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Teacher Education and Experiential Learning: A Visual Ethnography

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Abstract: This article reports research that critically examined our teacher education outdoor education pedagogy. The purpose was to use visual ethnography to critique our teaching over twenty years of annual five-day bush-based residential camps. The bush camps were situated in an outdoor education programme contributing to a four-year undergraduate teacher education Bachelor of Physical Education in Aotearoa New Zealand. The research method involved photo-elicitation of selected photographs representing students' experiences and our practices. We each wrote about the photographs using introspection and recall to create a layered narrative analysis reflecting on the educative focus of the images. We responded to one another's narratives, challenging and/or supporting the reflexivity, to interpret our joint perspectives about the learning context, pedagogic rationale and outcomes. The research highlights our teacher educator perspectives about experiential learning. Some of this learning was directly attributed to our intentional pedagogy and some to the unpredictable, incidental, situated experience made possible by engagement in the outdoor environment.

Keywords: outdoor education, teacher education, critical pedagogy, visual ethnography, photo-elicitation, narrative inquiry, experiential learning, physical education, New Zealand

Introduction

We were physical education teachers in secondary schools for over ten years, and now, we are teacher educators of health, physical education and outdoor education in a university environment for over twenty years. In the current education climate we are aware of the pressures placed on outdoor educators to justify the time and cost of educational camps involving experiential learning in the outdoors (Irwin, Straker & Hill, 2012). However, we are convinced such learning, when well planned and implemented, have unparalleled outcomes for students. This was the starting point for a research project that sought to critically examine the nature of our outdoor education pedagogy. The purpose of our project was to use visual ethnography, employing layered photograph and narrative analysis, to critique our many years of annual five-day bush-based residential camps. In New Zealand 'bush' is a colloquial term for forest. In this case, the bush was a native rain forest. The bush-based camps were one of four outdoor education experiences contributing to initial teacher education students learning in a four-year undergraduate Bachelor of Physical Education (BPE) in Auckland, Aotearoa New Zealand. The BPE is a physical education teacher education (PETE) degree.

We view outdoor education as a means of curriculum learning, in, through and about the outdoors. Like Hill (2010) our view includes traditional notions of pursuits-based outdoor adventure education alongside outdoor learning such as, a rocky shore study in biology or geography field trips. The BPE outdoor education programme was developed to expand the content so students encountered a range of outdoor experiences during their four-year degree. To achieve this we maintained the idea of different outdoor learning venues for each year group. Briefly these are as follows. Early in the semester one, BPE students from years 1 & 4 attend a combined three-day beach camp, while at the same time year 2 students participate in an off campus four-day e noho marae¹-marae stay (Legge, 2010, 2014). During semester 2, third year BPE students attend a five-day bush-based camp at Piha in the Waitakere Ranges, situated west of Auckland city.

The bush-based camps we sought to study were positioned in a course about teaching outdoor education. This course was developed to examine and experience the role of outdoor education as an educational process. Course learning outcomes related to practical outdoor skills, pedagogy, relevant M ori-indigenous New Zealander protocols, safety management, and legal responsibilities. We were challenged to set appropriate activities for the PETE students given the diversity of experience they bring to their third year camp because for the majority direct and close contact with the outdoors, as we have constructed the programme, is a first. The particular focus of our study was linked to how the PETE students developed and practiced the outdoor skills, knowledge, attitudes, and behaviours necessary for teaching outdoor education in schools through their own participation in bush-based experiential learning contexts. Experiential learning (Luckner & Nadler, 1992) was the focal point of our critical spotlight.

Our philosophical position for teaching outdoor education was underpinned by our practical faith (Bourdieu, 1990) in experiential learning and a constructivist belief, that learning is more effective if the learner is involved in an authentic context (Warren, Sakofs & Hunt, 1995). Experiential learning is based on the assumption that practical forms of knowing begin with the individual's relationship to the practical world (Joplin, 1995). We adopted Luckner and Nadler's (1992) definition of experiential learning as learning through doing. Like Sakofs (1995) and Joplin (1995), we understood that experiential learning values and encouraged linkages between concrete activities and abstract lessons to maximise learning. As Hunt (1995) argued, the strength of the reflective experience lies in the process of removing oneself from the primary experience - to reflect on the experience. The value of reflection on concrete experience was central to our pedagogy. Our goal was for the PETE students to be able to understand and use their experience (Dewey, 1938/1997).

