, views, contexts and cultures to foster awareness and deeper understandings of difference. Finally in evaluativist meaning-making assertions are seen as judgments that can be evaluated, argued and compared. As in multiplist thinking, reality is generated by human minds and is uncertain. Furthermore in evaluativist thinking (a) judgments are underpinned by a critical, possibly ethical stance, (b) persuasive argument is a vehicle to promote sound

assertions, and (c) understandings are deepened through dialogue (Kuhn & Weinstock, 2003, p. 124).

While multiplist thinking will enable our young people to develop deeper understandings of connectivity and interrelatedness, this is not sufficient for sustainability education. The latter essentially requires educators to aim for student engagement with evaluativist thinking that is based on multiplist understandings. The goal to achieve these more complex levels of analysis and meaning-making needs to be embedded within every aspect of eco-connected curriculum (Bowers & Flinders, 1990; Sterling, 2001).

The Potential of Drama Education to Promote Multiplist and Evaluativist Thinking

In contemporary drama education learners are immersed in dramatic worlds as they take on roles and develop relationships within a progression of dramatic episodes driven by different forms of tension. Essentially drama is a deconstructive pedagogy that supports experimentation with social relationships, multiple perspectives, time and space through enactment and reflection (O'Toole, 1992, pp. 223–235). Recent research shows that dramatic learning experiences combined with focussed learning activities are significantly more effective than other pedagogies in developing learning of processes, concepts and skills (Marzano, Gaddy, & Dean, 2000, p. 147). In his research, Edmiston (2000) argued that drama supports examination of points of view and their underpinning ethical stances and discourses, as well as provides opportunities for dialogue to enable personal perspectives to be examined and possibly change and evolve. In addition, drama pedagogy is dependent on language and social interactions and thus creates opportunities for expression of embedded cultural perspectives and understandings (Polanyi, 1966/1983).

Drama pedagogy creates conditions that may result in aesthetic engagement as a way of experiencing the world and our relationship with it. In her study, Bundy (2002) found three key factors of aesthetic engagement: connection, animation and heightened awareness. Aesthetic engagement gives a feeling of invigoration and animation resulting in feeling more alive and alert. In addition an aesthetic response is characterised by a personal connection with the idea evoked by the art form. For example a participant might juxtapose personal experience with elements that may be explicit or implicit in the dramatic experience. Finally heightened awareness is a result of experiencing animation and connection simultaneously (Bundy, 2002). Polanyi (1966/1983) describes heightened awareness in a similar way, and adds this is fundamental to encourage deeper levels of thinking in which "connections" to usually unconscious aspects of our thinking can be made. These deeper levels of meaning-making are prerequisite to considering "responsible" or more ethical analysis (Polanyi, 1966/1983), that is, evaluativist thinking.

Collaborative Conversations – Methodology

The main data in this study was gained from the reflective planning conversations between Julie and myself. Feldman (1999) maintains that conversation is much more than a data collection technique as it can be part of a critical inquiry process that facilitates understanding and meaning-making. As we gained each other's trust by sharing teaching and personal experiences, we were able to move into a deeper and more honest relationship as we began to co-author the teaching unit. Ely, Vinz, Downing and Anzul (1997) maintain that a "not-too-comfortable" creative tension in a collaborative relationship is a "fruitful condition for calling forth each other's best energies" (p. 308).

For us these tensions were defined by how we might creatively merge curriculum, eco-pedagogy goals and drama. Through a discursive process of interpretation and reinterpretation we challenged each others thinking as we sought to find drama "episodes" or lessons that sat within a cohesive dramatic story in which the students would be highly engaged. We continually examined the pedagogical conditions to deepen the dramatic engagement for the students, which, as the analysis later showed, also enhanced the level of teacher engagement and enjoyment. It was important that the unit "felt" right for both of us. Julie needed to discuss her level of comfort and discomfort in her learning journey, because drama challenged and occasionally threatened her teaching style and abilities. We also had to consider how the children, who were also novices to drama process, might accept or reject the drama constructs.

