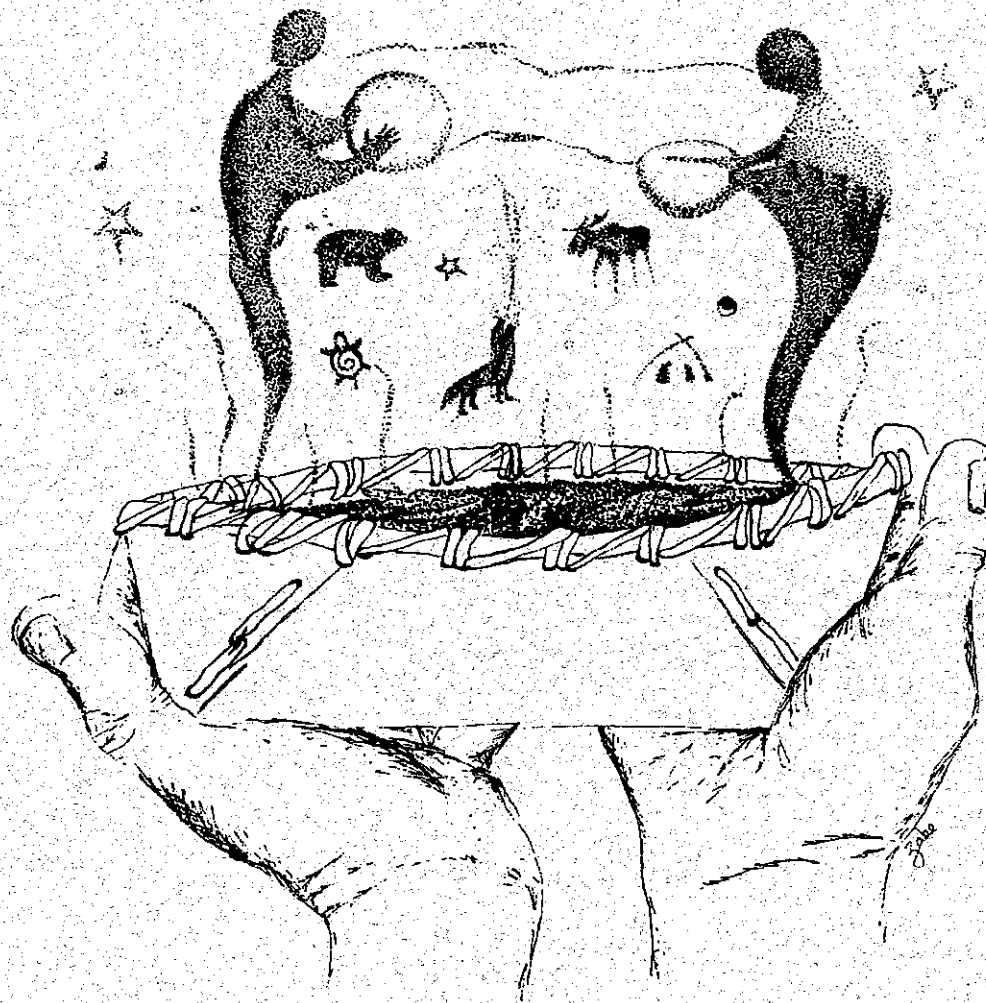


Pathways

Volume 7, No. 4
June, 1995

THE ONTARIO JOURNAL OF OUTDOOR EDUCATION



Pathways

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Editor's Log Book

As I pulled up a blank computer screen page to write this logbook, I had to remind myself that yes, this is the student issue of *Pathways*. Unlike some past student issues, this edition houses the voices of our older students - most of the voices you hear are from students attending high school, studying at university, or studying and teaching simultaneously. The pages which follow are filled with the voices of articulate, thoughtful students and educators. The profession is in good hands.

We welcome a new contributor to *Pathways*. Connie Russell from O.I.S.E. will co-ordinate the "Explorations" column. As her first article indicates, Connie is sure to challenge us to think deeply about our role as outdoor educators.

This issue also kicks off a new column, "Intersections", which examines issues relevant to integrated multi-credit secondary school programmes. As outdoor centres close, a new form of outdoor education is emerging in high

schools. Students stay together as a class throughout the day and work with one or two teachers in a format where subject boundaries and class change buzzers don't exist. Bert Horwood launches this column as he outlines key components for a successful programme, and Jennifer Jupp follows up with a thoughtful compilation of student voices from one of Ontario's first integrated programmes. We welcome contributions; it is our hope that "Intersections" will become a place of dialogue for the multitude of issues which arise from these programmes. (Check "Tracking" for a summer colloquium on this topic).

See you in Dorset at the fall conference. You will receive one more *Pathways* before then.

M.J. Barrett

Sketch Pad

The art in this issue comes from several contributors. The front cover is by Zabe McEachern. Watch for more of her work in the summer issue. It has a magical quality which speaks volumes.

Julie Rosenthal from Mayfield Secondary School contributed many of the sketches within these pages. A young woman of many talents, Julie is already making significant contributions to outdoor education through her work at Bolton Camp and her membership in the Caledon Citizens' Environmental Advisory Committee.

Sketches also come from Sara Blier, a graduate of McMaster University. Her contributions come from her canoe trip journal.

Also contributing is Jeni Rosenthal. We expect to see more of her artwork in the future.

To Listen

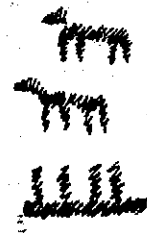
Steve Beffort

There is a Rhythm
beyond these pages
One that is inside of us all,
One that I cannot yet grasp.
I have heard it once or twice.

If you listen it will call you,
tell you where you're from.

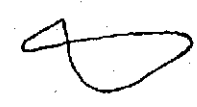
One may always hear it,
but the sound is often drowned out
by car and radios,
And by structures that have no rhythm,
At all.
The Rhythm never changes
But will never sound the same.

Pictographs

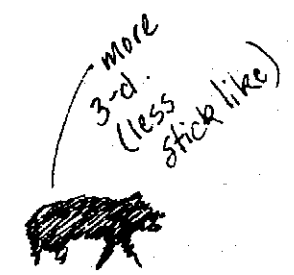


First Site

Drawn in red ochre on cliff sides



Second Site



Maimaiwaisgi
little people whom the
indians believed were
fairy-like. They could
make ones life hard if
you asked for it.

Another school year is almost over and here we are celebrating the writing of our more youthful members of COEO. It is exciting to me to note how many young members we have. There are many of us who are just starting out their teaching or professional careers and who have a keen interest in and concern for the outdoors. I am assure that as you read their words in this edition of *Pathways*, you will realize that the torch of environmental concerns for the Earth has indeed been passed into the hands of a caring generation.

Many school boards across this province have reviewed their outdoor education programs over the past three years and we have seen many reductions in this educational service. I am sure that all of us have a personal story to tell about the effects that budget restraints have had on a program we know about. As you may have heard, the latest victim in the era of cutbacks is a provincial one. The Ontario government has decided to close Bark Lake Leadership Centre as of August this year. Since 1948 this centre has made significant contributions to the development of outdoor education leaders and programmes across the province. Regardless of the outcome of the election, it is imperative that people get involved in writing to their legislative representative and the Premier of Ontario, in order to show their support for this vital outdoor education program. For further information contact Friends of Bark Lake Association, Bark Lake Leadership Centre, Irondale, Ontario KOM 1X0. Telephone (705) 447-2452 or Fax (705) 447-2475.

As a result of the pending closure of Bark Lake the 1995 COEO Annual conference has been relocated to the Leslie M. Frost Natureal Resources Centre near Dorset, Ontario. Information about the conference can be found in this and the next edition of *Pathways*. I would urge you to register for the conference as soon as you possibly can. We need to have a good idea of how many people plan to attend before we reach our cancellation date. By registering early you will ensure that the conference will proceed on schedule and save the volunteer organizing committee members a lot of anxiety.

The Board of Directors and a number of COEO members are currently writing standards to meet the environmental education outcomes outlined in the Common Curriculum. They are working hard to ensure that outdoor education is represented in the Ministry documents.

I understand that Western Region's Spring Migration was a big success this year. Everyone who participated had a great time on a wonderful spring weekend. To all of those who attended this event, thank you for your support, and to all of the organizing committee, thank you for a job well done.

I trust that all of you will be looking forward to the upcoming summer break and the wonderful outdoor experiences that this time of year can bring.

Glen Hester, COEO President



Good Measure: A Small Journal of Observations

Sara Jewell

I am a collector. Of letters and photographs, of moments, of memories. Each piece scotch taped into my journal, tacked to the wall next to my desk, in shoeboxes, under the bed! All kept for good measure, in case I ever need an idea for a story, for a wedding reception or an afternoon at a retreat. I collect and share ideas to keep them flourishing. Sometimes I am surprised by what I find, months later, in the piles of scribbles and notebooks in my room.

For three months in the spring on 1994, I was an "outdoor education assistant" for the Etobicoke Board of Education. My desk was in the Field Studies Centre, and my classroom was 650 hectares of the Claireville Conservation Area at Highway 50 and Steeles Avenue, just north of Metro Toronto. The opening was created by a maternity leave and I was fortunate to be the one to fill this woman's rubber boots. It was a comfortable, albeit temporary, fit. Glen Hester, the teacher-in-charge at E.F.S.C, welcomed me with a tour of the property that can only be described as inspiring. I felt at home right away, would wake up most mornings with eagerness to get to Claireville to start the day.

Claireville land includes woodlots, open fields, and reforestation areas. A branch of the Humber River flows through the property. Birds, animals, insects...this is the home of many, many organisms that should fascinate human beings, especially children under the age of twelve. What follows is an accumulation of field notes recorded periodically into the computer at E.F.S.C. as I tried to capture the attention and imagination of those children....

The best classroom is not the brightest, busiest or the quietest. There are no curtains to draw against the sunshine; it does not matter how close the washrooms or water fountains are; and the principal's office is too far to walk. This best-of-all-classrooms is lined with tall grasses, ruffled by breezes, and lit with free, natural sunlight. The best classroom is not a classroom at all-it is a whole different world.

Observation number one: nothing fascinates a child when he or she is cold, wet, even hungry. Although parents are informed that their children will be attending an outdoor education centre, children are still sent dressed for a walk along sidewalks in mild March air. Today was damp. Today was cold. Today was the twenty-ninth of March and it was not mild. Most of the grade three children in my group were cold and wet merely thirty minutes into our ninety. One little girl had no gloves. Two children had to borrow boots from our mudroom, having arrived in running shoes. Even the parent accompanying the class was unsuitably dressed in running shoes. What did she think? Everything is melting; we are still getting snow, and this is a conservation area. Our trails are not made of asphalt! This day alone should be enough to convince even the least progressive person that we still need our outdoor education programmes. These urban children have so much to discover.

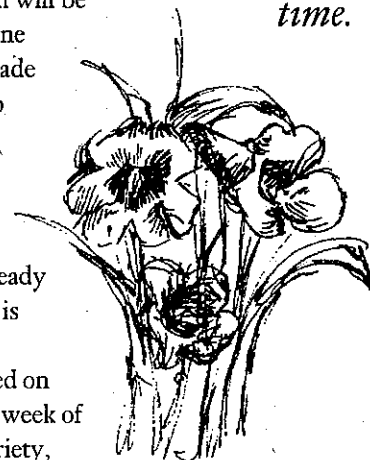
Observation number two: time exists only in the city and clocks mean nothing to me; the only time here is the bus time. The arrival of the bus signals the beginning of another journey for a class from the city. With them come schedules, worry, whining and snacks in plastic bags. With their departure, ninety minutes later, tranquility resumes and all that remains are the whistles and trills of the birds in the trees.

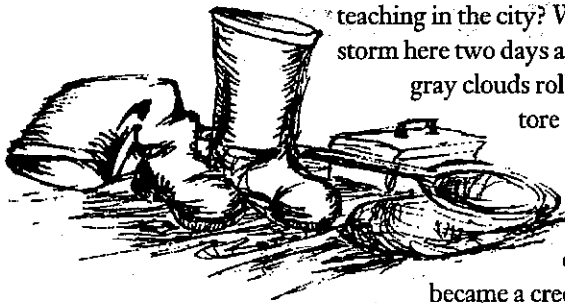
Observation number three: the bull will be mating when it is your first time alone on the farm tour. You and twelve grade five students. No senior teachers, no parents (whew!). This observation needs little elaboration. Needless to say, on my first solo trip to the farm with a class, we did not linger in the loafing shed. I wasn't ready to hear the question: "Is this why it is called the loafing shed?"