Situating the Context

We decided to teach best practice for outdoor education as bushcraft, based on our prior extensive experience as physical education teachers in secondary schools. We knew the outdoor skills and safety management required to camp and tramp provided a strong base to teach outdoor education in Aotearoa New Zealand, whether in the mountains, on water or in the bush. Our pedagogical aim was for the PETE students to develop outdoor skills through experiential learning. To implement the camp activity programme, the classes were divided into groups of 7 to 10 students depending on the numbers attending the camp. Criteria for the activity group selection meant each group had, one person whom we knew had first aid skills,

¹ Marae- spiritually a marae is the turangawaewae-home of tribal activity, and a platform for M ori culture. Physically a marae is on tribally owned land where the whareniui-meeting house representing the ancestral home is central. E noho marae means to stay on a marae.

a balance of gender and separation of known companions in an effort to promote new liaisons and networks within the classes.

The camp programme was designed to rotate the groups through experiential learning activities for example, related to survival, camping, tramping, and navigation via teaching and learning processes such as problem solving, discovery, trial and error. The sequence of the camp programme was deliberate but our pedagogy was nonlinear. This meant the day-to-day programme did not singularly progress knowledge and understanding but rather wove a web of connections. The programme was student centred so lessons could be learned by an individual in their own right, or through a group process of shared success and failures. However, one of the riskiest things to do is to learn from a failure (Brymer & Renshaw, 2010).

Our emphasis was on building professional teachers who understood their responsibilities and recognised the educative nature of many aspects of outdoor education. In our view, professional development began before camp by including the students in pre-camp organisation as members of a committee (administration, transport, food, equipment, environmental, social and cultural, and first aid), allocated responsibilities to complete before, during and after the camp. This practice supported our philosophy that experiential learning is not left 'out in the field'. Student leadership in the planning gave them a chance to have ownership towards the camp. Planning also helped develop skills of forward thinking, organisation and management.

Photographs as Evidence and Photo-elicitation

Schwartz (1989) argued photographs benefit social research when their use is grounded in the interactive context where they have meaning. Harper (2000) added that a series of photographs are empirical because they are a record of a particular subject at a particular time. Similarly, Smith (2001) noted the advantage of a photograph is that "it is a selective representation of reality and it freezes the scene and moment in time" (p 11). Schwartz (1989) suggested using photographs in social research requires a theory of how the researchers treat and understand photographic images. She contended when researchers view photography as records they are seeking "to reproduce the reality in front of the camera's lens, yielding an unmediated and unbiased visual report" (p. 120). Information is contained within the image, making the photograph "a receptacle from which individual viewers withdraw meaning". Dowdall and Golden (1989) noted that researchers see photographic testimony as informative rather than merely illustrative. Leibenberg (2009) suggested that...

... because images are argued to be visual representations of subjective experiences, rather than objective statements, the exploration of visual meanings not only helps us 'see', but also asks us to slow down and consider, to think about what it is we are seeing and what it is we don't see, and why (p. 445).

Encouraged by the visual ethnography of Dowdall & Golden (1989), Leibenberg (2009) and Harper (2000) we adopted, and adapted, a method Harper called photo-elicitation. Photo-elicitation involves describing each photograph, including the before and after details of its context. To interrogate our educative focus we examined our pedagogy using experiential learning, represented by a series of selected photographs that told a visual story. The photographs showed our practices and the student experiences in the bush-based camp. We understood that the images we selected could act on us as researchers; we might be moved by an image, contest it or interpret it differently, leading to discussion and reflection until finally coming to a representative meaning. We believed the meanings we attached to our photographic analysis could provide rich data for reflexive action.

For illustrative purposes photographs can stand-alone however, for research purposes insider information is needed to fully explore the phenomenon represented. A reflexive project of this nature involves individuals working and reworking their own insights (Abercrombie, Hill & Turner, 2000). Our insider knowledge of the contexts the photographs captured, enabled us to reflect on the activities and the stories they told. It was not the photographs themselves that would solely inform but rather our insights and analysis of the images (Schwartz, 1989), made possible because of our professional perspectives using introspection and recall.

