CONTRIBUTIONS WELCOME

Pathways is always looking for contributions. If you are interested in making a submission, of either a written or illustrative nature, we would be happy to hear from you. For a copy of our submission guidelines, please contact Randee Holmes, Managing Editor.

If you are interested in being a guest editor of an issue of Pathways, please request a copy of our guidelines for guest editors from Randee Holmes, Managing Editor.

If you have any questions regarding Pathways, please direct them to either of the Pathways Editorial Board Co-Chairs, Bob Henderson or Connie Russell. If you’d like more information about COEO and joining the organization, please refer to the inside back cover of this issue or contact a Board of Directors’ member.

Submission deadlines:
January 15
April 15
June 15
August 15
October 15

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Pathways is published five times a year for the Council of Outdoor Educators of Ontario (COEO) and distributed to COEO members. Membership fees include a subscription to Pathways, as well as admittance to workshops, courses and conferences. A membership application form is included on the inside back cover of this issue of Pathways.

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Like all cultures and fields of inquiry, outdoor education is full of assumptions — beliefs that are taken for granted and rarely questioned. For outdoor education to best serve society, outdoor professionals must question and engage in healthy debates to challenge these assumptions. Without such a critique, the field of outdoor education will cease to grow, develop and expand. So, in the interest of adding to the debate and widening the field of examination, here we explore the largely ignored relationships between technology and learning in the out-of-doors.

A growing number of participants in outdoor education today use lightweight stoves burning refined naphtha fuel, multi-piece nylon tents with graphite or flexible aluminium alloy poles, self-inflating sleeping mattresses and aluminium snowshoes. More and more frequently their clothing textiles include polyester and polypropylene, referred to as "hydrophobic." For many, their body warmth is usually retained by synthetic “fleece” while rain and wind are avoided by garments made with Gore-tex® — a gaseously permeable membrane that manufacturers claim keeps the rain out while allowing water vapour to escape — typically offered in vibrant colours. Communication devices such as cellular telephones and satellite phones have become the norm rather than the exception. Suffice it to say that it may be difficult to find a single item made of natural fibres in the backpack of a modern outdoor participant.

As such, the time has come for an exploration of modern technology in outdoor education. Certain questions beg debate. For example, how does the explosion of technological changes in the outdoors influence students’ learning, social experience and engagement with others and with the natural world? Does modern technology foster or hinder the attainment of learning outcomes?

In this issue, nine outdoor educators from a variety of backgrounds and Canadian regions come together to share their perspectives and experiences regarding technology and outdoor education. It is our hope that these authors’ thoughtful articles will spark self-reflections and debates on ways the field of outdoor education can best meet its objectives through more informed decision-making processes regarding the use of outdoor-related equipment and methods. We believe that it is also necessary for outdoor educators to realize that, whether the equipment they use be traditional, emerging or a mixture of both, each will send unique underlying messages to participants and impact student learning in a different way.

In closing, we wish to thank our artists Zabe MacEachren (pages 18 and 29) and Gord Puller (cover and pages 2, 9, 13, 15, 21, 25 and 30), our photographer Bob Henderson (pages 4, 6, 26, 36) and each of the authors for their work in preparing their contributions to Pathways. Your perspectives have both challenged some of our beliefs and deepened our resolve for others; for this we are grateful.

Both Brent Cuthbertson and Tom G. Potter teach outdoor leadership in the School of Outdoor Recreation, Parks and Tourism at Lakehead University, located on the north shore of Lake Superior in Thunder Bay, Ontario.
June 2003

COEO has many projects on the go at this time of the year. This is a review year for the constitution. The committee will forward your copy for review in the summer. There are a number of conference committees hard at work for you. The annual conference 2003 is being held at Paradise Lake on the weekend of October 3–5. “Through the looking Glass” is looking to be another great event! For more information take a look at the Gathering column in this issue. Also, you will receive a conference brochure with your next Sounding Board. If you need additional copies, feel free to contact the committee members.

The election of Board of Directors members and the presentation of COEO awards occur at the Annual General Meeting. We eagerly look forward to hearing from members regarding both areas. Keep your eyes and ears open and please be sure to send in your nominations to the appropriate committee in time to be considered fairly.

We are looking for members to work on the next two conferences: Conference 2004 is booked to be held at the new Tim Horton’s Camp, and Conference 2005 is already gearing up to be a big event. It is a joint Conference with EECOM and we have made a tentative booking at Bark Lake. We could use many hands to support either of these events. Feel free to contact any one of the Board members to indicate your interest.

We continue to look for ways to help our members while maintaining a strong organization. Both Pathways and our regular conferences continue to be well received. The PLP credits for our conferences seem to have been extremely positive. The requests for information about future conference and course offerings are many. Perhaps there are folks out there who are ready to present courses and workshops under the COEO name so that we can further support those in need of credits.

I hope that with all that is going on in this world, everyone finds the hope and peace that will sustain you. Enjoy a restful summer and I look forward to seeing you at Paradise Lake!

Mary Gyemi-Schulze
President, COEO

COEO Board of Directors Meetings
2002–2003

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<td>September 11th, 2003</td>
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Today’s outdoor education programs use substantially different equipment than programs of a few decades ago. Change itself, the rate of change, and the nature of change are troublesome to many working in this field. The purpose of this paper is to explore the implications of using new technology in the context of a program’s educational goals. We believe that equipment is secondary to a program having clear goals and being based on sound pedagogy. By this we mean that there is a place for both new technology and traditional equipment, and that similar objectives can be achieved with each.

Many models outline the goals of outdoor education (e.g., Bisson, 1996; Ewert, 1989; Priest & Gass, 1997). Priest’s (1986) Outdoor Education Tree serves as a particularly good model of identifying common goals and methods of outdoor education. The model seeks to address four relationships — interpersonal, intrapersonal, ecosystemic and ekistic — in an experiential learning process involving the six senses and three learning domains (motor, cognitive and affective). Outdoor education programs do not universally address all four of these relationships. Quite naturally, program goals are influenced by many factors such as instructors’ and students’ strengths and interests, the institution’s mission, the chosen natural environment, budgets, travel time, access to equipment and participant age and ability. However, all programs ideally share an experiential method that includes some form of an action/reflection cycle. We believe that an educator can purposefully use the reflection component to mitigate the potential negative side effects of emerging technology.

The goals of outdoor education have remained relatively constant over the past few decades, with slight changes. For example, the original goals of Outward Bound were centred around inter- and intrapersonal development (James, 1995), but many programs today include ecosystemic and ekistic goals to help students understand and connect to the natural world. Therefore, the question seems to be, how does emerging technology assist or block the ability of students to connect with self, others, the environment? We will use our own program as a case study to demonstrate the evaluation process.

A program we co-teach involves a 21-day canoe expedition to remote parts of the Canadian
north, usually on the tundra. The goals are to develop the students’ expedition planning skills (river and route selection, menu planning, equipment choice), leadership skills (facilitating daily activities, conflict resolution, decision making), outdoor skills (route finding, map reading, paddling), nature interpretation (plant and animal identification), environmental awareness (impact and monitoring) and appreciation of place (study of historical and cultural events of the area). In addition, from teaching and institutional points of view, the safety of our students and ourselves (physical, emotional, mental and spiritual) is a high priority.

In preparing for this course, we and the students establish a set of agreed-upon goals for the experience. These goals are reflected in a mission statement and a list of specific group norms and expectations. We then review the equipment that could be used and consider the usual costs (e.g., expense, training required, and reduced dependence on nature, self, and others) and benefits (e.g., safety, reduced liability, comfort, and convenience). However, we also assess how well each item adds to and detracts from our educational goals. The final decision requires a process of prioritizing and balancing educational objectives.

One of the items that we have chosen to use is a bug tent. This tent was constructed by our students and can accommodate 12 people for cooking and eating. While critics might suggest a bug tent artificially insulates us from the environment, our experience has been that its benefits outweigh its costs. First, we believe that directed and intentional reflection time is a central, but most often overlooked, aspect of outdoor education. Our experience has been that its benefits outweigh its costs. First, we believe that directed and intentional reflection time is a central, but most often overlooked, aspect of outdoor education. Jasper Hunt (personal communication, Winter 1994) was asked when he prefers to debrief groups he leads on wilderness journeys. He responded that he favours the end of the day when people were warm, well-fed, and had a hot drink in their hands. In his experience, to debrief or encourage reflection when students were uncomfortable, hungry, or cold was futile. We have had powerful moments in our bug tent with countless mosquitoes pounding at the screen. In fact, the most meaningful insights and connections regarding interpersonal and intrapersonal relationships have been made in that tent. Without it, such debriefs, often intense and lengthy in an environment dominated by mosquitoes, would be impossible. Therefore, the ability to insulate ourselves from the environment has enhanced the achievement of our educational goals by providing a sanctuary for reflection.

“One believe that equipment is secondary to a program having clear goals and being based on sound pedagogy.”

Developing these relationships, along with the ecosystemic and ekistic ones, is only possible because of time spent outside the bug tent traveling, exploring, leading and learning. Even with time in the bug tent, our students know the realities of living with bugs through the daily activities of traveling hundreds of kilometres across the tundra. Moreover, mitigating the impact of bugs is not a new phenomenon. The Inuit and Dene, who have lived in these regions for hundreds of years, had their own strategies for dealing with bugs, which sometimes included skin tents and smudge fires. They also chose campsites on high, dry ground with good wind exposure just as we do. So, while the technology is new, the objective is a traditional one.

We have also chosen to carry a satellite phone and a VHF radio. Critics of such technology claim that “the ability to communicate with the
‘outside’ world prevents people from being fully present in the wilderness since they can be in contact with friends, call for weather reports, or ask for more rations at a re-supply” (Loeffler, 1999, p.81). While this possibility certainly exists, we deliberately choose how we use radios and phones. Exercising this choice requires a commitment to program goals and pre-established norms and expectations. In our program we have an established group norm that the phone will only be used for emergencies or other unusual events, and only after the group has decided to do so. We have only used the satellite phone once and the associated decision-making process was a powerful learning experience.

This occurred on the coast of Victoria Island, on day 19 of a 22-day canoe trip when we were 44 km from our destination, after having been wind- and ice-bound for four days. We knew that paddling the last 100 km on the ocean involved a risk, and we had made arrangements with a local person to retrieve us by powerboat if we did not arrive on time. We gave ourselves seven days to paddle the 100 km, which included an estimated three-day weather buffer. As it turned out, those seven days were not enough. In the end, we phoned our contact only to discover that the wind and ice, which lasted another week, also prevented a powerboat from retrieving us. Eventually, we and our gear were picked up by all-terrain vehicles.

Did the presence of the satellite phone impede our educational goals? Some trip members wished we didn’t have it, and would rather that we had completed the trip with complete self-reliance. Other trip members never felt a disconnection with nature; in fact, the experience demonstrated how powerless we really were since the wind and ice dictated our every move. We speculate that if we did not have the phone, some of the party would have hiked the 44 km to arrange for the same type of assistance. In either case, our goals were achieved. The decision took place over five days, offering important insights into the group process. In addition, we all learned about how we responded to stress (environmental and group), what some of our core values were and what traveling in the wilderness meant for each of us.