Observation number four: it snowed on April 2nd, and we had frost the last week of May. Would I have noticed such variety,

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even hungry.*

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*budget
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and around the
picnic tables.*

*there are moments
in life that go on
forever*

teaching in the city? We had a glorious spring storm here two days ago. The sky darkened, the gray clouds rolled overhead, the wind tore at the leaves and limbs and clothing. The rain fell like a sheet of water against our windows, and the ditch by the driveway became a creek in an instant. We stood in a darkened office and quietly admired. Maybe even slightly exulted. We did not go as far as to dash out into the yard, but we enjoyed the natural spectacle just as much. In the city, rain and wind are an aggravation, lightning cracking across the horizon is unseen, and none of it appreciated. I would not have missed that storm at Claireville for all the corner variety stores in Toronto.

There are now only three weeks left in my contract for E.F.S.C. The woods are beautiful, the pond full of exotic life, and the dandelions have blown their seeds to the wind. Each day guarantees a new discovery or a re-acquaintance with a familiar sound, organism or idea. The forty minute drive from Oakville to Claireville is one of anticipation and curiosity, as I wonder what new questions the day's class will have for me. Often I can't answer every one of them, but it is a challenge and I enjoy witnessing their own enthusiasm for this new environment. Many times I am discouraged by the class visiting; not every child is eager to explore, question, and learn. Thank goodness for the exceptional ones that make these woods exciting and the days worthwhile.

Observation number five: Hot, Hazy and Humid is much more than a state of mind! The "three H's" have arrived with a vengeance. We are all wilting with this heat, but I thrive in it as well. After all, I could be working in a school, wearing a skirt, heels, and nylons. No thank you! Give me a woods full of mosquitoes over that any day. The barn is so cool...and no breeze penetrates the woods where vampiric insects lie in wait for the lines of soft flesh I lead along the paths. Oh! The Itchy-Scratchy Game!

Observation number six: budget consideration seem so unreal in the woods, at the pond, and around the picnic tables. A year later, as I reread and rewrite and remember, I realize that every person reading this already knows all of it and is probably shaking his or her head at my naiveté. I make no apologies. Everything is unique to me, and I am doing so many different things that I am never bored; frustrated, challenged, confused, inspired, but never, never bored! Claireville has provided me with my most memorable experience since graduating from the Faculty of Education. I was actually on my own, with students, doing a job I truly enjoyed. Far beyond the resume, I have already used so much of what I learned at Claireville with my youth group, for a weekend retreat I organized for my church, and when my housemate and I make it out for a Saturday morning hike. It is very satisfying. And finally, so justifying, after all the schooling, all the learning and so few real opportunities.

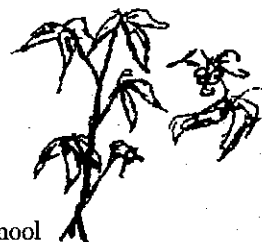
Observation number seven: there are moments in life that go on forever: walks, conversations, and storms that are never forgotten. For a collector like myself, the notes are endless, the shoeboxes piling up. Give me a pair of rubber boots to fill.

Sara Jewell is a free-lance writer who loves exploring the bush in a pair of rubber boots.



Pre-Reflections for School-Based Outdoor Travel and Camping Programmes

Erin Smith



Earlier this year, I spent four days one beautiful September weekend canoeing in Algonquin Park. I was a 'student-leader' for a group of fifteen grade twelve students from Ancaster High and Vocational School, in Ancaster, Ontario. For the kids, the trip was an optional component of their Physical Education course curriculum. Therefore, all group members were participating on a voluntary basis and getting a school credit for it as well.

For three weeks previous to the departure of the trip, the group spent their Physical Education class time learning basic camping skills. By the time of the actual trip, the kids were proficient in skills such as tent set-up, canoe strokes, packing, and menu planning. It was also at this point that I joined the group as student-leader. I accompanied a teacher from the school and provided knowledge and leadership in the area of canoe tripping.

This was my first experience in leading a school-based canoe trip; previous to this I tripped from a summer camp base. I quickly found out that there is quite a difference between the two experiences, mainly to do with the attitude and wilderness awareness of the participants. Compared to my summer camp groups, this school group was less willing or able to immerse itself in the wilderness; they seemed less aware of their role in or impact on the environment. It felt as if the kids were taking the city into the woods rather than leaving it behind. I realize that there are numerous reasons to explain why this occurred, such as the level of experience of the group members; or the fact that they really did basically walk out of the city, onto a bus, and into the wilderness. Rather than attempting to explain this occurrence, what interests me more is to see if there is a way in which a more developed awareness of the

wilderness could be created with the school group while they are preparing for the trip in the city. Therefore, I think it would be worthwhile to incorporate into the pre-trip curriculum a component such as 'wilderness awareness and appreciation', or 'how to leave the city behind you.' I feel the kids would benefit greatly from gaining an understanding that one of the primary beauties of canoe tripping is that it gives a person the opportunity to live in a way which is completely different from how one lives at home.

I have two main ideas about how this could be attempted. The first idea has the emphasis of incorporating this aspect into a structured curriculum, in the sense that it could be done in-class, with paper and pens, and taken up by a teacher. For example, the class could fill out a 'questionnaire-type' form which could lead to some insightful discussions on their reasons for partaking in this trip, and what they expect it to be like. Possible questions may include:

- Do you feel that you will act differently in Algonquin Park than you do at home?
- Do you feel that you *should* act differently? Why?
- What do you feel your connection is to the environment?
- Where do you feel most and least closely connected to the environment? Why?

I originally thought that this approach would be useful due to the fact that while most school kids are not familiar with canoe tripping, they are very familiar with this structured

the kids were taking the city into the woods rather than leaving it behind.



it is unfair to expect these kids to develop an awareness on their own before the trip.

form of learning. Therefore, a questionnaire could get kids thinking about a new learning experience via a techniques with which they are accustomed. However, I am not fully uncomfortable with this approach. I think the essence of the trip is that it is experiential; to try to incorporate the traditional learning style into the trip experience may end up having an effect opposite from the one desired as it may tie the trip more closely to the standard 'city-way' of learning. Therefore, if using this approach, it would probably be most effective in the very initial stages of the curriculum, as a lead-in to the whole experience.

Another idea is to introduce wilderness appreciation through reading. The course facilitator could either bring in excerpts or stories written with a focus on the connection of people and the environment, such as the famous speech by Chief Seattle (...how can you buy or sell the sky?...). Or, the facilitator could assign a reading list of books written about the experiences for others in the wilderness. Books also offer flexibility to the facilitator, as reading can occur in the classroom before departure and also effectively continue on trip around the campfire. Possible readings may include:

Against Straight Lines By Robert Perkins - the journal of a solo canoe traveller in Northern Labrador.

Winds from the Wilderness by Canadian Outward Bound School - inspirational quotes on leadership, conservation, adventures, and many other topics.

Of Time and Place by Sigurd F. Olson - memories of wilderness particularly in the Quetico area.

Freshwater Saga: Memoirs of a Lifetime of Wilderness Canoeing by Eric W. Morse - an account of his journeys in Canada.

Yukon Wild: The Adventures of Four Women who Paddled 2000 Miles through America's Last Frontier by Beth Johnson - the title says it all.

It is intentional that none of the books listed are 'how-to' books, and focus on the personal and contextual experience of wilderness tripping. As

attitudes generally develop through experience or ownership, and because the students have such little tripping experience, it is unfair to expect these kids to develop an awareness on their own before the trip. Therefore, in choosing books which espouse the philosophy which the group members are working on developing, the class could essentially use the experiences of others in developing their own perspectives prior to the trip. Of course, the class might incorporate both the reading and the questionnaire assignments into the pre-trip curriculum. Both approaches can serve as a starting point for discussion and development of awareness. If doing so, it may be best to use the self-reflective questionnaire following the reading of the reflections of others, so that the kids have insights to draw from.

Both assignments have the same purpose; to provide the opportunity for the group to really think about, sort of 'pre-reflect', what the wilderness experience can be like. Because the class is spending only a few short days in the wilderness, it is vitally important to make the most of that time. The wilderness is a special place which presents infinite opportunities for learning and growth which often cannot be found in the school. If a facilitator can develop an awareness before the group heads out, each group member will benefit.

Erin Smith is a graduate of Physical Education/ Kinesiology at McMaster University and has spent many summers canoe guiding with Camps Wanakita, Thunderbird, and Queen Elizabeth.



... And How I've Grown.

J. Maxwell Donelan

Almost in the beginning was curiosity.

Isaac Asimov

We go about our lives understanding very little of our everyday world. We take a lot for granted while giving little thought to our environment that makes life possible, and whose equilibrium we fundamentally depend on. Except for children (who don't know enough not to ask the important questions), few of us spend much time wondering why nature is the way it is. Curiosity is defined as "the desire to learn and know" (Webster's, 1966, p. 360), and it is this desire that fuels many children, and not enough adults to ask the obvious, but difficult questions. How high is the sky? Why do cheetahs have spots? What makes a stone fall? While trying to lose myself in the simplicity of a trip, I often encounter qualities of our world for which I do not have an explanation. Keeping in mind a saying by Albert Einstein, "God does not play dice with the cosmos!", I set out to explore the answers to my questions.

Nothing is rich but the inexhaustible wealth of nature. She shows us only surfaces, but she is a million fathoms deep.

Ralph Waldo Emerson

After rising early, eating hearty, and breaking camp, we hit the water. With not a whisper of wind to stir the lake, we paddled silently across the watery mirror. As I watched my paddle dip into the water, I noticed it looked like it was bent. This is not an unfamiliar phenomena as I have seen it before with a spoon in a glass of water ... why?

What is happening is that the light that is reflecting off the paddle is "refracting" or bending. Refraction occurs when light crosses the boundary between mediums. The angle of refraction is always smaller than the angle of incidence when a ray of light enters a denser

medium and larger when it enters a less dense medium. Water, being denser, slows light down by a third, and bends the light. We observe this as the bending of the paddle. This law also explains why a pool of water looks shallower and fish look larger than they really are. Refraction also underlies the operation of lenses in your standard eye glasses. (Sherwood, 1991, p. 40).

Out yonder there is this huge world, which exists independently of us human beings and which stands before us like a great eternal riddle.

Albert Einstein

After a particularly long day of paddling we were quickly approaching our campsite for the night. As a group we were subdued and drained, and the constant drizzle continued to dampen us emotionally and physically. As we rounded a bend, the campsite came into view, and one could feel the group's spirits lift. Suddenly, something occurred bordering on pathetic fallacy. The clouds broke, and the sun shone through, followed quickly by a beautiful rainbow. It was not until a quieter time later that night that I questioned the science behind the rainbow ... why?

When light from the sun travels in a straight line, it appears to be colourless (this is termed white light). But once these rays are bent (or refracted), it becomes evident that the rays are really seven colours, separated into red, orange, yellow, green, blue, indigo, and violet (always in this order). Refraction results in separation because light is a wave with each colour having a different wavelength, and as a result a different angle of refraction. Sir Isaac Newton demonstrated the colourful solar spectrum by using a prism to refract the light. We experience it as sun shines through the rain drops and creates a rainbow (Larkin, 1976, p. 121).

*few of us spend
much time
wondering why
nature is
the way it is.*

*I questioned the
science behind the
rainbow ... why?*

*The cultivation of the mind is a kind of food
supplied for the soul of man.*

Marcus Tullius Cicero

*I had plenty of
time to contemplate
thunder and
lightning ... why?*

Having crawled into bed soon after dinner, I was able to get a few hours sleep before the storm hit. While the steady downpour made being outside less than desirable, it was the thunder and lightning that made sleep impossible. So, with the tent being lit up as if a flash was going off, my ears ringing like my head was between two cymbals, and me stirring restlessly wondering why I was the only one up, I had plenty of time to contemplate thunder and lightning ... why?