Layered Analysis

Accepting Harper's photo-elicitation as our overarching methodology we decided upon a layered analysis drawn from Dowdall and Golden (1989) who used such an approach to systematically analyse photographs as data. They termed their first analytical layer 'appraisal' - this involved a comparison of visual and written information. The next layer involved a thematic 'inquiry' by looking at the images and appraisal as a whole, to find themes of evidence relating to their research question. Dowdall and Golden's third layer of analysis adopted Geertz's (1973) concept of thick description and focused attention back on the individual images. They called this layer 'interpretation' involving close, detailed and probing reading of selected images to uncover phenomena that exemplified their question.

However, for our layered approach we preferred and adopted the use of the photographic terms - frame, visual perception and selective focus. These were terms Smith (2001) had used in a text on photography. According to Smith, in photographic terms, frame refers to the boundaries by which the image is defined and limited. Our frame was bounded by our focus on the outdoor education content and knowledge of the context. Our insight into this context was in turn bounded by the nature of the course of study and our learning outcomes, as well as our knowledge of the experiential learning environment, all of which provided the necessary background for further analysis.

The second layer, visual perception, required us to form and critique our perception of the image. As Smith argues, visual perception requires a deeper analysis of the framed image. It requires a process of seeing where each part of the photograph is analysed separately but contributes to the overall interpretation of the image (Smith, 2001). Our visual perception involved the process of using our insight of the photograph to introspectively recall and tell an insiders story from within our educative frame. This involved a process where one author would select and write about a photograph, or more often a series of related photographs, and then the other author would critique, challenge or agree with the first author's narrative before a final representation was agreed upon. The exchange strengthened our inquiry because any hint of myth, saga or digression was exposed by the other author/researcher.

The third phase, selective focus, required a more nuanced analysis of the image where we looked beyond the obvious for deeper interpretation. Selective focus intentionally throws certain elements in a photograph out of focus and others into focus so that the eye returns to the subject of inquiry (Smith, 2001). Our selective focus sought to highlight, through reflexivity, the significance of certain elements to our pedagogy. This was how we used photo-elicitation to move us from collated, empirical images to critique our pedagogy.

Photo-elicitation was made possible because one of us had built a photographic archive dating back to the 1990's. These were photographs that Maureen had taken or the students had passed on to her. Although, at the time, they were taken to document the moment and to keep as a record of the events more than an analytic reference, which they had now become, they were invaluable as a source of documented information. Each photograph

reflected a history of our outdoor education pedagogy because they had captured our practices and were now central to the research.

From 361 digital photographs we selected twenty-five on the basis they represented a range of activities and, importantly, had captured images of real scenarios that we could use to reflect on our pedagogy. The photographs we selected were not inherently meaningful because they take meaning from their contexts or the contexts that we inscribe to them (Leibenberg, 2009; Schwatz, 1989). So we had to ask ourselves... What was the context of the photograph? What does the photo show? What does the picture reveal? Why is the image important to me? How does the photograph(s) represent outdoor education teacher education experiential learning? The strength of the photographs was because they were specific instances that assured the entities of our narrative existed and showed what we were writing about is possible. The selection of photographs also showed enough aspects of events to verify that nothing relevant to the narrative had been left out (Becker, 2002).

Ethically, the use of visual material raises issues such as confidentiality, permission, informed consent, and how information is presented. These issues are not unique to visual ethnography. Piantanida and Garman (1999) suggested by outlining the course of action, research method demarcation and reasoning, researchers draw attention to how criteria of ““rigour”, “integrity”, “verité”, “utility”, “vitality”, “aesthetics” and “ethics”.” (p. 148) have been applied. However, Piantanida and Garman acknowledge these criteria are not discrete characteristics but aspects that can complement and blend into one another.