Communicating with others is not a new phenomenon. The Inuit and Dene of the past communicated with each other using traditional means such as inuksuks, fire, and messengers. We can imagine that they faced difficult decisions regarding communication that had important consequences. Just as they did, we too must consider the consequences of the use of communication technology. Today, those consequences are clearly different. The best technology available is so much more effective and we cannot ignore, for example, considerations such as liability requirements, time constraints, and the cost of missed flights. Having said that, as Loeffler (1999) indicates, we need to ensure that technology does not become seductive, leading us to be careless and jeopardize our educational goals.
Leopold (1949, p. 224) warned of the dangers of our “innumerable physical gadgets” that inhibit the development of a vital relationship with the land. We agree, but do not believe that gadgets necessarily create barriers to developing such a relationship. For example, we also take binoculars, spotting scopes, and weather monitoring equipment, which, we believe, enhances our understanding of, and relationship to, the land.

This is also true of current explorers such as Borge Ousland, a celebrated Norwegian explorer who has completed many extended solo treks in both the Arctic and Antarctic. Although he uses the most advanced technology and newest equipment, he claims that his deep connection to the land results primarily from the amount of time spent alone in nature. To achieve his goal of spending extended periods (50–80 days) alone without resupply, which especially necessitates minimizing the amount of weight he must carry, Ousland uses the latest technology.

Interestingly, when faced with the challenge of crossing open water on his treks across the North Pole, Ousland used the polar bear as a model. Whereas he used to walk, sometimes for days, around open leads in the ice, he noticed that polar bears swim right across these leads. Having watched the polar bears’ approach, Ousland developed a dry suit, worn on top of his clothes and ski boots, to allow him to similarly swim across open leads. In addition, after many polar treks and observations of polar mammals, Ousland began to prepare himself as the mammals do for the extreme cold. Ousland now puts on considerable weight by eating high fat foods so that he begins his treks with increased quantities of heat-retaining stores of high-energy fat.

As outdoor educators, we should not be distracted by equipment and technological gadgets. However, we should also ensure that we have clear program objectives and sound pedagogy to form the foundation of our programs. Technology will continue to evolve and we will face ongoing questions about technology in the outdoors. Perhaps it is most appropriate to ask those questions in relation to the way that program goals will best be achieved.

References


Morten Asfeldt (asfeldtm@augustana.ca) is Associate Professor of Physical Education, and Glen Hvenegaard (hveng@augustana.ca) is Associate Professor of Geography and Environmental Science, both at Augustana University College in Camrose, Alberta.
Several days before my class and I departed for our five-night winter wilderness trip, a student asked “What are some of the advancements in this form of travel today?” “Well,” I began, “that’s a great question, one that I have been doing a lot of thinking about of late.” I went on to tell the story of the Boy Scouts Millennium celebration in Quebec where they hosted a huge winter camping gathering to celebrate the New Year. The Scouts had chosen to use large canvas tents with portable gas heaters. But it was so cold that the propane wouldn’t ignite. The kids became extremely cold, the celebration was abandoned, and the millennium was welcomed indoors rather than out. Thus, the word “advancement” raises some good questions.

We then departed on our winter trip and also met some extremely cold temperatures: two nights at –35°C and –40°C. Our tents were of a similar canvas, but our heaters were portable sheet metal woodstoves that got hauled in by toboggans and sleds. We had no problem starting those fires. And, oh, how those stoves glowed red with warmth while the trees popped in the Algonquin night. So are propane heaters a step forward or a step backward? All I know is that this question is one small snowflake in a winter’s storm of dialogue.

Therefore, on the issue of pedagogical implications of traditional versus emerging equipment and techniques used in outdoor education, I present the following arguments:

1) traditional techniques and gear are better suited for comfortable extended wilderness trips with high school students;

2) emerging technologies and techniques based on low-impact camping and petroleum-based clothing are sending our students the wrong messages about ecological relatedness and sustainability; and,

3) traditional travel techniques and equipment create fantastic opportunities of experience enrichment through cultural and heritage connections.

First, some definitions: I recognize “traditional” as the equipment and techniques used by people who lived and travelled on a specific landscape prior to the use of motorized vehicles such as the motorboat or snowmobile. Typically this has been a hybrid of Aboriginal people’s contributions and the European descendants of the last 400 years. I will use Algonquin Park as the setting as this is familiar to many of us and is representative of much of the greater Shield country.

Traditional summer travel may have looked like this: Wood-canvas canoes, wood paddles, canvas or Egyptian cotton tents tied to trees or metal poles, cooking over wood fires with fire irons, baking with reflector ovens, kitchen outfits in a wanigan or grub box, canvas packs with tumplines or headstraps. Small axes and collapsable bucksaws were used for firewood gathering. Clothing was mostly wool and leather, and oiled cotton was used for rainproofing.

Winter travel looked like this: Wood and babiche snowshoes, hand-pulled wood toboggans and komatik sleds, canvas or Egyptian cotton tents with portable sheet metal woodstoves (pipes fitting inside the firebox during travel). Tent poles were made from balsam trees with the boughs being used as a floor covering. Cooking was done on the woodstove with reflector ovens and a kitchen outfit in a wanigan or grub box. Axes and bucksaws were used for collecting firewood. Clothing was many layers of wool (merino wool against the skin) and outerwear was of canvas. Footwear was leather moccasins and wool socks.

3) traditional travel techniques and equipment create fantastic opportunities of experience enrichment through cultural and heritage connections.

Lessons from Trees
by Mike Elrick
The description of wilderness travel with emerging technology is much more complicated, but I will summarize several common elements. Cooking is mainly performed by gas cookstoves such as the Coleman® 2-burner or Peak1®, or the more compact MSR® variety. Clothing consists of mostly petroleum-based products such as nylon, Gore-tex®, pile, and polypropylene. Equipment is mostly plastic and aluminium-based (such as ABS canoes and aluminium snowshoes). Packs are nylon with heavy-duty shoulder and waist straps. Sleeping is in nylon tents with aluminium or fibreglass poles, quinzhees or tarps, and food is often prepared from freeze-dried, pre-mixed packages. Summer travel is mainly by canoe or foot. Winter travel is by skis or snowshoes with backpacks.

These descriptions are by no means complete or totally accurate but one is able to develop a basic picture.

The idea of pedagogical implications of using traditional versus emerging equipment and techniques never truly came to be until I began to experience traditional winter travel. Canoe trips will always be connected to “tradition” to some extent because, simply put, travel is by canoe, in the warmer months, and most folks sit around an open campfire in the evening at sites used for generations. And basic needs of warmth and shelter are easier to satisfy in seasons other than winter.

My first introductions to winter camping were typical: sleeping in a nylon tent with two sleeping bags, sleeping under a tarp, or making quinzhees or snow huts. We generally either walked in, drove in, or skied in with all gear hauled on our backs with hiking packs. And I enjoyed these experiences. I loved winter. But I never went for more than two nights, and often by that time my gear was quite damp or burnt from attempting to dry it on an open fire.

In time I entered the teaching profession and began to lead students on extended wilderness trips. Eventually I was able to teach a grade 10 integrated program and had planned to finish our course with a seven-day canoe trip in June. But life is not a straight line, as Robert Perkins (1983) stated, and my wife became pregnant with her due date — guess when — right in the middle of my planned canoe trip finale. So I investigated the idea of going on an extended winter trip at the start of the course in February. But the idea of camping in the ways I had known to date scared me. Some of my students had never slept in a tent before, let alone in winter. And, as we are in public education, asking many of my students to buy expensive winter gear was not reasonable.
I had, however, been briefly exposed to traditional winter travel by Bob Henderson (1985) at McMaster University and somehow this style seemed to sit more comfortably in my soul. In the end I made a connection with a person who was extremely knowledgeable in the ways of the winter trail. We had a wonderfully successful trip, and I became introduced to equipment and techniques that provided a sense of comfort and safety I never dreamed possible in winter.

“...emerging gear and techniques are sending our students the wrong messages about ecological relatedness and sustainability.”

By way of comparison with the descriptions offered earlier, our trip looked like this: After a hard day’s travel over lakes and portages, a group of nine or ten people worked for approximately two hours to set up a tent and collect firewood; for the remaining evening hours, the group relaxed and cooked in the comfort of a heated tent. The stove was “stoked” every two to three hours during the night to maintain the tent’s temperature for decent sleeping. And the most amazing thing is that at the peak of the tent were three clotheslines where all of our mitts, boot liners, and wet clothing were hung up to dry. Getting dressed in the morning was like putting on clothes right out of the dryer.

I have found that no matter how cold, damp, or exhausting the day before has been, I’m “good to go,” as my students say, the next day. Now, after ten years leading high schools students on five-night winter trips in Algonquin, I couldn’t imagine it any other way.

I’m ready now for my first argument that traditional techniques and gear are better suited for comfortable extended wilderness trips. This past winter, I honestly feel that without these methods and gear, with the clientele I have, leading a trip would have been unsafe. The forecast for our trip was two nights between –35 and –40°C and day highs between –16 and –20°C. My sense of responsibility was especially heightened due to the avalanche deaths of seven Alberta students in British Columbia. But off we went, twenty-one high school students, six leaders, three tents, and oh, how beautiful it was. The equipment and techniques were at their best. The sun shone, the full moon glowed and we howled comfortably through five nights on the trail.

I read in the Globe and Mail (2003) that the aluminium and neoprene snowshoe is the fastest selling new product on the market. My nephew claims they are amazing. I’m sure they are, but I guarantee they would not have been functional on our Algonquin trip. The snow was simply too deep and light for those modern snowshoes to obtain any “float.” The Algonquin-styled and shaped snowshoe, however, is perfectly adapted to all snow conditions in that landscape.

I remember hearing it said that, a long time ago, the canoe was created first, and then the land to have a perfect match. In my opinion, they should have included the snowshoe as well. And a reflection I had several years ago is that the canoe and the snowshoe/toboggan really are quite similar in shape and function. They both have their largest width just front of centre to break the waves or float in the snow. It is, after all, the same medium: water. Today, my winter travel influences are spilling over to my canoe trips. I am finding great success with traditional Duluth packs. The alignment of the tumpstrap with the spine allows my students to carry greater loads, and the durability and feel of canvas and leather buckles have been amazing.

I also contend that emerging gear and techniques are sending our students the wrong messages about ecological relatedness and
sustainability. Again, it was traditional winter camping that rammed this point home to me. Much more than in summer, camping in the winter environment forces the reality of our reliance on and connection to the Earth’s natural resources. Traditional winter camping demands that for each tent, seven live balsam trees must be cut for poles, green balsam boughs be used to cover the front of the tent and insulate the stove from the snow, and lots of firewood be gathered locally for the wood stove. It is “impact in your face.” But the idea of leaving no traces by the use of a gas/propane stove is a lie. The ecological impact of fossil fuel extraction, refinement, packaging and delivery is far greater than using local sources of renewable wood.