Electricity in clouds is generated by the extremely rapid condensation of water vapor, due to a rapidly rising column of highly heated air during an excessively hot day. The upper layers of air, up to four miles high, are charged with electricity. The clouds charge (positive or negative), cannot reach the earth because of the poor conductivity of the dry air layers below. When two oppositely charged clouds approach each other, or when a highly charged cloud induces an opposite charge on a nearby cloud, or on the earth, the discharge, known to us as lightning, will result. As lightning discharges, it heats and greatly expands the air in its path. As this air quickly cools and contracts, the returning air particles collide and create the sound of thunder. The light from the lightning travels at the almost instantaneous speed of all electromagnetic radiation, while sound, requiring the oscillation of air particles, travels much slower. As a result, you always see the lightning before you hear the thunder. The arrival of sound waves varies more with distance than with the arrival of light waves, and this is why you can judge how close the storm is by counting the time between lightning and thunder (Asimov, 1985, p. 210).

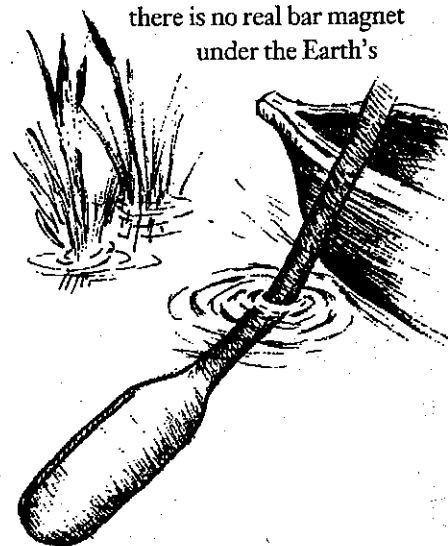
*The most beautiful thing we can experience is the
mysterious. It is the source of all true art and science.
He to whom this emotion is a stranger, who can no
longer wonder and stand rapt in awe, is as good as
dead; his eyes are closed.*

Albert Einstein

Climb the hill, descend the hill, walk through the bog, climb another hill-it seemed like the portage would never end. But as we dragged our sweat-soaked bodies into our canoes, we were filled with a sense of completion. It was not until we had paddled a few meters out into the blue water that we realized that the constant turning of our land trek had disoriented us. Where was the next portage? Not to worry, we just whipped out the compass, took a bearing, checked the map, and were on our way. As we paddled, and I contemplated the compass, I could not help but wonder ... why?

By the beginning of the 12th century, the Chinese had discovered that if a piece of lodestone was suspended, it always set itself so that it pointed approximately north and south. It was not long before ships and other travellers were using this simple compass as an aid to navigation. The observation that magnets align themselves along a north-south axis implies that the Earth itself must possess a magnetic field. Indeed, the Earth behaves as if it has a bar magnet at its center. Magnets and compass needles align themselves with the Earth's lines of magnetic force. These lines are not exactly along the geographic meridians, so the north and south magnetic poles do not coincide exactly with the geographic ones. Their positions are slowly changing all the time, so the angle between magnetic and geographic meridians is variable. Physicists have deduced from a study of earthquake waves that the earth has a liquid core, i.e.,

there is no real bar magnet
under the Earth's



surface. The field is generated by moving material in the Earth's liquid metal core, and obtains its energy from the slow escape of interior heat and the rotation of the planet (Morrison, 1990, p. 56).

"They were apes only yesterday. Give them time."

"Once an ape-always an ape ... "

"No, it will be different ... Come back here in an age or so and you shall see ... "

The gods, discussing the Earth.
from the movie by H. G. Wells
The Man Who Could Work Miracles

I remember a warm June night where the wind coming across the point was strong enough to keep the mosquitoes at bay, and the sky was so clear that the stars shone like individual suns. We lay on our backs taking in not only the wondrous night sky, but also one of nature's more beautiful phenomena, the Northern Lights. While basking in the colourful light show, I could not help but contemplate the nature of Aurora Borealis ... why?

Like the compass, the Northern Lights are an effect of the Earth's magnetic environment. Aurorae occur at altitudes of 100-300 km when electrons spiral down the Earth's magnetic field toward the poles. The electrons excite different molecules which emit electro-magnetic radiation. The wave-length of the radiation varies, and since the colour of light is a function of the wavelength, you can see a wide spectrum of colours as the molecules return to ground state. This effect can occur towards both poles, and is known as Aurora Australis, or the Southern Lights, in the southern hemisphere (Alexander, 1983, p. 13).

Although the answer is not unknown, I'm searchin', searchin', and how I've grown.

Neil Young
from the song
"World on a String"

What, you may ask, have I accomplished in searching for these obscure bits of trivia? In fact, I have asked this question of myself more than a few times, and I keep coming back to the same point. While trying to be one with nature, I often find myself a stranger, left out of the secrets that are being traded all around me. Often we are content to ignore our gossiping environment and go about our daily business, but truth be told, it is human nature to want to share secrets, to be part of the conspiracy. As Pandora could not help but open the box, humankind cannot help but be curious. Although curiosity may have killed the cat, and Pandora's story does not have a happy ending, humans continue to explore and prosper in doing so. It seems the desire to know is the desire to grow.

Bibliography

Alexander, Robin. *Aurora*. Edinburgh: Anthroscopic Press, 1983.

Asimov, Isaac. *The Guide to Science*. New York: Basic Books Inc., 1985.

Larkin, Sonya. *The Book of the Physical*. Middlesex: Oxford University Press, 1976.

Morrison, David. *Frontiers of Astronomy*. Philadelphia: Saunders College Publishing, 1980.

Sherwood, Martin. *The Physical World*. New York: Oxford University Press, 1991.

"Curiosity" *Webster's New World Dictionary*. Toronto: Nelson, Foster & Scott, 1966.

Max is a graduate of McMaster University Dept. of Kinesiology. He was an active member of the Outdoor Education track offered his senior year, and has experience at both Camp Tobwee and Wanakita.

While trying to be one with nature, I often find myself a stranger, left out of the secrets that are being traded all around me



The Single Concept / Single Skill Field Trip

Compiled by Clarke Birchard

When primary or junior classes are taken on full-day or half-day field trips to Outdoor Education or Nature Centres, the visits may be packed with a large number and variety of activities. The day may seem to be packed and hurried and at odds with what good educators know about effective pedagogy and the techniques of helping young people to bond with nature. The Outdoor Education teachers may be doing this on purpose in order to maximize the use of time and travel funds as well as to demonstrate to the accompanying teachers a number of activities that they may use with their students near their schools at other times. We all know that the better way for young people to learn would be by doing fewer things at a more leisurely pace with more time for reflection and even repetition.

Helen Ross Russell in her classic book *A Teacher's Guide to Ten-Minute Field Trips* states, "There are many important advantages to using the school grounds as the main base of operations. There is no scheduling problem; no waiting for a date; no need to hurry or interrupt a classroom topic; you can go for ten minutes several times a day if it suits the topic; and, the number of field trips is limitless".

Following is a selection of a few "single topic" outings that might be done with a primary or junior class on or near the school grounds. Some might also be linked together in various sequences to form the "script" of longer nature study outings. It will be evident that some are very simple and some involve higher level or more abstract concepts and skills.

Relationships

Look for evidence of things that need other things. After listing and discussing a number of examples, some may fit the following categories:

- two things that cannot get along without each other (two-way relationships);
- one thing that cannot get along without the other (a one-way relationship);

- one thing or event that is the direct cause of another;
- one thing, process or event that is the result of another.

Changes

Find the evidence of changes taking place. You may not see the actual changes so will have to infer them from the observable evidence.

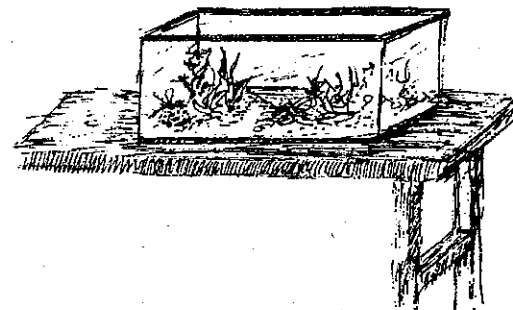
Some may fit the following categories:

- something is getting bigger;
- something is getting smaller;
- something is getting more complex;
- something is getting simpler;
- something is harming something else (a human value judgement, of course);
- something is benefitting something else;
- changes that follow predictable patterns and repeat themselves regularly (cycles).

Classifying

Give each student a bag. Have them gather lots of different kinds of leaves, pebbles, or other things. Spread them out on tables, desks, sheets of paper or plastic. Initially let them come up with their own criteria for sorting things into piles. Through discussion move them toward an understanding of the usefulness of observable physical characteristics (e.g. size - big, small) and the difficulty of qualitative characteristics (e.g. pretty, ugly). In due time the teacher can ask that they be sorted in certain ways:

- Leaves: smooth edges, jagged edges; one part, more than one part; etc.
- Pebbles: rounded, angular; coloured, plain; harder than a nail, softer than a nail; etc.



Seed Travellers

Give each student or group of students an egg carton and some glue. Have them try to collect a seed that hitchhikes, a seed that blows in the wind, a seed that travels by tummy (has "fruit" around it), a seed that spins like a helicopter rotor, a seed case that explodes, and others that you think of.

Signs of the Seasons

Have older students or adult leaders carry clipboards on which to note the signs that younger students find that represent a season.

e.g. fall - coloured leaves, cricket songs, flocking birds, cooler air, drifting seeds, etc.; winter - snow, ice, leafless trees, animal tracks, empty bird nests, icicles, etc.; spring - warmer air, melting snow, growing buds, singing birds, etc.

Nature Sounds

Stop and listen to all the sounds you can hear - wind, rain, crickets, frogs, birds, footfalls, etc.

Traps

Spider webs, pitcher plants, burrs, thorns, etc.

Untimely Ends

A fly in a spider web, a rock or sidewalk cracked by a tree root, a tree cut or blown down, something burned by a fire, an animal killed by a car, a leaf eaten by an insect, a flower stepped on by a person, etc.

Movements

Clouds; things blowing in the wind; flowers that open and close; things that fly; things that walk, run, hop, jump, gallop; things that grow or get smaller; things that flow; etc.

Discards

Things that get left behind - droppings; litter; tracks; the "crumbs" left after a meal by a bird, mammal (includes kids, of course); cocoons; snake skins; etc.

Patterns, Designs

Look for shapes in nature - circles, stars, lines, triangles, waves, radiations, etc.

Coverings

These might be on rocks, trees, animals, birds, fish, leaves, seeds, nuts, fruit, etc.

Freaks, Oddities, Curiosities and Variations

A plant that has pushed up through a dead leaf, a four-leaf clover, a tree growing in an unexpected place, a twisted tree, etc.

Remnants of Yesterday

Old birds' nests, leaf skeletons, trails, footprints, naturally dried flowers, stumps, old fences, foundations, driftwood, etc. What are the stories they might tell?

Miniatures

Go for a hike to find things that can best be explored with a magnifying glass - insides of flowers, spider webs, flies wings, grass flowers.

Cycles

Find something that is part of a cycle. Infer the rest of the cycle. e.g. plant-bud-flower-seed-plant; egg-larva-pupa-adult-egg; egg-tadpole-frog-egg.

Climbers

Squirrels, cats, tree frogs, wild grapes, etc. Discuss how and why they climb.

Babies

Young plants, animals (including all of the animal groups - mammals, invertebrates, birds, amphibians, reptiles, fish, etc.).

Homes

Nests, burrows, dens, hiding places, tree holes, etc.



Clarke Birchard is an 'actively retired' outdoor educator and Pathways editorial board member.

He is editing the fall issue which focuses on nature interpretation.

Energy and Knowledge: The Story of Integrated Curriculum Packages

Bert Horwood

Editor's note: This marks the introduction of a new Pathways column dedicated to exploring issues in integrated multi-credit high school programmes.

Introduction

There has been a dramatic emergence of integrated, multi-credit curriculum packages in Ontario High Schools. Many of these packages have large outdoor and out-of-school components and it is not surprising that the outdoor education community has become involved.