Devising the Unit: Developing Points of View through Puppet Characters

Julie's class had participated in the Pullenvale Environmental Arts Camp *Who Speaks for the Trees?*[2] during which they created life-sized moving-mouth puppets. They met an environmentally passionate character, Mrs Blue Gum (teacher-in-role) who was so rude and loud as she "spoke for the trees" that nobody wanted to listen to her. To help her the students devised and performed a puppet play to demonstrate their knowledge of the forest and show her how to communicate without upsetting other people. During the camp they discussed different views about remnant forests, and were introduced to problematic aspects of "good" and "bad" forest users. They examined how some forest users were unaware they were causing damage, and that some cared more about the forest than others.

We decided to build on the children's continuing interest in using the puppets. Julie wanted them to develop "persuasive argument" as a genre of effective communication within literacy, and an important outcome within environmental education. She also knew this was a difficult genre for year 5 students. In the previous year, her year 5 class had used puppets quite superficially and she commented "they couldn't put themselves in role and speak through their puppets". We decided that this year we would give the students small, scaffolded steps to gain competence to speak from another's view through providing a range of opportunities that built on their emerging new knowledge of forest users from the Arts Camp. We hoped this scaffolding would improve their written arguments. This aligned with Kuhn and Weinstock (2003, p. 139) view that evaluativist meaning-making is encouraged if students practice making and defending claims in a supportive and encouraging environment, especially in social contexts.

In developing the drama pedagogy I wanted Julie to feel comfortable and have ownership, so I was reluctant to offer my "solutions" to the emerging pedagogical problems. Initially we discussed at length how the puppets might be used. I had a concern that "[the children would] get lost in the manipulation of the puppets and lose the dialogue". This excerpt from the transcripts illustrates, with a brief analysis, some of the issues we discussed.

J: ... When they get their head[s] around what they do and their character and what their point of view is, then we can lead them into/I don't know/maybe we could do something about how their character conflicts with someone else's character.	Julie posed a major problem – how can we support the children to develop a puppet character with a point of view? She also posed the much harder question: how can we support the characters to interact?

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E: [interrupting, talking over last words] I'd get their character very firm first, even to go away and do a bit of research...	Ellen was concerned that the first step might be all the children could cope with. (Note: We did not predict what actually did happen: as the children became immersed in their puppet roles they wanted to interact with other puppet characters in meaningful ways. They did so without teacher intervention, as later analysis shows).
J: they are already doing tomorrow a short talk from topics I've given them, they have chose one of them. I think one is about trail-bike riders, "trailbike riders do damage to the forest" and they have to argue that point, and basically have to come up with a couple of arguments.	Julie described that children were already developing their points of view.

Planning the drama unit challenged us to consider multiple perspectives and scenarios as we brainstormed ideas for the teacher-in-role and student roles. To develop Julie's understanding and confidence, each suggested scenario was carefully thought through and discussed so that possible problems or successes could be examined. After lengthy discussions, we decided that the puppets would each take the character of one forest user and develop their point of view before we considered how the characters might interact.

Challenges of Role-Play

Julie began with a drama technique called "hot seat" in which she took on role as a forest expert, and the children, without the puppets, questioned her about the forest. The morning after this role-play Julie found me before school. I wrote a rushed note in my diary: "Enthusiasm – J has tried the hot seat strategy and it worked better than she expected. She was challenged and excited".

At a later meeting she reflected on this first hot seat in a more thoughtful way:

J: So they came up with questions and everybody wanted to have a turn - so they really got into that.	
E: Excellent.	
J: So I let it go. E: So what was their level of questioning? Was it fairly sophisticated?	Julie takes a risk in allowing the drama to carry on.
J: I tried to bring that out, so the kids would say "Do lots of people go into the environmental park?" And I'd say "Yes"... I was quite sharp, short and sharp about it, ... They could tell just by my response that it wasn't what I was looking for. That probably went on for about 10 to 15 minutes. Then I stopped it. It was longer than what I planned to let it go for, but because the children were talking about the park, which is what I wanted them to be talking about, and getting the idea of questioning, and getting into the idea of having different roles, we just let it go.	Julie able to control the drama from within it – teacher-in-role manipulating the drama. Children posed questions, evaluated and modified them to elicit better responses from teacher-in-role.

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Then I stopped them and said let's talk about the questions that you asked, which people asked me good questions....	Children reflecting on action – reinforcing effective question posing and practicing evaluativist thinking.