What is critical, however, is to take those lessons back to our homes and our communities. Upon return from my wilderness trips my class begins assignments and a series of local field trips to explore our daily impacts of energy use and waste absorption. On average, 75% of my students, when asked, do not know what energy is used to heat their homes or where it comes from. We always make comparisons back to our winter camp. We look at renewable alternatives and energy conservation techniques that are sustainable. One of the most important lessons I feel we need to teach our students today is that we all have an impact on the Earth, but we have the opportunity to make choices about how much and where that impact occurs.

My students told me an interesting story upon returning from our trip. Often when they arrive back at school they are labelled as tree-huggers. This year, they joked among themselves that on this past winter camp they cut down more trees than they hugged. And in my mind that is fine. I want them to acknowledge that for us to live out there in winter we needed those trees.

I also worry that by not using the resources that the immediate land provides we are not forming a sense of relatedness with the natural world. Ten years of traditional winter and summer travel have literally fired a relationship with trees for me. When I return to my winter tent at sundown with a stick of dry tamarack, the experience is of a spiritual nature. I can now identify all the local hard and soft woods, and I deeply appreciate the difference between dry and wet wood. The same goes for the fresh smell of a balsam floor, the candlelight glow of a tent in the distance, the magic and superior capabilities of moosehide moccasins. Each of these examples of relatedness demanded that I directly engage myself with the Algonquin landscape.

Elliot Merrick captured this same feeling years ago on an extended winter trip in Labrador when he stated the following:

It is strange, coming to the glade where we are going to camp. This is home for a little while. Everything grows closer and more intimate. The trees introduce themselves as individuals with peculiar crotches and forks and ways of leaning and lifting their heads. There is a friendly birch whose bark will light our fires, here a tufted silver pine whose boughs we will lie. Heretofore, the woods have been just woods, endless hillsides of dark green seen from the river. Now we have picked a little patch of them to be our own, and when the fire gleams in the dusk and the axes ring, the glade, our glade, welcomes us. It is as though a door had been opened. (1933, p. 274)

As educators, we need to forge the same relatedness with local, sustainable examples. We need to bring the lessons of wilderness relatedness home.

I recently purchased a traditional anorak specifically designed for winter travel. When I put it on, a chill ran down my spine. I realized for the first time, I would be heading into Algonquin fully “biodegradeable.” If I died on the trail, this would be my kind of “no trace camping.”

Finally, I believe that the use of traditional travel methods and gear create wonderful
opportunities for trip enrichment through cultural and heritage connections. When I skied in to build quinzhees a long time ago, I had a good time as I have mentioned, but there were no deeper links for me. Skis and quinzhees were not of this land. No one has written about them from the past.

Today, before and during the trips, my students read about traditional travel from Grey Owl, Sigurd Olson, and Elliot Merrick. We watch the film *Attiuk* and admire the Native people as they make their own incredible snowshoes and swing in and out of them with their traditional Indian hitch. And we tell tall tales of park rangers like Aubrey Dunn who was a legend in Algonquin for his snowshoe journeys of distance and speed. I want my students to know that, in the words of Grey Owl,

> Each succeeding generation takes up the work that is laid down by those who pass along, leaving behind them traditions and a standard of achievement that must be lived up to by those who would claim a membership in the Brotherhood and Sisterhood of the Keepers of the trail. (1931, pp. 25–26)

For me, these human links have forged a connection now not only with the land itself, but with people on the land. And when I read from Sigurd Olson and Helge Ingstad, and I know that Norwegian blood runs through all three of us, I feel their adventurous spirits in me as I journey through Canadian lands.

I accept that many examples of emerging technology are part of me and will remain that way. I love my new Basecamp Thermarest®, and Grumman® canoes are a good match for high school outdoor education programs when maintenance has been downloaded to the teachers. As well, some high-use camping areas simply do not have the firewood resources to be sustainable, and in these cases the gas stoves have their place. I think what I am most excited about is that, as a profession, we are beginning a dialogue on this issue.

A story to finish with: I spent the better part of my youth traveling down rivers. Recently, I was introduced to the traditional technique of poling a canoe upriver. This involves standing up just behind the centre thwart and pushing up small rapids with a 10- to 12-foot spruce pole. For years, I paddled over a small rapid on the Eramosa River just east of Guelph. But when I poled up this same rapid I saw something I had never seen before. The rapid was created by a smooth limestone ledge and all across it were deer tracks made in the layer of algae on top of the rock. “Hey,” I said to myself, “This is a deer crossing.” And it was confirmed by the large trails on both sides. I would never have seen that if I wasn’t standing up in the canoe with a new perspective — a traditional perspective. And with the Earth and all of us heading downstream in a leaky canoe made of toxic materials on rapids that are drying up, maybe, just maybe, we need to stand up, look upstream and pole around for a while. There may be some answers to things that we have already passed by. I wonder if we became too obsessed with running the next rapid without doing a good enough job scouting.

**References**


Mike Elrick teaches a high school interdisciplinary course called Community Environmental Leadership Program (CELP) out of Centennial Secondary School in Guelph. He was a six-year member of the Canadian whitewater slalom kayak team and has recently become an avid snow walker.
At a Society for Teaching and Learning in Higher Education (STLHE) Conference in the mid-1990s, I spoke out for outdoor educators everywhere. I did this against my better judgment. The keynote presenter (I spoke from the audience) came up to me after the presentation to essentially say, “It’s okay. You made a fool of yourself in front of two hundred people, but it’s okay.” And it was okay. I was proud then (or perhaps ‘content’ is a better word) and I’m proud today.

I was speaking out about the importance of technological practices in outdoor education. Here’s the story, which I hope will serve to showcase our culture’s feeble considerations of the role of technology in our lives and the importance outdoor educators can play in drawing out possibilities for more engaging and thoughtful life practice.

The room was full. Academics from universities and colleges in North America had gathered for the keynote presentation on “Innovative Technologies for Teaching.” I, of course, like all attending, knew what this meant: the latest on PowerPoint presentations, scripted projected images, microphone headsets and Internet communications. Curious but uninspired, I settled in to learn the latest. What caught me off guard was this question: “Who would like to share classroom technologies they are using?” My hand went up, went down, and went back up. I was selected. I would be the trickster. Coyote howled. It went something like this.

“Yes, I can talk about technology and teaching. Each summer I lead a field trip canoe travel course. We introduce the technological operations of canoe and paddle, and I am particularly pleased with our use of reflector ovens that bake bannock from the fire’s radiant heat. Sure, baking bannock is not as efficient as carrying crackers or breads, but the heritage-based, now re-innovative, technological practice carries with it strong social and spiritual benefits. People are excited by this seemingly mundane task of daily living. It is hard work, but the bannock is warm and tasty. It seems to fill a void. It is an engaging practice that captures students from start to finish. As for the canoe, it remains for over 1,000 years the soundest technological adaptation to the particular challenges of moving people and supplies through the rough Canadian Shield. Amazing, eh! And another thing, students can carve their own paddles in this course as well as use a spoke-shave and good-ole elbow grease.”

I had to go on, now driven by the trickster’s frenzy: “I also teach a winter travel course where we travel by snowshoes and camp with wall tents and wood stoves. We draw our water from the lake using the principle of ‘running water’ equals ‘running for water.’ We use the technique of the outhouse, which so clearly connects means and ends in ways that the flush toilet cannot. We sit for hours by the focused heat of the outdoor fire circle and the wood stove firebox, delighting in its intense focused heat and the physical/social dynamics such closeness involves. But let me finish with the snowshoe. The
snowshoe, like the canoe, is thousands of years old, but oh so elegant! The cycle of the caribou hide drum is an instrument of evocation to bring the hunter to the caribou (Perrault & Bonniere, 1960), and to make the snowshoe and the drum to allow the hunt to continue: caribou, drum, snowshoe, hunt, caribou, drum, snowshoe, hunt. Well it is, of course, a beautiful and elegant technological process. We talk about this in class. We also talk about the many snowshoe designs adapted for the various and varying terrain and seasonal conditions.

Surely with the snowshoe and the canoe, we see the centrality of Native peoples in providing much of the technological practice that informs my field of Canadian outdoor education at the university level. I say re-innovative because it is now ‘innovative’ to teach the lessons of pre-industrial/scientific revolution technologies: the lessons that come with the technical operations of moving a canoe or snowshoe/toboggan outfit with a group through rough terrain in a self-propelled manner. And there are intriguing lost or waning techniques to re-experience, such as a storyteller’s circle around the fire or learning about akiagun, the age-old practice of using tree limbs to leave messages on the trail in the snow.”

That, in essence, was my response to the conference presenter’s question. Okay, I actually wasn’t that articulate, and I didn’t quote from the film Attiuk, and I didn’t mention outhouses and akiagun. But I did, in the minds of all too many, go on and on. I introduced a counterpoint version of technological boosterism. And I did, for outdoor educators everywhere, proclaim our place in discussions of technology in higher education. There was a long pause. Absolute silence. The presenter at the podium began to speak about an audio-visual technology for large lecture halls and normalcy was reclaimed. I could feel the relief come over the room in a wash of superficiality. Trickster was satisfied all the same.

Much later, I thought about what I had done. I had introduced the distinction between what Jacques Ellul calls technological operations and technological phenomenon. Once, a technology was a practice. It was a human affair steeped in traditions and the social fabric of living. It still is, but we perhaps are losing this understanding. It was (and still is) an operation of material culture carried out for, perhaps, religious, traditional and, obviously, survival and social/political life patterns. Now, since the nineteenth century in the Western world, we have a technological phenomenon whereby all technology is evaluated rationally by the one and only criteria: efficiency. This has become the only critical measure. Also, technology has come to be equated with the machine (Ellul, 1986). In education, this mainly means the computer. Mainstream technological boosterism: a phenomenon.

This now well-developed judgment of technology involves an understanding of that technology; it is not just the device, the tool. Ellul writes, “It is not just a practice; it also presupposes values — an intellectual or a spiritual attitude consistent with the demands of technology” (1986, pp. 41–42). These new values became rationality (based on reasoning, using reason or logic and rejecting explanations that involve the supernatural) and efficiency (providing results with little waste of effort) (Oxford Dictionary, 1994). So, human values and our views of technological systems need to match. Similarly, the machine, the tool, and the knowledge and skill set (the activities that make the machine work) all make up a restricted definition of technology; simply put, the machine is the PowerPoint presentation, computer, cell phone, automobile. This is how we have evolved to think of the term “technology.”

And, technology must be a modern phenomenon for us moderns. The snowshoe and canoe are not “technology” in our current common understanding. Their values and life operations are passé. Traditional local knowledge systems, like akiagun (snow messages) and respect of sacred sites, are off the radar screen.

Pacey in The Culture of Technology adds to the restricted technical aspects of technology practice with a more comprehensive addition of organizational and cultural aspects. Thus he adds to “hardware” the notion of “liveware” to “technology-practice” (1983, pp. 4–7). We must then think of technology as ways of doing things, rather than as the things alone. Organizational
aspects involve the activity of economics, industry, institutions and professions. Cultural aspects involve goals, values, ethical codes and one’s beliefs (or disbeliefs) in progress. Pacey uses our medical system of practice as an example. We can easily see the technical aspect of medicine as equipment and training, but we also understand there are ethical cultural issues and organizational aspects to the overall technological practices of medicine.