Although there were earlier, informal meetings, the first province-wide gathering of teachers interested in integrated curriculum was held at Bark Lake Outdoor Leadership Centre in August, 1994. This article, based on the key-note address I gave to that meeting, is intended to set the stage for future articles on curriculum integration involving the outdoors in *Pathways*.

I've chosen to highlight energy and knowledge for two reasons: First, it is a tribute to the pioneers who brought great energy and initiative to breaking the stranglehold of isolation among school subjects. In Ontario, teachers like Paul Tamblyn at Acton High School, and John McKillop and Doug Jacques of the Bronte Creek Project are examples. They are the working expressions of an earlier tradition expressed by thinkers and movers like Kurt Hahn, Alfred North Whitehead, Charity James, and Bob Pich.

The second reason to emphasize energy and knowledge is to recognize the core qualities it takes to put together and sustain an integrated curriculum package. These programs are very demanding on teachers and students. There are also demands on the community. Most teachers and students find the programs rewarding, but the entry fee is a larger than usual amount of energy and commitment.

In this article, I'll set the stage for future articles by describing the sources and kinds of

knowledge we have about integrated packages. I'll give a picture of integrated packages deprived from recent research and conclude by identifying some serious problems in education which integrated packages reveal.

The nature of knowledge

There are several different sources of knowledge about integrated curricula. The richest and most valuable is knowledge that arises from experience within each teacher. Those who have taught such programs have the the best and most intimate knowledge of them. I hope that this practical knowledge will be featured from time to time in *Pathways*, as teachers tell their own stories.

Another excellent but less accessible source of knowledge is the students of the integrated packages. Their knowledge is more than the subject content; they also have knowledge of the process. It goes without saying that this knowledge, the student's-eye view of life, is probably somewhat different than that of their teachers. Only in the most ideal world would students describe events the same way as their teachers. Yet it has happened. This is the kind of knowledge that is exposed when teachers visiting a another program spend time talking with the students. This is the kind of knowledge that is revealed when teachers take students with them to guest presentations, at the local Legion or Kiwanis Club, for instance.

These are the direct sources of practical knowledge. They provide the day-to-day facts, rules and relationships that enable teachers and pupils to get things done. It's front-line knowledge. This sort of knowledge may be hidden and disorganized. It is sometimes called tacit, or silent, knowledge. I think it is an ongoing task for teachers to organize and make public their personal, professional knowledge.

the entry fee is a larger than usual amount of energy and commitment.

In addition, we have indirect sources of knowledge. There are people who know little at first-hand, but have significant second hand knowledge. They often form strong opinions on that knowledge and may exert considerable influence. Board members and officials, staff members in a school, parents and community members who work with students, other students who are friends of students in the programmes, siblings of students, all these people also know something about these programmes.

Finally, there is the indirect knowledge possessed by a person like me. I am a researcher and former researching staff member in an integrated multi-credit curriculum package. I bring a kind of knowledge which is extracted from the knowledge possessed by teachers and students and fitted together with my direct observations. Research knowledge includes the public knowledge found in the literature and is strongly tied to theoretical considerations. Researchers know about integrated programs in the way a bird watcher knows how birds build nests, except that they may be birds, too.

All of these sources of knowledge and kinds of knowledge are important. We must not dismiss practical knowledge. Teacher's practical knowledge is direct, intimate, and grounded in the practice of the teacher's art. Who would want to promote ignorance of hard-won experience? Neither must we dismiss knowledge possessed by students and parents. Who would want to be ignorant of the perspectives of those we serve? We must not ignore theoretical knowledge. Research knowledge is important because it is disciplined, and constructed to be readily applicable from one situation to another. Who would promote ignorance of the ideas which connect? In short, we are in the knowledge business. I'm sure none of us is keen to promote ignorance.

A generalized picture of an integrated package

I'm going to describe the qualities which I think are essential to any integrated program.

They are based on programs I've studied in detail, and on conversations with teachers and researchers of other programs in Ontario. The description will be general in that it will outline fundamental qualities which my evidence tells me are absolutely essential for any and all integrated programs. In the end, this description should show experienced teachers a map of where they have been, and at the same time give a blueprint to those who'd like to start their own package. I don't claim to be infallible. If anyone finds that any part of this picture is wrong, please let me know.

Six central factors

There are six general features of integrated curriculum packages that make them integrated and make them work. I have come to think that these features are the central defining qualities of integrated curriculum. If a program has these features, it doesn't matter what administrative arrangements were used to achieve them. Specific details are important to get a good fit within a particular budget, within a particular school system, within a particular staffing situation. But none of these things matter if the six central factors are present. Certainly, it doesn't matter in the least which subjects are combined in the package. If these six factors are made to be present, then music, physical education, history, and art credits will fit as well as will building trades, English and co-op education.

The six central features of all integrated curricula are: experiential learning, whole process, authenticity, challenge, responsibility, and community.

Experiential learning means that students learn from making sense of their own direct experiences. The teacher may select and arrange the experiences, but the students actually do it and are expected to learn from thinking and feeling about what happened. For example, in TAMARACK (the integrated package run by Bill Patterson at Mackenzie High School, Deep River, Ontario), students learn to conduct magazine interviews by listening to a journalist and then practising on the Vice Principal.

The six central features of all integrated curricula are: experiential learning, whole process, authenticity, challenge, responsibility, and community.

Preliminary instruction is just enough to enable them to start themselves. Students learn to interview from the experience of interviewing.

Whole process refers to an arrangement of experiences such that the students participate in as much of the process as possible. For example, in TAMARACK one year, a visitor taught students to make white ash canoe pack baskets. They started with unpeeled logs, which meant removing the bark, pounding the wood to remove the strips, then weaving the strips to make the basket and finally finishing it with handles and straps. Successful integration happens when students participate in as much of the process as possible.

Authenticity is the factor through which students believe that what they are doing makes a difference in the world. Students think their work counts for something. It is real to them. I don't fully understand how authenticity works, because sometimes students find it in obviously bogus situations. For example, a key event in TAMARACK's winter camp is a stream crossing. The students are required to cross a shallow, swift, icy stream in the bush without anyone getting wet. They may use only dead wood and their own resources. The fascinating thing to me, as I watched the intense, emotional, sometimes funny efforts, was the fact that I knew the students knew that there was a road and bridge over the stream just 50 m away. Students often refer to the stream crossing as an important event in their learning. They give it as an example of a real, authentic problem.

Challenge means the property that makes the work difficult. When challenge is present, students can not get off the hook. Challenging work calls on students to dig deeply into their internal resources of ingenuity, tenacity and determination.

Responsibility probably speaks for itself. In TAMARACK the students told me that they felt a double responsibility in the program. There was the usual responsibility that each student has to the teacher. But there was also a large responsibility the students felt to the other members of their class or work group. On both counts the students said they had more responsi-

bility in the multi-credit package than they had in any other semester.

Community is the social coherence and connection which the students in multi-credit packages feel. Probably the other five factors feed this sense of community. In the packages I've studied there is also a feeling of connection with the larger community outside the school, too. For example, Karne Kozolanka (1993) reported the pride felt by students in a construction trades program in Frontenac County as they described the fact that, long after their class was gone, there would be a house standing that people would make their home.

These six qualities are the central blueprint for a successfully integrated curriculum. The hard task teachers take on whenever they attempt to put a variety of credits together into a single connected program is to ensure that these six factors are present. (It is possible that there is a seventh central factor called engagement by Karne Kozolanka in his study of a building trades multicredit package. I haven't been able to see yet how it fits with the six already established factors. That's part of the uncertainty of research knowledge. It's never quite finished!)

Out of school

It might be possible to achieve the six central factors entirely within the walls of the school. But I doubt it. School makes an excellent base camp for significant periods of time spent elsewhere. In the programs I know best, students spend from 40% to 80% of their education time in places other than school. If there is an environmental education component, it makes it all the more critical that students have many experiences outdoors.

Using students' data from the TAMARACK program, I was able to identify three critical factors that come from being outside of school. They are inescapable consequences, personal growth and sense of wonder.

Inescapable consequences means that outside of school students are more likely to meet the consequences of action which can not be evaded. A teacher or parent can not get them



off the hook. This characteristic helps to develop the six central factors.

Personal growth refers to students making personal meaning. That is what Jim Raffan (1993) referred to in his letter to the Peel Board of Education. Students learn in private ways, and develop knowledge and insights different from the academic, propositional knowledge of the public curriculum. Personal growth also promotes the six central factors.

Sense of wonder means the student's experience with feelings that go beyond words to express. It might come from an encounter with an aged person in a home, or with a grey jay on a bush trail. But it leaves the student with a memorable emotional sense of themselves within the world. The students are touched emotionally by such experiences in ways that enhance every aspect of their learning and memory. It is almost impossible to elicit the sense of wonder inside a school. Some teachers refer to this quality as "magic."

The point of these research findings is that, so far as anyone knows today, these nine characteristics together are hallmarks of successfully integrated packages. It doesn't matter how a program is organized, so long as it creates these factors.

Serious dilemmas

There are four major problems arising from integrated packages that require attention. We won't solve these problems; we can only learn to limit them and to live with them. We need to know their dimensions so that we can find ways around, through, under, or over.

Teacher training

None of the pioneers of integrated packages were specifically trained to do the task. But they were broadly educated, and possessed imagination and initiative. Teacher education should pay attention to fostering such qualities. Another aspect of the teacher supply problem is to ensure replacement teachers for those who leave their integrated packages for other work or retirement. Finally, these packages are very energy demand-

ing and emotionally draining. Teacher rest and renewal is a general need which the profession has not addressed well. There are no easy answers, but perhaps the launching of articles on integrated packages in *Pathways* will encourage open expression of ideas for teacher renewal and replacement.

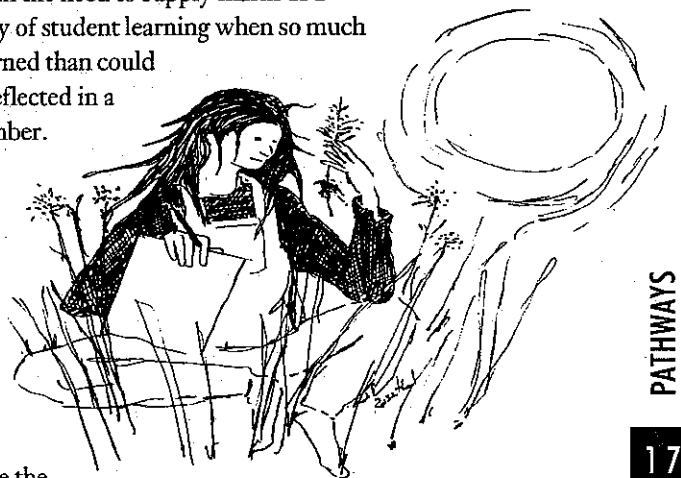
Research

Earlier, I claimed that we are rich in silent, practical knowledge, but weak in public, disciplined research knowledge. I think that multicredit packages should be studied and described in all sorts of ways. Otherwise, we will have no trustworthy, independent accounts with which to convince skeptics of the value of what we do. A small start has been made with my work outlined here and reported more fully elsewhere (Horwood, 1987, 1993, 1994a, 1994b). Graduate students Karne Kozolanka (1993) and Chris Anjema (York University) have completed studies. Leigh Hobson, final year recreation major at University of Waterloo, is investigating the experience of graduates of an integrated package as they return to regular classes. But this is barely a beginning. There is a great deal to be learned.

Grading and evaluation

One of the thorniest problems in multi-credit packages is grading and evaluation. All of the teachers I've spoken to were dissatisfied in some way with the need to supply marks as a final summary of student learning when so much more was learned than could possibly be reflected in a two-digit number.

The evaluation tail still wags the curriculum dog and experienced teachers have found hundreds of tricks to evade the



Anatomy of an integrated multicredit package

A typical package has the following features:

4 senior level credits

1 teacher full time for 1 semester

1 class full time for 1 semester

The above structure ensures that teacher and students are entirely free from the school's timetable.