The photographs we used were taken with a snapshot mentality and represented amateur photography, described by Chalfen (1987, cited in Van House, 2011) as personal expression and interpersonal communication. Student participants gave their consent for the photographs to be taken and many asked for digital copies to illustrate their post-camp assignment. Because the PETE students were in the moment, doing the activities while on camp, it was often difficult for them to take their own photographs, although our visual array was widened with the inclusion of photographs the students did manage to take. These photographs almost always featured at their graduation dinners, as friends and family were entertained by PowerPoint presentations of many different photographed moments, educational and social, taken during their four-year degree experience. Our visual ethnography was undertaken after the event, student work was not compromised in any way. The photographs in this article are a small representative sample to exemplify our visual ethnography and at the same time provide empirical evidence to support our interpretation.

Reflexive Analysis using Photo-Elicitation

The twenty-five selected photographs reflected five different, recurring camp activities that had significance to us. The analytic process, as outlined above, was the same for each of the five scenarios and each provided rich explanations of the experiential learning processes of the activities in question, and what we perceived to be worthy learning outcomes. Space does not permit us to present all five analyses so we have selected two to demonstrate our visual analysis and reflexive narrative. These events; native plant identification with a selective focus on self, national identity and ecology; and an overnight solo in which our selective focus was on preparedness, crisis prevention and risk management; are explained in full below. The other three examples included the visual and narrative analysis of a bridge building problem-solving exercise in which our selective focus was group dynamics and masculine hegemony; a search and rescue exercise where our selective focus was safe practices and common sense planning; and a tramping exercise where leadership and group cohesion was our primary focus.

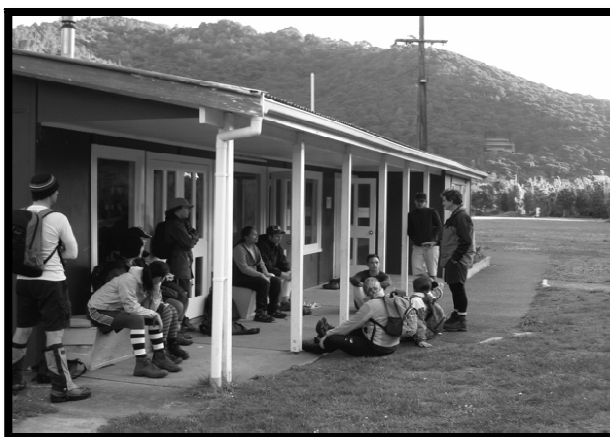
Native Plants and Self-Identity

Frame: Connecting With The World Around Us

We are framed by our focus on the educative value of our bush-based, outdoor education context. Our overall frame of reference is bounded by our interest in the experiential learning nature of the outdoor education context. These two photographs (Fig. 1 & 2) show the residential camp located at Piha on the west coast of Auckland city about $\frac{3}{4}$ of an hour drive from the university campus. In the background are the Waitakere Ranges, a vast wilderness area of native bush. Throughout the ranges there are a myriad of tramping tracks that offer many pathways for recreational walkers or more serious trampers.



Figure 1



The
featured in the
foreground of the
setting for much of
work. The facilities
building include a
kitchen area,
and accommodation
staff. Separate to this building is an ablution block with male/female toilets, showers and laundry. A third building is the dormitory where on the ground floor accommodation is in

Figure 2

residential camp
second photo and
first was the
our preparatory
in the main
large dining and
lounge/classroom
for two teaching

rooms with up to six bunks and upstairs is a large room with bunks for twenty people. A small cottage on the left of the main building is a caretaker residence. We usually had about forty-five student participants. The Auckland City council owns the camp facilities; the land was previously used as a timber mill that milled the surrounding native forest until the 1960s.

The framed photographs below (Figures 3-7) capture images of our pedagogy when identifying and discussing the significance of native plants in the immediate camp surroundings. This activity became a regular feature of our programme after an earlier camp highlighted that many of the students were unable to identify native trees and shrubs in the bush. During a walk in the bush surrounding the campsite a small collection of samples were taken for closer identification back at base camp. As the photographs show, the activity included both hands-on experiential learning and reflective group processing.