Hmmm, do we so readily see the overall technological practices of education and outdoor education? That STLHE conference keynote session was about the restricted meaning of technical aspects alone. The new machines were inevitable and good (read: efficient) and were the definition of technological innovation. We were shown much technological wizardry in that keynote session, but I do not remember much by way of a discussion of the cultural aspects (I fear cultural losses) with the innovation of, say, a double PowerPoint presentation with audio-visual supports shown in action to a thousand students in one hall.

We lose something when technology is only modern. We lose wisdom of traditional practice. In the words of Canadian philosopher George Grant,

> We can hold in our minds the enormous benefits of technological society, but we cannot so easily hold the ways it may have deprived us, because technique is ourselves. Technique comes forth from and is sustained in our vision of ourselves as creative freedom, making ourselves, and conquering the chances of an indifferent world. (1969, p. 137)

How are vision and freedom linked to technique as I make choices about walking or driving, taking the cell phone to the bush when I’m teaching the primitive (closer to the Earth) arts of heritage travel and camping? Carrying Grant’s intimations of deprival mantra along with us might help us be more self-determined rather than determined in experiencing the “human affair” of technology. It will help us remember that, “if we want to control technology, history teaches that we must first learn to control ourselves” (Rybczynski, 1983).

Experiencing technology can become an addiction of efficiency and conquering a set of logistics. Outside Magazine and others regularly showcase the likes of Speed Hiker Ted “Cave Dog” Keizer who “has a blistering dream to

with little reason for more discussion. But, of course, there are tradeoffs. The lights dim, the PowerPoint may masterfully take over, the human lecturer dissolves and something, some things may be lost. The cell phone call may kill any intimacy in play at the restaurant. And, as a safety device on the wilderness trip, it just might erode any deeply satisfying feelings of really being away, self-sufficient and authentically out there like the traveller of old. So much for a call of the wild. Something is lost. Sure the car trip to work is efficient, but when I do walk along a city creek side trail, I see turtles, kingfishers and sunrays. When I arrive, it is a more refreshing arrival. The latest snowshoe is expensive. It does have a purpose, a place, and is low maintenance. But it is certainly not superior to a traditional babiche snowshoe overall. And maintenance, just like waxing skis, is part of the love affair. New is not always better. We must ask, “what is lost?”
climb 140,000 vertical feet in the Adirondacks — in five days.” (That was the headline). Adventure racers need the latest high-end gear to compete. Sure, I need that too for my next Algonquin Park trip. I’d be more efficient (well except for those new snowshoes and ...) and could overcome greater obstacles. It is rational. The problem is, we get people who love the gear, love climbing/canoeing, love the technique and do not love camping, do not love the mountains, the lakes and rivers, do not come to know the place or care to. And correspondingly do not, I fear, come to care about/with the place. The place becomes a showcase for technological operations alone and/or a challenge arena with more and more devices non-indigenous to the place carried along. Bruce Fairley (1984) in Mountaineering and the Ethics of Technique has said, “I wondered if I was worrying too much about achievement; losing the sense of beauty in the mountain environment through an obsession with technique” (p.25). As an outdoor educator, I hope travel experience can work to “unlearn” this obsession and re-inspire our latent spiritual impulse to relate (no matter how irrationally and inefficiently) with the land. We can also unlearn the misguided notion that modern is always better. There remains a strong case for traditional practice.

As a university teacher, I have had to fight against an administrative focus on efficiency to ensure some small class sizes and field trips. What was threatened was the development of personalized educative relationships with students so that heightened relevance for all in terms of people-to-people, people-to-land relationships are possible. I worry we may be loving the wrong things: the GPS over the forest, the wizardry of the audio-visual over the students, the modern snowshoe over the traditional one. This does, for me, boil down to one central idea. We are losing a certain power of engagement: mental, physical and social. We are losing connecting means and ends in human processes. We are ever-gaining disburdening processes and devices that separate means and ends. We are surrounded by disengagement rather than engagement. Or, put in another way that may be better for outdoor education, we are surrounded by disburdensome practices having lessened our daily living burden. The problem is that “the burden” is engaging. Baking bannock by the fire’s radiant heat fills a void. Hauling one’s own load on a hand-hauled sled is a day’s accomplishment. Stoking the wood stove and filling water buckets from the lake for a post-trip group steam wash is a celebration. These are involved, start-to-finish endeavours. They are time-consuming with a chance of failure with consequence. They are not easy, not instantaneous. Compared to running a river rapid or portaging a tough route that day, baking bannock, starting a fire, drawing water from the river and hauling our load by sled are mundane experiences. Compared to carrying pre-packaged bread or using a camp stove, baking bannock by the fire is a burdensome (less efficient and risky) activity. Burdensome yes, but engaging also. The work involved interweaves means and ends and is warming to the psyche as well as the physique.

By the outdoor fire or in the woodstove-heated wall tent, we are warmed in part by our feelings of contentment having learned about wood as fuel, having pitched the tent and dug a snow-pit fire circle, having started and tended the fire. There was lots of work involved. Good work. This is a far cry from the ubiquitous, instantaneous heat of central air in our homes that leaves one so ignorant and indifferent. Do we even bother to stop and wonder about the means by which we have acquired this end of central heating? So much of our day-to-day lives involves taking our technological operations for granted. Do we pause and thank the sun when we fill our automobiles with gas? (Thanks to Steve Van Matre for that one). Do we marvel at the set of processes involved in — “presto” — bringing a McDonald’s burger to our stomachs? We have learned to not think about such things because we have so little to do in the operation. We are disburdened from the act and the thought.

Not true for the outdoor educators’ winter camping trip. Food, shelter, heat: these are burdensome technological operations that are certainly not taken-for-granted. Why would we bother with this in our “presto-filled” (safe, easy, instantaneous ubiquitous) technological world (Strong, 1995)? Answer: it’s that void. We need engagement; the caring for ourselves and others,
testing our powers in living, knowing the ways (means and ends) of doing something. It is fulfilling too, knowing where this heat, this bannock comes from. We will gather around such engagement. It is the technology of the guitar sing-song, different from background stereo music. It is the technology of the snowshoe walk, different from the Stair Master gym workout. It is the warmth of the bannock bake as different from a quick trip into McDonald’s. Engaging technological practice is a beneath-the-surface, important part of outdoor education. The winter post-trip shower back in shower stall alone is a wonderful experience in warmth and cleanliness regained. But it can’t hold a candle to the winter post-trip evening group steam sauna. Ahhh, I can hardly wait; preparing the fire, warmth, stories and good cheer. So much of outdoor education practice is about engaging technology and opening up possibilities to see the engagement, and correspondingly to see detachment, “intimations of deprival.” Here outdoor education is about learning skills, enhancing group development, curricular enrichment and exploring cultural possibilities for change.

The trickster at that keynote conference session had all that in mind contained in that simple beginning of a response: “Yes, I can talk about technology and teaching.” It was a strange moment at the time. Cut off the power that fuels the machines of our modern home and school and eventually the dwelling will be evacuated (Rybczynski, 1983). The lecture theatre will be vacated as well. Not so for the outdoor educator in the field. The power that fuels the technological systems here is our own energy, creativity and resourcefulness. This power will bake bannock, haul a load, fuel the sauna, and even make a paddle and snowshoe. It is good to still know practically how to do these things. But more importantly, it is still good to know how to do these things for physical, social and intellectual — and spiritual — quality of life considerations.

As outdoor educators, we must see our work as involving technological operations and avoid the seductive trap of thinking exclusively in terms of modern technological phenomena. We must be attentive to intimations of deprival in experiencing technology in the bush and in our school and home environments. And we must centrally focus on engaging “burdensome” practices that involve us fully in the process. It is good counter-culture work for the psyche and the planet. It is not about being a back-to-nature freak. But as cultural maverick Paul Shepard (1973) has said, it is about realizing that when it comes to nature, we have never left.

References


Bob Henderson teaches Outdoor Education at McMaster University, including two field trip-based travel courses in the summer and winter that involve exploring technological practice. He would like to thank Mike Elrick for first conceptualizing the engagement/detachment distinction concerning outdoor education practice and Zabe MacEachren for introducing David Strong’s book, which was important in shaping the argument presented here.
Dreams: Traditional or Contemporary Technology?
by Zabe MacEachren

Technology is a difficult term to define. The general population typically views technology as the tools people use in their daily lives. Today this frequently means electronic or fuel-powered, digitalized devices encased in metal and plastic containers. Modern technology allows us to do something faster, more powerfully and with greater precision. Yet, to many philosophers, technology is more of a way of thinking or taking up with the world.

As part of a Nature, Society and Technology course at York University, students were asked if dream catchers were technology. This question arose in a class where students were making dream catchers, beginning with gathering materials from a nearby woodlot to bend into a hoop. The class also involved some discussion and context for how dream catchers were used in the Anishinabe First Nation culture, in which I had previously worked, taught, learned and lived. This article will address the question of whether dreams are an example of technology. It will also address what I think is a bigger question: In what ways does the technology with which we engage place us in relationship with the land? Does technology immerse us in nature, or does technology separate us from nature so we feel we can stand apart to observe, measure, record and control?

During my first year in the community many social singing gatherings occurred. One evening the chief had arrived early and, before everyone started singing, he began to explain an interesting event that had happened to him that afternoon. He had received a phone call from an anthropologist wanting to inform the community that some old bones in a mass burial site had been found. Never having heard of a mass burial tradition, the chief proceeded to the home of an elder, a woman believed to be over 100 years old. When he asked her about this burial technique, she replied that the bones were probably from the Sioux raids. (The expression “Sioux raids” referred to the many skirmishes that existed between the Sioux and Anishinabe over the valuable wild rice fields of northwestern Ontario.) It was with this comment that the chief realized that this woman, having been raised by her grandfather, who would have participated in the Sioux raids, might be able to answer some of his own questions about this historical period.

Let me begin with sharing a few stories and events I encountered over a five-year period living in a First Nation community in Northern Ontario. The connection and significance of these events occurred slowly over many years. When I entered the community I was well aware that the Anishinabe was a culture based upon dreams, but at the time I would have found it very hard to describe why this was so.
The chief then proceeded to ask this elder something he had often wondered about these raids: How did the men know where to go in foreign (enemy) territory with which they would not have been familiar? She replied that their dreams would have informed them where to go. Each man in a raiding party would have fasted until one man had a dream that informed them where they should travel or what they should do. The man with the dream would become the leader until the guidance from his dream had been fulfilled and then, if needed, everyone would fast again until someone else had a dream that gave direction.