Julie's later reflections showed her trepidation about her first teacher-in-role:

> J ... The teacher-in-role stuff/ I suppose I worried about a lot, particularly about the kids accepting me. Definitely it is that "letting go of the control" ... . While you can come out of role and be the teacher, it is obviously not desirable, so you really need to try to manage things in role, which I tried to do. Like [I said in role] "I've got a job to do, and I can't listen to all you talking, if you've got something to say, put your hand up".

In this example, the drama strategy was challenging Julie to analyse her pedagogy specifically about how being in role created opportunities for alternative classroom power relationships. We had touched on classroom power earlier in our discussions but Julie had not really thought much about this aspect of her teaching even though I had asked her about her thinking on it a few weeks earlier. She did not articulate her thinking about it until after her experiences with teacher-in-role. Within the drama she was facilitating alternative forms of classroom power by allowing the children to take control in appropriate ways. The students had a high level of control of the classroom power dynamics within the dramatic context because if they behaved inappropriately the teacher would drop out of role and the dramatic play would end. Julie was manipulating the dramatic action from within the drama through continually assessing and making pedagogical judgments as she interacted in role with the children. The children and teacher creatively and playfully struggled to make sense of the boundaries of the dramatic and social structures, not through teacher instruction but through social interaction. In this mode of heightened awareness, teacher and students were considering many alternatives simultaneously, evaluating them as the action unfolded then trying out responses or questions.

In the next dramatic episode the children worked in groups of similar users: scientists, toxic waste dumpers, litterbugs, artists and motorbike riders. They discussed answers to a range of questions: How do they use the forest? How do they feel about the forest? Do they value the forest? Then each puppet character presented a point of view at a press conference about how the forest should be used. Julie was in role as a newspaper reporter who questioned these puppet representatives. What surprised us was how this structured improvisation moved seamlessly into more complex "play" without any teacher-led transition.

J: ... They sat together in their groups, in a circle, because sometimes they had to have a group conference about what their answer was going to be. But then the other groups started to make judgement calls on what the other groups were doing.	Each group's representative is questioned by the reporter (teacher-in-role).
E: You got the interaction!	Puppet characters and students interact without teacher intervention.

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J: And conflict and tension I hadn't planned to build. Because I had not planned to have the characters from the different groups talking to different groups. It was really just going to be me directing, doing straight question and answer type stuff. ...	

Julie further described the complexity and creativity in the students' thinking:

J: But I was surprised that the scientists got a bit of a raw deal. A lot of people were giving the scientists inquisitions about what they were doing in there, and asking question like ... Do they leave things behind? And what sorts of things were they testing for?	The students were using prior knowledge of what scientists do.
E: Did they develop a scenario, a story around that?	Students created a story to fit the scientists being in the forest (this was not teacher directed).
J: They were searching for a cure for a rare disease ... but the scientists also said that the artists were having quite a high impact on the forest because the artists were doing paintings, which were then being displayed by museums. These particular scientists had seen [this exhibition] and it had prompted them to go to this particular forest, because the artists were saying that they did not think they had an impact.	Interaction between scientists and artists – critical thinking evident.

The children made appropriate decisions about the direction of the dramatic play as they held points of view that were not their own. They responded to each other and the teacher-in-role. They were also *critical* of the actions of other users and *experimented* with a range of questions and suggestions. They *evaluated* how each forest user might think and what values they might draw from, as well as *developing arguments* to defend these positions. Both teacher and students were demonstrating evaluative meaning-making in action.

The Unit Concludes

The unit concluded when the children met Mrs Blue Gum again (myself in role) who had just heard that the BMX riders intended to take over the whole forest. She challenged them to present their puppet character's arguments one more time to help her in this new debate. The assessment of the unit followed, which was a written explanation of three different views about the forest.

Julie's Evaluation

Julie's evaluation of the unit was important, as it was her goal to use drama to achieve environmental education outcomes. Lather (1986) calls this "catalytic validation" as it gives credibility to the research through the participant's articulation of self-

understanding and self-determination. Compared to her previous years attempt, Julie realised the importance of the longer preparation time for the students that the drama provided. It engaged the students and enabled experimentation and practice of dialogic relationships. She said, "You can't expect children to be able to get into the heads of someone else without all that preparatory work".