Visual Perception: Native Plant Identification and Identity Awareness

In the first photograph (Fig 3.) we are identifying some of the characteristics of the native plants on the outskirts of the camp. This is an experiential process of walking through the bush, discussing and touching plant life, to gain a physical perspective, including their location in sheltered river valleys or exposed ridge lines. In the second photograph (Fig 4.) the students are in the base camp classroom, they use 'homemade' labels, reference texts and the collected samples to identify the species. The PETE students work together to identify characteristics such as pointed, pear-shaped, or long and skinny leaves using a practical guide text to identify each specimen (Crowe, 2000). In a manner similar to Straker (2012) who also helps her students name what they see, we tell stories about, for example; the medicinal use of the plants, along with tales of other uses; the pliable stem of the long thin lancewood, which is at 9 o'clock, was used in colonial times as a shoelace by stripping away the narrow leaf from the stem; or points of interest; the fern in the middle of the table is a very ancient species dating from the time of the dinosaur. Like a mnemonic these tales help to teach, learn and remember.



Figure 3

Figure 4



Figure 5

The third two PETE students on identifying plant life a two-hour tramp

identification activity. The two-hour tramp was a cumulative outcome of the initial series of activities on camp. The intent was to apply concepts of tramping and group leadership/membership, to deconstruct tramping so the object was to 'walk through not to' or as Straker (2012) suggests focus on "the here and now of where we are" (p.176). During the tramp the student were asked to observe the bush, to compare and contrast the geography of plant location and collect small samples of unknown species for identification on the group's return to base camp.

photograph (Fig. 5) shows a bush track discussing and their location while on programmed after the

The final two photographs (Fig. 6 & 7.) show reflective group processing where the students compared labels and samples. By this stage many of the students informally engaged in this matching exercise without our direction. Their interest was sparked by their hands-on contextual experience leading to them viewing the matching exercise as a personal challenge to identify as many plants as they could. The final photograph (Fig. 7.) is an evening exercise where the native plant identification processing was taken to a more critical level as we

investigated the significance of the plants to cultural identity with Aotearoa New Zealand. It is also a time when we discussed the plants importance to forest ecology and the significance of the parkland and its close proximity to Aotearoa New Zealand's largest city.



Figure 6.



Figure 7

Selective Focus: On Native Flora as Cultural Identity

Selective focus intentionally throws certain elements in a photograph out of focus and others into focus so that the eye returns to the subject of inquiry. This involves a more nuanced analysis of the images where we look beyond the obvious for deeper interpretation. When we focused in on specific details of the photographs, such as the bush walk discussion between the two students (Fig 3.), one a Pkeh -European female and the other a M ori male, we were reminded how this native plant identification activity often led to discussions about indigenous cultural identity and inheritance among our students. Equally, when we viewed the group processing (Fig 6 & 7) we read into the images our insider knowledge of how the students engaged in meaningful conversations about Aotearoa New Zealand's native bush and national identity. In this parkland there are species that are iconic symbols or cultural emblems of the country Aotearoa New Zealand and significant to the indigenous M ori. For example; the silver fern is worn by New Zealanders when they represent the country; kauri, is one of the largest and most long lived tree species in the world; while totara trees with their hard wood are culturally significant for carving and building traditional M ori waka-canoe. Additionally, many of the species have medicinal and special nutritional qualities, while many plants have yet to be researched for ways they might contribute to science.

The process of recognition and identification of the plants prompted the students to think about their own identity as New Zealanders. Knowingly or unknowingly part of their identity with Aotearoa New Zealand was characterised and made visible through the plant species. According to Quay (2003), cultural discourses broaden the scope of social constructivism to "embrace learning that occurs at the level of the wider society" (p.106). Recognising the societal impact of plant cultural emblems enabled us to draw the students attention to their lived experience, and how identity is formed and constructed through interaction in physical, social and cultural contexts (Brown, 2009). The bush took on more meaning because it had national, cultural and social significant to the PETE students as New Zealanders. This process promoted recognition, reconciliation and identity with the land and the bush. These developments were simultaneous to other aspects of the camp programme.