The following spring I found myself part of a community duck hunting event. I awoke my first morning downriver to the sound of a hunter shooting a loon. I have eaten many wild animals but, for some reason, the thought of killing and eating a loon unsettled me. Yet I knew to keep my thoughts to myself and just watch how things unfolded. Later that morning I caught a glimpse of the medicine man cleaning the loon. This was an unusual sight, as typically women did such work. In the early afternoon I was sitting around a fire with only a few others while the loon boiled. With very little fanfare and few words spoken, the pot with the loon was taken off the fire and laid to the side to cool. Then in a quiet procession everyone went up to the pot and ate a piece of loon. When one of my peers, a Native teaching assistant, was finished, she motioned for me to go and eat some loon myself. Not wanting to be offensive in any way I ventured over to the pot, but inside me I felt more repulsion and lack of desire to eat than a picky child at a dinner table. Ever so slowly I cut off a piece of loon and put it in my mouth. Surprisingly my body quivered, as if with an accumulation of all the resonances I had ever felt when hearing all the loon calls in my life so far. After I chewed for a while and tasted all that fishy flesh, I swallowed and instantly a thought flooded my mind. I am now a loon. I am now that most ancient of birds that lived and was heard among the dinosaurs. Eating that mouthful of loon had to have been one of the most sensual eating pleasures that I have ever felt.

Soon afterwards the teaching assistant would nod her head in approval of my participation and explain how eating loon at the beginning of each duck hunting season was a traditional ceremony. The loon was considered the elder of all the duck-like birds.

The next year I ventured down to the spring duck hunting camp late in the evening. Arriving at dusk I quickly put up my tent and joined a family dinner fire already underway. I was offered manomin-shiishiip-naboob, a traditional meal having been eaten for hundreds, if not thousands, of years in this region. It was simply duck boiled in lake water with wild rice. Knowing I would need to be up before the sunrise to hunt, I went to bed soon after eating. As I lay my head down, I immediately entered a dream-like state. I was a duck flying low above the wetlands. The air smelled crisp, cool, damp and of new buds. As a person who seldom remembers her dreams, this dream always stayed with me because of its intense sensual qualities. I can still recall the way the water felt skimming by the arch of my webbed feet when I stretched them out to land on the lake’s surface.

The following year I again participated in a weekend of duck hunting activities. I arrived back at my home just as the sun set knowing that I had to work the next morning. A fellow teacher, seeing my arrival, invited me to join her for shiishiip naboob and bannock. I remember how delicious this meal was after a full weekend spent out-of-doors. I also remember how my alarm awoke me the next morning for work. It had interrupted my second amazing dream. I can recall how as a child I might have had a few dreams involving soaring jumps, but in this dream, I had again flown like a bird.

In this dream I was a snow goose flying at the back end of a “V” formation. I recall looking down at the various land formations below me and feeling exhausted. Before me was the ridge of a high mountain. I pushed my arms on and flapped them in exhausting pain as all the other geese, which I identified as my students, honked and encouraged me on. That morning I looked
into my students’ faces and recalled how they had encouraged me as snow geese. I no longer felt like a teacher, but as a true community member in this small gathering of people in the north woods of Ontario.

During the winter of the next year, Paul Schurke, a polar explorer and dog sledding outfitter, took a group of tourists through Quetico Park and the Boundary Waters Wilderness Area where I lived, stopping for a night in our village. He and one of his staff pulled out a map to explain the route they were taking. An interesting conversation pursued. The gentle silence between all our map notations indicated our miscommunication, our different ways of navigating upon the land. Schurke’s guide pointed out destinations and daily distances they planned to make. I pointed out where my experience traveling in the winter had indicated weak ice and possible winter portage routes, and a village elder pointed to a few locations where people had had special dreams about drums and ceremonies.

The following spring found me downriver, again duck hunting and fishing. When I returned back to work it was Earth Day and the whole school picked up garbage around the village and later sat in the gymnasium to listen to a medicine man. My thoughts were very much on making sure my class behaved. The dry monotone in which the medicine man frequently spoke was not always conducive to attentive listening. As I scanned the gym watching for inappropriate student behaviour, I found myself suddenly drawn into what the medicine man was saying: “Many people come to me because they have bad dreams. To change your dreams you must eat wild food. . . . You don’t know anything about how old food is that comes from a can. You don’t know anything about where the food comes from when it comes from a package. To change your dreams you must eat wild food . . . fish, moose, deer, duck.”

It was at this moment that I began to reflect upon all my significant dream experiences and realize some connection. All my dreams about flying and being a wild creature had come after I had eaten wild food like duck and wild rice. This may have been the first complete meal of wild food I had ever eaten in my life. As today’s store-bought fowl seldom even get out of cages, those wild birds were probably the only things that I had ever eaten that had actually flown in their lives. And wild rice was definitely a plant that was raised in scattered patches across the north woods, not in neat rows efficiently spaced for machines to harvest.

Those few brief moments of flight in my dreams allowed me to realize how, in early generations, Anishinabe and Sioux men might have been able to find their way across vast distances. Their bodies would have been carefully weaned on a diet of totally bioregional food. Digested wild rice might have told them about wetlands, fish would have taught them of water routes, duck might have provided them with aerial viewpoints of the places over which they were traveling. Their bodies and thoughts were nurtured by the land and a culture attuned to and adept at understanding everything around them, including the wisdom of their dreams.

So consider what a dream catcher does for a child. It is a small circular branch with a woven pattern in the middle and duck feathers suspended from it. Usually it is hung above a sleeping child to catch bad dreams and allow only good dreams to enter their sleep. What does the constant daily sighting of such an item encourage a person to attend to in their daily thoughts and their nightly dreams? How would attending to a dream catcher compare to attending to a “resource map” hung on a wall? Does a dream catcher’s function make it a device with a purpose and therefore suitable to be called a form of technology? Does the frequent sight of a dream catcher in an Anishinabe home encourage a child to follow their dreams? Does it work as a mnemonic device for a culture embedded in following the dreams of its people?

Compare a dream catcher to a Geographic Positioning System (GPS). Both provide a way of encouraging a person to find their way on the land, to position themselves in the world. One system is based upon immersing yourself within the land through many hands-on activities — engaging, interacting and reciprocating with the
land by gathering and hunting for all your daily needs. The other system involves maps and grid reference systems, numbers derived from representations and satellite-based observations made from afar of an earthly stance.

As an outdoor and environmental educator, I might ask myself what kind of perspective students will develop of the world if they spend the vast amount of their geography classes and/or outdoor education curriculum time engaging with a GPS or compass. Will a student who only encounters such devices ever learn to trust their dreams enough to follow them and find their way on the land? And when in the chain from dream catchers to astrolabes, from compasses to GPS did technology change from traditional to contemporary means?

A few times in my life I have placed a two-dimensional map in front of an elder who has never used a map in their life and asked them to locate something for me. After a few minutes of orienting themselves to this representational two-dimensional world they can typically point out what I ask of them. On the other hand it would take years of living and concentrating for me to be able to trust my ability to dream my way on the land without a map. Without a culture or an educational system to support me, I may never be able to succeed. It takes a lifetime and a culture of support to position oneself in a world of dreams. When did we lose the traditional means of finding our way?

There are many good questions, but I have no sound answers. I simply know that I try to nibble a few wild buds on every camping trip and I never pass up the chance to eat wild meat. I try to always carry a fishing line and hook in my pocket. I consider this a type of life insurance that might cover me whenever I feel like I am lost in (or at one with) the north woods. Maybe someday the curriculum guidelines of the Ministry of Education will include making dream catchers and harvesting wild food so students can practice living sustainability with the land. Whether or not we consider dreams a form of technology may not be as important as the ability to consider dreams as a way back into a total immersion of being one with the land.

Eat wild food and dream my friends.

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As a teenager, having already enjoyed years of diverse outdoor recreation activities, I became eager to understand nature at a more personal level. The types of outdoor recreation activities (e.g., backpacking, skiing, winter camping) I participated in were often an end in themselves. In other words, the activities and settings were enjoyable, but my knowledge of nature and its processes seemed to stagnate. I realized that simply recreating in natural settings was not sufficient for fostering the levels of understanding and connection I desired. Hence, I began to focus my efforts on the study of nature.

As I nurtured these emerging interests, I became familiar with local flora and fauna, night sounds, and other aspects of nature through observation and readings. Later, I began to take courses offered by various traditional, survival, primitive, and nature-lore experts and became able to build diverse types of shelters, find food, and make friction fires. As my knowledge increased, I began to learn advanced skills such as making bows, birch bark canoes, and Inuit kayaks, tanning hides for clothing/craft, and building snowshoes. I also engaged in more spiritual aspects such as nature meditations.

Collectively, I was learning primitive wilderness skills, which worked to connect me with nature physically, cognitively and spiritually. I later attained undergraduate and graduate degrees in a related field and continued to share these skills in the various programs with which I had been involved.

Through this process, I have come to believe that the most precious aspect of learning and teaching primitive wilderness skills is the development of a bond (i.e., an emotional attachment) to nature. Grob (1995) found this to be vital for creating pro-environmental behaviours. Gould (1991) similarly stated that people will tend not to destroy what they love; it seems that developing emotional bonds to nature is required to save it. The need to focus on primitive wilderness skills for creating emotional bonds to the natural world is a reactionary movement. Suzuki (1996) maintains that because we have been “overwhelmed by a multiplicity of consumer products, we seldom have a chance to see how few are really important or necessary. . . . Clearly, we also need a renewed sense of Earth as home; belonging to the land, connected to all other living things” (p. 14).

To expand on primitive wilderness skills as a method of creating an emotional attachment (i.e., bonding) to nature, I will briefly consider literature related to the objects that create the experience of an emotion. Following is a discussion on the effects of using both modern and primitive technological objects in affecting the nature-bonding experience.

The Experience of an Emotion

There are dozens of theoretical perspectives and approximately one hundred theories on emotion (De Rivera, 1977). However, for purposes here, the experience of emotion will be discussed because of its close connection to the lived experience of affective processes. That said, it is commonly accepted that the experience of an emotion is influenced by a cognitive component (Averill, 1996; Edwards & Dickerson, 1987; Kenny, 1963; Mathews & Wells, 1999; Mogg & Bradley, 1999; Parkinson et al., 1996; Tallis, 1999; Tan, 2000). In general, the experience is said to follow a pattern: a person (a) encounters an event or object and decides if it is threatening, pleasant or other; (b) feels a resulting emotion, such as being happy or fearful; and (c) is aware of the emotion being felt (Plutchik, 1984; Russell & Snodgrass, 1987).1 Hence, all objects (e.g., trees, rocks, and personal gear) are potential sources of our experienced emotion. However, in this paper, I limit my focus to the technological objects (and skills) we take into nature.
Contrasting Objects: Modern versus Primitive Technology

Advancements in technology offer new products, and, therefore, new objects of emotion for the outdoor enthusiast, which result in improved safety and access to natural areas (Ewert & Shultis, 1999). This improved safety and accessibility allows more people to appreciate natural areas and develop bonds to nature — a process that furthers the protection of such areas. Moreover, it may also be argued that modern technology can alleviate the impacts on natural areas through no-trace practices. Conversely, however, in using this technology we also support consumptive activities such as mining, smelting, burning fossil fuels, wars, and over-packaging. What happens to the wilderness experience when we include these objects?