Variations occur in the credits which are combined, the nature of out-of-school components, and whether more than one teacher and more than one class is involved.

problem and still live with their consciences. It would be nice, though, if we could get this serious problem out in the open. Let's hear about ways that people have found to accurately and fairly assess and report the richness of students learning and experience. For example, a distinguished outdoor education department in one Australian University has developed carefully-disciplined anecdotal reporting as part of each student's transcript. It would be very helpful for teachers to learn more about practices like that.

Money

Most programs that I know do not cost the public purse any more than if the program were not running. But they do cost somebody more. Who is that somebody? And where does the extra money come from? My friend and colleague Bill Patterson says that fundraising stinks. Yet he is a master at it. In fact, there is reason to think that being a good fundraiser is an essential ability for the teachers of all integrated packages. There are community resources that can be tapped, and many parents are able to help out with time and labour, if not cash. Again, this is an issue which the profession needs to air and discuss.

Conclusion

I think that integrated multi-credit packages are one of the most stimulating innovations to have hit the education scene in this century. It is true that they make great demands on the energy and knowledge of teachers. But, in turn, the packages revolutionize teaching and learning. For outdoor educators, the packages provide an unequalled opportunity to teach the same group of students for prolonged periods of time in outdoor settings while within the conventional framework of curriculum required by the Ministry of Education for secondary schools.

The history of similar innovations shows that they tend to slowly disappear after the early enthusiasm wears off (Olson, 1992). I hope that the action of *Pathways* to provide a forum for teachers, students and researchers to tell their

stories and discuss their dilemmas will help to sustain and refine the practice of integrated education.

References

- Horwood, B. (1987). *Experiential Education in High School. Life in the Walkabout Program*. Boulder, CO. Association for Experiential Education.
- Horwood, B. (1993) "Humpty Dumpty revisited: Seeing things whole in Outward Bound." *Canadian Outward Bound Wilderness School Journal of Education*. 4(1), 13-21.
- Horwood, B. (1994a). "Integration and Experience in the Secondary Curriculum." *McGill Journal of Education*. 29(1), 89-102.
- Horwood, B. (1994b). "Outdoor Education and Curriculum Integration." Proceedings of the Second Biennial Research Symposium. Coalition for Education in the Outdoors. In press.
- Kozolanka, K. (1993). *Beyond Integrated Curriculum. Student Voice and the Nature of Engagement*. Faculty of Education, Queen's University, Kingston, Ontario K7L 3N6. Unpublished Master's Thesis.
- Olson, J. (1992). *Understanding Teaching. Beyond Expertise*. Bristol, PA., 19007. Open University Press.
- Raffan, J. (1993) "Saying no to personal meaning. A letter to the Peel County Board of Education." *Pathways, The Ontario Journal of Outdoor Education*. 5(5), 6-9.

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An Integrated Programme From the Students' Perspective - The Bronte Creek Project

Jennifer Jupp

During the final months of my year at teachers' college, my decision to avoid classroom teaching was a difficult one. I was met with skepticism from various friends and family members:

"Didn't you go to teachers college to teach"?

"Are you going to keep monkeying around with this camp stuff"?

Amidst the never-ending questions and self-doubt, I had an overwhelming feeling that there was something out there that for me, reached beyond the classroom in terms of flexibility of teaching/learning and its meaningful life experiences for students. I found what I was looking for in the Bronte Creek Project run by the Halton Board of Education.

The Bronte Creek Project (BCP) has been called the "grand-daddy" of integrated packaged programmes in Ontario and is now into its 14th year of operation. Doug Jacques and John McKillop are the teachers at the two BCP rural camp sites. They are assisted by Jennifer Jupp (me) and Allison Myers respectively.

For me, the Bronte Creek Project means integration of four grade eleven subjects (environmental science, guidance leadership, phys. ed., and personal lifestyle management). It means freedom from regular classroom timetables and schedules. It also gives high school students across the Halton Board an environmental leadership experience as they facilitate the highly acclaimed "Earthkeepers" and "Novice Day" programs to grades four and five students from area schools. Furthermore, it takes place at an isolated outdoor education site which gives us privacy and high teaching impact. This impact is also high since the students at each site have only two teachers and we the teachers have one class for a full semester.

If one reads through the extensive documentation on the program, the packages sent to students and the curriculum information, one learns that John McKillop and Doug Jacques have developed a unique approach to integration. They believe that having a focus is critical - in this case the focus is the community's work with elementary children across the Halton Board. The facilitation of the *Earth Education* programmes provides much of the framework of the BCP. Students are given leadership theory and subsequently "try it out" with the elementary students. Each program is debriefed extensively from a variety of standpoints and voila! one of its operating principals is in part satisfied- it's experiential!

The essence of the Bronte Creek Project lies in the experience of the high school students. In an effort to qualify and further to report this experience I set out on a quest to contact past and present BCP students. I wanted to know whether a student's experience in the BCP plays any role in life beyond the Project. After many telephone calls and out-of-service numbers, I made contact with ten BCP graduates. The 'interviews' were framed by four main questions: 1) "What experience did you gain, if any, through facilitating the Earth Ed. programs?"; 2) "Comment on this program compared to regular high school"; 3) "What are your thoughts and feelings about 'community' with respect to the BCP?"; and 4) "Do you feel the program has changed you in some way? How?"

Whenever possible I had a cassette recorder running throughout the interviews. I found that we easily forgot about the recorder and often about the questions! I was astounded with the breadth of these students' experiences - my questions didn't begin to cover them!

*having a focus
is critical*

I am left with pages of transcribed conversation from the hearts of these young people. Four main areas emerge: Authenticity, empowerment, responsibility and personal relations. With these classifications for a framework, I will share with you the students' experiences of the Bronte Creek Project.

Authenticity

"I was the worst student when I was in regular high school.... I probably didn't do homework for about three years in high school just because I need more of that immediate motivation to do it. I couldn't see the point of it. I didn't see it as a valid responsibility whereas here, the wash house has to be done and that's my responsibility and if it's not done then I see that it's not done and someone is going to get back to me right away. They're not going to change my mark but you know that it wasn't done properly." (Todd: Sem. 2, 1991)

"In order to get everything done - the whole system running - kitchen, props in etc. requires the whole team working together...just like a soccer team. If the goal goes in, it's not the goalies' fault, it's the whole team's fault 'cause why did it get passed to center half in the first place?'" (Andrea: Sem. 2, 1991)

Everyday life at "school" for students in the Bronte Creek Project requires a community effort. Meals are prepared each day by a crew of ten students. Props, buildings and washrooms require maintenance or cleaning and few tasks can be completed by one person alone. This reality and the immediate success vs. failure feedback adds to the authenticity of their "school work".

"Problem solving is learned from a textbook in regular school. It's real here." (Ken: Sem. 2, 1989)

"You put into practice what you learned...like we spent however long talking about leadership, talking about groups...and then we took that one step further and we actually put it into practice...Instead of sitting in math class for 76 minutes and walking out at the end saying 'I don't understand BODMAS' (Order of Opera-

tions), here we talk about leadership and go out and do it." (Jim: Sem. 2, 1994)

Every student in this study spoke of the practical aspect of the program. Theory is taught and learned for a reason - to use it. A Bronte Creek student will not have a single day's note-taking not used in practice by the end of the semester.

"The [elementary] kids have one chance to enjoy Novice Day, like it's easy for us to say 'well it's okay, I'll do it better next time'. The kids don't have a next time so we have to pull it off for them the best we can every single time or they'll lose that experience." (Peter: Sem. 1, 1993)

"If you don't do it right, it's failed; it's not a blip on a screen somewhere, it's on the kids faces, success vs. failure." (Darren: Sem. 2, 1993)

"It's almost like you're a parent and you have like fifteen kids and there's not a teacher around to do it.... They're your kids, if they don't eat anything it's your responsibility and you have to get them back to the bunkhouse at night." (Andrea)

The roughly eight weeks of Earth Ed. programs (affectionately called Kids' Days) are the number one factor in making the Bronte Creek experience authentic for the high school students. During Kids' Days, the teachers on site become program facilitators whose main role involves keeping the day running smoothly and handling large issues such as decisions during torrential downpours and emergencies. The Bronte Creek students deliver the Earth

I was the worst student when I was in regular high school....

Problem solving is learned from a textbook in regular school. It's real here.



Ed. program. They are the teachers and counselors. They feel completely responsible for the program delivery and therefore for its success. Furthermore, they become the main caregivers for the elementary children during their overnight stay. In essence, the high school students are doing front line work with younger people who need them. The results and consequences of their efforts or lack thereof, are immediate and real. Every Bronte Creek student knows that the BCP relied on the Earth Ed. programs for finances and program structure. A poor experience on a Kids' Day can lead to a loss of that elementary school as a "customer". This reality seems to reach beyond marks on a page.

Finally, many of the students commented on the setting as a contributing factor in making the experience "more real".

"How can you teach people about the environment and being connected to the earth, when you're in a classroom with fluorescent lights buzzing?" (Steve: Sem. 1, 1990)

For the students of the Bronte Creek Project, this type of schooling is more authentic than traditional high school - their responsibilities reach beyond work habits and marks. The theory is put to practical use and the outdoor setting makes them feel alive and connected to their subject matter.

Empowerment

I learned more than I had anticipated about each student with respect to motivation and empowerment. The program seems to help students feel better about themselves. They become proactive with respect to the environment and to their futures.

"BCP really focused my ideas - When you have something that you believe in, you get more inner strength to go out and change things....It's whoever gets to these kids first who's gonna make a big impact on how they view the environment." (Steve)

"Before BCP I didn't care much for the environment....It [BCP] helped me with my career planning....Now I want to go into architecture to renovate homes to make them more environmentally sound and I'm in civil engineer-

ing as a first step right now." (Rene: Sem. 1, 1993)

"I came here and my head was all cluttered and I didn't know where I wanted to go and you know while you're sitting in the woods, it's amazing how something like that can lead you in the right directions. I could not do that looking at the four walls...This place has given me time to focus towards my life so I can prepare myself for that I want." (Joanne: Sem 2, 1994)

Other students reported finding out that they are likable individuals, that they felt accepted by a group of peers for the first time in their lives, that they could drop the person they were trying to be, be who they really were and that they were worth more than they had previously believed....Wow! These changes to self in all cases helped students in their lives beyond the Bronte Creek Project.

Responsibility

Other changes in the students interviewed which reached beyond their BCP semester were in the area of responsibility. Once again, I chose four from dozens of quotes saying similar things.

"My realizing how kids reacted to me made me realize my responsibility as a role model. I now remember my role modeling role all the time." (Peter)

"I learned all this responsibility. I don't have to get drunk to have fun and I won't get in a car if I've been drinking...my parents put all this trust in me...my parents love the Bronte Creek Project...they see so much change in me." (Andrea)

"If you don't take charge, nothing will ever happen. You can relate that to everyday life." (Steve)

"Being in BCP put everything in perspective....I have different priorities in my life now. Getting drunk on a Friday night is not a priority, other things are.... I lead an environmental group at my school....You know? Different things are important now." (Darren)

"You learn that the present is important. What you leave behind is not as important as how you lead your life now." (Steve)

*How can you
teach people about
the environment
and being connected
to the earth,
when you're in a
classroom with
fluorescent lights
buzzing?*

I used to be really judgemental

These students felt responsible for their own actions. They feel that they are responsible members of society. They feel responsible for the future of the planet. And, they enjoy this responsibility. It makes them feel in charge of their lives in positive ways. I believe that this feeling of responsibility is due to several factors. The authenticity of the program, especially on Kids' Days, allows the high school students to experience true responsibility. Success during and following these days leads the students to feeling positive about responsibility. I think responsibility is then no longer something to be feared, but rather something to be sought. They feel confident and empowered - ready to take more responsibility in their lives outside the BCP.

Personal Relations

All interviewed students reported major changes in their relations with teachers, parents, peers, and employers.