Just as our selective focus highlighted cultural and national identity it also reminded us how this experiential learning activity contributed to our students growth in appreciating the ecological value of this forest. Through this activity students became informed of the importance of responsible behaviour towards the outdoor environment so that it can be preserved for future generations. When we were out, in the outdoors, our teaching heightened student awareness and consciousness about the environment encouraging them to develop an environmental ethic based upon knowledge, sensitivity and concern for environmental quality. Through this exercise they learnt to consider their environmental impact and appreciate the need for conservation. It is critical for the well being of the planet that students develop an environmental consciousness based on sensitivity and concern for the environment. Learning activities that promote understanding and social action to improve and maintain environmental quality are an important aspect of outdoor education. However, we would be cautious in claiming how much this made a difference to their everyday lives away from the camp environment.

Overnight Solo, Preparedness, Crisis Prevention and Risk Management

Frame: Solo - Survival

The intention of this activity was to manage a mock survival situation and spend a prescribed amount of time alone - solo in a designated safe location. Nicholls (2009) found that typically the solo time frame is twenty-four hours to several days. In our programme we allocated fifteen hours, between 3.00pm and 6.45 am the following day. The students were 'dropped off' at a bush site on a marked track at intervals of 80-100 metres between 3.00 and 4.00 pm. The terrain was irregular and rose gradually, but sometimes steeply, from a rocky stream; underneath the canopy of large trees and tree ferns with an under growth of shrubs, small trees, layers of humus, and rotting plant material. We checked on each student to discreetly supervise the construction of shelters usually sited between 20-50 metres off the track. We completed the check by 5.00 pm and returned to the base camp. We left the groups to determine wake up procedures and their return for breakfast by 7.15 am the following morning. Each group was required to pitch an emergency tent as part of the safety management for the activity.

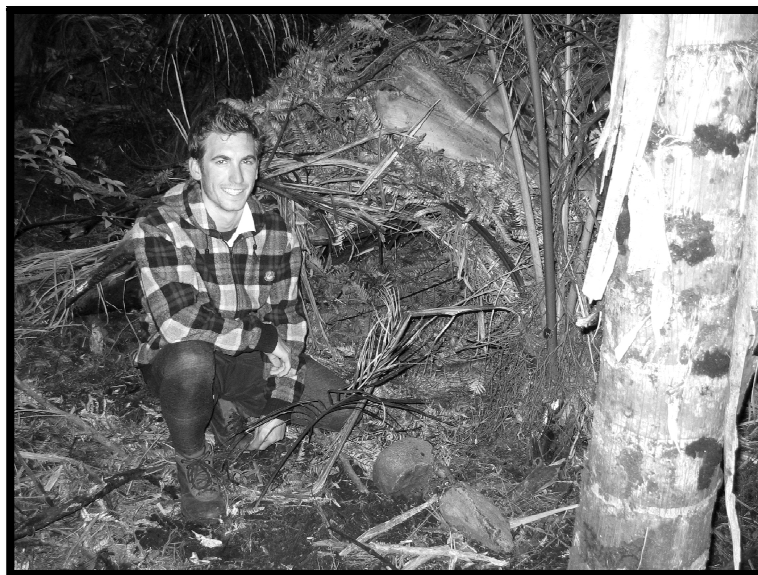


Figure 8.

Visual Perception: Shelter Construction and Preparation

The student in this photograph (Fig 8.) has laid a dried nikau-palm roof over an A frame shape now curved into a C from the weight of the foliage. The construction looks strong enough to last for one or two nights, although more careful layering and thatching would be needed for effective water run off. He has taken care to make a bed of dried ferns. This student might have made a shelter before because he has built this one without using any man made items such as a blue tarpaulin usually purchased from a building depot or gardening centre. It appears that as a personal test of his capabilities, he was willing to take the challenge further and limit the use of resources to natural ones.

Coming into the solo it was clear that some student were nervous and scared because of negative thoughts such as, what if it rains, what if they forget something, what if their shelter fails, what if the area they have doesn't have trees, what if insects crawl into their shelter? The PETE student in this photograph does not appear to show these feelings. Crouched low to the ground, he looks confident and alert. On campus the students learnt specific safety requirements and outdoor skills related to the activity. For example, choosing outdoor clothing, determining equipment for overnight tramping, packing a pack, knot tying, and lashing. In the gymnasium, we provided a range of equipment such as tarps, twine, beams, and 1½ to 2 metre lengths of manuka-tea tree. Students were allocated the construction of a range of shelters as a pre-camp group problem solving and initiative task. Most commonly we selected, 'A' frame, teepee, lean to, and square, as we know the bush setting suits these best. At the completion of their construction students viewed one another's work to discuss the variables associated with each type of shelter.