Beyond being aware of these objects in the light mentioned above, Aldo Leopold (1949/1986) clearly warned us about modern technologically based objects in outdoor recreation:

> Then came the gadgeteer, otherwise known as the sporting-goods dealer. He has draped the American outdoors man with an infinity of contraptions, all offered as aids to self-reliance, hardihood, woodcraft, or marksmanship, but too often functioning as substitutes for them. . . . where is the go-light idea. . . . I have the impression that the American sportsman is puzzled . . . it has not dawned on him that outdoor recreations are essentially primitive, atavistic; that their value is a contrast-value; that excessive mechanization destroys contrasts by moving the factory to the woods or to the marsh. (pp. 180–181)

The use of modern technology in the outdoors is still debated in various circles today. For example, a recent book, *Controversial Issues in Adventure Education* (Potter & Wurdinger, 1999), contains a few chapters debating technology issues (e.g., communications devices in nature). The concern with using modern technological objects lays in the debate over how/if the wilderness experience is affected (Loeffler, 1999; Rowe, 1990; Shultis, 2001). Alternatively, Sigurd Olson (1956) believed that the sight of primitive (or timeless) objects like a wooden paddle could awaken ancient memories. So too, wool clothing and primitively tanned moccasins achieve the timeless element that Olson (and others) speak of.

Epel (1999) offers a list of the benefits of using primitive technologies, including learning about ecology, primitive cultures, connections, and challenges, and teaching ourselves about the world. Similarly, Brown (1983) believes that the ultimate aim of practicing such skills is to re-establish connection and harmony with the Earth. Of course, a common argument against primitive technology is with regards to its impacts on natural areas, and rightly so. However, such impacts are within the control of the individual (a bio-regional practice) versus the lack of control s/he has over the industry attached to modern technology. We need to carefully consider the impacts for each activity we involve ourselves in.

Lastly, if we believe that the “natural setting” is an important environment (object of emotion) to be experienced, then “primitive skills” should be considered an important technology (objects of emotion) to be experienced. To do otherwise would highlight our disconnection from nature resembling that of misplaced beings in a hostile environment requiring technological support (i.e., high-tech gear) from urban centres. Moreover, outdoor skills, a source of pride and accomplishment, should include time spent learning about primitive technology (and nature), instead of solely urban technology (and factory gadgets).

Conclusion

Creating pro-environmental behaviours requires, to some degree, creating bonds to the natural world. Such bonds had wilderness philosophers of both the past and present debate how the wilderness experience “should” be. One such debate considers the use of technology. One side of this debate argues that modern technology allows more people to experience natural areas. The other argues that practicing primitive wilderness skills limits the physical objects of our emotions to natural ones, thus keeping the wilderness experience nature-based. Looking
forward, one problem I see is that there are very few people practicing, to any significant degree, primitive skills. However, to end on a positive note, we can start making our wilderness outings more primitive simply by leaving the more obviously un-needed modern technological objects at home.

**Note**

1. Further analysis of an experienced emotion has been taken through the structuring of an emotion along the dimensions of arousal (vertical) and pleasantness (horizontal) in a bi-polar circumplex of affect (Parkinson et al, 1996; Plutchik, 1984; Russell, 1980, 1987; Russell & Bullock, 1985).

**References**


Chad Clifford has an MA in Recreation and Leisure Studies and has been a primitive skills enthusiast for almost 20 years. More recently, he has been teaching these skills at Wilderness Rhythms, his personal business. He also teaches for another organization he co-founded, Alba Wilderness School.
Mass media and cultural myths support the notion that technology makes life easier. It appears this belief has permeated the field of outdoor recreation. For example, lightweight materials used in equipment design (e.g., graphite canoe paddles) and the increased use of global positioning system (GPS) units have had a positive impact on certain aspects of outdoor recreation. However, traditional outdoor skills and equipment should not be supplanted by modern technology, but rather should be used as any new outdoor tool. The degree to which technology is implemented will depend on the outdoor program and the population being served.

Many people believe that technology is the safest, and most efficient and effective means of easing access to the outdoors, particularly for people such as the elderly and people with disabilities. However, we contend that attitude, integration techniques and simple adaptations, not technology alone, increase accessibility. Our discussion will centre on how to use these ideas in increasing outdoor accessibility for people with disabilities.

**Positive Attitude**

Anecdotal evidence suggests that positive attitudes on the part of both leaders and participants are perhaps one of the main contributors towards making the outdoors accessible for people with and without disabilities. It is incumbent on outdoor educators to instill a positive attitude in those with whom they are working, particularly when trying to make the outdoors accessible. There are several ways this may be accomplished, including framing physical, mental and emotional barriers to accessibility as challenges instead of insurmountable obstacles.

Outdoor leaders should infuse a sense of value of all ability levels within their groups, and encourage participants to do the same through modeling appropriate behaviours and using language conducive to accomplishing this goal. Additionally, a “can do” approach to activities will allow groups of people to work together to make the outdoors an accessible place. In essence, a positive attitude when coupled with determination and “people power” can not be underestimated as a way to make the outdoors more accessible for people with disabilities.

**Integration Techniques**

Wilderness Inquiry, a leader in the field of integrated outdoor adventure travel, suggests seven techniques for integrating people with disabilities into groups engaged in outdoor activities. These include respecting each person’s dignity, maintaining open lines of communication, establishing patterns of integrated decision making, emphasizing the value of effort, focusing on group challenges and activities, developing symbiotic relationships among participants, and delineating and delegating tasks (Wilderness Inquiry, 2002).

Using these techniques assists in making the outdoors more accessible by encouraging groups to work together to reach common goals, and by “levelling the playing field” between people with and without disabilities. These techniques rely on the nature of group interaction and the collective power of a group of people working together to achieve a common goal. These methods may be modified to suit any type of outdoor activity — it is up to the leader to use her or his ingenuity in applying these tactics.
Adaptations

Simple adaptations may also help make the outdoors more accessible for people with disabilities. However, within a discussion of adaptations, it is easy for people to believe that technology and expensive equipment will aid people with disabilities in the outdoors. Often this is not the case. One place to start when considering adaptations for people with disabilities is to ask that person what will help most in that situation. For example, in asking “What would help you hold that paddle better?” an outdoor leader may discover that a glove with a sticky palm may suffice. To better her grip on the canoe paddle, a gardening glove over the person’s hand with some duct tape may replace a commercially produced flexion mitt (a special glove with Velcro straps specifically designed to secure a person’s hand to an object).

When developing adaptations, the following principles should be kept in mind: participant need, simplicity, materials that are readily available, and function. Outdoor leaders may find they need to refine adaptations over the course of an activity; often what a participant or leader initially thinks will work will require modification. Therefore, finding an adaptation that works for each individual frequently involves some trial and error. It is important to remember that what works for one person may not work for another, even if he or she has a similar disability. Some simple adaptations that have been found to work well include using paddles as walking sticks, gloves with sticky palms for grasping objects, sleeping pads as support for lateral stability, increased handle size on cutlery and writing instruments, tipping a wheelchair back on its rear wheels when moving over rough terrain, and using rope as a trail marker for people with vision impairments. The opportunities for creating simple, effective adaptations that make the outdoors accessible are only limited by our imagination!

Conclusion

Advances in technology have certainly made the outdoors more accessible for people with disabilities. However, it is often the attitudes of people and the skill of the leader in integrating people with disabilities into groups that enhances the accessibility of the outdoors. A simple formula for making the outdoors more accessible for people with disabilities includes one part positive attitude, one part ingenuity, and one part “people power.” Remember, batteries not included!

Reference

As an outdoor skills instructor specializing in primitive skills and, to a lesser extent, traditional and survival skills, I believe it is important to have a clear understanding of the differences between these areas. Confusion exists among enthusiasts and businesses alike as terms are used interchangeably. However, variation in the purpose and intent of the skills associated with each area may result in an experience that students may or may not be expecting. Differences stem from the types of skills and knowledge pursued in relation to the natural environment. Here I briefly outline the characteristics of each skills area as I have come to understand them.

**Wilderness Survival Skills**

Wilderness survival skills training teaches one how to survive a disaster in the wilderness and one should expect to receive sound advice on all aspects of being prepared. For example, emphasis is often given to preventive measures such as appropriate clothing systems, which may include petrochemical clothing, wool, and cotton. Other skills learned include using flares, snaring animals, making various shelters — using high-tech devices, as well as traditional techniques. Because the focus is strictly oriented to surviving traumatic experiences, such as being lost or stranded, little to no emphasis is placed on the skills as a connective part of the nature experience.

**Traditional Skills**

The phrase “traditional skills” is somewhat all-encompassing. There is a tendency, however, for such programs to mimic the Voyageur era, and, to a lesser degree, any outdoor skills that have been around for fifty or more years. Alternately, some refer to traditional knowledge and skills as part of First Nations’ cultures. In general, the traditional skills enthusiasts and programs practice days-gone-by methods of camping such as using canvas tents and trail stoves in summer and winter outings. They also advocate using equipment and gear made from natural materials where possible. For example, wooden snowshoes would be preferred over modern synthetic ones and clothing would usually include the use of wool, leather and cotton. Traditional techniques are commonly viewed as aesthetically pleasing and superior to modern ones, but a connection to the land is often seen as somewhat separate from skill development.

**Primitive Living Skills**

The primitive living skills approach joins ancient knowledge and craft to legend (and/or spiritual connections to the land). Conversely, there are primitive skills sects that prefer to keep the skills completely separate from the spiritual (or legendary) aspects. Instructors of these programs are often self-identified through well-known skills lineages of contemporary leaders in the field (e.g., Larry Dean Olsen or Tom Brown Jr.). Interestingly, primitive skills enthusiasts would not necessarily label their skills as being “survival” oriented. Their practices of hunter/gatherer-like skills were simply living skills in the original context. The skills include various nature-based camp crafts such as bow and drill fire lighting, making tools from wood, nature awareness, and knowledge of natural history. This type of program is of value to those who want to experience nature on a personal level through the skills that are said to “fit” the nature context.

It is worth pointing out that the differences among these three areas roughly lay with the skill sets, the time periods they were originally used, and the way the skills relate to the wilderness experience. In light of these differences and in the notable lack of discernment between them, as seen in much outdoor program literature, I would suggest one also read over a prospective program’s philosophy and instructor background. Then, go with your “gut” feeling; if you are not inspired at that stage, chances are you will not be when you get there either.

Chad Clifford has an MA in Recreation and Leisure Studies and has been a primitive skills enthusiast for almost 20 years. More recently, he has been teaching these skills at Wilderness Rhythms, his personal business. He also teaches for another organization he co-founded, Alba Wilderness School.
The thought of participating in a winter camping practicum can be both appealing and frightening to outdoor education teacher candidates. Good times skiing and making snowmen as children linger in students’ memories, enticing them to try winter camping. Conversely, the ache of thawing toes from waiting at bus stops standing in all assortment of store-bought winter boots would make anyone seriously doubt spending four to five nights on the winter trail.