"I used to be really judgemental, looking at a person and deciding whether or not they were what I was into....I think that came from school." (Joanne)

(Jim speaking with Joanne) "Ya, you had to be careful who you made friends with 'cause if you made a mistake, first if all you'd be a geek or a loser or something." (Jim)

"They [parents] can see results that they've never seen before. Like my dad would get mad and all of a sudden I'd be saying, 'let's talk about it'. Like I used to yell back and what's that solving?" (Andrea)

"We learned to deal positively with outcasts regardless of the circumstances." (Ken)

"I found that I'm a pretty likable guy....[BCP] made me realize what I can do in a group instead of sitting there. I became sort of assertive in groups so things would get done instead of arguing." (Peter)

"I used to even scare myself when I'd get angry...like Angry angry...It gets back to the slowing things down instead of blowing up and completely losing control...I now go, 'okay why is this person making me so mad, like what is it that's happening that's making me so angry?'" (Jim)

While I realize that these changes may seem to be merely a result of the normal maturation process for these young people, in each instance quoted here, the student states that he or she feels the Bronte Creek Project was an instrumental factor in the "life changes." mentioned above.

As with most research, during the course of interviews and writing, many other questions were raised in my mind and in later interviews I began asking, "How does this happen? What aspect of the program is helping to elicit these changes?" I'd like to share with you a few responses to this question.

"You're put in a situation with twenty people and you're with them five days a week for practically the whole day and you have to get along....Since you do things together you either hate him or you get along with him and find out who he really is." (Andrea)

"We spend so much time with each other that you can't help but learn who people really are...their true selves, not just who they try to portray". (Joanne)

"At the beginning we do things that make everybody look stupid. It sorta helps shed your inhibitions 'cause everybody's doing it....People stop wearing make up, you can show up looking 'horrible'. Like you would never show up at school like that or people would think you're completely off your bean, but people come like that and we still realize that they're cool and stuff." (Todd)

The Bronte Creek Project provides students with an opportunity to work with their peers in a unique fashion. They have high exposure to each other which allows their true selves to emerge over time. Teamwork is essential. It pushes their limits with respect to peer relations. They need to "get along" and work together effectively - to drop stereotypes and divisional behaviours. Furthermore, they are given many opportunities to feel success. This leads to empowerment and higher self-confidence.

One day not long ago, Doug Jacques and I were standing watching our twenty students work through an activity in small groups. I noted how much one particular acutely introverted student was contributing to the group.

I found that I'm a pretty likable guy...

"It's hard to believe he's the same guy as on September seventh, eh?" I said.

"Some people just need encouragement, space and community", Doug said.

I think that about says it. The Bronte Creek Project gives students encouragement, space and community in a unique format of outdoor experiences and leadership opportunities. Students find the program authentic; they feel empowered and motivated; they become more responsible young adults and their personal relations improve substantially.

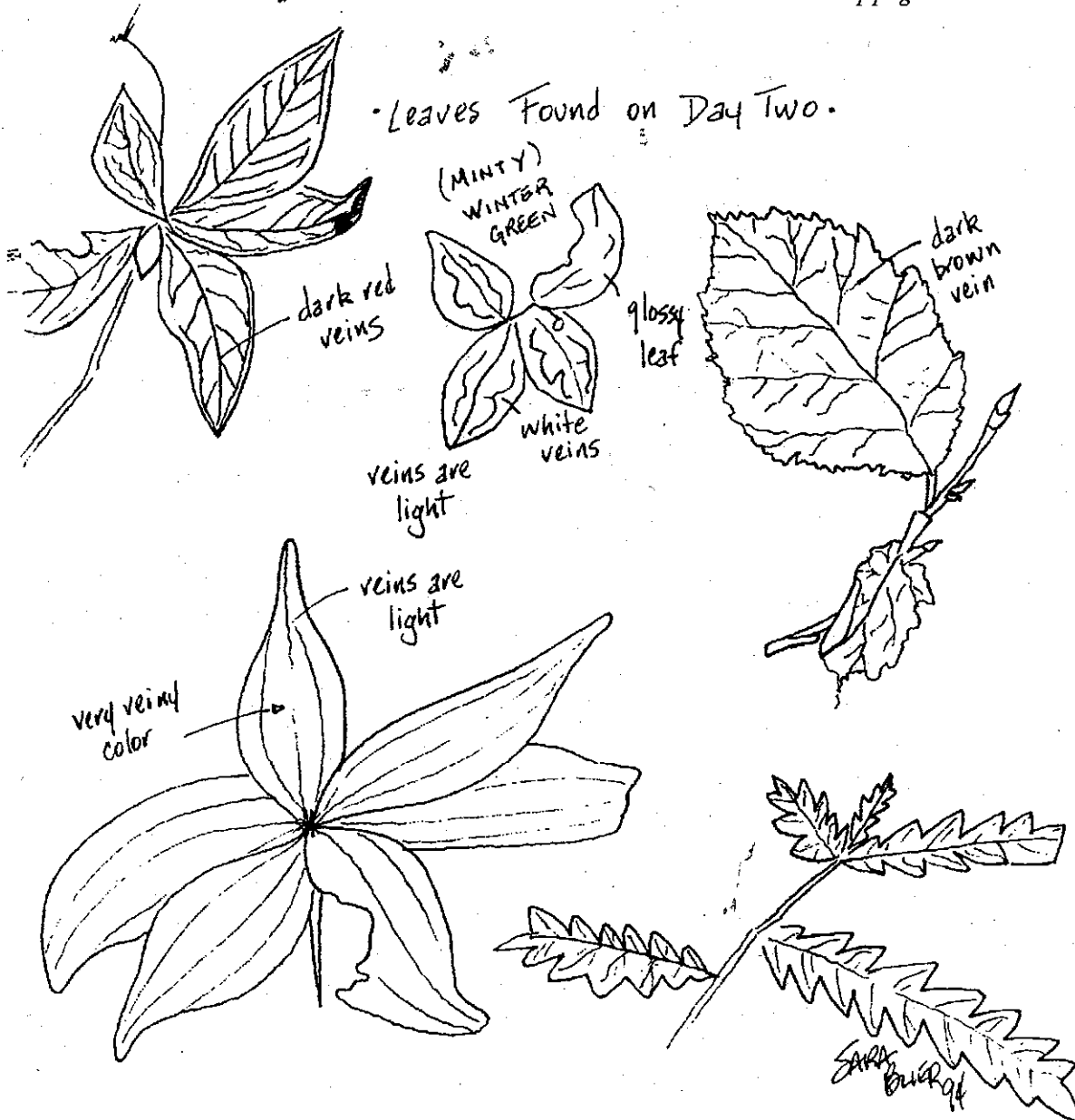
The classroom plays an essential role in our educational system. I believe students need

classroom experience. I also believe there is a place for integrated programs - a much needed and often misunderstood place. May we always listen to the students when we make important changes in our educational system.

Many thanks to Ken, Rene, Steve, Darren, Peter, Andrea, Todd, Joanne, and Jim for your time, commitment, and compassion.

Jennifer Jupp (JJ) brings great energy and insight to the Bronte Creek Project at Rocky Ridge Ranch. During the summer she brings those same qualities to Arowhon, where she runs the camp's leadership programme.

The Bronte Creek Project gives students encouragement, space and community



Critical Pedagogy and Outdoor Education

Constance L. Russell

*Outdoor educators
are in a unique
position to resist
anthropocentrism*

Close to sixty years ago, John Dewey suggested that we ought not assume that experience is neutral, that is, that all students would interpret the experiences we offer as educators in the ways we expect or intend. Rather, he suggested that each individual brings with her or him a truckload of assumptions and ideas developed through past experiences and hence brings a unique perspective to any learning situation. For example, my husband and I may see the same film or read the same book and come up with widely different interpretations of what it *really* meant. This is not to say that we never agree; for the most part, we do. But our different backgrounds and experiences, and certainly our gender, influence our perceptions of these various phenomena. Educators working from a critical perspective advocate that a careful examination of such differences and their implications are in order.

Critical pedagogy is notoriously difficult to define; indeed, it would be more accurate to talk of critical theories that influence the different perspectives and priorities of educators who are considered to be working under this rubric. While undoubtedly simplistic, I understand critical pedagogy to be an approach characterized by a deep commitment to social justice and to the development of theories and practices which not only expose the underlying biases of traditional education but work towards eradicating such biases. The most obvious examples are educational practices which challenge sexism, racism, classism, and heterosexism.

Various new "isms" continue to be added to the field and one which I and my colleague and friend, Anne Bell, feel must be considered is anthropocentrism. The belief that humans are separate from and superior to all other life and therefore have the right to dominate and control other life is widespread and is related to what John Livingston calls "zero-order humanism", the belief that the human enterprise has absolute

primacy on the planet. According to environmental philosophers, anthropocentrism and zero-order humanism are highly destructive and have contributed greatly to the environmental crisis. Pointing to the fact that other cultures have had, and some continue to have, different understandings of and relationships with the natural world than those of industrial North American society, environmental philosophers see hope in the development of a new environmental ethic.

So, what does this all have to do with outdoor education? Lots, in my opinion. Outdoor educators are in a unique position to resist anthropocentrism. By offering students the opportunity to interact with the other life around them, they may come to realize that they are connected to, not separate from, nature. But, returning to Dewey, it also means that we must carefully examine the experiences we offer as outdoor educators to ensure that we are not unintentionally perpetuating anthropocentrism or, in the process of resisting anthropocentrism, that we are not contributing to another form of oppression.

For example, if we encourage students to relate to the land as solely a recreational resource, talk of "good" and "bad" weather, we reinforce the dominant ways of understanding other life. Or, if we only practice what Ian Robottom has called "technocratic environmentalism" and offer scientific technofixes as the solution to environmental degradation, we are offering our students simplistic answers to complex questions and implying that it is appropriate for humans to manage all other life for our own benefit. Or, if, when discussing environmental issues around the world, we suggest that Southern peoples are to blame for destroying, for example, the Amazon, we ignore our own society's role in perpetuating the conditions that often lead to environmental degradation.

The students with whom we learn and teach undoubtedly will be encountering a complex world and will need to be both critical and compassionate as well as creative. Weaving insights from critical pedagogy through outdoor education practices holds great potential in helping us achieve such ends.

Connie Russell is a Ph.D. student at the Ontario Institute for Studies in Education, University of Toronto. She is taking on the Explorations column which examines research issues in the field. Connie may be contacted at 252 Bloor St. West, Toronto, ON, M5V 1V6.

Bibliography

Bell, A. and Russell, C.L. *Beyond Human, Beyond Language: Anthropocentrism in Critical Pedagogy*. Paper presented at the Canadian Critical Pedagogy Association Annual Meeting, Learned Society Conference, University of Calgary, Calgary, Alberta June 14-16., 1994.

Dewey, J. *Experience and Education*. New York: Collier, 1938.

Livingston, J.A. *Rogue Primate: An Exploration of Human Domestication*. Toronto: Key Porter, 1994.

Robottom, I. "Technocratic Environmental Education: A Critique and Some Alternatives." *Journal of Experiential Education*, 14 (1), 20-26, 1991.



COEO Annual Conference
Leslie M. Frost Centre, Dorset, ON
September 22-24, 1995

Rooted in the Classroom? Branch Out!
 Limited space; register now!
 See *The Gathering* later in this issue.

Integrated, Multi-Credit High School Programs - A Colloquium
August 22-24, Bark Lake Leadership Centre

Have you ever wished you could spend almost every day working in the outdoors with the same group of students? Join a mix of practicing teachers, researchers and students who have been part of these programs, to explore this exciting new approach to outdoor education.

To register, contact Bark Lake at 1-800-668-6638. For Program information, contact Chris Anjema (416) 762-7076 email ES051136@ORION.yorku.ca or MJ Barrett (519) 942-0075.

North American Association for Environmental Education (NAAEE)
Annual Conference
September 15-20, 1995
Portland, Maine

Theme: Gaining New Insights - Building on Experience

Contact: NAAEE Conference Registration Office

P.O.Box 400 Troy, OH 45373 USA
 Phone/Fax (513) 676-2514

Vancouver to host '97 NAAEE Conference

Late August, 1997. The tentative theme is urban and multicultural issues in Environmental Education. Conference Chair is Dr. Rick Mrazek of the University of Lethbridge.