While the survival/solo was programmed as an individual experience, the students were positioned within their activity groups to enable the opportunity to support one another, physically, mentally and emotionally, to complete the shelter construction and time alone. To ensure no one was at risk, of not having sufficient shelter, an emergency tent was pitched midway between all participants in each group. After the solo overnight experience each shelter was dismantled and sites left looking as untouched as possible. A debriefing session at the base camp reflected on the experience and focused on student led comments such as insects, fear, safety, types of skills needed to manage a solo/survival, enjoyment and satisfaction (or otherwise), and relevance of the experience.

Selective Focus: (Mis) Adventure, Solitude, Fear, and Resourcefulness

What was the phenomenon of the solo activity? What was the educative focus? The intention of the activity was to provide an example of a possible outdoor scenario to allow students to apply knowledge, understanding and skills in an unfamiliar setting. Examining this photograph we wondered why we had named the activity a 'solo' when the key object was to practice shelter building for a survival setting. Underpinning the survival context was the idea of experiencing 'being lost' or 'separated from a group'. To be 'solo' in this kind of circumstance would not be an adventure. It would be a misadventure.

In contrast, to go solo, conjures up the idea that the person wanted to be alone in the wilderness, possibly as some kind of initiation, or to find a sense of self or spirituality through being alone - essentially a time of solitude, as a state of being alone but not lonely (Nicholls, 2009). Solo as we have constructed it for this learning activity does not fit the same package. We had pitted the concept of survival against solo when on reflection we see each has a different purpose. What the students were experiencing was the solitude of being left alone to create a shelter. Our observation of student feedback during the post solo debrief supports this notion, although the sense of being alone and not lonely was mixed with the pressing need to act with confidence and create a secure shelter to withstand whatever weather occurred during the event. To be able to commune with nature would be a bonus.

Keeping safe in the outdoors often means student had to deal with fear of their physical wellbeing. We knew fear was high on the list of the student feelings prior to the solo activity. Fear of; insects, the dark, getting wet and cold, and being alone ran rampant in their conversations prior to participation. There was no doubt most students were reluctant to be left alone in the bush but some were excited by the prospect of the challenge. This activity required initiative and students had the chance of basic 'feet on the ground' learning. We believe the resourcefulness that emerged from the construction of a shelter was in leaving the students to problem-solve on their own. Mustering their courage, after the initial shock and

reality of being ‘dropped off’, was demonstrated when the individual recognised the ‘danger’ but felt a sense of control and personal ability.

The terrain was never copybook. Illustrations and prior on-campus experience (in the gymnasium) of shelter construction lacked the three dimensions of sloping hill, tangled tree roots, damp surfaces, and glossed over the need to effectively scout around for natural resources to make the shelter before dark descended. This activity brought the students into direct contact with Papatuanuku- M ori earth mother and showed them how ‘she’ can help to sustain their overnight experience. The educative value of this activity was to build resilience, perseverance in the face of setbacks, and show courage to work through feelings when faced with difficulties and frustration. Pragmatically, being alone was an essential part of the activity to teach the necessary resourcefulness it might take in the event of really being lost and alone – anywhere, not just in a section of bush off a track within 1-2 kilometres of the base camp.

Another educative focus of shelter construction was being aware of the consequences of risk taking by making ‘risk’ a positive experience because it is informed. We do not think that risk is necessary to enhance learning but safety management does. Risk and stress in the context of shelter building were not being manipulated to create disequilibrium (Brown & Fraser, 2009) but instead highlighted the importance of preparation for outdoor education. The camp was held in early September, spring in Aotearoa New Zealand, the weather patterns are variable. The camp was in a coastal location but situated inland in a valley. A freezing south-westerly wind can come from the Tasman Sea blowing the rain horizontal, yet on the same day, while still windy, the sun can stream down, its warmth trapped on the valley floor.