The winter camping expedition that I lead students on is considered a traditional form of camping. A combination of toboggans, sleds, wooden snowshoes and wall tents with portable wood stoves are used. Although our equipment is considered traditional, we still use some modern equipment like plastic toboggan runners and most students will wear some synthetic clothing derived from the petroleum industry (e.g., polyester and polypropylene). I believe that the fear of being cold is dramatically reduced when a few pieces of group equipment are introduced like wall tents and woodstoves. Of all the equipment I introduce to students on the winter trail I have one favourite item that greatly eases my role as the guide: mukluks. I do not have to worry about students’ discomfort with cold feet because ninety-percent of the students will make and wear their own footwear.

When I initially present winter camping early in the fall, I also inform them that I will provide some equipment that is traditional to winter camping. I explain how making mukluks will keep their feet warm and be one of the cheapest forms of winter footwear they will ever invest in. Mukluks are also light so the weight of wearing both a winter boot and snowshoes will not be as heavy. With a used pair of Army surplus wool liners, an extra wool insole, a canvas upper wrap, leather for the mukluk bottom, and a few crafting skills, a great pair of winter footwear can be had for less than $40.00. For students on limited budgets, and for teachers seeking to connect different types of knowledge, this is good news.

One of the highlights of making mukluks is that each student learns how to make their own footwear with a pattern designed especially for their feet. As little as 100 years ago this was a typical experience, but today most people must fit their feet into standardized sizes and widths. More importantly, if you teach students how to make their own mukluks they will also be better equipped to do repair work to all leather and canvas equipment in the field.

Usually during this craft-making process I share some folklore and fascinating tidbits about moccasins. To an outside observer this means that project work includes integrating subjects and interdisciplinary work. For instance, some ideas and questions that may be raised are as follows:

**Technology and Design:** What characteristics of leather are required for good footwear and what is involved in a tanning process? Why does a running stitch used in conjunction with a welt create a stronger seam than a whip stitch without a welt?

**Math and Estimating:** Did you know your heel can be used to make the tongue of your mukluk or that your foot can fit into the crook between your elbow and wrist?

**English:** What do you think about the poem Duke Redbird wrote about his mukluks? Do you agree with Tom Brown Jr.’s ideas about the spirit residing in leather? And why would Jill Oakes and Rick Riewe write a book entitled *Our Boots*?

**Science:** Why would caribou hides have so many more weevil marks on them than deer hides? What stages and transformation of the skin are involved in the tanning process? How many toxins are used to produce lighter tanning hides in comparison to black leather?
Physical Education: What strength is required in your fingers to pull a piece of sinew through three layers of hide? Can you walk and stitch at the same time? (This was a skill once required in the past in severe wet spring ice conditions.) How does walking with or without a heel effect a person’s walking ability? Why were heels introduced into various cultural pieces of footwear?

History: Why did various Native groups design their footwear differently? What different cultural ideas exist around the world in regards to wearing or working with leather — the skin of another creature? What advantages and disadvantages existed for Armies and explorers that accepted mukluks as a form of footwear?

Although students may be frantically working on their mukluks the evening before the trip begins, the first day of the trip is seldom completed before a few students will have already started to make comments to me about their mukluks.

“I don’t believe it is –25° out. I have been out all day and still my feet are warm.”

“You know I nearly did not come because I have cold feet all the time, and I have tried many things winter camping, but now I know the secret to having warm feet — it’s mukluks.”

“I love putting on these mukluks every morning; it is like guaranteed warmth.”

“My feet feel so cozy and comfortable in these mukluks; thanks for showing me how to make them.”

My favourite mukuluk comment came while camping with students last February after two solid days of rain and sleet. It was the type of comment that can give any teacher a sense of satisfaction that all the stress and turmoil of preparing and planning for the trip was worthwhile. A student came into the tent and stood at the doorway in her expensive Goretex® jacket and pants and then proceeded to announce, “You know, everything on me is a little cold and damp except for my feet, which are nice and warm and cozy.” Then she raised both her hands above her head and let out a nice big loud, “YES!”

If there is ever a gesture or story I can think of in support of teachers teaching others to make mukluks, it would have to be this one. What can make students feel so great that they will raise both their hands in the air and say “YES” or want to break into spontaneous dance on a cold winter’s day? Warm feet. Making and wearing mukluks in today’s modern world is a way to connect the wisdom embedded in traditional winter travel equipment to modern commercial gimmicks and infatuation with design ideas that lack functionality. No Goretex® or other specially designed material has ever been able to reproduce the incredible qualities of leather. It is breathable, durable, and decomposes. It also originates from the skin of an animal. There is no better material with which to sense and walk upon the Earth.

Note
1. Mukluks keep your feet warm because they allow your feet to fully move, so circulation is not impeded. The wool liners used as insulation can be dried each night in the wall tent, which means no big boots in the base of your sleeping bag at night.

Zabe MacEachren coordinates the Outdoor and Experiential Education program in the Faculty of Education at Queen’s University. When not at work, you will find her sewing leather items, gathering wild food, huddled around a campfire, telling and listening to stories, and drifting in her canoe “Instinct.”
When I saw this edition’s call for articles I thought, “Wow, I’m gonna have fun with this.” As a disciple of the Bob Henderson Institute of Canadian Friluftsliv, my initial thoughts were that I’d rant on about how we’ve got to get back to basics. You know, rid outdoor education of fancy synthetic fabrics, mass-marketed brand-name gear, anything digital, and just focus on getting outside to enjoy the place and each other. As an outdoor educator, I live in an unfortunate paradox. On one hand, I take tremendous pleasure in cranking telemark turns down a ski hill with wooden skis, leather boots, and wool pants; on the other hand, I keep a copy of the MEC catalogue by my bedside and have come awfully close to convincing myself that my life would be ten times better if I owned a brand new pair of short, fat, six hundred dollar skis. My point is that while I have been called a gear-freak in my time (by some very misinformed people), I am also motivated enough to be out in the woods in most conditions and I am willing to go without all of the latest gear and gadgetry. The same may not be true of some of the young people in our programs who are more accustomed to an urban world characterized by immediate gratification, media bombardment and technology.

Suppose that we were charged with taking a group of 12-year-olds out snowshoeing while at a residential outdoor centre. My approach would be to keep it simple, fun, and traditional: minimum equipment and contrived activities, maximum variety, action, and time outside. Despite those being the basic tenets of our afternoon in the woods, I would not be against keeping a technological gimmick up my sleeve for when my charisma fails, the trail seems endless, and the temperature plummets.

Let’s say that while we are out in the wintery sunshine, I am becoming more and more aware of a pair of unathletic boys whose chatter oscillates between the latest computer game and how it’ll be the last time they ever go snowshoeing in their lives — ever. What if I were to pull out a handheld GPS, offer them a few basic instructions, let them play with it for a while, and then challenge them to get us back for dinner at the lodge without using a marked trail? My guess is that they’d probably think the gadget was pretty cool, they’d feel good about contributing to the group, and it might raise their street credibility in the eyes of their peers. I know that good ole John Dewey would approve of this approach, as he believed that a key part of being an educator is finding the passion within one’s students and letting that interest guide the educational process.

My stance is that I’ll opt for minimalist and traditional methods and equipment every time, but not at the expense of someone having a negative or unenjoyable outdoor experience. After all, if educators can provide the conditions for a positive outdoor experience, then students might seek out similar experiences by themselves. And isn’t that our goal, to get young people outside having their own adventures?

Simon is a Montrealer working towards a PhD in adventure education at University College Chichester in England. He would welcome an e-chat from any Pathways devotee; his email is s.beames@ucc.ac.uk.
Asking students to write journals as a means of reflection is a popular activity used by many outdoor educators. However, through anecdotal evidence, our experiences in asking students to journal, and evaluating the literature related to journaling, we have discovered some problems with the use of journals. Outdoor educators often give students a journal and ask them to write about their experiences with insufficient direction or training in journal writing. For many of these students, journaling becomes a mundane task with little or no meaning. What could be a powerful reflective tool rapidly loses its intended effect.

Researchers from many academic disciplines have commented on the practice of having students write in journals, and have noted many positive and negative student perceptions of journaling. For example, instructors have examined journal writing in various contexts such as literature (Cole, 1994), psychology (Hettich, 1990), and business (Johnson & Baker, 1995). Although outdoor educators frequently ask students to write in journals, they have commented very little on the theory and practice of journal writing in the field. Work by Raffan and Barrett (1989), Driver (1997), and Bennion and Olsen (2002) are notable exceptions.

In an effort to alleviate some of the aforementioned problems with journal writing, we created a short workshop for university students who write journals as part of several different outdoor education courses in both Canada and the United States. Although the workshop was developed primarily for university students, it may be modified to meet the needs of students of younger ages.

**Workshop Description**

We designed the workshop to address many of the concerns that we experienced with our own students as well as the concerns of other instructors as identified in the literature. We borrowed many of the components of the workshop from existing sources as noted throughout. Each of the components was intended to address an individual part of what we envisioned to be the “journaling experience” for our university students. By the end of the workshop, the students were expected to demonstrate the following:

1. The ability to write entries related to specific areas of content;
2. An understanding of Bloom’s Taxonomy of Cognitive Thinking (Bloom, 1956) and how it applies to their journal writing; and,
3. An understanding of the numerous types of creative journal entries that exist.

The workshop is divided into three sections. We begin the workshop with an activity used by Jim Raffan. Students are asked to write down one thing they dislike about journaling on a small piece of paper. After sharing some of these dislikes, the pieces of paper are collected and burned. The ashes are mixed with egg yolk, which creates paint that is used in the closing activity of the workshop.

Because we have often noticed that students quickly limit themselves in the style of their journal entries, the first portion of the workshop is thus devoted to helping students understand at least eight types of entries they might make in their journals. We introduce the types of journal entries and provide examples of each type of
By having a variety of types of entries in their “journal writing toolbox,” we hope our students will frequently change styles to avoid boredom and repetition.

The second portion of the workshop is used to introduce students to Bloom’s Taxonomy of Cognitive Thinking. The levels of Bloom’s Taxonomy are 1) knowledge (ability to recall facts, concepts or principles); 2) comprehension (ability to interpret information); 3) application (ability to apply previously gained knowledge); 4) analysis (ability to break material down); 5) synthesis (ability to analyze parts and put them together to form a new whole); and 6) evaluation (ability to make judgements).