Julie had hoped that the written assessment would reflect her observations of the students' ability to speak from different points of view. Nearly all the students found paragraph structuring difficult so she scaffolded them by providing the opening sentence to each paragraph of the explanation. The structure was: an introduction; three paragraphs describing three different views; a summary; and possible conclusion. She observed some children wrote in the first person, and found it hard to speak from another's view, but she was satisfied that many were able to write from the alternative points of view. Careful thought went into her assessment of how they articulated the points of view and drew conclusions. She looked for linking words, textual features that showed deductive and inductive reasoning, organisation of ideas, and use of qualifying adjectives. She deliberately did not test them on the content, however, she noted that those children who did not have accurate facts and understandings were less likely to write a cohesive point of view. For the majority of the children she said: "I really felt that by the end of the piece of writing ... they showed a significant understanding (of expression of different points of view)".

Our discussions about the use of drama pedagogy and her own interactions with her students supported Julie to articulate her concerns about her method of assessment. She observed that some children could present a point of view in conversation and within the drama but that this was not reflected in their written expression. In addition she knew one child had had rich forest experiences during family excursions but he could not orally express these experiences and any resulting understandings. She expressed concern that she was not assessing what the children really knew, even many of the better writers. At this stage Julie did not take these reflections any further, but my later discussions with her indicated that these experiences sowed the seeds for further development of more authentic assessment in her practice.

In her evaluation of the environmental education outcomes, Julie observed that the drama process supported the children to engage with a range of social and environmental issues:

> J: ... these children have thought about real people in the real world, who have real jobs, like scientists, environmentalists, toxic waste dumpers and all those people who play a part in our world ... And they have thought about whether or not their actions were ok or not ok, and what were the repercussions for other the people in society as well as how it affected them. They have thought about how it effects the world and the environmental issues that go with that. And how could they convince those people not to do those things, and why do those people do things, what were their motivations, and how can we change their thinking, and [they asked] is it ok that they do that.

A year after this unit and completing four major drama units in collaboration with me, Julie's expanded drama knowledge, supported by her emerging ideas about pedagogy within sustainability education enabled her to articulate deeper insights into how drama supports children to discuss complex issues.

> J: ... you can't do a drama construct about an issue that is right or wrong, where you are going to be making a moral judgement, you need to have a question/ you still might make a moral judgement but have a question where

> a range of views is ok, and there is no real right or wrong. By the children making choices, it shows you where they are at.

This statement demonstrates how Julie's thinking had evolved (and is still evolving). At this point she was able to articulate the complexity of drama process in relation to moral reasoning. Her realisation that drama could *expose* children's thinking about their moral understandings agrees with Edmiston's (2000) view, and reinforced drama's potential to facilitate conditions in which evaluativist thinking may occur. Importantly, it also indicated that personal ethical development does not have to be didactic and through drama pedagogy children can maintain ownership of the developing ideas and insights.

Conclusion

Evaluativist thinking is a fundamental building block in an eco-connected pedagogy as it builds on an individual's knowledge of connectivity and difference, the perspectives and beliefs of others framed through personal critical lenses. These critical lenses are also developing and forming in this process through articulation, dialogue, reflection and evaluation. This study bought into focus some ways that drama can be used to promote a range of multiplist and evaluativist thinking with a middle primary class. Furthermore the process of drama planning and implementation through an eco-connected critical lens highlighted important pedagogical issues for the teacher. It was a catalyst for the teacher to critically evaluate her pedagogy and gain insights into some underpinnings, discourses and tensions in her pedagogical decision-making. It also enabled the teacher to consider (non-) predictability of student outcomes in this type of pedagogy, student/teacher power relationships, the quality of students engagement, the joy of engaging playfully with students in appropriate ways, ethical foundations the students were drawing from, and authentic assessment.

Finally this study indicated that further research investigations about drama education as a catalyst for pedagogical and paradigmatic change is an important stepping-stone towards an education underpinned by values of sustainability.

Keywords: puppetry; drama pedagogy; sustainability education; personal epistemology; higher order thinking.

Endnotes

1. This teacher's real name is not being used in this paper.
2. Pullenvale Environmental Education Centre is in the western suburbs of Brisbane and uses immersion in story, drama and other arts and the environment to create learning environments.

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