Our choice of timing for the camp was deliberate. For most people modern living is so comfortable, protection from outside elements is taken for granted. The value of wearing clothing that traps warmth, or being enclosed in waterproof products that enable participation in an activity regardless of the weather, is a significant aspect of learning that has inherent risk if participants are not dressed appropriately. The style of dress the student in the photograph was wearing, signaled orientation to the outdoors expected as responsible best practice. Safety consciousness is an ongoing process of awareness, evaluation and application of skills, knowledge and understanding to new and changing situations - it is not something that can be passed like a driver’s license. However, when students are competent in a variety of outdoor skills their safety and enjoyment is strengthened because understanding the purpose and practice of the ‘skill’ is an essential feature of safety management. M ori risk management comes from understanding the cultural significance of the environment being used.

Concluding Lessons from Photo-Elicitation of our Outdoor Education Pedagogy

Aotearoa New Zealand teachers and students have been participating in outdoor education learning for more than 100 years (Lynch, 2006). Hills (2010) notes these events have moved from ad hoc activities, for curriculum enrichment, to the establishment of outdoor education as a key area of learning in the Health and Physical Education Curriculum (Ministry of Education, 1999). According to Zink (2005), a narrative that permeates outdoor education literature is that experience allows students to construct meaning for themselves. The narrative of our outdoor pedagogy is preparation of PETE students, for teaching outdoor education in New Zealand secondary schools.

However, Zink (2005) argues that student learning from experience is largely anecdotal and suggests “a challenge for research in outdoor education is to explore what is, or

rather the practices of outdoor education, rather than what should or ought to happen” (p. 19). The photographs we used were everyday objects of content and form that represented our practices of outdoor education. Meaning was constructed through systematic layered reflexive analyses that allowed us to explore our practices of outdoor education by highlighting the complexity, and contradictions in students experience and learning, and our pedagogy. What is distinctive about our use of visual evidence is that while the viewer can see the photographs, we have guided what they see by a narrative inquiry that makes explicit our pedagogical connections to each photograph. We have examined our teaching of outdoor education to increase our understanding of some things that occur when we take PETE students into the outdoors. These “somethings” (Quay 2003, 109) are related to context, and critically we recognised learning and teaching in the outdoors is not about ‘activities’. Instead, we have asked what counts as experience and how this counts!

Sakofs (1995) observed that teachers who use experiential education “are explorers of ideas and concepts which hold progressive value for education and society” (p. 442). Like Ketelle (2010), who connected her photography to a visual ethnography about school principals, our research was a way to connect Maureen’s photographs to our outdoor pedagogy that was important to us. We learned to ask ourselves not only what we saw but to think about what it is we were seeing and show, for the benefit of ourselves and others, what we don’t see or can’t see without knowing or thinking about the underpinning pedagogy and the relationship of the experience to teaching outdoor education. We explored the taken for granted and commonplace, and valued our own knowledge and experience as teacher educators. In the process we recalled stories and pedagogical practices depicted by the photographs. These stories further illuminated and triggered thinking about our practice and underscored the roles we played in shaping the learning situation.

In this paper we have described how we developed a visual ethnography by adapting photo-elicitation, creating our version of a layered photograph analysis, and writing a narrative inquiry to make meaning out of lived experience. The value of our research lies in its contribution to the use of visual methods in educative research and the advancement of qualitative methods. Our use of photographs was a strategy to communicate and foreground their possible multiple meanings. The combination of written text and photographs may contribute to others understanding of outdoor education, in this case, in tertiary education. Although our interpretation was not definitive! The outdoor environment offers students a huge variety of settings in which experiential learning can take place. Our pedagogy models opportunities for practical experiences in the outdoors that teach resourcefulness, are challenging and are useful life long practices to acquire. The research has reinforced our belief in the educative value of experiential learning pedagogy and the strength of placed based experiences. Our research has reassured us the experience our student teachers gain, from experiential learning, provides a pedagogical foundation on which to position their future planning and teaching in outdoor education. Importantly, we have strengthened our resolve to continue to advocate experiential outdoor learning for future PETE student teachers. Photo-elicitation has proven to be an effective research method to reflexively express our outdoor education pedagogy. We hope that it will support our endeavour to continue with outdoor education teacher education for future generations of student teachers.

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