There are several models that may be substituted

<table>
<thead>
<tr>
<th>Type of Entry</th>
<th>Sample Entry</th>
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<tbody>
<tr>
<td>Personal reflection and self-discovery</td>
<td>“Why am I so excited about the solo? I think I’m looking forward to being totally independent. This search for independence seems strange. I don’t understand it but feel a need to escape the support I need from others. I am very social and always try to support others. Why? I need to prove to myself that I can do it on my own. Who knows . . . maybe I’ll just sit under a tree, get really cold, and feel lonely.”</td>
</tr>
<tr>
<td>Group dynamics</td>
<td>“I know that each of us in the group will have preconceived ideas about each other based on things we’ve heard from others. I think that it will be very important for each of us to forget these ideas and get to know each other in the group for ourselves. This is our chance to drop expectations from the classroom and just be ourselves with each other.”</td>
</tr>
<tr>
<td>Professional development</td>
<td>“Today I learned the retraced figure 8, the Munter’s hitch, and the clove hitch. I know I’ll need those for my job at camp this summer.”</td>
</tr>
<tr>
<td>Sense of place / Connection to place</td>
<td>“I had a truly incredible day today. We walked to beach and were getting wood together for a fire when we saw a whale close to shore. We watched it for a while and figured out that they were grey whales — a mom and baby whale. Learned that they travel between Baja and Alaska (calving in Alaska). Saw all kinds of behaviours such as spy-hopping, sounding, and spouting.”</td>
</tr>
<tr>
<td>Transfer of academic theory to field course</td>
<td>“I think that our group is in the ‘storming’ stage of Tuckman’s model. We argued over which campsite to choose and it took way too long.”</td>
</tr>
<tr>
<td>Transfer of field course to academic theory</td>
<td>“We had a talk from an ecotourist whale watching outfitter today and a tour on the ocean. Now I could go on, but after seeing ‘ecotourism’ in practice today and doing all those readings for class, I’ve made up my mind. I believe that ecotourists are those tourists who have the intent of learning about a scarce resource by visiting and/or recreating in it. It seems to me that ecotourism does have tremendous impact that can almost be more devastating than traditional tourism because it can be so sneaky.”</td>
</tr>
<tr>
<td>Factual information</td>
<td>Date, location, weather, group members, length of travel, flora/fauna seen, events, etc.</td>
</tr>
</tbody>
</table>
for Bloom’s Taxonomy, including Gardner’s Multiple Intelligences (Gardner, 1993), the ICE Approach to Assessment and Learning (Young & Wilson, 2000), and Cole’s Taxonomy of Student Journal Entries (Cole, 1994).

After much thought, we adopted Bloom’s Taxonomy because it is a fairly straightforward evaluative tool and it has been used in other journal writing research (Hettich, 1990). We thought this component of the workshop was important because we noticed most of our students were writing at the knowledge and comprehension levels of the taxonomy. Although an important function of journaling is to capture basic information, we believe that students must write at the higher levels of Bloom’s Taxonomy to truly reflect on their experience. As part of a research study related to the development of this workshop, we found that students believed that they had written at the highest levels of Bloom’s Taxonomy.

However, after reviewing what they actually wrote in their journals, we found that our students failed to appropriately judge the level of their writing. They rarely, if ever, wrote above the knowledge and comprehension levels (Dyment & O’Connell, 2003).

The third section of the workshop is designed to encourage students to write more creatively in their journals. We thought this objective was important for several reasons. First, many of our students’ journal entries contained only writing in plain text with relatively little use of drawings or colour. Second, students told us that they felt “burnt-out” by journal writing, a feeling that has been noted by others (Anderson, 1992). Finally, written entries cater to those who are adept at expressing their thoughts and feelings through the use of prose. Many students are able to better convey what they are thinking through non-written entries such as a collage of pictures or drawings.

Table 2: Selected Creative Journaling Techniques Presented in Workshop

<table>
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<tr>
<th>Technique</th>
<th>Example</th>
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<tbody>
<tr>
<td>Concept maps</td>
<td><img src="image" alt="Concept map example" /></td>
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<tr>
<td>Polar passages</td>
<td><img src="image" alt="Polar passages example" /></td>
</tr>
<tr>
<td>Acronyms</td>
<td><img src="image" alt="Acronyms example" /></td>
</tr>
<tr>
<td>Maps</td>
<td><img src="image" alt="Maps example" /></td>
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</table>
In an attempt to address some of these issues, we provide students with various examples and illustrations of creative journal entries. A selected sample of these techniques is found in Table 2. While certainly not comprehensive, this list of creative journal entries was compiled from numerous sources, including Raffan (1990), Raffan & Barrett (1989), Scheider (1994), Walden (1995), and Janesick (1998). Students were also encouraged to use coloured pencils, paint, crayons, tape, glue and natural materials to enhance their journal entries.

To conclude the workshop, participants are asked to write a reflective entry on their workshop experience. We specifically ask them to consciously write at one level of Bloom’s Taxonomy, use one type of entry, and use one creative technique. All the materials previously mentioned are available, as well as the egg paint made in the initial stage of the workshop.

Conclusion

Generally, our students indicated they appreciated the workshop and would like to learn more about effective, meaningful journal writing. Unmistakably, if outdoor educators are going to ask students to write journals that encourage meaningful reflection, it is essential that we teach our students some fundamental aspects of the journal writing process. We encourage outdoor educators across Ontario to borrow, modify and implement any or all aspects of this workshop and let us know what you think!

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The Otesha Project

A dream, born in Kenya, has grown to become an educational cross-Canada cycling tour called The Otesha Project, which means “reason to dream” in Swahili. It was created as a means to enable and empower Canadian youth to adopt sustainable lifestyles and is based on the belief that there are alternatives to our consumer society, and that, for a better future, we must be the change we wish to see in the world. Starting on May 1, 2003, 18 passionate youth from the organization will be spending six months cycling across Canada from Victoria, BC to Newfoundland, bringing Otesha’s education programs to over 100 youth venues along the way. They will be accompanied by a Civic Hybrid donated by Honda Canada.

In Ottawa, Jessica Lax and Jocelyn Land-Murphy, both 22, founded the Otesha Project while they were part of a traveling field school in Kenya in January of 2002. Like so many others who participate in experiential education overseas, they were overwhelmed with the inequity they witnessed. They were sickened by the excess that prevailed in their home country, and the blinders that their fellow citizens, including themselves, had worn concerning resource allocation and the global effects of their consumer society.

“In grade 12, I participated in a trip to Kenya that changed my perspective dramatically. For the first time, I was out in the real world, seeing and experiencing the issues, instead of just reading about them,” says Jessica. “On my second visit to Kenya, I vowed that the lessons I learned there weren’t going to be lost, and I decided to take action.”

Instead of feeling powerless to change the extensive problems they witnessed, Jessica and Jocelyn sought to find solutions they could enact on a personal level. They began to alter their own lifestyles to reflect the changes they wanted to see in the world: rethinking what they really needed, conserving resources, and voting with their dollars. The result was a feeling of empowerment, that their individual actions were an important part of the solution. They dreamed of the impacts that could result should this mindset spread amongst Canada’s youth. Thus on February 16, 2002, a beautiful sunny day in Kitale, Kenya, The Otesha Project was created.

The Otesha Project’s education programs, which are hope- and action-based, involve emotional multi-media presentations, humorous skits, games, and interactive workshops for all age groups. The programs strive to make education more than a textbook or a lecture. They focus on re-evaluating daily choices to reflect the kind of future we’d like to see, connecting everyday actions to their global impacts and making them socially and environmentally relevant.

“Otesha has given me the opportunity to enroll in the school of life,” says Jessica. “I’ve learned the value of sharing my love and respect of the natural world and all of its inhabitants, the unbelievable potential of youth, and the recognition that individuals can and do make a difference.” As The Otesha Project team brings their message of sustainable consumption across Canada, and strives to bring education to life, they hope to inspire and empower their own generation to take action, and to work towards realizing all of our dreams for a better future.

To find out more information, book a venue, or make a donation, please visit The Otesha Project Web site at www.otesha.ca or contact Jocelyn Land-Murphy at (613) 591-3607 or info@otesha.ca.
The Date: October 3–5, 2003 (Friday to Sunday) is the planned date for the 2003 COEO Annual Conference. For regular attendees, this is one weekend later than has been the tradition. With the Jewish Holy Day, Rosh Hashanah, falling on Saturday, September 27 in 2003, the move to the following weekend is appropriate. It will be early fall in southern Ontario, a wonderful season for outdoor personal and professional learning and sharing.

The Location: The YMCA Outdoor Centre on Paradise Lake is near St. Clements, a village northeast of Waterloo. This is a central location for southern Ontario attendees, more of a distance for others. Is there a car pool arrangement you can initiate now? This is a camp-like facility that will allow for overall conference costs to be reasonable. There is a range of accommodation options onsite, some with indoor communal washrooms and some with outdoor communal washrooms. There will be an onsite tenting option for those who wish. Several nearby motels (5–10 minutes away) will be recommended for those who would like more upscale privacy. Meals will be served in the large dining hall building onsite and program activities will be onsite or originate onsite with bicycles or car pools. The site has about 70 acres with varied developed and natural habitat. The lake is a small kettle lake with some homes on it, but is “paddle-able” and offers a touch of southern Ontario “paradise.”

A “Green” Facility: A decade of systematic building and renewing of aspects of the outdoor centre will let us live in a facility that is well along the environmental sustainability scale. The main accommodation unit is built into the south-facing side of a hill, thereby taking advantage of passive solar heat, and earth insulation to retain winter heat and summer coolness. It has composting toilets, water saving systems and is heated with a central wood-burning masonry heater. The day use building was built with recycled materials, is also passive solar, and has a biological sewage treatment system. There is some photovoltaic energy “produced” onsite. Two accommodation units are straw bale constructions with passive solar heat and radiant floor heat. All the operating systems of the facility have been audited and improved in terms of environmental sustainability. If you’ve ever desired to directly learn more about such “green” practices, either personally or for your teaching, bring a camera and notepad to the site tours, which will be one of the conference program options.

A Balanced Program: COEO conference attendees tend to share common values but have diverse professional and personal conference interests. With the outdoor education community as a core theme, the committee is offering balanced program choices. There will be intellectual sessions, physical activity sessions, sessions with immediate teaching application, sessions with personal interest and growth as the goal, crafting sessions, futures sessions and fun sessions. Being in such an environmentally sound facility points toward some environmental emphasis, both in conference lifestyle and program options. Expect some sessions with environmental sustainability at their core. In addition to “talking the talk,” expect requests to “walk the walk” in terms of opting into conference community practices with sustainability at their core.

Outdoor education shrinkage in Ontario will be addressed. We hope to have students present as part of presentation teams. Some sessions will deal with practical useable outdoor and environmental teaching/learning ideas for the classroom and the school environs. Some sessions will go offsite to learn with/in/about the local Mennonite community and will deal with local community issues and projects of interest to the membership. Supporting all the program options will be a focus on community. At mealtimes, in planned and informal social time, a community of caring, values-conscious, fun-loving human beings will gather to welcome new members and to renew and extend our caring for each other and for our profession.
Each member of COEO will be assigned to a region of the province according to the county in which they live.

Central (CE)  Niagara South, Lincoln, Hamilton-Wentworth, Halton, Peel, York, Simcoe, Metro Toronto
Far North (FN)  Patricia, Kenora, Thunder Bay, Algoma, Cochrane, Sudbury, Rainy River, Timiskaming
Northern (NO)  Parry Sound, Nipissing, Muskoka, Haliburton, North Bay
Western (WE)  Essex, Kent, Elgin, Lambton, Middlesex, Huron, Bruce, Grey, Dufferin, Wellington, Waterloo, Perth, Oxford, Brant, Haldimand-Norfolk