28th Annual NYSOEA Conference
Co-Sponsored by ANSS
October 6-8, 1995

Theme: Our Mother Earth, She Gives us Vision

New York State Outdoor Education Association teams up with the American Nature Study Society to host this year's conference with a special focus on women in the environment. Contact: S.A. Melcher, c/o Dr. C. Kelley, 370 White Spruce Blvd., Rochester, NY 14623 Tel: (716) 424-6143 or email to SVAAP3@AOL.COM

Employment Opportunity

Mayfield Secondary School Integrated Multi-Credit Outdoor/Environmental Education Programme EYC position Dec.- March, 1995-96.

Prepare for and help implement an Earth Education program taught by secondary school students. Responsibilities include: Research and preparation of props and program materials; assist in preparation of elementary school classes and teachers; assist in general preparation of high school students; implementation and evaluation of the programme (if funding can be attained to extend the position past March). EYC age limit is 24 years, 26 if disabled.

Attributes sought: commitment to environmental stewardship; environmental studies background; writing and communication skills; experience working with youth ages 9-10 and 16-17; experience with Earth Education Programs is an asset; word processing skills are an asset.

Contact: MJ Barrett, Mayfield Secondary School, RR #4 Brampton, ON L6T 3S1.

**First Nations Education in the
Elementary School: Bringing Your
Classroom Outside
August 20-25, 1995**

The Federation of Women's Teacher's Associations of Ontario (FWTAO) is sponsoring their third Aboriginal Education Summer Course at the White Bear Lodge, Emo (near Rainy River). Registration fee is \$250.

Native people and the land have a strong relationship based on balance, respect and harmony. During the five day course, participants will paddle northern lakes, interact with the world of the Anishinabe. Hands-on activities will help you develop ways to enhance your classroom activities from a different perspective.

For more information or application call Nancy Wannamaker at 416-964-1232 or 1-800-268-7205.

De Troyes Expedition Re-enactment

Tim McDonagh, president of the Iroquois Falls Canoe and Kayak Club, is organizing a re-enactment of the De Troyes Expedition route from Mattawa to Iroquois Falls.

The re-enactment is scheduled for August, 1995. It will start at the Samuel de Champlain Provincial Park, west of Mattawa, and will finish at Iroquois Falls.

For more information contact: Iroquois Falls Canoe and Kayak Club, P.O. Box 1178, Iroquois Falls, Ont. P0K 1G0

**Moving Forward Together: An
Aboriginal Awareness Workshop for
Educators:
September 22-24, 1995
Frost Centre, Dorset**

Together we will share: experiences to better understand Aboriginal People, their culture and their relationship with the Earth; ideas, opportunities and resources for education students; information on matters related to environmental protection and conservation.

Sponsored by First Nation Partners and the Ministry of Natural Resources. Contact Barrie Martin at 705-766-0567 as soon as possible - spaces are limited.

**Third Annual Environmental Music
Week: with composer Murray
Schafer
July 31-August 5, 1995**

Harmonizing with nature is the theme of this unique one week Environmental Music Course offered by composer R. Murray Schafer in the natural beauty of Haliburton Forest & Wild Life Reserve. No professional musical experience is necessary, though a knowledge of the rudiments of music is desirable.

Hiking, canoeing, picnics and other wilderness pursuits will be included.

Fee: \$620/person includes all meals, accommodation, instruction by Murray Schafer, use of Haliburton Forests equipment and trails.

*A maximum number of 30 participants 15 years of age or older.

For more information contact: Haliburton Forest & Wild Life Reserve Ltd., R.R.#1 Haliburton, Ontario, K0M 1S0, Tel: (705) 754-2198 or Fax: (705) 754-1179

*Northern Illinois University
Council of Outdoor Educators of Ontario
Professional Development Committee
Offer:
Graduate Level Courses in Outdoor Education*

- Title & Description:* C1OE 590 Workshop
The Great Lakes Basin & the Grand River Watershed
- Instructors:* Dr. Bob Vogl - Professor NIU
Dr. Frank Glew - Outdoor Educator, Waterloo
Mr. Warren Stauch - Geography Head, E.D.S.S. Elmira
Mr. Brent Dysart - Outdoor Educator, Waterloo
- Course Fee:* \$400 ((\$100 deposit with application) + text books
- Enrolment:* 16 students minimum, 30 maximum
- Dates & Times:* Sept. 16,17 (TO); 30, Oct. 1 (K-W); Oct. 28-29 (TO);
Nov. 11, 12 (K-W); - 9am to 4pm each day
- Location:* 2 weekends in Toronto area
2 weekends in Grand River Watershed area
- Learning Outcomes:*
- Students will broaden their knowledge and background on:
 - a) The Great Lakes basin as a living ecosystem.
 - b) The Grand River watershed as a heritage river with it's natural and cultural heritage within the Great Lake basin.
 - Students will experience, plan, develop and share classroom-ready cross-curricular units of study on the two ecosystems.
 - Students will participate in two field trips suited for class educational excursions.

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457 Stillmeadow Circle, Waterloo, Ontario N2L 5M1*

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City and Postal Code: _____

Against Straight Lines - Alone in Labrador

by Robert Perkins, Little, Brown and Co.

Reviewed by Erin Smith

I have few things more enjoyable than when I spent the evening relaxing in my chair, drinking a hot cup of Earl Grey, and immersing myself in a Robert Perkins classic: *Against Straight Lines - Alone in Labrador*. I found myself completely absorbed; the descriptions and reflections took me with Perkins as we made our way through the northern tundra in the summer of 1979.

Against Straight Lines - Alone in Labrador is the compilation of journal writings which Robert Perkins made during a solo six week canoe trip in Northern Labrador. It is written in the true style of journals: words and ideas ebb and flow on the paper as they arise from the thoughts of the recorder. The pages are filled with descriptions of the rugged tundra environment and details of what fills Perkins' days, ranging from the mundane to near-death experiences. It also includes a number of insights and introspections on his life, his experience, or thoughts completely unrelated to his trip but nevertheless fascinating to read.

One of the most enjoyable aspects of the book comes about because Perkins has no idea of what the outcome of his trip will be. The reader shares in the anticipation felt by Perkins throughout his trip. As the days pass, the tone and themes of his writing also progress. The reader can sense in the early entries that Perkins is struggling to establish a rhythm, both with body and mind. He complains about aches and pains and readily admits his fear of starvation, injury, and of the overwhelming power of the elements. The search for a purpose to the journey is also at the forefront of his writing. He explains that "everyone I've ever met in the North has his particular reason (for being here), usually a scientific one...what I'm studying and looking for is harder to put in words..."

The journal evolves as Perkins becomes more comfortable with his experience. Further

along in the journal, Perkins has settled in and become accustomed to being alone, and has begun to relax. He is now fully immersed in his voyage; the 'baggage of memories' which often entered his thoughts earlier in the trip have essentially disappeared from his writing. By the time of his final entries, Perkins has come to understand his personal reasons for making this trip. He articulates this in a letter to his girlfriend: "...each day here has an intensity to it. I'm a flame here, not the ember I am at home. Home? I feel more comfortable here than I ever have anywhere..."

To most people, the idea of a solo voyage is at the very least overwhelming and at the most, completely unimaginable. As Horance Kephart states, "The bare idea of faring alone in the wilds for days or weeks at a time is eerie and fantastic: it makes the flesh creep". However, while Perkins is a solo traveller, numerous relationships still form and develop: relationships with himself, with his canoe, with food, and particularly with nature. Perkins eloquently scribes this connection in one of my favourite of his entries:

"Some types express their relationship to nature aggressively. To them nature is a force to subdue, overcome, challenge, defeat, tame, or avoid. My irony is an inability to adopt that attitude...my attitude is maternal, plantlike. My desire is to feel what's around me, to embrace it, to have it to nourish me, enter me..."

An interesting twist near the end of the book arises when Perkins is joined by Richard, a magazine photographer, for the final two weeks of the trip. The two men form a stark contrast to each other, and new insights form as Perkins struggles with the abrupt invasion of his solitude.

It may seem obvious to state that Perkins did not write his book with an outlined purpose. It is a journal; Perkins simply writes whatever he

*Perkins is
struggling to
establish a rhythm,
both with
body and mind*

happens to feel like writing. However, this by no means prevents the use of his book toward a purpose; it could be used in many environments quite effectively. *Against Straight Lines* is personal, subjective, and contextual, and has a great deal to offer the outdoor or experiential education student and teacher.*

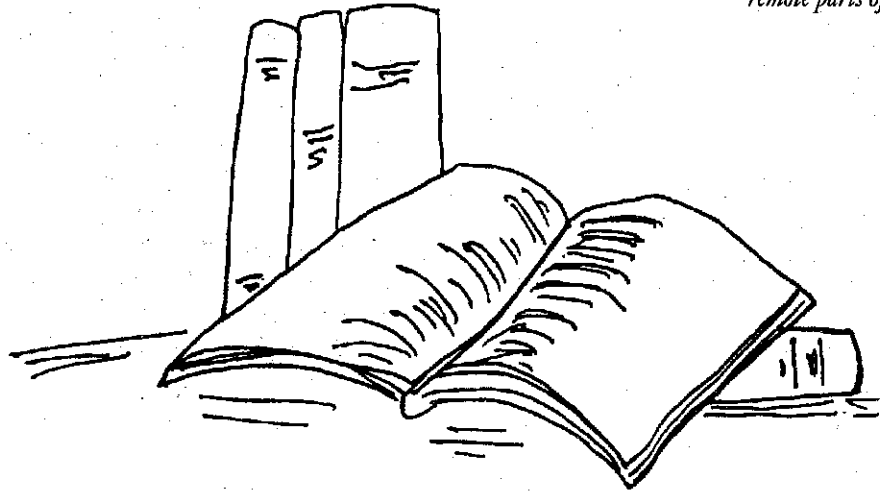
The outdoor enthusiast will also immensely enjoy *Against Straight Lines*. Although this book could never be considered a practical 'How to camp in the Tundra' guidebook, there is a great deal to learn from Perkins about the art of canoe tripping. The journal proves to be informative and enlightening. Independent of background knowledge, each reader will find his or her own favourite entries and insights.

The expression 'If you can't take Mohammed to the mountains, take the mountains to Mohammed' comes to mind as I reflect on my

reading of *Against Straight Lines*. Not all of us will have the opportunity to have an adventure such as Perkins' voyage in the Labrador Tundra. Yet reading this book gives us a glimpse of maybe, just maybe, what it would be like for us if we did. Thank you to Robert Perkins for letting us see, feel, hear, smell, and taste the northern tundra as you did.

*For ideas about how to integrate this book into your tripping programme, see Erin's article "Pre-Reflections for School-Based Outdoor Travels," earlier in this issue.

*Erin Smith is a fourth-year Physical Education student at McMaster University in Hamilton, Ontario. While at school, she reads books like *Against Straight Lines* and imagines that she is canoeing in remote parts of Canada.*



Rooted in the Classroom?
Branch out at
COEO Conference '95

Leslie M. Frost Natural Resource Centre
Dorset, Ontario

September 22 - 24, 1995



The Council Of Outdoor Educators of Ontario presents:



- Outdoor workshops especially for classroom teachers.
- Sessions will focus on major subject areas.
- Lots of hands-on activities you can use on Monday morning.
- Opportunities for skill development (canoeing, orienteering, hiking) and personal growth
- Time to relax and share ideas with fellow teachers.
- Pre Conference Workshop: Schoolyard Habitat -
a new activity manual available from Canadian Wildlife Federation
(\$ 30.00 includes lunch and manuals)
- Space is limited to 80 participants - save a spot now! (see over for registration information)

ABOUT THE WEEKEND

In response to your needs and wants, this year's planning committee is pleased to offer a conference geared especially to the classroom teacher. We recognize that these are days of restraint and many outdoor centres have closed or become inaccessible due to costs. We also know that most schools have yards and many are within easy walking distance of a park or natural space. This weekend will help you better utilize the classroom beyond with lots of hands-on activities you can use, regardless of your subject area or grade level taught.

We have tried to keep costs down and are once again offering a substantial discount for early registration, as well as special student rate. This year's conference is at the Frost Centre, a modern multi-use, outdoor education, lakeside accomodation in the Haliburton Highlands. The Frost Centre offers excellent facilities, with shared accommodations and super food with options for vegetarians.

Space is limited to 80 participants, so register now and join us in BRANCHING OUT. A minimum number of 50 applications is required by September 1, 1995 to insure a successful conference. If you have any questions, contact Linda McKenzie at (705) 386-0503.

REGISTRATION FORM - COEO CONFERENCE '95

NAME _____ MALE _____ FEMALE _____
 HOME ADDRESS: _____
 CITY: _____ PROVINCE: _____
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 TELEPHONE: (h) _____ (w) _____
 May we give out your name for car pooling purposes? YES _____ NO _____

CONFERENCE FEES:

Pre Conference Workshop (Friday 11:00 a.m. - 5:00 p.m.)	30.00	
Schoolyard Habitat (includes lunch & manual)		_____
Weekend Conference (Friday night to Sunday noon)	200.00	_____
Early Bird (by July 1)	175.00	_____
Student	135.00	_____
Day Fee (Saturday only - includes lunch)	50.00	_____
Non Member additional fee	30.00	_____
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...or join now! COEO Membership (includes subscription to <i>Pathways</i>)	40.00	_____
Student COEO Membership	25.00	_____
Your total:		_____

PAYMENT: MINIMUM \$50.00 deposit (balance payable by post dated cheque Sept. 15, 1995)

CANCELLATION POLICY: After Sept. 1, '95 \$50.00 is forfeited unless replacement person is found.

Please send registration form and cheques (payable to COEO CONFERENCE '95) TO:
 Linda McKenzie, Box 324, South River, Ontario P0A 1X0

The Tao of Leadership: Leadership of a New Age

by John Heider, Bantam New Age Books, 1985

Reviewed by Erica Jensen

What do students, parents, church groups, educators, therapists, salespeople, business men and women, politicians and government officials have in common? They are all leaders. How can we become more effective as leaders? Be silent and do less.

The Tao of leadership is an interpretation of Lao-Tsu's *Tao Te Ching* - an ancient Chinese book of sayings on wisdom. John Heider extended these sayings to apply to the ideal qualities and actions of a wise leader. The purpose of this book is for leaders to consider facilitation for rather than domination over the group process.

This book offers a plethora of leadership ideas. For example, group leaders must be intuitively attentive to the group field or dynamics. Heider also suggests that a leader will take action in one of three ways: (1) to act - as a warrior, (2) to listen - as a healer (3) to withdraw - the essence of Tao. This withdrawal provides the atmosphere and space for growth measured by the group's standards rather than interference of the leader's imposing ideals.

The strength of this book is its direct and compact style. Heider closely followed the eighty-one sayings of the original *Tao Te Ching*. Each section is merely one page with a related sketch on the facing leaf. You will find reading *The Tao of Leadership* enjoyable due to its simple style and organization.

A shortcoming of this book is its repetition of general ideas in an attempt to maintain its close relationship to the eighty-one sections of the *Tao Te Ching*. It seems that Heider may have run short of parallels. This repetition however, works to his advantage. It reinforces Heider's main point. Leaders should strive to be more aware of group process and try not to interfere with the group's development.

The Tao of Leadership describes the many nuances of a good leader. Adventure-based facilitators should use this book to develop, remind and reinforce their leadership style. Both group members and leaders will benefit from the leader reading and applying several pages of this book every day.

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Lifelines: Rock Climbing at Bark Lake Leadership Centre

Elizabeth Kurucz

I was not afraid of falling. I was afraid of failing.

"Only those willing to go too far will know how far they can really go" — Chuck Yeager. Once again I disturbed these words from their crumpled resting place, then folded them up and put them in my pocket.

"Ok Chuck, here I go", I muttered to myself, clicking the belay line through my carabiner and fastening it to the chest harness with a figure-eight knot learned just moments earlier.

"Belay on?", I called out.

"On Belay", my support system gave me an encouraging response.

"Elizabeth climbing."

I took two steps up the rock face and panicked. Standing there, frozen, for what seemed like a life sentence, I was held back by my own disbelief. My hands and legs began to feel weak and the resolve that had filled my veins mere moments earlier had vanished so perfectly I couldn't find a trace of it to calm my racing thoughts. I could hear voices below, shouting in what seemed to be supportive tones but words were indistinguishable on this plateau. My hands were quickly and desperately caressing and cajoling the rock face, making some kind of tactile plea for a direction to follow.

Nothing.

"I can't believe this", I thought in dizzied confusion. "I can't do this, I don't even have a glimpse of an idea as to what I'm supposed to do, I'll have to come down."

"How are you doing Elizabeth?", "You can do it girl", "Are you ok up there?": The voices began to drift through and distract me from my own, less confident thoughts. I couldn't absorb the meaning of their words but I understood their intent and I felt the need to respond.

"Oh, I'm fine. I'm just trying to figure out what to do next here", I stated in my brightest, most self-assured voice. I wasn't fine at all, but

as soon as I heard myself speak so convincingly I couldn't help but be swayed to believe what I said. After all, it fit much better with my goal (which was now starting to drift back into my conscious mind), to climb as far as I could, to really push myself on this, my first attempt at a long awaited experience.

I began to climb again and my certainty grew with each foothold that I found. I could hear my heart beat more calmly now and my breath came back warm on my face, pushed toward me by the rock I closely ascended. The sunlight called the sleeping colours in the craggy depths awake and dazzling in my eyes were the glinting forms of minerals. My progress slowed with my breathing and I found myself caught once again, stymied as to how I could progress.

"If the rock isn't helping you, use your body to create some leverage", an experienced voice called from down below.

"We've got you", my belayers spoke to reassure me.

Truth be known, I hadn't given a thought to the physical dangers associated with falling. The trust we'd built in our group happened very quickly and seemed natural. I couldn't feel the belay lines as I climbed but I knew that the slack was being gathered in response to my progress. Why then was my heart starting to pound again, my breath coming back to me more fiercely now, ricocheting off the boulder I faced. I was not afraid of falling. I was afraid of failing.

Trying to escape from this thought, I moved to step into a foothold and it disappeared. For a moment my leg hung freely over the ledge and I flashed back to the dream I had awoke from early that morning where I was climbing and I fell. My left hand clawed at air, then clamped in a vice grip on the rock and I tried furiously to get my foot back into its original place.

Did it.

A sense of exhilaration flooded me as the

adrenaline afterglow began to set in. "Nothing can stop me from going as far as I can, except myself", I realized with something akin to relief. My own voice, an encouraging, not a demanding one, filled my head.

At that moment I stopped looking for a pathway that was familiar and easy, I stopped waiting for a perfect stepladder to conveniently descend from the top of the precipice and guide my way up. I began to see the rock for what it was and to develop a relationship with it. Now, with my sense of self-control flooding back to me and an appreciation for the unique character of the craggy cliff, I intuitively contorted myself to create a balance between me and this other work of nature. I had to understand the rock and to trust myself. I needed this more than I needed to believe in the tested safety of the visible lifelines supporting me.

I leaned forward, into the boulder, so close now that the breath which warmed my face seemed to come from the sun-heated cliff itself. Pushing up on my hands, I raised the weight of my body and, frog-like, scrambled to get my legs on a higher, firmer plane.

Made it.

The rest of the way up was difficult, but my new perspective made each grasping movement seem possible. When I reached the highest point and pulled myself over the edge, I felt a range of emotions, from relief, to astonishment, to accomplishment.

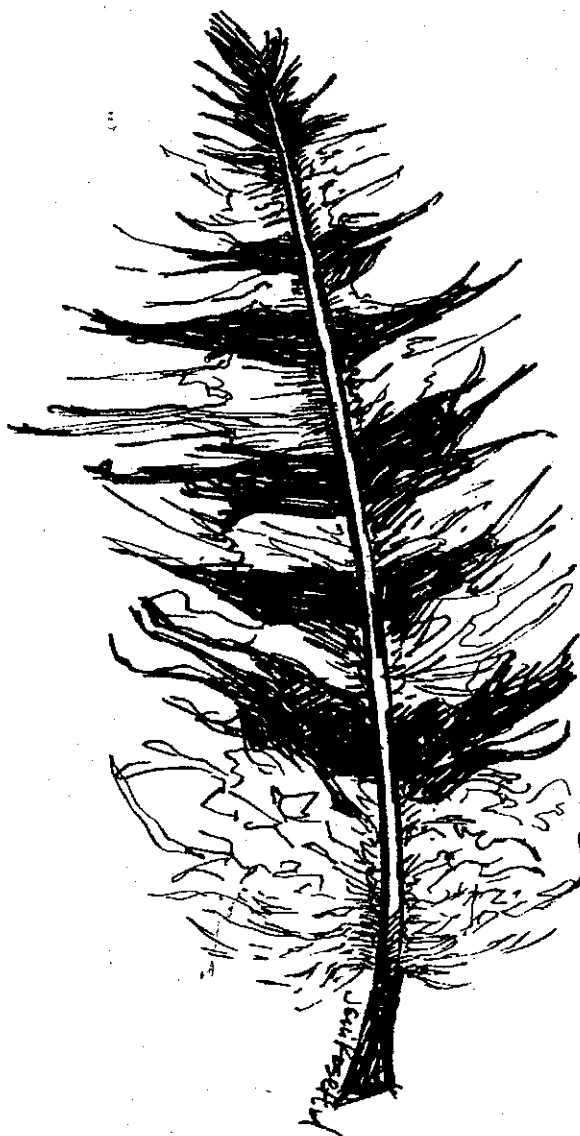
"Ok, enjoy the view while you're up there Elizabeth", shouted Janine, one of our group facilitators. "You've earned it."

"It's fabulous", I called down. I sat and rested for a few moments, waiting to catch my breath, staring out at the clear blue sky and the northern wilderness of conifers, listening to the cool sounds of rushing water. I felt as though I had a very different view of things than from my stance on the ground, and yet I knew that in reality these landscapes couldn't be so very different. I thought of the note which my best friend had slipped into my pocket when I got on the bus to come to this place. There were two quotes. The first one was from the pilot Chuck Yeager and I understood its significance immedi-

ately. The second one, from the novelist Marcel Proust, had intrigued me and I felt now as though I had earned the meaning of those words, "the real voyage of discovery consists not in seeking new lands, but in seeing with new eyes".

Elizabeth Kurucz has used adventure-based programming at Crawford Lake Conservation Area and the Toronto Nature Centre to teach children and adults about the "fundamental interconnectedness" of themselves and nature. Participating in a Bark Lake programme has offered her a new perspective on life and experiential learning.

*I began to see
the rock for what
it was*



Pathways

THE ONTARIO JOURNAL OF OUTDOOR EDUCATION

Conventions:

(based on *The Globe and Mail Style Book* and *Editing Canadian English*)
... combining distinctive features of Canadian style and modern typographic approaches.

- programme, colour, Centre, etc., (essentially British spellings)
- 'organize', etc., (using the North American 'z' instead of the British 's')
- 'co-operate', etc., (using the hyphen to separate the 'co-' syllable)
- Put punctuation outside final quotes (in contrast to American usage).
- etc., / i.e., / ... / pg6 / 7 P.M. (i.e., formal typographic style)
- Use "curly (smart) quotes".
- Use italics instead of underlining. Do not use ALL-CAPS.
- Use em-dashes – with spaces – instead of double hyphens.
- Use only one space after periods, commas, exclamation points, question marks, quotation marks – any punctuation that separates two sentences.
- Use metric units, rounding off where the context indicates a generalized reference.

Submission Format:

DOS / Windows: WordPerfect / Word / on 3.5" or 5" floppies

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- In general, use minimal formatting, as it will need to be re-formatted at the layout stage anyway.
- Everything should be spell-checked with a Canadian dictionary.
- When faxing, select 'fine scale' and send clean typewritten or computer printout, so as to make optical character recognition more possible.
- Artwork should be clean and crisp line-art or standard computer format provided on disk (PICT or 300dpi paint or EPS or TIFF for Mac format; EPS or TIFF for DOS).

References:

The Globe and Mail Style Book

The Elements of Style, Strunk and White

Webster's New World Guide to Punctuation

The Mac Is Not A Typewriter, (The PC Is Not A Typewriter), Robin Williams, PeachPit Press,
Editing Canadian English, Freelance Editors' Association of Canada